

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: December 30, 2016, or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from _____ to _____

Commission File Number: 000-30235

EXELIXIS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

04-3257395

(I.R.S. Employer Identification Number)

210 East Grand Ave.

South San Francisco, CA 94080

(650) 837-7000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class
Common Stock \$.001 Par Value per Share

Name of Each Exchange on Which Registered
The Nasdaq Stock Market LLC

Securities Registered Pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter:

\$1,361,396,920 (based on the closing sales price of the registrant's common stock on that date. Excludes an aggregate of 63,607,456 shares of the registrant's common stock held by persons who were directors and/or executive officers of the registrant at July 1, 2016 on the basis that such persons may be deemed to have been affiliates of the registrant at such date. Exclusion of such shares should not be construed to indicate that any such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant or that such person is controlled by or under common control with the registrant.)

As of February 16, 2017, there were 290,866,613 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the registrant's definitive proxy statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A, not later than April 29, 2017, in connection with the registrant's 2017 Annual Meeting of Stockholders are incorporated herein by reference into Part III of this Annual Report on Form 10-K.

EXELIXIS, INC.
ANNUAL REPORT ON FORM 10-K
INDEX

	Page
<u>PART I</u>	
Item 1. Business	2
Item 1A. Risk Factors	30
Item 1B. Unresolved Staff Comments	48
Item 2. Properties	49
Item 3. Legal Proceedings	49
Item 4. Mine Safety Disclosures	49
<u>PART II</u>	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	50
Item 6. Selected Financial Data	52
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	53
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	67
Item 8. Financial Statements and Supplementary Data	67
Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	107
Item 9A. Controls and Procedures	107
Item 9B. Other Information	109
<u>PART III</u>	
Item 10. Directors, Executive Officers and Corporate Governance	109
Item 11. Executive Compensation	109
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	110
Item 13. Certain Relationships and Related Transactions, and Director Independence	110
Item 14. Principal Accounting Fees and Services	110
<u>PART IV</u>	
Item 15. Exhibits, Financial Statement Schedules	111
Item 16. Form 10-K Summary	111
SIGNATURES	112

PART I

Some of the statements under the captions “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” and elsewhere in this Annual Report on Form 10-K are forward-looking statements. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry and involve known and unknown risks, uncertainties and other factors that may cause our company’s or our industry’s results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied in, or contemplated by, the forward-looking statements. Words such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “focus,” “goal,” “objective,” “will,” “may,” “would,” “could,” “estimate,” “predict,” “target,” “potential,” “continue,” “encouraging” or the negative of such terms or other similar expressions identify forward-looking statements. Our actual results and the timing of events may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such a difference include those discussed in “Item 1A. Risk Factors” as well as those discussed elsewhere in this Annual Report on Form 10-K. These and many other factors could affect our future financial and operating results. We undertake no obligation to update any forward-looking statement to reflect events after the date of this report.

We have adopted a 52- or 53-week fiscal year policy that generally ends on the Friday closest to December 31st. Fiscal year 2014, a 53-week year, ended on January 2, 2015; fiscal year 2015, a 52-week year, ended on January 1, 2016; fiscal year 2016, a 52-week year, ended on December 30, 2016; and fiscal year 2017, a 52-week year, will end on December 29, 2017. For convenience, references in this report as of and for the fiscal years ended January 2, 2015, January 1, 2016, and December 30, 2016 are indicated as being as of and for the years ended December 31, 2014, 2015, and 2016, respectively. The quarterly period ended January 2, 2015 is a 14-week fiscal quarter; all other interim periods presented are 13-week fiscal quarters.

ITEM 1. BUSINESS

Overview

Exelixis, Inc. (“Exelixis,” “we,” “our” or “us”) is a biopharmaceutical company committed to the discovery, development and commercialization of new medicines to improve care and outcomes for people with cancer. Since its founding in 1994, three products discovered at Exelixis have progressed through clinical development, received regulatory approval, and entered the commercial marketplace. Two are derived from cabozantinib, an inhibitor of multiple tyrosine kinases including MET, AXL, and VEGF receptors: CABOMETYX™ tablets approved for previously treated advanced kidney cancer and COMETRIQ® capsules approved for progressive, metastatic medullary thyroid cancer. The third product, Cotellic®, is a formulation of cobimetinib, a selective inhibitor of MEK, marketed under a collaboration with Genentech (a member of the Roche Group), and is approved as part of a combination regimen to treat advanced melanoma. Both cabozantinib and cobimetinib have shown potential in a variety of forms of cancer and are the subjects of broad clinical development programs.

The following is a summary of important information about our internally-discovered, marketed products:

- **CABOMETYX (cabozantinib)** was approved by the U.S. Food and Drug Administration, or FDA, on April 25, 2016, for the treatment of patients with advanced renal cell carcinoma, or RCC, who have received prior anti-angiogenic therapy. The European Commission, or EC, approved CABOMETYX on September 9, 2016 similarly for the treatment of advanced RCC in adults following prior vascular endothelial growth factor, or VEGF, targeted therapy. Outside the U.S. and Japan, CABOMETYX is being marketed by our collaboration partner Ipsen Pharma SAS, or Ipsen. Should CABOMETYX be approved in Japan, it will be marketed by our collaboration partner Takeda Pharmaceutical Company Limited, or Takeda. In 2016, we generated \$93.5 million in net product revenue from sales of CABOMETYX in the United States.
- **COMETRIQ (cabozantinib)**, our first marketed product, was approved by the FDA on November 29, 2012 for the treatment of patients with progressive, metastatic medullary thyroid carcinoma, or MTC. In March 2014, the EC granted COMETRIQ a similar, conditional marketing authorization for the treatment of adult patients with progressive, unresectable locally advanced or metastatic MTC. COMETRIQ is now commercialized in the European Union by Ipsen. In 2016, we generated \$39.4 million in net product revenue from sales of COMETRIQ in the United States and received \$2.5 million in product revenue from sales of COMETRIQ by our former distribution partner, Swedish Orphan Biovitrum, or Sobi. Cabozantinib has shown clinical anti-tumor activity in more than 20 forms of

cancer, so we are focused on advancing the broad cabozantinib clinical development program in order to advance commercial opportunities beyond advanced RCC and MTC. For additional information, see “Cabozantinib Development Program.”

- **Cotellic (cobimetinib)** was approved by the FDA on November 10, 2015, in combination with vemurafenib for the treatment of patients with BRAF V600E or V600K mutation-positive advanced melanoma in the United States. It has also been approved in combination with vemurafenib in multiple other territories including the European Union, Switzerland, Canada, Australia and Brazil. In 2016, we recognized \$2.8 million in collaboration revenue as a result of royalties on ex-U.S. sales of Cotellic and beginning in the fourth quarter of 2016, we also recognized a small net profit for our share of U.S. activities under the collaboration agreement. Genentech has an extensive clinical development program for this compound. For additional information on the cobimetinib development program, see “Cobimetinib Development Program.”

Our immediate business objective is to maximize the clinical and commercial potential of CABOMETYX, COMETRIQ and Cotellic. Over the course of 2016, the revenue generated from the sale of these products and from our collaboration agreements, coupled with disciplined expense management and reduced debt on our balance sheet, has created a capital structure upon which we believe Exelixis can grow in a sustainable manner. As a result, we believe we are increasingly well positioned to drive the expansion and depth of our product offerings through the continued development of cabozantinib, the measured resumption of internal drug discovery activities and the evaluation of in-licensing and acquisition opportunities that align with our oncology drug development expertise.

Recent Developments

Commercialization of CABOMETYX for Advanced RCC

The American Cancer Society’s 2016 statistics cite kidney cancer as among the ten most commonly diagnosed forms of cancer among both men and women in the United States. The second and later-line RCC market is large and growing; published studies suggest that the drug-eligible patient population encompasses approximately 17,000 individuals in the United States and 37,000 globally.

When the FDA approved our novel tyrosine kinase inhibitor, or TKI, CABOMETYX, in April 2016, we were prepared to engage with the advanced RCC treating community and bring CABOMETYX to market for the benefit of patients. Experienced and professional oncology sales, marketing, market access, and medical affairs teams were in place and our supply chain and distribution arrangements were substantially complete. Our educational efforts began to familiarize physicians with CABOMETYX’s unique product profile, although physicians were already largely familiar with the TKI class.

CABOMETYX is distinct from other approved treatment options for previously treated patients with advanced RCC because it is the first single agent therapy to demonstrate robust and clinically meaningful improvements in all three key efficacy parameters - overall survival, or OS, progression-free survival, or PFS, and objective response rate, or ORR - in that indication. The FDA recognized this during its regulatory review, when it granted CABOMETYX Fast Track and Breakthrough Therapy designations. For additional information about METEOR (Metastatic RCC Phase 3 Study Evaluating Cabozantinib vs. Everolimus), the phase 3 pivotal trial upon which the approval of CABOMETYX was based, see “Cabozantinib Development Program - Exelixis Sponsored Trials - RCC - METEOR.”

A review of the launch to date shows that physicians are rapidly adopting CABOMETYX, demonstrated by increasing demand and patients initiating therapy, despite the large number of competing products approved to treat advanced RCC. The clinical profile and initial success of CABOMETYX in the United States has enabled us to continue to attract top talent and further build commercial and medical affairs organizations of considerable size and experience. As a result, we believe that we are well positioned to support the growth of our development pipeline.

In Europe, Ipsen has made significant progress since September 2016, when the EC approved CABOMETYX tablets for the treatment of advanced RCC in adults following prior VEGF targeted therapy. By the end of 2016, Ipsen recorded its first commercial sales in Europe and is now preparing to potentially market CABOMETYX in all 28 member states of the European Union, Norway, Iceland, and elsewhere.

Establishment and Expansion of Global Partnerships for Cabozantinib

On February 29, 2016, we entered into a collaboration and license agreement with Ipsen, a specialty pharmaceutical company already engaged in the global distribution of oncology medicines. Our collaboration focuses on the further development of cabozantinib and provides Ipsen exclusive rights to commercialize current and potential future cabozantinib indications outside of the United States, Canada and Japan. On December 20, 2016, we agreed to add Canada to the Ipsen territories because Ipsen also has substantial business resources in that country. The upfront payments and regulatory milestones we received from Ipsen during 2016 were essential to our commercial success because they provided us with the financial resources to successfully commercialize CABOMETYX in the United States without having to access alternative sources of capital. For additional information on our collaboration with Ipsen, see “Collaborations - Cabozantinib Collaborations - Ipsen Collaboration.”

On January 30, 2017, we continued to advance the global development and commercialization of cabozantinib by entering into a collaboration and license agreement with Takeda for the commercialization and further clinical development of cabozantinib in Japan. Pursuant to the terms of the collaboration agreement, Takeda has exclusive commercialization rights for currently developed and potential future cabozantinib indications in Japan. The parties have also agreed to collaborate on the future clinical development of cabozantinib. For additional information on our collaboration with Takeda, see “Collaborations - Cabozantinib Collaborations - Takeda Collaboration.”

Submission Planning for Supplemental New Drug Application, or sNDA, for Cabozantinib as a Treatment for First-Line Advanced RCC

On May 23, 2016, we announced that CABOSUN, a randomized phase 2 trial of cabozantinib in patients with previously untreated advanced RCC being conducted by The Alliance for Clinical Trials in Oncology, or The Alliance, as part of our Cooperative Research and Development Agreement, or CRADA, with the National Cancer Institute’s Cancer Therapy Evaluation Program, or NCI-CTEP, met its primary endpoint, demonstrating a statistically significant and clinically meaningful improvement in PFS compared with sunitinib in patients with intermediate- or poor-risk disease. Based on these results, we are working towards the submission of a sNDA in 2017 for cabozantinib as a treatment for first-line advanced RCC. For additional information on the results of CABOSUN, see “Cabozantinib Development Program - Trials Conducted through our CRADA with NCI-CTEP and our IST Program - RCC - CABOSUN.”

Expanded Development and Commercialization of Cotellic

During 2016, our collaboration partner, Genentech, received additional approvals for Cotellic in combination with vemurafenib for the treatment of patients with unresectable or metastatic melanoma with a BRAF V600E mutation in multiple countries, including Australia and Brazil. Genentech also advanced the development program for cobimetinib during 2016, through the initiation and announcement of multiple phase 3 pivotal trials exploring the combination of cobimetinib with other targeted and immuno-oncology agents for the treatment of melanoma and colorectal cancer, or CRC. Cobimetinib has the potential to provide us with a meaningful second significant source of revenue. For additional information on the cobimetinib development program, see “Cobimetinib Development Program.”

Extinguishment of Convertible Debt

During 2016, we retired our 4.25% Convertible Senior Subordinated Notes due 2019, or the 2019 Notes. This was accomplished by first entering into privately negotiated exchange transactions pursuant to which \$239.4 million of the 2019 Notes were exchanged for an aggregate of approximately 45 million shares of our common stock and an aggregate cash payment of approximately \$2.4 million. Following completion of these exchange transactions, we issued a redemption notice for the remaining \$48.1 million of the outstanding 2019 Notes. As a result of the redemption, \$47.5 million of the 2019 Notes were converted into shares of our common stock and the remaining \$0.6 million of the 2019 Notes were redeemed in cash for 100% of the principal amount thereof, plus accrued and unpaid interest through the end of the redemption period. As a result of the successful completion of the exchange transactions and redemption of the 2019 Notes, we significantly reduced our outstanding debt and strengthened our capital structure to support potential future growth. For additional information on the exchange transactions and redemption of the 2019 Notes, see “Note 7, Debt,” to our Notes to Consolidated Financial Statements contained in Part II, Item 8 of this Annual Report on Form 10-K.

Evaluation of Cabozantinib in Combination with Immune-oncology Agents in Various Indications, Including a Phase 3 Trial in First Line Advanced RCC

Cabozantinib has demonstrated clinical activity as a single agent in advanced RCC, and we are interested in further examining its potential in combination with immunotherapies to treat this serious disease. Building on the available preclinical and clinical observations that suggest treatment with cabozantinib results in a more immune-permissive tumor environment potentially resulting in cooperative activity of cabozantinib in combination with immune check point inhibitors, in collaboration with Bristol Meyers Squibb Company, or BMS, we intend to evaluate the combination of cabozantinib with nivolumab or nivolumab and ipilimumab in various tumor types, including bladder cancer, hepatocellular carcinoma, or HCC, and a phase 3 trial in first-line advanced RCC. The combination of cabozantinib with nivolumab or nivolumab and ipilimumab is being evaluated in a phase 1b trial that has demonstrated an acceptable safety profile and clinical activity in patients with heavily pre-treated genitourinary malignancies, as reported at the European Society of Medical Oncology, or ESMO, 2016 Congress and, more recently at the 2017 Genitourinary Cancers Symposium. Additionally, we are planning to initiate a phase 1b trial with various expansion cohorts evaluating cabozantinib and atezolizumab, Roche's PD-L1 targeting antibody, in patients with advanced genitourinary malignancies, including RCC and bladder cancer. For additional information on our clinical collaboration agreements with BMS and Roche, see "Cabozantinib Development Program."

Resumption of Discovery Activities

We have recently resumed internal drug discovery efforts with the goal of identifying novel and promising therapeutic candidates to advance into clinical trials. From 2000 until 2012, we had an active Discovery group that advanced 22 compounds to Investigational New Drug, or IND stage, either independently or with collaboration partners, including cabozantinib and cobimetinib. We built a significant infrastructure, including a library of 4.6 million compounds, and gained extensive experience in the identification and optimization of drug candidates against multiple target classes for oncology, inflammation and metabolic diseases.

Our new discovery organization will leverage that history, but will be more focused and measured. We intend to concentrate our in-house work on the most sensitive and demanding aspects of lead optimization and use contract research organizations, or CROs, to support more routine activities, thereby minimizing our internal footprint while still maintaining an agile, competitive approach. We intend to be judicious in the selection of targets and focus on those with the most robust preclinical validation datasets. We anticipate that our experience and ability to identify high quality lead compounds through use of our proprietary compound library will permit us to prosecute competitive and productive discovery programs in areas of high potential.

Cabozantinib Development Program

Cabozantinib inhibits the activity of tyrosine kinases, including MET, AXL, VEGF receptors, and RET. These receptor tyrosine kinases are involved in both normal cellular function and in pathologic processes such as oncogenesis, metastasis, tumor angiogenesis, and maintenance of the tumor microenvironment. Objective tumor responses have been observed in patients treated with cabozantinib in more than 20 individual tumor types investigated in phase 1 and 2 clinical trials to date, reflecting the medicine's broad clinical potential. We are currently evaluating cabozantinib in a broad development program comprising over 45 ongoing or planned clinical trials across multiple indications. We are the sponsor of some of those trials, including CELESTIAL (Cabozantinib Phase 3 Controlled Study In Hepatocellular Carcinoma), our phase 3 pivotal trial comparing cabozantinib to placebo in patients with advanced HCC who had received previous treatment with sorafenib, with the remaining trials being conducted through our CRADA with NCI-CTEP or our investigator sponsored trial, or IST program. Beginning in February 2017, we also entered into individual clinical collaboration agreements with BMS and Roche, for the purpose of conducting clinical studies combining cabozantinib with BMS's PD-1 and CTLA-4 immune checkpoint inhibitors and Roche's anti-PD-L1 immunotherapy compound.

A select summary of our cabozantinib clinical development activities is below:

Indication	Combination Regimen	Status Update
Progressive, Metastatic Medullary Thyroid Cancer (MTC)		
		Approved in US and EU
		Post-marketing study (EXAMINER)
Renal Cell Carcinoma (RCC)		
Second-line		Approved in US and EU
First-line (intermediate- or poor-risk classification)		Preparing to file sNDA in 2017 based on results from CABOSUN† trial
First-line	+ nivolumab +/- ipilimumab	Phase 3 pivotal trial expected to begin in 2017, co-sponsored with Bristol-Myers Squibb
Hepatocellular Carcinoma		
Second-line		Phase 3 (CELESTIAL), data anticipated in 2017
Non-Small Cell Lung Cancer		
EGFR wild-type		Phase 2†
Molecular alterations in RET, ROS1, MET, AXL, or NTRK1		Phase 2*
Genitourinary Tumors, including Bladder and Urothelial Cancers		
Genitourinary tumors	+ nivolumab +/- ipilimumab	Phase 1†
Advanced solid tumors	+ atezolizumab	Phase 1B* trial to begin in 2017, planned cohorts in RCC and urothelial carcinoma
Signal Search Opportunities to Inform Potential Development		
Pancreatic neuroendocrine and carcinoid tumors		Phase 2*
Endometrial cancer		Phase 2†
Differentiated thyroid cancer		Phase 2*
Metastatic gastrointestinal stromal tumor		Phase 2 (CABOGIST)§
Breast cancer with brain metastases	+/- trastuzumab	Phase 2*
Metastatic, hormone-receptor-positive breast cancer	+ fulvestrant	Phase 2*
Metastatic, triple negative breast cancer		Phase 2*
Soft-tissue sarcomas		Phase 2†
High-grade uterine sarcomas		Phase 2§
Relapsed osteosarcoma or Ewing sarcoma		Phase 2†
Colorectal cancer	+/- panitumumab	Phase 1*

* Trial conducted through Exelixis' Investigator-Sponsored Trial program.

† Trial conducted through collaboration with NCI's Cancer Therapy Evaluation Program.

§ Trial sponsored by the European Organization for Research and Treatment of Cancer (EORTC).

Exelixis Sponsored Trials

MTC - EXAM

COMETRIQ's safety and efficacy were assessed in an international, multi-center, randomized double-blinded controlled trial of 330 patients with progressive, metastatic MTC, known as EXAM (Efficacy of XL184 (Cabozantinib) in Advanced Medullary Thyroid Cancer). Patients were required to have evidence of progressive disease within 14 months prior to study entry. This assessment was performed by an independent radiology review committee, or IRRC, in 89% of patients and by the treating physicians in 11% of patients. Patients were randomized 2:1 to receive COMETRIQ 140 mg (n = 219) or placebo (n = 111) orally, once daily until disease progression determined by the treating physician or until intolerable toxicity. Randomization was stratified by age (≤ 65 years vs. > 65 years) and prior use of a TKI. No cross-over was allowed at the time of progression. The primary endpoint was to compare PFS in patients receiving COMETRIQ versus patients receiving placebo. Secondary endpoints included ORR and OS. The main efficacy outcome measures of PFS, ORR and response duration were based on IRRC-confirmed events using modified Response Evaluation Criteria in Solid Tumors, or RECIST, which is a widely used set of rules that defines when cancer patients improve ("respond"), stay the same ("stabilize") or worsen ("progress") during treatments.

EXAM served as the basis for the regulatory approval of COMETRIQ in the United States and European Union. A statistically significant prolongation in PFS was demonstrated among COMETRIQ-treated patients compared to those receiving placebo [HR 0.28 (95% CI: 0.19-0.40); $p < 0.0001$], with median PFS of 11.2 months in the COMETRIQ arm and 4.0 months in the placebo arm. Partial responses, or PRs, were observed only among patients in the COMETRIQ arm (27% vs. 0%; $p < 0.0001$). The median duration of objective response was 14.7 months (95% CI: 11.1-19.3) for patients treated with COMETRIQ. The most commonly reported adverse drug reactions occurring in at least 25% of patients were diarrhea, stomatitis, palmar-plantar erythrodysesthesia syndrome, or PPES, decreased weight, decreased appetite, nausea, fatigue, oral pain, hair color changes, dysgeusia, hypertension, abdominal pain, and constipation. In November 2014, we announced completion of the OS analysis, the secondary endpoint of the study. Consistent with an earlier interim analysis, there was no statistically significant difference in OS between the treatment arms. The median OS was 26.6 months for the COMETRIQ arm and 21.1 months for the placebo arm (HR = 0.85; 95% CI 0.64-1.12; $p = 0.2409$). The subgroup analysis by RET M918T mutation status, a known negative prognostic factor in MTC, revealed a large improvement in OS of 25.4 months for COMETRIQ-treated patients positive for the RET M918T mutation; the median OS was 44.3 months for the COMETRIQ arm and 18.9 months for the placebo arm (HR = 0.60; 95% CI 0.38-0.95; $p = 0.026$, not adjusted for multiple subgroup testing). We presented the final results at the American Society of Clinical Oncology, or ASCO, 2015 Annual Meeting and submitted the results to regulatory authorities to satisfy post-marketing commitments.

In connection with the approval of COMETRIQ for the treatment of progressive, metastatic MTC, we were subject to post-marketing requirements, all of which have been satisfied, other than a requirement to conduct a clinical study comparing a lower dose of COMETRIQ with the labeled dose of 140 mg. This study is evaluating safety and PFS in progressive, metastatic MTC patients and is ongoing.

RCC - METEOR

In July 2015, we announced positive results of METEOR, a phase 3 pivotal trial comparing CABOMETYX to everolimus in patients with advanced RCC who have experienced disease progression following treatment with at least one prior VEGF receptor inhibitor. METEOR was initiated in May 2013. The trial was designed to enroll 650 patients at approximately 200 sites. Patients were stratified based on the number of prior VEGF receptor inhibitors received, and on commonly applied RCC risk criteria. Patients were randomized 1:1 to receive 60 mg of CABOMETYX daily or 10 mg of everolimus daily and no cross-over was allowed between the study arms. The METEOR trial was designed to provide adequate power to assess both the primary endpoint of PFS, and the secondary endpoint of OS. The trial protocol specified that the primary analysis of PFS would be conducted among the first 375 patients randomized while the secondary endpoint of OS would be conducted among all 650 patients randomized. This design was employed to ensure sufficient follow-up and a PFS profile that would not be primarily weighted toward early events. Such disproportionate weighting of events was a potential risk if the entire study population required for the secondary endpoint analysis of OS had also served as the population for the primary analysis of PFS. On September 26, 2015, *The New England Journal of Medicine* published the complete, detailed positive results from the primary analysis of METEOR, and these results were also presented during the Presidential Session I at the European Cancer Congress 2015. The trial met its primary endpoint, demonstrating a statistically significant increase in PFS for CABOMETYX, as determined by an IRRC among the first 375 patients enrolled. The median PFS was 7.4 months for the CABOMETYX arm versus 3.8 months for the everolimus arm, and the hazard ratio [HR] was

0.58 (95% confidence interval [CI] 0.45-0.75, $p < 0.001$), corresponding to a 42% reduction in the rate of disease progression or death for CABOMETYX compared to everolimus. The trial also showed that CABOMETYX significantly improved the ORR. The most commonly reported adverse drug reactions occurring in at least 25% of patients were diarrhea, fatigue, nausea, decreased appetite, PPES, hypertension, vomiting, weight decreased, and constipation.

A review of adverse events, or AEs, demonstrated that the frequency of AEs of any grade regardless of causality was approximately balanced between study arms, and the rate of treatment discontinuation due to adverse events was 9% and 10% for CABOMETYX and everolimus, respectively. With additional follow-up for OS, the study also met its secondary endpoint of OS as presented in June 2016 at the ASCO 2016 Annual Meeting and published in *Lancet Oncology*. Compared with everolimus, CABOMETYX was associated with a 34% reduction in the rate of death and median OS was 21.4 months for patients receiving CABOMETYX versus 16.5 months for those receiving everolimus (HR=0.66, 95% CI 0.53-0.83, $P=0.0003$).

In January 2016, an analysis of PFS among all 658 patients enrolled was presented at the 2016 Genitourinary Cancers Symposium, and revealed consistent results with the primary analysis showing a median PFS of 7.4 months for the CABOMETYX arm versus 3.9 months for the everolimus arm, and a HR of 0.52 (95% CI 0.43-0.64, $p < 0.001$), corresponding to a 48% reduction in the rate of disease progression or death for CABOMETYX as compared to everolimus. In addition, subgroup analyses for PFS showed consistent beneficial effect of CABOMETYX versus everolimus; subgroups included: ECOG performance status; commonly applied RCC risk groups as described by Motzer et al.; organ involvement, including bone and visceral metastases and overall tumor burden; extent and type of prior VEGF receptor inhibitor therapy; and prior PD-1/PD-L1 therapy. For patients without prior PD-1/PD-L1 therapy, median PFS was 7.4 months for CABOMETYX and 3.9 months for everolimus (HR = 0.54, 95% CI 0.44-0.66). For patients who had received prior PD-1/PD-L1 therapy, the median PFS for CABOMETYX was not reached, and the median PFS for everolimus was 4.1 months (HR = 0.22, 95% CI 0.07-0.65). Subgroup analyses for ORR also showed consistent benefit for CABOMETYX as compared to everolimus.

On the basis of the data from the METEOR trial, CABOMETYX was approved by the FDA for the treatment of patients with advanced RCC following prior antiangiogenic therapy, and by the EC for the treatment of advanced RCC in adults following prior VEGF targeted therapy.

HCC - CELESTIAL

Published studies indicate that an estimated 700,000 new cases of HCC present each year worldwide, with 39,000 of these cases in the United States. While patients with localized disease may be candidates for surgery or other therapies such as embolization, treatment options for advanced disease are limited. Currently, sorafenib is the only approved agent for the first line treatment of advanced, unresectable HCC. However, patients typically progress despite sorafenib treatment, at which point there is no approved therapy available to them. While a number of VEGF receptor targeting agents have been tested in phase 2/3 trials in the post-sorafenib setting, only one phase 3 trial has shown positive results. In 2016 results from a study comparing regorafenib and placebo in the second line treatment of HCC has reported positive results and data are currently under review by regulatory agencies. Thus, second-line advanced HCC still represents an area of substantial unmet medical need.

MET is the tyrosine kinase receptor for hepatocyte growth factor, and plays a crucial role in liver development and regeneration. Expression of MET is elevated in HCC, particularly in metastatic HCC, and high MET levels are associated with reduced OS and resistance to sorafenib treatment. In preclinical models, upregulation of MET has been shown to drive escape from VEGF receptor inhibition, and to promote an increase in invasion and metastasis. Consistent with this, treatment of HCC patients with sorafenib can result in increases in tumor MET expression. These findings provide a strong parallel with the RCC setting, where high levels of MET expression and activation are also associated with poor prognosis and resistance to and escape from first-line treatment with VEGF receptor inhibitors.

We believe that targeting both MET and VEGF receptors with cabozantinib in HCC may provide benefit in second-line HCC by maintaining VEGF receptor inhibition while also inhibiting MET-driven oncogenic and resistance pathways. In an initial test of this hypothesis, a cohort of HCC patients, including a subset whose disease had progressed despite prior sorafenib treatment, was enrolled in our phase 2 randomized discontinuation trial. Based on the encouraging data that emerged from this trial, we launched CELESTIAL, our phase 3 pivotal trial comparing cabozantinib to placebo in patients with advanced HCC who had received previous treatment with sorafenib. The trial is designed to enroll 760 patients at up to 200 sites. Patients are being randomized 2:1 to receive 60 mg of cabozantinib daily or placebo. The primary endpoint for CELESTIAL is OS, and the secondary endpoints include ORR and PFS. In September 2016, following the first planned

interim analysis for CELESTIAL, the trial's Independent Data Monitoring Committee, or IDMC, determined that the study should continue without modifications per the study protocol. We anticipate top-line results from CELESTIAL in 2017.

Trials Conducted Under our Clinical Collaboration Agreements

Bladder Cancer, HCC and First-Line Advanced RCC - Combination Studies with BMS

Building on the available preclinical and clinical observations that cabozantinib results in a more immune-permissive tumor environment potentially resulting in cooperative activity of cabozantinib in combination with immune check point inhibitors, in February 2017, we entered into a clinical trial collaboration agreement with BMS for the purpose of evaluating the combination of cabozantinib with nivolumab or cabozantinib with nivolumab and ipilimumab in various tumor types, including, in a planned phase 3 trial in first-line advanced RCC, and in potential additional trials in bladder cancer and HCC. Pursuant to the terms of the collaboration agreement, each party will grant to the other a non-exclusive, worldwide (within the collaboration territory as defined in the collaboration agreement), non-transferable, royalty-free license to use the other party's compounds in the conduct of each clinical trial. The parties' efforts will be governed through a joint development committee established to guide and oversee the collaboration's operation. Each trial will be conducted under a combination IND application, unless otherwise required by a regulatory authority. Each party will be responsible for supplying drug product for the applicable clinical trial and costs for each such trial will be shared equally between the parties, unless two BMS compounds will be utilized in such trial, in which case BMS will bear two-thirds of the costs for such study treatment arms and we will bear one-third of the costs. Unless earlier terminated, the collaboration agreement shall remain in effect until the completion of all clinical trials under the collaboration, all related trial data has been delivered to both parties and the completion of any then agreed upon analysis. The collaboration agreement may be terminated for cause by either party based on uncured material breach by the other party, bankruptcy of the other party or for safety reasons. Upon termination by either party, the licenses granted to each party to conduct a combined therapy trial will terminate.

Locally Advanced or Metastatic Solid Tumors - Combination Study with Roche

We are also planning to initiate a phase 1b dose escalation study that will evaluate the safety and tolerability of cabozantinib in combination with Roche's atezolizumab in patients with locally advanced or metastatic solid tumors. Based on the dose-escalation results, the trial has the potential to enroll up to four expansion cohorts, including a cohort of patients with previously untreated advanced clear cell RCC and three cohorts of urothelial carcinoma, namely platinum eligible first-line patients, first or second-line platinum ineligible patients and patients previously treated with platinum-containing chemotherapy. Enrollment for this trial is scheduled to begin mid-year 2017. We will be the sponsor of the trial, and Roche will provide atezolizumab.

Trials Conducted through our CRADA with NCI-CTEP and our IST Program

In October 2011, we entered into a CRADA with NCI-CTEP for the clinical development of cabozantinib. Through our CRADA with NCI-CTEP and our IST program we have been able to expand the cabozantinib development program dramatically while avoiding over-burdening our internal development resources. Our CRADA reflects a major commitment by NCI-CTEP to support the broad exploration of cabozantinib's potential in a wide variety of cancers, each representing a substantial unmet medical need. Through this mechanism, NCI-CTEP provides funding for as many as 20 active clinical trials of cabozantinib each year for a five-year period. The term of the CRADA was extended in October 2016 for an additional five-year period through October 2021, provided, that both parties maintain the right to terminate the CRADA for any reason upon sixty days' notice, an uncured material breach upon thirty days' notice and immediately for safety concerns. IND applications for trials under the CRADA are held by NCI-CTEP. NCI-CTEP also retains rights to any inventions made in whole or in part by NCI-CTEP investigators. However, for inventions that claim the use and/or the composition of cabozantinib, we have an automatic option to elect a worldwide, non-exclusive license to cabozantinib inventions for commercial purposes, with the right to sublicense to affiliates or collaborators working on our behalf, as well as an additional, separate option to negotiate an exclusive license to cabozantinib inventions. Further, before any trial proposed under the CRADA may commence, the protocol is subject to our review and approval, and the satisfaction of certain other conditions. We believe our CRADA with NCI-CTEP has and will enable us to continue to expand the cabozantinib development program broadly in a cost-efficient manner.

RCC - CABOSUN

In October 2016, we announced detailed results from CABOSUN, a randomized phase 2 trial of cabozantinib in patients with previously untreated advanced RCC with intermediate- or poor-risk disease conducted by The Alliance under our CRADA with NCI-CTEP. CABOSUN was a randomized, open-label, active-controlled phase 2 trial that enrolled 157 patients with advanced RCC. Patients were randomized 1:1 to receive cabozantinib (60 mg once daily) or sunitinib (50 mg once daily, 4 weeks on followed by 2 weeks off). The primary endpoint was PFS. Secondary endpoints included OS and ORR. Eligible patients were required to have locally advanced or metastatic clear-cell RCC, ECOG performance status 0-2, and had to be intermediate or poor risk per the International Metastatic Renal Cell Carcinoma Database Consortium, or IMDC, criteria (Heng, *Journal of Clinical Oncology*, 2009).

CABOSUN met its primary endpoint, demonstrating a statistically significant and clinically meaningful improvement in PFS compared with sunitinib. With a median follow-up of 21.4 months, cabozantinib demonstrated a 34 percent reduction in the rate of disease progression or death [HR 0.66, 95% CI (0.46-0.95), one-sided P=0.012]. The median PFS for cabozantinib was 8.2 months versus 5.6 months for sunitinib, corresponding to a 2.6 months (46 percent) improvement favoring cabozantinib over sunitinib. PFS benefits were independent of the IMDC risk group (intermediate or poor risk) and presence or absence of bone metastases at baseline. The results for sunitinib were in line with a previously published retrospective analysis of 1,174 intermediate- and poor-risk RCC patients from the IMDC database, which documented a median PFS of 5.6 months with a first-line targeted therapy, mainly sunitinib, in this patient population. ORR was also significantly improved, at 46 percent (95% CI 34% - 57%) for cabozantinib versus 18 percent (95% CI 10% to 28%) for sunitinib. With a median follow-up of 22.8 months, median OS was 30.3 months for cabozantinib versus 21.8 months for sunitinib [HR 0.80, 95% CI (0.50 - 1.26)]. The most common grade 3 or 4 adverse events with cabozantinib were hypertension (28%), diarrhea (10%), palmar-plantar erythrodysesthesia (8%), and fatigue (6%); with sunitinib, they were hypertension (22%), fatigue (15%), diarrhea (11%), and thrombocytopenia (11%). Grade 5 adverse events occurred in four patients (5%) in the cabozantinib group and five patients (7%) in the sunitinib group. Treatment-related grade 5 events occurred in three patients in the cabozantinib group (acute kidney injury, sepsis, and jejunal perforation) and three patients in the sunitinib group (sepsis, respiratory failure, and vascular disorders). The rate of treatment discontinuation because of adverse events was 20% (n = 16) and 21% (n = 16) in the cabozantinib and sunitinib groups, respectively.

Based on these results, we plan to submit a sNDA for cabozantinib as a treatment of first-line advanced RCC, and are working with The Alliance so that we can develop the appropriate regulatory filings.

Advanced Genitourinary Tumors

Results from a phase 1 trial of cabozantinib in combination with nivolumab in patients with previously treated genitourinary tumors being conducted under our CRADA with NCI-CTEP were first presented at the ESMO 2016 Congress in October 2016 and recently updated at the 2017 Genitourinary Cancers Symposium in February 2017.

Between July 22, 2015 and December 31, 2016, 48 patients were accrued with previously treated metastatic urothelial carcinoma, or mUC, (n=19), urachal adenocarcinoma (n=4), squamous cell carcinoma of the bladder or urethra (n=2), germ cell tumor (n=4), castration-resistant prostate cancer (n=9), RCC (n=4), trophoblastic tumor (n=1), sertoli cell tumor (n=1) or penile squamous cell carcinoma (n=4) and treated in two parts. In Part I, 30 patients were treated with the doublet combination of cabozantinib and nivolumab at four dose levels. In Part II, 18 patients were treated with the triplet combination of cabozantinib, nivolumab and ipilimumab at three dose levels.

Among the 43 patients who were evaluable for response, the ORR for all tumor types was 30% (38% for the doublet dosing schedule and 18% for the triplet dosing schedule) with a 7% complete response, or CR, rate and a 23% PR rate. Stable disease, or SD, was reported in 56% of patients. The ORR for patients with mUC was 38%, and 2 of 16 patients achieved a CR, while 2 patients with squamous cell carcinoma of the bladder had objective responses (1 CR and 1 PR). In the mUC cohort, 15 of 16 patients had a CR, PR or SD as their best response.

Grade 3 adverse events (>5% of patients) observed in the doublet combination included neutropenia (17%), hypophosphatemia (13%), hypertension (10%), lipase increase (7%), fatigue (7%), diarrhea (7%) and dehydration (7%). Grade 3 adverse events (>5% of patients) observed in the triplet combination included hypertension (17%), hypophosphatemia (17%), fatigue (13%), hyponatremia (13%), lipase increase (13%), nausea (13%) and rash (6%). There were limited numbers of grade 4 adverse events (10% including thrombocytopenia and lipase increase in the doublet combination, and 6% (lipase increase) in the triplet combination), and no grade 5 adverse events observed in either part of the trial.

The recommended doses for the ongoing expansion cohorts were determined to be cabozantinib 40 mg daily plus nivolumab 3 mg/kg once every 2 weeks for the doublet and cabozantinib 40 mg daily, nivolumab 3 mg/kg plus ipilimumab 1 mg/kg every 3 weeks for 4 doses, then nivolumab 3 mg/kg every 2 weeks for the triplet.

We believe these promising early stage clinical findings support further investigation of cabozantinib in combination with nivolumab and other immune checkpoint inhibitors in a number of genitourinary tumors.

Non-Small Cell Lung Cancer (NSCLC)

In November 2014, we announced positive top-line results from a randomized phase 2 trial of cabozantinib and erlotinib alone or in combination as second- or third-line therapy in patients with stage IV EGFR wild-type NSCLC. This trial (Study E1512) was sponsored through our CRADA with NCI-CTEP and was conducted by the ECOG-ACRIN Cancer Research Group. It enrolled 125 patients with EGFR wild-type metastatic NSCLC who had received at least one or two prior chemotherapy regimens; of these, 111 patients were evaluable for efficacy and 118 patients were evaluable for safety. Patients were randomized 1:1:1 to receive erlotinib (150 mg daily), cabozantinib (60 mg daily), or the combination of erlotinib plus cabozantinib (150 mg plus 40 mg daily).

The positive results from this trial were reported at the ASCO 2015 Annual Meeting on May 31, 2015, and subsequently published online in *Lancet Oncology* on November 4, 2016. The study met its primary endpoint, demonstrating significant increases in PFS for cabozantinib and the combination of cabozantinib plus erlotinib when individually compared to the erlotinib arm. The median PFS for the combination of cabozantinib and erlotinib was 4.7 months versus 1.8 months for erlotinib alone, a more than two-fold increase. The HR was 0.37 (80% CI 0.25-0.53, $p=0.0003$), which corresponds to a 63% reduction in the rate of disease worsening. The median PFS for cabozantinib monotherapy was 4.3 months versus 1.8 months for erlotinib alone, and the HR was 0.39 (80% CI 0.27-0.55, $p=0.0003$), corresponding to a 61% reduction in the rate of disease worsening. OS was a secondary endpoint of the trial. Median OS was 13.3 months for the combination of cabozantinib and erlotinib, and 9.2 months for cabozantinib alone, as compared to 5.1 months for erlotinib alone. When individually compared to the erlotinib arm, HR for OS was 0.51 ($p=0.011$), corresponding to a 49% reduction in the rate of death for the combination of cabozantinib plus erlotinib, and 0.68 ($p=0.071$), corresponding to a 32% reduction in the rate of death for the cabozantinib monotherapy arm. ORR, another secondary endpoint, was 3% for the combination arm (1 PR), 11% (4 PRs) for the cabozantinib monotherapy arm, and 3% (1 PR) for the erlotinib arm. SD as a best response was observed in 46% of patients in the combination arm and 50% in the cabozantinib monotherapy arm, compared with 16% in the erlotinib arm. One hundred and nineteen patients were evaluable for safety. The most common treatment-related adverse events, or AEs, grade 3 or higher, for the combination arm ($n=39$) were: diarrhea (28%), fatigue (15%), and anorexia (8%). For the cabozantinib monotherapy arm, the most common AEs, grade 3 or higher, were: hypertension (25%), fatigue (15%), mucositis (10%), diarrhea (8%), and thromboembolic events (8%). The most common AEs, grade 3 or higher, for the erlotinib arm were fatigue (13%) and diarrhea (8%). Overall, the rate of grade 3 or higher adverse events was 72% in the combination arm, 70% in the cabozantinib monotherapy arm, and 33% in the erlotinib arm.

Informed by these clinical results, we are working with clinical collaborators to explore cabozantinib's further development in NSCLC, including potential combination approaches with immuno-oncology agents.

Other Cancer Indications

Other clinical trials approved to date under the CRADA include the following:

- Phase 2 or phase 1/2 clinical trials to help prioritize future pivotal trials of cabozantinib in disease settings where there is substantial unmet medical need and in which cabozantinib has previously demonstrated clinical activity, consisting of randomized phase 2 clinical trials in ocular melanoma, prostate cancer and second/third line EGFR-wt NSCLC;
- Additional phase 2 or phase 1/2 clinical trials to explore cabozantinib's potential utility in other tumor types, including endometrial cancer, bladder cancer, sarcomas, NSCLC (EGFR-activating mutation positive), differentiated thyroid cancer, triple-negative breast cancer, hormone-receptor-positive breast cancer, cutaneous melanoma (molecularly selected patients), pancreatic neuroendocrine and carcinoid tumors. Positive results in these indications could lead to further study in randomized phase 2 or phase 3 clinical trials; and
- Additional phase 1 clinical trials to further evaluate cabozantinib, consisting of a combination trial of cabozantinib and immuno-oncology agents (nivolumab with or without ipilimumab) in genitourinary tumors,

a trial to evaluate the safety and pharmacokinetics of cabozantinib in pediatric patients, and a trial of cabozantinib in patients with advanced solid tumors and human immunodeficiency virus.

In addition to supporting the further development of cabozantinib, our medical affairs department receives and responds to unsolicited physician inquiries with appropriate scientific and medical information, supports scientific presentations and publications, and oversees the IST process. Like our CRADA with NCI-CTEP, our IST program helps us to continue to evaluate cabozantinib across a broad range of tumor types, including NSCLC, bladder cancer, melanoma, breast cancer, differentiated thyroid cancer and others, to support further prioritization of our clinical and commercial options. Currently there are 25 active IST or CTEP trials and 16 trials are in advanced planning stage.

Cobimetinib Development Program

In addition to the advances made under our cabozantinib development program, significant progress continues to be made with respect to the clinical development, regulatory status and commercial potential of cobimetinib. Cobimetinib is a potent, highly selective inhibitor of MEK, a kinase that is a component of the RAS/RAF/MEK/ERK pathway. This pathway mediates signaling downstream of growth factor receptors, and is prominently activated in a wide variety of human tumors. Cobimetinib is being evaluated in a broad development program by Genentech.

A select summary of Genentech’s ongoing cobimetinib development activities, all of which are sponsored by Roche/Genentech, is provided below:

Indication	Combination Regimen	Status Update
Metastatic or Unresectable Locally Advanced Melanoma		
BRAF mutation-positive	+ vemurafenib	Approved in US, EU and other territories
First-line BRAF mutation-positive	+ atezolizumab + vemurafenib	Phase 3 (IMspire150 TRILOGY)
First-line BRAF wild-type	+ atezolizumab	Phase 3 (IMspire170) planned for 2017
Colorectal Cancer		
Third-line advanced or metastatic disease	+ atezolizumab	Phase 3 (IMblaze370)
Second/third-line metastatic disease	+ atezolizumab + bevacizumab	Phase 1
Breast Cancer		
First-line metastatic triple negative disease	+ taxane +/- atezolizumab	Phase 1/2 (COLET)

Melanoma - coBRIM

In July 2014, we announced positive top-line results from coBRIM, the phase 3 pivotal trial conducted by Genentech evaluating cobimetinib in combination with vemurafenib in previously untreated patients with unresectable locally advanced or metastatic melanoma harboring a BRAF V600E or V600K mutation. Data were subsequently presented at European Society for Medical Oncology in September 2014. The trial met its primary endpoint of demonstrating a statistically significant increase in investigator-determined PFS. The median PFS was 9.9 months for the combination of cobimetinib and vemurafenib versus 6.2 months for vemurafenib alone (HR=0.51, 95 percent CI 0.39-0.68; p<0.0001), demonstrating the combination reduced the risk of the disease worsening by half (49 percent). The median PFS as established by an IRRC, a secondary endpoint, was 11.3 months for the combination arm compared to 6.0 months for the control arm (HR=0.60, 95 percent CI 0.45-0.79; p=0.0003). ORR, another secondary endpoint, was 68% for the combination versus 45% for vemurafenib alone (p<0.0001). Updated results for PFS and ORR from coBRIM were presented at the ASCO 2015 Annual Meeting and showed a median PFS of 12.3 months for vemurafenib plus cobimetinib versus 7.2 months for vemurafenib alone (HR=0.58, 95 percent CI 0.46-0.72) and an ORR of 70% for the combination of vemurafenib and cobimetinib versus 50% for vemurafenib alone. In November 2015, we announced that the coBRIM trial also met its OS secondary endpoint, demonstrating a statistically significant increase in OS for the combination of cobimetinib and vemurafenib compared to vemurafenib monotherapy. The median OS was 22.3 months for the combination of cobimetinib and vemurafenib versus 17.4 months for vemurafenib alone, corresponding to a 30% reduction in the rate of death for the combination as compared to vemurafenib alone (HR=0.70, 95 percent CI 0.55-0.90, p= 0.005). The safety profile of the

combination was consistent with that observed in a previous study. The most common adverse drug reactions for COTELLIC occurring in at least 20% of patients were diarrhea, photosensitivity reaction, nausea, pyrexia, and vomiting.

CoBRIM served as the basis for the regulatory approval of Cotellic in combination with Zelboraf as a treatment for patients with BRAF V600E or V600K mutation-positive advanced melanoma in the United States, Switzerland, the European Union, Canada, Australia, Brazil and other countries.

CRC - IMblaze370

In June 2016, Genentech initiated IMblaze370, a phase 3 pivotal trial evaluating the combination of cobimetinib and atezolizumab, an anti-PD-L1 antibody, or atezolizumab alone versus regorafenib, in unresectable locally advanced or metastatic CRC patients who have received at least two lines of prior cytotoxic chemotherapy. IMblaze370 was informed by results from Genentech's ongoing phase 1b trial of the same combination in advanced CRC.

The trial is designed to enroll 360 patients who have received at least two prior chemotherapies in the metastatic disease setting. The primary endpoint of the trial is OS.

Melanoma - IMspire150 TRILOGY and IMspire170

In January 2017, Genentech initiated IMspire150 TRILOGY, a phase 3 pivotal trial evaluating the combination of cobimetinib, vemurafenib and atezolizumab vs. cobimetinib plus vemurafenib in previously untreated BRAF V600 mutation positive patients with metastatic or unresectable locally advanced melanoma. This trial was based on the results of Genentech's ongoing phase 1b trial in the same patient population. The trial is designed to enroll 500 patients, and the primary endpoint is PFS.

Genentech has also plans to initiate IMspire170, a phase 3 trial comparing cobimetinib plus atezolizumab to pembrolizumab in previously untreated BRAF WT patients with metastatic or unresectable locally advanced melanoma in the second quarter of 2017. IMspire170 was based on the results of Genentech's ongoing phase 1b trial in the same patient population. The trial is designed to enroll 500 patients with primary endpoints of PFS and OS.

Other Cancer Indications

In addition to coBRIM, IMblaze370 and TRILOGY, additional clinical trials are ongoing studying the combination of cobimetinib with a variety of agents in multiple tumor types. These include:

- The combination of cobimetinib and vemurafenib in additional melanoma patient populations and settings;
- A phase 2 trial of cobimetinib in combination with taxanes, with or without atezolizumab in first line triple negative breast cancer (COLET);
- Phase 1 studies of cobimetinib in combination with atezolizumab in melanoma and NSCLC, in combination with vemurafenib and atezolizumab in melanoma, and in combination with venetoclax in relapsed or refractory acute myeloid leukemia; and
- A phase 1b study evaluating the safety, tolerability and pharmacokinetics of cobimetinib in combination with atezolizumab and bevacizumab in patients with metastatic CRC.

A complete listing of all ongoing cobimetinib trials can be found at www.ClinicalTrials.gov.

XL888

XL888 is an Exelixis-discovered highly potent small molecule oral inhibitor of Heat Shock Protein 90 (HSP90), a molecular chaperone protein that affects the activity and stability of a range of key regulatory proteins, including kinases such as BRAF, MET and VEGFR2, which are implicated in cancer cell proliferation and survival. After completing phase 1 testing of the compound, we deprioritized XL888 and our other pipeline assets to focus our limited resources on our lead compound, cabozantinib. Investigators at the H. Lee Moffitt Cancer Center went on to conduct additional preclinical work showing activity of XL888 in vemurafenib-resistant melanoma models, the results of which provided the rationale for the initiation of an investigator-sponsored phase 1 trial conducted by investigators at the Moffitt Cancer Center.

In November 2014, we announced positive preliminary results from this phase 1 trial, which evaluated the safety and activity of XL888 in combination with vemurafenib in patients with unresectable stage III/IV BRAF V600 mutation-

positive melanoma. The primary endpoint of the trial was to determine the safety and tolerability of the combination, including determination of a maximum tolerated dose, or MTD, for XL888. Secondary endpoints included ORR (RECIST-1 criteria), estimates of PFS and OS, and analysis of pharmacodynamic biomarkers. The trial had enrolled fifteen subjects, and at the time of data cut-off, objective tumor regression was observed in 11 of 12 response-evaluable patients (two CRs and nine PRs), for an ORR of 92%. Safety data for the combination identified tolerable dose levels of XL888 with full dose vemurafenib.

Based on these results, as well as findings from coBRIM, the phase 3 pivotal trial of cobimetinib, an Exelixis-discovered MEK inhibitor, and vemurafenib in previously untreated metastatic melanoma patients with a BRAF V600E or V600K mutation, investigators at the Moffitt Cancer Center initiated a phase 1b IST of the triple combination of vemurafenib, cobimetinib, and XL888 in a similar patient population during the second quarter of 2016.

Collaborations

We have established collaborations with Ipsen and Takeda for cabozantinib, Genentech for cobimetinib, and other collaborations with leading pharmaceutical companies including, Daiichi Sankyo Company Limited, or Daiichi Sankyo, Merck (known as MSD outside of the United States and Canada), BMS, and Sanofi for compounds and programs in our portfolio. Under each of our collaborations, we are entitled to receive milestones and royalties or, in the case of cobimetinib, a share of profits (or losses) from commercialization.

Cabozantinib Collaborations

Ipsen Collaboration

In February 2016, we entered into a collaboration and license agreement with Ipsen for the commercialization and further development of cabozantinib. Pursuant to the terms of the collaboration agreement, Ipsen received exclusive commercialization rights for current and potential future cabozantinib indications outside of the United States, Canada and Japan. The collaboration agreement was subsequently amended in December 2016 to include commercialization rights in Canada. We have also agreed to collaborate with Ipsen on the development of cabozantinib for current and potential future indications. The parties' efforts are governed through a joint steering committee and appropriate subcommittees established to guide and oversee the collaboration's operation and strategic direction; provided, however, that we retain final decision-making authority with respect to cabozantinib's ongoing development.

In consideration for the exclusive license and other rights contained in the collaboration agreement, Ipsen paid us an upfront payment of \$200.0 million in March 2016. Additionally, as a result of the amendment to the collaboration agreement, we received a \$10.0 million upfront payment from Ipsen in December 2016. As a result of the approval of cabozantinib in second-line RCC by the EC in September 2016, we received a \$60.0 million milestone payment in November 2016. We are also eligible to receive additional development and regulatory milestone payments, totaling up to \$254.0 million, including, milestone payments of \$10.0 million and \$40.0 million upon the filing and the approval of cabozantinib in second-line HCC with the European Medicines Agency, or EMA, and additional milestone payments for other future indications and/or jurisdictions. In the fourth quarter of 2016 we earned two \$10.0 million milestone payments for the first commercial sales of CABOMETYX in Germany and the United Kingdom. The collaboration agreement also provides that we will be eligible to receive contingent payments of up to \$544.7 million associated with the achievement of specified levels of Ipsen sales to end users. We will also receive royalties on net sales of cabozantinib outside of the United States and Japan. We will receive a 2% royalty on the initial \$50.0 million of net sales, and a 12% royalty on the next \$100.0 million of net sales. After the initial \$150.0 million of sales, we will receive a tiered royalty of 22% to 26% on annual net sales; these tiers will reset each calendar year. We are primarily responsible for funding cabozantinib related development costs for existing trials; global development costs for potential future trials are shared between the parties, provided Ipsen opts in to participate in such trials, with Ipsen to reimburse us for 35% of such costs. Ipsen has opted to participate in and co-fund in accordance with our collaboration agreement the future first line RCC phase 3 study evaluating cabozantinib in combination with the immune checkpoint inhibitors nivolumab and ipilimumab that we are planning in collaboration with BMS, as well as the phase 1b trial evaluating cabozantinib in combination with atezolizumab in genitorinary malignancies that we are planning to initiate mid-year. We remain responsible for the manufacture and supply of cabozantinib for all development and commercialization activities under the collaboration agreement. As part of the collaboration agreement, we entered into a supply agreement that provides that through the end of the second quarter of 2018, we will supply finished, labeled product to Ipsen for distribution in the territories outside of the United States and Japan. From the end of the second quarter of 2018 forward, we will continue to manufacture cabozantinib tablets and capsules while Ipsen will be responsible for packaging and labeling the products in territories where they have been approved outside of the United States and Japan, as applicable.

Unless terminated earlier, the collaboration agreement has a term that continues, on a product-by-product and country-by-country basis, until the latter of (i) the expiration of patent claims related to cabozantinib, (ii) the expiration of regulatory exclusivity covering cabozantinib or (iii) ten years after the first commercial sale of cabozantinib, other than COMETRIQ. The collaboration agreement may be terminated for cause by either party based on uncured material breach by the other party, bankruptcy of the other party or for safety reasons. We may terminate the collaboration agreement if Ipsen challenges or opposes any patent covered by the collaboration agreement. Ipsen may terminate the collaboration agreement if the FDA or EMA orders or requires substantially all cabozantinib clinical trials to be terminated or if the EMA refuses to approve our marketing authorization application, or MAA, for cabozantinib in advanced RCC in such region. Ipsen also has the right to terminate the collaboration agreement on a region-by-region basis after the first commercial sale of cabozantinib in advanced RCC in the given region. Upon termination by either party, all licenses granted by us to Ipsen will automatically terminate, and, except in the event of a termination by Ipsen for our material breach, the licenses granted by Ipsen to us shall survive such termination and shall automatically become worldwide, or, if Ipsen terminated only for a particular region, then for the terminated region. Following termination by us for Ipsen's material breach, or termination by Ipsen without cause or because we undergo a change of control by a party engaged in a competing program, Ipsen is prohibited from competing with us for a period of time.

Takeda Collaboration

In January 2017, we entered into a collaboration and license agreement with Takeda for the commercialization and further clinical development of cabozantinib in Japan. Pursuant to the terms of the collaboration agreement, Takeda has exclusive commercialization rights for currently developed and potential future cabozantinib indications in Japan. The parties have also agreed to collaborate on the future clinical development of cabozantinib in Japan. The parties' efforts are governed through a joint executive committee and appropriate subcommittees established to guide and oversee the collaboration's operation and strategic direction.

In consideration for the exclusive license and other rights contained in the collaboration agreement, we received a \$50.0 million upfront payment from Takeda in February 2017. We are eligible to receive development, regulatory and first-sales milestone payments of up to \$95.0 million related to second-line RCC, first-line RCC and second-line HCC, as well as additional development, regulatory and first-sales milestones payments for potential future indications. The collaboration agreement also provides that we are eligible to receive pre-specified payments of up to \$83.0 million associated with potential sales milestones. We will also receive royalties on net sales of cabozantinib in Japan at an initial tiered rate of 15% to 24% on net sales for the first \$300.0 million of cumulative net sales. Thereafter, the royalty rate will be adjusted to 20% to 30% on annual net sales.

Takeda is responsible for 20% of the costs associated with the global cabozantinib development plan, provided Takeda opts in to participate in such trials, and 100% of costs associated with the cabozantinib development activities that are exclusively for the benefit of Japan. Pursuant to the terms of the collaboration agreement, we remain responsible for the manufacture and supply of cabozantinib for all development and commercialization activities under the collaboration. As part of the collaboration, the parties intend to enter into a supply agreement covering the manufacture and supply of cabozantinib to Takeda and a quality agreement setting forth in detail the quality assurance arrangements and procedures for our manufacture of cabozantinib.

Unless earlier terminated, the collaboration agreement has a term that continues, on a product-by-product basis, until the earlier of (i) two years after first generic entry with respect to such product in Japan or (ii) the later of (A) the expiration of patent claims related to cabozantinib and (B) the expiration of regulatory exclusivity covering cabozantinib in Japan. The collaboration agreement may be terminated for cause by either party based on uncured material breach by the other party, bankruptcy of the other party or for safety reasons. For clarity, Takeda's failure to achieve specified levels of commercial performance, based upon sales volume and/or promotional effort, during the first six years of the collaboration shall constitute a material breach of the collaboration agreement. We may terminate the agreement if Takeda challenges or opposes any patent covered by the collaboration agreement. At any time prior to August 1, 2023, the parties may mutually agree to terminate the collaboration agreement if Japan's Pharmaceuticals and Medical Devices Agency is unlikely to grant approval of the MAA in any cancer indication in Japan. After the commercial launch of cabozantinib in Japan, Takeda may terminate the collaboration agreement upon twelve months' prior written notice following the third anniversary of the first commercial sale of cabozantinib in Japan. Upon termination by either party, all licenses granted by us to Takeda will automatically terminate, and the licenses granted by Takeda to us shall survive such termination and shall automatically become worldwide.

Cobimetinib Collaboration

In December 2006, we out-licensed the development and commercialization of cobimetinib to Genentech pursuant to a worldwide collaboration agreement. Genentech paid upfront and milestone payments of \$25.0 million in December 2006 and \$15.0 million in January 2007 upon signing of the collaboration agreement and with the submission of the IND application for cobimetinib. Under the terms of the collaboration agreement, we were responsible for developing cobimetinib through the determination of the maximum-tolerated dose, or MTD in a phase 1 clinical trial, and Genentech had the option to co-develop cobimetinib, which Genentech could exercise after receipt of certain phase 1 data from us. In March 2008, Genentech exercised its option to co-develop cobimetinib, triggering a payment to us of \$3.0 million. In March 2009, we granted to Genentech an exclusive worldwide revenue-bearing license to cobimetinib, at which point Genentech became responsible for completing the phase 1 clinical trial and subsequent clinical development. We received an additional \$7.0 million payment in March 2010 and are not eligible for any additional milestone payments.

Under the terms of our collaboration agreement with Genentech for cobimetinib, we are entitled to a share of U.S. profits and losses received in connection with commercialization of cobimetinib. The profit share has multiple tiers: we are entitled to 50% of profits and losses from the first \$200.0 million of U.S. actual sales, decreasing to 30% of profits and losses from U.S. actual sales in excess of \$400.0 million. In addition, we are entitled to low double-digit royalties on ex-U.S. net sales. In November 2013, we exercised an option under the collaboration agreement to co-promote in the U.S. The FDA approved cobimetinib in the U.S. under the brand name Cotellic on November 10, 2015. Cotellic is indicated in combination with Zelboraf as a treatment for patients with BRAF V600E or V600K mutation-positive advanced melanoma. Following FDA approval of Cotellic in November 2015, we began fielding 25% of that product sales force. Cotellic in combination with Zelboraf has also been approved in Switzerland, the European Union, Canada, Australia, Brazil and multiple additional countries for use in the same indication.

We believe that cobimetinib has the potential to provide us with a second significant source of revenue. Our objective, therefore, is and has been to work with Genentech on the execution of the U.S. Cotellic commercial plan in order to maximize the product's revenue potential. However, we believe Genentech's pricing of, and cost and revenue allocations for, Cotellic, as determined exclusively by Genentech, have been contrary to the applicable terms of the collaboration agreement. We raised this concern with Genentech, along with other material concerns regarding Genentech's performance under the collaboration agreement, but were unable to come to resolution on any of these issues. Accordingly, on June 3, 2016, following a 30 day dispute resolution period, we filed a demand for arbitration asserting claims against Genentech related to its clinical development, pricing and commercialization of Cotellic, and cost and revenue allocations in connection with Cotellic's commercialization in the United States. On July 13, 2016, Genentech asserted a counterclaim for breach of contract seeking monetary damages and interest related to the cost allocations under the collaboration agreement. On December 29, 2016, Genentech withdrew its counterclaim against us and stated that it would unilaterally change its approach to allocation of promotional expenses arising from commercialization of the Cotellic plus Zelboraf combination therapy, both retrospectively and prospectively. We believe this revised allocation approach substantially reduced our exposure to costs associated with promotion of the Cotellic plus Zelboraf combination in the United States. Notwithstanding Genentech's change of approach, other significant issues remain in dispute between the parties. Genentech's action does not address the claims in our demand for arbitration related to Genentech's clinical development of cobimetinib, or pricing and promotional costs for Cotellic in the United States, nor does it fully resolve claims over revenue allocation. And, Genentech has not clarified how it intends to allocate promotional costs incurred with respect to the promotion of other combination therapies that include cobimetinib for other indications that will be developed or are in development and may be approved. As a result, we will continue to press our position for the arbitral panel to obtain a just resolution of these claims. The ultimate outcome of the arbitration is difficult to predict.

Unless earlier terminated, the collaboration agreement has a term that continues until the expiration of the last payment obligation with respect to the licensed products under the collaboration. Genentech has the right to terminate the collaboration agreement without cause at any time. If Genentech terminates the collaboration agreement without cause, all licenses that were granted to Genentech under the agreement terminate and revert to us. Additionally, if Genentech terminates the collaboration agreement without cause, or we terminate the collaboration agreement for cause, we would receive, subject to certain conditions, licenses from Genentech to research, develop and commercialize reverted product candidates. The collaboration agreement may be terminated for cause by either party based on uncured material breach by the other party.

Other Collaborations

Prior to the commercialization of our first product, COMETRIQ, our primary business strategy was focused on the development and out-license of compounds to pharmaceutical and biotechnology companies under collaboration agreements

that allowed us to retain economic participation in compounds and support additional development of our proprietary products. Our collaboration agreements with Daiichi Sankyo, Merck, BMS and Sanofi are representative of this historical strategy. We have since evolved and are now a fully-integrated biopharmaceutical company focused on maximizing the clinical and commercial potential of CABOMETRYX, COMETRIQ and Cotellic. While our historical collaboration agreements described below have the potential to provide meaningful future revenue in the aggregate, we do not expect to receive substantial revenues from these historical collaboration agreements unless and until our partnered compounds enter late-stage clinical development and/or receive marketing approval from the FDA, if ever, when the milestone payments, royalties or other rights and benefits under our historical collaboration agreements become more substantial and material to our business.

With respect to our partnered compounds, other than cabozantinib and cobimetinib, we are eligible to receive potential contingent payments totaling approximately \$2.2 billion in the aggregate on a non-risk adjusted basis, of which 9% are related to clinical development milestones, 42% are related to regulatory milestones and 49% are related to commercial milestones, all to be achieved by the various collaborators, which may not be paid, if at all, until certain conditions are met. Since we do not control the research, development or commercialization of any of our other partnered compounds that would generate these milestones, we are not able to reasonably estimate when, if at all, any milestone payments or royalties may be payable by our collaborators. In addition, most of the collaborations for our other partnered compounds are at early stages of development. Successfully developing a product candidate, obtaining regulatory approval and ultimately commercializing it is a significantly lengthy and highly uncertain process which entails a significant risk of failure. In addition, business combinations, changes in a collaborator's business strategy and financial difficulties or other factors could result in a collaborator abandoning or delaying development of a partnered compound. As such, the remaining potential contingent payments associated with our historical collaboration agreements involve a substantial degree of risk to achieve and may never be received. Accordingly, we do not expect, and investors should not assume, that we will receive all of the potential contingent payments described above and it is possible that we may never receive any additional significant milestone or other payments under these historical collaboration agreements.

Daiichi Sankyo

In March 2006, we entered into a collaboration agreement with Daiichi Sankyo for the discovery, development and commercialization of novel therapies targeted against the mineralocorticoid receptor, or MR, a nuclear hormone receptor implicated in a variety of cardiovascular and metabolic diseases. Under the terms of the agreement, we granted to Daiichi Sankyo an exclusive, worldwide license to certain intellectual property primarily relating to compounds that modulate MR, including CS-3150/esaxerenone (a specific rotational isomer of XL550). Daiichi Sankyo is responsible for all further preclinical and clinical development, regulatory, manufacturing and commercialization activities for the compounds and we do not have rights to reacquire such compounds, except as described below.

During the research term, which concluded in November 2007, we jointly identified drug candidates with Daiichi Sankyo for further development. For each product from the collaboration, we are entitled to receive payments upon attainment of pre-specified development, regulatory and commercialization milestones. To date, we have received an aggregate of \$25.5 million in development milestone payments related to CS-3150, an oral, non-steroidal, selective mineralocorticoid receptor antagonist, including a \$15.0 million milestone payment in October 2016 in connection with the initiation of a phase 3 pivotal trial to evaluate CS-3150 as a treatment for essential hypertension in Japanese patients. We are eligible to receive additional development, regulatory and commercialization milestone payments of up to \$130.0 million. In addition, we are also entitled to receive royalties on any sales of certain products commercialized under the collaboration. Daiichi Sankyo may terminate the agreement upon ninety days' written notice in which case Daiichi Sankyo's payment obligations would cease, its license relating to compounds that modulate MR would terminate and revert to us and we would receive, subject to certain terms and conditions, licenses from Daiichi Sankyo to research, develop and commercialize compounds that were discovered under the collaboration.

Merck

In December 2011, we entered into an agreement with Merck pursuant to which we granted Merck an exclusive worldwide license to our phosphoinositide-3 kinase-delta, or PI3K-d, program, including XL499 and other related compounds. Pursuant to the terms of the agreement, Merck has sole responsibility to research, develop, and commercialize compounds from our PI3K-d program. In July 2015 we received a \$3.0 million milestone payment from Merck in connection with Merck's selection of a compound from our PI3K-d program to advance into clinical trials and in April 2016, we received a milestone payment of \$5.0 million in connection with the initiation of a phase 1 clinical trial for the compound. We will be eligible to receive additional payments associated with the successful achievement of potential development and regulatory

milestones for multiple indications of up to \$231.0 million. We will also be eligible to receive payments for combined sales performance milestones of up to \$375.0 million and royalties on net-sales of products emerging from the agreement.

Merck may at any time, upon specified prior notice to us, terminate the license. In addition, either party may terminate the agreement for the other party's uncured material breach. In the event of termination by Merck at will or by us for Merck's uncured material breach, the license granted to Merck would terminate. In the event of a termination by us for Merck's uncured material breach, we would receive a royalty-free license from Merck to develop and commercialize certain joint products. In the event of termination by Merck for our uncured material breach, Merck would retain the licenses from us, and we would receive reduced royalties from Merck on commercial sales of products.

Bristol-Myers Squibb - ROR Collaboration Agreement

In October 2010, we entered into a worldwide collaboration with BMS pursuant to which each party granted to the other certain intellectual property licenses to enable the parties to discover, optimize and characterize ROR antagonists that may subsequently be developed and commercialized by BMS. Under the terms of the collaboration agreement, we were responsible for activities related to the discovery, optimization and characterization of the ROR antagonists during the collaborative research period which began on October 8, 2010 and ended on July 8, 2013. Since the end of the collaborative research period, BMS has and will continue to have sole responsibility for any further research, development, manufacture and commercialization of products developed under the collaboration and will bear all costs and expenses associated with those activities.

For each product developed by BMS under the collaboration, we will be eligible to receive payments upon the achievement by BMS of development and regulatory milestones. In February 2017, we received a \$2.5 million development milestone payment in connection with the achievement of certain preclinical milestones set forth in the collaboration agreement. We are eligible for additional development and regulatory milestone payment of up to \$250.0 million in the aggregate and commercialization milestones of up to \$150.0 million in the aggregate, as well as royalties on commercial sales of any such products.

The collaboration agreement was amended and restated in April 2011 in connection with an assignment of patents to a wholly-owned subsidiary. BMS may, at any time, terminate the collaboration agreement upon certain prior notice to us on a product-by-product and country-by-country basis. In addition, either party may terminate the agreement for the other party's uncured material breach. In the event of termination by BMS at will or by us for BMS's uncured material breach, the license granted to BMS would terminate, the right to such product would revert to us and we would receive a royalty-bearing license for late-stage reverted compounds and a royalty-free license for early-stage reverted compounds from BMS to develop and commercialize such product in the related country. In the event of termination by BMS for our uncured material breach, BMS would retain the right to such product, subject to continued payment of milestones and royalties.

Bristol-Myers Squibb - LXR Collaboration

In December 2005, we entered into a collaboration agreement with BMS for the discovery, development and commercialization of novel therapies targeted against LXR, a nuclear hormone receptor implicated in a variety of cardiovascular and metabolic disorders. The collaboration agreement became effective in January 2006, at which time we granted BMS an exclusive worldwide license with respect to certain intellectual property primarily relating to compounds that modulate LXR, including BMS-852927 (XL041). During the research term, we jointly identified drug candidates with BMS that were ready for IND-enabling studies. After the selection of a drug candidate for further clinical development by BMS, BMS agreed to be solely responsible for further preclinical development as well as clinical development, regulatory, manufacturing and sales/marketing activities for the selected drug candidate. We do not have rights to reacquire the drug candidates selected by BMS. The research term expired in January 2010 and we transferred the technology to BMS in 2011 to enable it to continue the LXR program. BMS has terminated development of XL041 and we have been advised that BMS is continuing additional preclinical research on the program. The collaboration agreement was amended and restated in April 2011 in connection with an assignment of patents to a wholly-owned subsidiary.

Under the collaboration agreement, BMS is required to pay us contingent amounts associated with development and regulatory milestones of up to \$53.0 million per product for up to two products from the collaboration. In addition, we are also entitled to receive payments associated with sales milestones of up to \$310.0 million and royalties on sales of any products commercialized under the collaboration.

Sanofi

In May 2009, we entered into a global license agreement with Sanofi for SAR245408 (XL147) and SAR245409 (XL765), leading inhibitors of phosphoinositide-3 kinase, or PI3K, and a broad collaboration for the discovery of inhibitors of PI3K for the treatment of cancer. The license agreement and collaboration agreement became effective on July 7, 2009. Under the license agreement, Sanofi received a worldwide exclusive license to SAR245408 (XL147) and SAR245409 (XL765), which entered into a series of phase 1, phase 1b/2 or phase 2 clinical trials, and has sole responsibility, including funding, for all subsequent clinical, regulatory, commercial and manufacturing activities. We were notified by Sanofi that the initial clinical trials involving XL147 or XL765 have been terminated or are in the process of concluding, and that Sanofi is still considering whether to initiate any further trials. We will be eligible to receive contingent payments associated with development, regulatory and commercial milestones under the license agreement of \$745.0 million in the aggregate, as well as royalties on sales of any products commercialized under the license. Sanofi may, upon certain prior notice to us, terminate the license as to products containing SAR245408 (XL147) and SAR245409 (XL765). In the event of such termination election, Sanofi's license relating to such product would terminate and revert to us, and we would receive, subject to certain terms, conditions and potential payment obligations, licenses from Sanofi to research, develop and commercialize such products.

In December 2011, we entered into an agreement with Sanofi pursuant to which the parties terminated the discovery collaboration agreement and released each other from any potential liabilities arising under the collaboration agreement prior to effectiveness of the termination in December 2011. Each party retains ownership of the intellectual property that it generated under the collaboration agreement, and we granted Sanofi covenants not-to-enforce with respect to certain of our intellectual property rights. If either party or its affiliate or licensee develops and commercializes a therapeutic product containing an isoform-selective PI3K inhibitor that arose from such party's work (or was derived from such work) under the collaboration agreement, then such party will be obligated to pay royalties to the other party based upon the net sales of such products. The termination agreement provides that Sanofi will make a one-time payment to us upon the first receipt by Sanofi or its affiliate or licensee of marketing approval for the first therapeutic product containing an isoform-selective PI3K inhibitor that arose from Sanofi's work (or was derived from such work) under the collaboration agreement.

Manufacturing and Product Supply

We do not own or operate manufacturing or distribution facilities or resources for clinical or commercial production and distribution of CABOMETYX and COMETRIQ. Instead, we have multiple contractual agreements in place with third party contract manufacturing organizations, or CMOs, who, on our behalf, manufacture clinical and commercial supplies of CABOMETYX and COMETRIQ, and will continue to do so for the foreseeable future. We have selected well-established and reputable global CMOs for our drug substance and drug product manufacturing that have good regulatory standing, large manufacturing capacities, and multiple manufacturing sites within their business footprint. We also have contracted with a third party logistics provider, with two distribution locations, to provide shipping and warehousing services for our commercial supply of both CABOMETYX and COMETRIQ in the United States. We employ highly skilled personnel with both technical and manufacturing experience to diligently manage the activities at our CMOs. Our quality department audits these suppliers on a periodic basis. Our commercial suppliers are subject to routine inspections by regulatory agencies. We work closely with our third party manufacturers to ensure compliance with current good manufacturing practices, or cGMP, and other stringent regulatory requirements enforced by the FDA or foreign regulatory agencies in other territories, as applicable.

We source raw materials that are used to manufacture our drug substance from multiple third-party suppliers in Asia and Europe. We stock sufficient quantities of these materials and provide them to our third party drug substance contract manufacturers to ensure they can manufacture adequate drug substance quantities per our requirements, for both clinical and commercial purposes. We store drug substance at third party facilities, and provide appropriate amounts to our third party drug product contract manufacturers who then manufacture, package and label our specified quantities of finished goods for COMETRIQ and CABOMETYX, respectively. Our third-party contract manufacturers also need to obtain materials such as excipients, components and reagents to manufacture our drug substance and finished drug products.

Within our supply chain, we have established safety stock amounts for both our drug substance and drug products, and store these quantities in multiple locations. The quantities that we store are based on our business needs and take into account scenarios for market demand, production lead times, potential supply interruptions and shelf life for our drug substance and drug products. In parallel, for business continuity reasons, we are in the process of evaluating and expect to establish additional suppliers for our drug substance and drug product manufacturers in the near future. We believe that our current manufacturing network has the appropriate capacity to produce sufficient commercial quantities of CABOMETYX to

support the current approved indication of advanced RCC, as well as potential indications of first-line RCC and second line HCC, if those indications prove to be successful and gain regulatory approval in the future.

Marketing, Sales and Distribution

We have a fully integrated commercial team consisting of sales, marketing, market access, and commercial operations functions. Our sales team promotes CABOMETYX and COMETRIQ in the United States, and we co-promote Cotellic in association with Genentech. We use customary pharmaceutical company practices to market our products and concentrate our efforts on oncologists, oncology nurses and pharmacists. While we have expanded our U.S. distribution and pharmacy channels in connection with the approval of CABOMETYX by the FDA, we still rely on a relatively limited distribution network to dispense COMETRIQ in fulfillment of prescriptions in the United States. Furthermore, we rely on Ipsen and Takeda for the commercialization and distribution of CABOMETYX and COMETRIQ in territories outside of the United States, as well as for access and distribution activities for the approved products under our named patient use, or NPU, program. We also rely on Genentech, as our collaboration partner for Cotellic, for all commercialization and marketing activities, with the exception of the limited co-promotion activities highlighted above.

To help ensure that all eligible patients in the United States have appropriate access to CABOMETYX and COMETRIQ, we have established a comprehensive reimbursement and support program called Exelixis Access Services, or EASE. Through EASE, we provide co-pay assistance to qualified, commercially insured patients to help minimize out-of-pocket costs and provide free drug to uninsured or under-insured patients who meet certain clinical and financial criteria. In addition, EASE is designed to provide comprehensive reimbursement support services, such as prior authorization support, benefits investigation and, if needed, appeals support.

Seasonal Operations and Backlog

Sales of our marketed products do not reflect any significant degree of seasonality.

The markets in which we operate are characterized by short lead times and the absence of significant backlogs. We do not believe that backlog information is material to our business as a whole.

Environment, Health and Safety

In support of the development and expansion of our product pipeline, we have resumed discovery activities. Our research and development processes involve the controlled use of certain hazardous materials and chemicals. We are subject to federal, state and local environmental, health and workplace safety laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous materials and waste products. While we have incurred, and may continue to incur, expenditures to ensure we are in compliance with these laws and regulations, we do not expect the cost of complying with these laws and regulations to be material.

Government Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacture and marketing of pharmaceutical products. These agencies and other federal, state and local entities regulate, among other things, research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, distribution, export, import, record keeping, approval, advertising and promotion of our products.

The process required by the FDA before product candidates may be marketed in the United States generally involves the following:

- preclinical laboratory and animal tests that must be conducted in accordance with Good Laboratory Practices;
- submission of an IND, which must become effective before clinical trials may begin;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed drug candidate for its intended use;
- submission of a New Drug Application, or NDA, to FDA for commercial marketing, or of a sNDA, for approval of a new indication if the product is already approved for another indication;
- pre-approval inspection of manufacturing facilities and selected clinical investigators for their compliance with Good Manufacturing Practices, or GMP, and Good Clinical Practices, or GCP;
- if FDA convenes an advisory committee, satisfactory completion of the advisory committee review; and
- FDA approval of the NDA or sNDA.

The testing and approval process requires substantial time, effort and financial resources. Prior to commencing the first clinical trial with a product candidate, we must submit an IND to the FDA. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the clinical trial. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Submission of an IND may not result in FDA authorization to commence a clinical trial. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development. Further, an independent institutional review board for each medical center proposing to conduct the clinical trial must review and approve the plan for any clinical trial and provide its informed consent form before the trial commences at that center. Regulatory authorities or an institutional review board or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

For purposes of NDA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- Phase 1 - Studies, which involve the initial introduction of an IND into humans, are initially conducted in a limited number of subjects to test the product candidate for safety, dosage tolerance, absorption, metabolism, distribution and excretion in healthy humans or patients.
- Phase 2 - Studies are conducted with groups of patients afflicted with a specified disease in order to provide enough data to evaluate the preliminary efficacy, optimal dosages and expanded evidence of safety. Multiple phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive phase 3 clinical trials. Phase 2 studies are typically well controlled, closely monitored, and conducted in a relatively small number of patients, usually involving no more than several hundred subjects. In some cases, a sponsor may decide to run what is referred to as a “phase 2b” evaluation, which is a second, confirmatory phase 2 trial that could, if positive, serve as a pivotal trial in the approval of a product candidate.
- Phase 3 - When phase 2 evaluations demonstrate that a dosage range of the product is effective and has an acceptable safety profile, phase 3 trials are performed to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the drug and to provide an adequate basis for physician labeling. Phase 3 trials are undertaken in large patient populations to further evaluate dosage, to provide replicate statistically significant evidence of clinical efficacy and to further test for safety in an expanded patient population at multiple clinical trial sites.

The FDA may require, or companies may pursue, additional clinical trials after a product is approved. These so-called phase 4 studies may be made a condition to be satisfied after a drug receives approval. Failure to satisfy such post-marketing commitments can result in FDA enforcement action, up to and including withdrawal of NDA approval. The results of phase 4 studies can confirm the effectiveness of a product candidate and can provide important safety information to augment the FDA’s adverse drug reaction reporting system. The results of product development, preclinical studies and clinical trials are submitted to the FDA as part of an NDA, or as part of an sNDA. The submission of an NDA or sNDA requires payment of a substantial user fee to the FDA. The FDA may convene an advisory committee to provide clinical insight on NDA review questions. Although the FDA is not required to follow the recommendations of an advisory committee, the agency usually does so. The FDA may deny approval of an NDA or sNDA by way of a Complete Response letter if the applicable regulatory criteria are not satisfied, or it may require additional clinical data and/or an additional pivotal phase 3 clinical trial. Even if such data are submitted, the FDA may ultimately decide that the NDA or sNDA does not satisfy the criteria for approval. An NDA may be approved with significant restrictions on its labeling, marketing and

distribution under a Risk Evaluation and Mitigation Strategy. Once issued, the FDA may withdraw product approval if ongoing regulatory standards are not met or if safety problems occur after the product reaches the market. In addition, the FDA may require testing and surveillance programs to monitor the effect of approved products that have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs.

Satisfaction of FDA requirements or similar requirements of state, local and foreign regulatory agencies typically takes several years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. Government regulation may delay or prevent marketing of product candidates or new diseases for a considerable period of time and impose costly procedures upon our activities. The FDA or any other regulatory agency may not grant approvals for new indications for our product candidates on a timely basis, if at all. Success in early stage clinical trials does not ensure success in later stage clinical trials. Targets and pathways identified in vitro may be determined to be less relevant in clinical studies and results in animal model studies may not be predictive of human clinical results. Data obtained from clinical activities is not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. Even if a product candidate receives regulatory approval, the approval may be significantly limited to specific disease states, patient populations and dosages. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market.

Any products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including record-keeping requirements and reporting of adverse experiences with the drug. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with GMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers.

The FDA closely regulates the marketing and promotion of drugs, including restricting the promotion of uses for which a drug is not approved by the agency. Not only must a company have appropriate substantiation to support claims made about a drug, under the FDA's current interpretation of the relevant laws, a company can make only those claims relating to safety and efficacy that are for indications for which FDA has approved the drug and that are otherwise consistent with the FDA-approved label for the drug. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may, in their independent medical judgment, prescribe legally available drugs for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturers' communications on the subject of off-label use. Additionally, a significant number of pharmaceutical companies have been the target of inquiries and investigations by various U.S. federal and state regulatory, investigative, prosecutorial and administrative entities in connection with the promotion of products for off-label uses and other sales practices. These investigations have alleged violations of various U.S. federal and state laws and regulations, including claims asserting antitrust violations, violations of the Food, Drug and Cosmetic Act, false claims laws, the Prescription Drug Marketing Act, anti-kickback laws, and other alleged violations in connection with the promotion of products for unapproved uses, pricing and Medicare and/or Medicaid reimbursement.

In the United States, the Orphan Drug Act of 1983, as amended, is intended to incentivize the development of drugs and biological products for rare diseases or conditions that affect fewer than 200,000 people in the U.S. (or that affects more than 200,000 persons in the U.S. and for which there is no reasonable expectation that the cost of developing and making available the drug in the U.S. for such disease or condition will be recovered from sales of the drug in the U.S.). If a drug is being developed for a rare disease or condition, to be eligible for designation as an orphan drug, the FDA must not have previously approved a drug considered the "same drug" for the same orphan indication. If the FDA has previously approved another same drug for the same indication, to obtain orphan drug designation, the sponsor of the subsequent drug would be required to provide a plausible hypothesis of clinical superiority over the previously approved drug to obtain an orphan designation. Upon FDA receipt of Orphan Drug Designation, the sponsor is eligible for tax credits of up to 50% for qualified clinical trial expenses, the ability to apply for grant funding, and waiver of the Prescription Drug User Fee Act application fee. In addition, upon marketing approval, an orphan-designated drug could be eligible for seven years of market exclusivity for the approved orphan-designated indication. Such orphan drug exclusivity, if awarded, would only block the approval of any drug considered the same drug for the same orphan indication. Moreover, a subsequent same drug could break a previously approved drug's orphan exclusivity through a demonstration of clinical superiority over the previously approved drug.

The FDA has various programs, including Fast Track, priority review and accelerated approval, which are intended to expedite or simplify the process for developing and reviewing promising drugs, or to provide for the approval of a drug on the basis of a surrogate endpoint. Generally, drugs that are eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs and those that offer meaningful benefits over existing treatments. For example, Fast Track is a process designed to facilitate the development and expedite the review of drugs to treat serious or life-threatening diseases or conditions and fill unmet medical needs. Priority review is designed to give drugs that treat serious conditions and that offer major advances in treatment or provide a treatment where no adequate therapy exists an initial review within six months of NDA filing as compared to a standard review time of 10 months from NDA filing. Certain other types of drug applications are also eligible for priority review. Although Fast Track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a Fast Track designated drug and expedite review of the application for a drug designated for priority review. Accelerated approval provides for an earlier approval for a new drug that is intended to treat a serious or life-threatening disease or condition and that fills an unmet medical need based on a surrogate endpoint. As a condition of approval, the FDA may require that a sponsor of a product candidate receiving accelerated approval perform post-marketing clinical trials to confirm the clinically meaningful outcome as predicted by the surrogate marker trial. In addition to the Fast Track, accelerated approval and priority review programs, the FDA also designates Breakthrough Therapy status to drugs that are intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Drugs designated as breakthrough therapies are also eligible for accelerated approval. The FDA will seek to ensure the sponsor of a breakthrough therapy product candidate receives: intensive guidance on an efficient drug development program; intensive involvement of senior managers and experienced staff on a proactive, collaborative and cross-disciplinary review; and rolling review.

Additional programs intended to expedite the development of drug products were included in the recently enacted 21st Century Cures Act, or the Cures Act. Signed into law on December 13, 2016, the Cures Act includes various provisions to accelerate the development and delivery of new treatments, such as those intended to expand the types of evidence manufacturers may bring to the FDA to support drug approval, to encourage patient-centered drug development, to liberalize the communication of healthcare economic information, or HCEI, to payers, and to create greater transparency with regard to manufacturer expanded access programs. Central to the Cures Act are provisions that enhance and accelerate the FDA's processes for reviewing and approving new drugs and supplements to approved NDAs, including provisions that:

- require the FDA to establish a program to evaluate the potential use of real world evidence to help to support the approval of a new indication for an approved drug and to help to support or satisfy post-approval study requirements;
- provide that the FDA may rely upon qualified data summaries to support the approval of a supplemental application with respect to a qualified indication for an already approved drug;
- require FDA to issue guidance for purposes of assisting sponsors in incorporating complex adaptive and other novel trial designs into proposed clinical protocols and applications for new drugs; and
- require FDA to establish a process for the qualification of drug development tools for use in supporting or obtaining FDA approval for or investigational use of a drug.

As to dissemination of HCEI, the Cures Act amends Section 114 of the Food and Drug Administration Modernization Act of 1997 to help clarify and facilitate the dissemination of HCEI, including by broadening the definition of HCEI, expressly extending the dissemination of HCEI to payors, and clarifying that HCEI must only “relate” to an FDA-approved indication rather than “directly” relate to the indication.

The Hatch-Waxman Act

The Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, established two approval pathways for drug products in which potential competitors may rely upon the FDA's prior approval of the same or similar drug product.

ANDA. An abbreviated new drug application, or ANDA, may be approved by the FDA if the applicant demonstrates that the proposed product is the same as the approved drug, which is referred to as the “reference listed drug,” or RLD. Generally, an ANDA must contain data and information showing that the proposed generic product and RLD (1) have the same active ingredient, in the same strength and dosage form, to be delivered via the same route of administration, (2) are

intended for the same uses, and (3) are bioequivalent. This is instead of independently demonstrating the proposed product's safety and effectiveness, which are inferred from the fact that the product is the same as the RLD, which the FDA previously found to be safe and effective. Furthermore, conducting bioequivalence testing is generally less time consuming and costly than conducting a full set of clinical trials in humans.

505(b)(2) NDAs. A 505(b)(2) application is one for which one or more of the investigations relied upon by the applicant for approval were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. Under Section 505(b)(2) of the Food, Drug, and Cosmetic Act, or FDCA, an applicant may rely, in part, on the FDA's previous approval of a similar product, or published literature, in support of its application. If the 505(b)(2) applicant establishes that reliance on FDA's prior findings of safety and efficacy for an approved product is scientifically appropriate, it may eliminate the need to conduct certain preclinical or clinical studies. The FDA may require additional studies or measurements, including comparability studies.

Unlike a full NDA for which the sponsor has conducted or obtained a right of reference to all the data essential to approval, the filing of both an ANDA application and a 505(b)(2) application may be delayed due to patent or exclusivity protections covering an approved product. The Hatch-Waxman Act provides five years of data exclusivity for the first approval of a new chemical entity, and three years of data exclusivity for supplemental applications containing clinical studies essential to the approval of the sNDA.

Orange Book Listing. An NDA sponsor must identify to the FDA patents that claim the drug substance or drug product or approved method of using the drug. When the drug is approved, those patents are among the information about the product that is listed in the FDA publication, *Approved Drug Products with Therapeutic Equivalence Evaluations*, which is referred to as the *Orange Book*. Any applicant who files an ANDA or a 505(b)(2) NDA must certify, for each patent listed in the Orange Book for the RLD that (1) no patent information on the drug product that is the subject of the application has been submitted to the FDA, (2) such patent has expired, (3) the listed patent will expire on a particular date and approval is sought after patent expiration, or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. The fourth certification described above is known as a Paragraph IV certification. A notice of the Paragraph IV certification must be provided to each owner of the patent that is the subject of the certification and to the reference NDA holder. The reference NDA holder and patent owners may initiate a patent infringement lawsuit in response to the Paragraph IV notice. Filing such a lawsuit within 45 days of the receipt of the Paragraph IV certification notice prevents the FDA from approving the ANDA or 505(b)(2) NDA until the earlier of 30 months, expiration of the patent, settlement of the lawsuit, or a decision in the infringement case that is favorable to the ANDA or 505(b)(2) applicant. The ANDA or 505(b)(2) application also will not be approved until any applicable non-patent exclusivity listed in the Orange Book for the RLD has expired.

Regulation Outside of the United States

In addition to regulations in the United States, we are subject to regulations of other countries governing clinical trials and the manufacturing, commercial sales and distribution of our products outside of the United States. Whether or not we obtain FDA approval for a product, we must obtain approval by the comparable regulatory authorities of countries outside of the United States before we can commence clinical trials in such countries and approval of the regulators of such countries or economic areas, such as the European Union, before we may market products in those countries or areas. The approval process and requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from place to place, and the time may be longer or shorter than that required for FDA approval.

Under European Union regulatory systems, a company may submit MAAs either under a centralized or decentralized procedure. Under the centralized procedure, MAAs are submitted to the EMA whose Committee for Medicinal Products for Human Use reviews the application and issues an opinion on it. The opinion is considered by the EC which is responsible for deciding applications. If the application is approved, the EC grants a single marketing authorization that is valid for all European Union member states as well as Iceland, Liechtenstein and Norway, or the EEA. The national authorization procedures, the decentralized and mutual recognition procedures, as well as national applications, are available for products for which the centralized procedure is not compulsory. The mutual recognition procedure provides for the European Union member states selected by the applicant to mutually recognize a national marketing authorization that has already been granted by the competent authority of another member state, referred to as the Reference Member State, or RMS. The decentralized procedure is used when the product in question has yet to be granted a marketing authorization in any member state. Under this procedure the applicant can select the member state that will act as the RMS. In both the mutual recognition and decentralized procedures, the RMS reviews the application and submits its assessment of the application to the member states where marketing authorizations are being sought, referred to as Concerned Member States or CMS. Within

90 days of receiving the application and assessment report, each CMS must decide whether to recognize the RMS assessment. If a member state does not agree with the assessment, and the disputed points cannot be resolved the matter is eventually referred to the EC, whose decision is binding on all member states. If the application is successful national marketing authorizations will be granted by the competent authorities in each of the member states chosen by the applicant.

Conditional marketing authorizations may be granted for a limited number of medicinal products for human use referenced in European Union law applicable to conditional marketing authorizations where the clinical dataset is not comprehensive, if (1) the risk-benefit balance of the product is positive, (2) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data, (3) unmet medical needs will be fulfilled and (4) the benefit to public health of the immediate availability on the market of the medicinal product outweighs the risk inherent in the fact that additional data are still required. Specific obligations, such as the completion of ongoing or new studies and obligations relating to the collection of pharmacovigilance data, may be amongst the conditions stipulated in the marketing authorization.

As in the United States, we may apply for designation of a product as an Orphan drug for the treatment of a specific indication in the European Union before the application for marketing authorization is made. In the European Union orphan designation is available for products in development which are either: (a) intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than 5 in 10,000 persons in the European Union, or (b) intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition in the Community and when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the medicinal product. Additionally, the sponsor of an application for orphan drug designation must establish that there exists no satisfactory authorized method of diagnosis, prevention, or treatment of the condition or even if such treatment exists, the product will be of significant benefit to those affected by that condition.

Orphan drugs in the European Union enjoy economic and marketing benefits, including up to ten years of market exclusivity for the approved indication unless another applicant can show that its product is safer, more effective or otherwise clinically superior to the orphan-designated product. The period of market exclusivity may be reduced to six years if at the end of the fifth year it is established that the criteria for orphan designation are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity.

Healthcare Regulation

Federal and state healthcare laws, including fraud and abuse and health information privacy and security laws, also apply to our business. If we fail to comply with those laws, we could face substantial penalties and our business, results of operations, financial condition and prospects could be adversely affected. The laws that may affect our ability to operate include, but are not limited to: the federal Anti-Kickback Statute, which prohibits, among other things, soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs; and federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent. Additionally, we are subject to state law equivalents of each of the above federal laws, which may be broader in scope and apply regardless of whether the payer is a federal healthcare program, and many of which differ from each other in significant ways and may not have the same effect, further complicate compliance efforts.

Numerous federal and state laws, including state security breach notification laws, state health information privacy laws and federal and state consumer protection laws, govern the collection, use and disclosure of personal information. Other countries also have, or are developing, laws governing the collection, use and transmission of personal information. In addition, most healthcare providers who are expected to prescribe our products and from whom we obtain patient health information, are subject to privacy and security requirements under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology and Clinical Health Act, or HIPAA. Although we are not directly subject to HIPAA, we could be subject to criminal penalties if we obtain and/or disclose individually identifiable health information from a HIPAA-covered entity, including healthcare providers, in a manner that is not authorized or permitted by HIPAA. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing amount of focus on privacy and data protection issues with the potential to affect our business, including recently enacted laws in a majority of states requiring security breach notification. These laws could create liability for us or increase our cost of doing business. International laws, such as the EU Data Privacy Directive (95/46/EC) and Swiss Federal Act on Data Protection, regulate the processing of personal data within the European Union and between countries in the European Union and countries outside of the European Union, including the United States. Failure to provide adequate privacy

protections and maintain compliance with safe harbor mechanisms could jeopardize business transactions across borders and result in significant penalties.

In addition, the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or the PPACA, created a federal requirement under the federal Open Payments program, that requires certain manufacturers to track and report to the Centers for Medicare and Medicaid Services, or CMS, annually certain payments and other transfers of value provided to physicians and teaching hospitals made in the previous calendar year. In addition, there are also an increasing number of state laws that require manufacturers to make reports to states on pricing and marketing information. These laws may affect our sales, marketing, and other promotional activities by imposing administrative and compliance burdens on us. In addition, given the lack of clarity with respect to these laws and their implementation, our reporting actions could be subject to the penalty provisions of the pertinent state and federal authorities.

For those marketed products which are covered in the United States by the Medicaid programs, we have various obligations, including government price reporting and rebate requirements, which generally require products be offered at substantial rebates/discounts to Medicaid and certain purchasers (including “covered entities” purchasing under the 340B Drug Discount Program). We are also required to discount such products to authorized users of the Federal Supply Schedule of the General Services Administration, under which additional laws and requirements apply. These programs require submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulations, and the guidance governing such calculations is not always clear. Compliance with such requirements can require significant investment in personnel, systems and resources, but failure to properly calculate prices, or offer required discounts or rebates could subject us to substantial penalties. Subject to the application in the European Union of the Transparency Directive 89/105/EEC, which aims to ensure the transparency of measures adopted to control pricing and reimbursement, pricing and reimbursement in the EU/EEA is governed by national rules and policy and may vary from Member State to Member State.

Reimbursement

Sales of our approved products and any future products of ours will depend, in part, on the extent to which their costs will be covered by third-party payers, such as government health programs, commercial insurance and managed healthcare organizations. Patients may be less likely to use our products if coverage is not provided and reimbursement is inadequate to cover a significant portion of the cost of our products. Third-party payers may limit coverage to specific drug products on an approved list, also known as a formulary, which might not include all of the FDA-approved drugs for a particular indication. Moreover, a third-party payer’s decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Additionally, a third-party payer’s decision to cover a particular drug product does not ensure that other payers will also provide coverage for the drug product, or will provide coverage at an adequate reimbursement rate.

In the United States and other potentially significant markets for our products, government authorities and third-party payers are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. Further, the increased emphasis on managed healthcare in the United States and on country-specific and national pricing and reimbursement controls in the European Union will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing coverage and/or reimbursement controls and measures, could have a material adverse impact on our net product revenues and results of operations.

The United States and some foreign jurisdictions are considering proposals or have enacted legislative and regulatory changes the healthcare system that could affect our ability to sell our products profitably. Among policy makers and payers in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. There has been particular and increasing legislative and enforcement interest in the United States with respect to drug pricing practices, particularly with respect to drugs that have been subject to relatively large price increases over relatively short time periods. There have been several U.S. Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. In the United States, the pharmaceutical industry has already been significantly affected by major legislative initiatives, including, for example, the PPACA. In January 2017, Congress voted to adopt a

budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of PPACA. The Budget Resolution is not a law, however, it is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of PPACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of PPACA that are repealed. We cannot predict what healthcare reform initiatives may be adopted in the future. Further federal, state and foreign legislative and regulatory developments are likely, and we expect ongoing initiatives to increase pressure on drug pricing, which could have a negative impact on our revenue or sales of any products or future approved products.

Other legislative changes have also been proposed and adopted since the PPACA was enacted. For example, the Budget Control Act of 2011 resulted in aggregate reductions in Medicare payments to providers of up to 2% per fiscal year, starting in 2013, and the American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several types of providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. Such laws, and others that may affect our business that have been recently enacted or may in the future be enacted, may result in additional reductions in Medicare and other healthcare funding. In the future, there will likely continue to be additional proposals relating to the reform of the United States healthcare system, some of which could further limit coverage and reimbursement of drug products, including our approved products and any future approved products. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our products.

In addition, in some non-U.S. jurisdictions, the proposed pricing for a drug must be approved before its cost may be funded within the respective national healthcare system. The requirements governing drug pricing vary widely from country to country. For example, European Union member states may restrict the range of medicinal products for which their national healthcare systems provide reimbursement and may control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profits the medicinal product generates for the company placing it on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products on cost-effectiveness grounds. Historically, products launched in countries in the European Union do not follow the price structures of the United States and they generally tend to be priced significantly lower.

Competition

There are many companies focused on the development of small molecules and antibodies for cancer. Our competitors and potential competitors include major pharmaceutical and biotechnology companies, as well as academic research institutions, clinical reference laboratories and government agencies that are pursuing research activities similar to ours. Many of our competitors and potential competitors have significantly more financial, technical and other resources than we do, which may allow them to have a competitive advantage.

Competition for Cabozantinib

We believe that our ability to successfully compete will depend on, among other things:

- efficacy, safety and reliability of cabozantinib;
- timing and scope of regulatory approval;
- the speed at which we develop cabozantinib for the treatment of additional tumor types beyond its approved indications;
- our ability to complete preclinical testing and clinical development and obtain regulatory approvals for cabozantinib;
- our ability to manufacture and sell commercial quantities of cabozantinib product to the market;
- our ability to successfully commercialize cabozantinib and secure coverage and adequate reimbursement in approved indications;
- product acceptance by physicians and other health care providers;

- the level of our collaboration partners' investments in the resources necessary to successfully commercialize cabozantinib in territories where it is approved outside of the United States;
- skills of our employees and our ability to recruit and retain skilled employees;
- protection of our intellectual property; and
- the availability of substantial capital resources to fund development and commercialization activities.

We believe that the quality and breadth of activity observed with cabozantinib, the skill of our employees and our ability to recruit and retain skilled employees, our patent portfolio and our capabilities for research and drug development are competitive strengths. However, many large pharmaceutical and biotechnology companies have significantly larger intellectual property estates than we do, more substantial capital resources than we have, and greater capabilities and experience than we do in preclinical and clinical development, sales, marketing, manufacturing and regulatory affairs.

The markets for which we intend to pursue regulatory approval of cabozantinib are highly competitive. We are aware of products in research or development by our competitors that are intended to treat all of the tumor types we are targeting, and should they demonstrate suitable clinical evidence, any of these products may compete with cabozantinib. Our future success will depend upon our ability to maintain a competitive position with respect to technological advances and the shifting landscape of therapeutic strategy following the advent of immunotherapy. Our products may become less marketable if we are unable to successfully adapt our development strategy to address the likelihood that this new approach to treating cancer with immuno-oncology agents will become prevalent in indications for which our products are approved, most notably advanced RCC, and in additional indications where we may seek regulatory approval.

CABOMETYX: We believe the principal competition for CABOMETYX in advanced RCC includes: BMS's nivolumab and ipilimumab; Pfizer's axitinib, sunitinib and temsirolimus; Novartis' everolimus and pazopanib; Bayer's and Onyx Pharmaceuticals' (a wholly-owned subsidiary of Amgen) sorafenib; Genentech's bevacizumab and atezolizumab; and Eisai's lenvatinib. The competition we currently face from BMS's nivolumab is particularly significant. Nivolumab was approved for the treatment of advanced RCC on November 23, 2015, following a rapid review by the FDA. That approval was based in large part on the results of BMS's phase 3 trial comparing nivolumab to everolimus in patients who had received previous antiangiogenic therapy for advanced RCC (Checkmate 025), in which nivolumab met its primary endpoint of showing a statistically-significant improvement in OS over everolimus, a current standard of care for the treatment of second line RCC patients. Nivolumab failed to demonstrate a statistically-significant PFS benefit over everolimus. Nivolumab also demonstrated an acceptable safety profile. Additionally, there are a variety of combination therapies being developed for RCC, including, Roche's bevacizumab and atezolizumab, BMS's ipilimumab and nivolumab, Merck's pembrolizumab and Eisai's lenvatinib, Merck's pembrolizumab and Pfizer's axitinib, Pfizer's avelumab and axitinib, and Merck's pembrolizumab and Roche's bevacizumab.

COMETRIQ: We believe that the principal competing anti-cancer therapy to COMETRIQ in progressive, metastatic MTC is Genzyme's RET, VEGFR and EGFR inhibitor vandetanib, which has been approved by the FDA and the EC for the treatment of symptomatic or progressive MTC in patients with unresectable, locally advanced, or metastatic disease. In addition, we believe that COMETRIQ also faces competition as a treatment for progressive, metastatic MTC from off-label use of Bayer's and Onyx Pharmaceuticals' (a wholly-owned subsidiary of Amgen) multikinase inhibitor sorafenib, Pfizer's multikinase inhibitor sunitinib, Ariad Pharmaceutical's multikinase inhibitor ponatinib, Novartis' multikinase inhibitor pazopanib, and Eisai's multikinase inhibitor lenvatinib.

Potential Cabozantinib Indications Beyond RCC and MTC: Should cabozantinib be approved for the treatment of HCC, we believe its principal competition may include Bayer's and Onyx Pharmaceuticals' sorafenib, Bayer's regorafenib, Eisai's lenvatinib, BMS's nivolumab, Merck's pembrolizumab and Lilly's ramucirumab. In particular, Bayer recently announced positive results from a Phase 3 trial that compared regorafenib to placebo in the same HCC patient population that is being enrolled in our Phase 3 trial. Examples of potential competition for cabozantinib in other cancer indications include: other VEGF pathway inhibitors, including Genentech's bevacizumab; other RET inhibitors including Eisai's lenvatinib and Ariad's ponatinib; and other MET inhibitors, including Amgen's AMG 208, Pfizer's crizotinib, ArQule's tivantinib, and Mirati's glesatinib; and immunotherapies such as BMS's ipilimumab and nivolumab, Merck's pembrolizumab and Roche's atezolizumab.

Competition for Cobimetinib

We believe that cobimetinib's principal competition amongst targeted agents includes Novartis' trametinib and dabrafenib, and Array's encorafenib and binimetinib; and within the class of immunotherapies, BMS's ipilimumab and

nivolumab and Merck's pembrolizumab. The second category, immunotherapies, are of particular competitive importance vis-a-vis cobimetinib in advanced melanoma as they are already FDA approved in melanoma patient populations that overlap with those that may be eligible for cobimetinib, they have been rapidly incorporated into the National Comprehensive Cancer Network treatment guidelines, and they are viewed with a high degree of enthusiasm by physicians and key opinion leaders. Ongoing and future trials incorporating immuno-oncology agents, including combination trials, may further impact usage of cobimetinib in melanoma and potentially in additional tumor types in which cobimetinib may ultimately gain approval.

Financial Information and Significant Customers

We operate as a single business segment and have operations solely in the United States. During the year ended December 31, 2016, we derived 33% of our revenues from Diplomat Specialty Pharmacy, which is located in the United States and 17% of our revenues in connection with our collaboration with Ipsen which is located in the European Union. Information regarding total revenues, including geographic regions in which they are earned, net loss and total assets for the years ended December 31, 2016, 2015 and 2014 is set forth in "Note 14. Concentrations of Credit Risk" in our "Consolidated Financial Statements" included in Item 8 of this Annual Report on Form 10-K.

Research and development expenses were \$96.0 million for the year ended December 31, 2016, compared to \$96.4 million for the year ended December 31, 2015 and \$189.1 million for the year ended December 31, 2014. Additional information about our research and development expenses in each of the last three fiscal years is set forth in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Patents and Proprietary Rights

We actively seek patent protection in the United States, the European Union, and selected other foreign countries to cover our drug candidates and related technologies. Patents extend for varying periods according to the date of patent filing or grant and the legal term of patents in the various countries where patent protection is obtained. The actual protection afforded by a patent, which can vary from country to country, depends on the type of patent, the scope of its coverage and the availability of legal remedies in the country. We have numerous patents and pending patent applications that relate to methods of screening drug targets, compounds that modulate drug targets, as well as methods of making and using such compounds.

While many patent applications have been filed relating to the drug candidates that we have developed, the majority of these are not yet issued or allowed.

Cabozantinib is covered by six issued patents in the United States, including U.S. Pat. No. 7,579,473, for the composition-of-matter of cabozantinib and pharmaceutical compositions thereof. U.S. Pat. No. 7,579,473 would normally expire in September 2024, but we have been granted a patent term extension to extend the term to August 2026. The additional issued U.S. patents will expire between 2024 and 2032. We own the rights to the six issued U.S. patents. Cabozantinib is also covered by an issued patent in Europe (covering cabozantinib's composition-of-matter and certain methods of use) and an issued patent in Japan (covering cabozantinib composition-of-matter). These issued patents would normally expire in September 2024, but we have applied for Supplementary Protection Certificates in Europe to extend the term to 2029. We intend to apply for patent term extension in Japan to extend the term to 2029. Foreign counterparts of the issued United States and European patents are issued in Australia and Canada, which are anticipated to expire in 2024. We have patent applications pending in the United States, the European Union, Australia, Japan and Canada covering certain synthetic methods related to making cabozantinib, which, if issued, are anticipated to expire in 2024. We have filed patent applications in the United States and other selected countries covering certain salts, polymorphs and formulations of cabozantinib that, if issued, are anticipated to expire in approximately 2030. We have filed several patent applications in the United States and other selected countries relating to combinations of cabozantinib with certain other anti-cancer agents that, if issued, are anticipated to expire in approximately 2030.

Cobimetinib is covered by three issued patents in the United States, including U.S. Pat. No. 7,803,839 for the composition of matter of cobimetinib and pharmaceutical compositions thereof. U.S. Pat. No. 7,803,839 would normally expire in February 2027, but we have applied for a patent term extension to extend the term to November 2029. We own the rights to the three issued patents. Cobimetinib is also covered an issued patent in Europe (covering cobimetinib's composition-of-matter and certain methods of use), which would normally expire in October 2026, but we have applied for Supplementary Protection Certificates to extend the term to November 2030. Foreign counterparts of the issued United States and European patents are issued or pending in Australia, Brazil, Canada, China, Colombia, the Eurasian Patent Organization, Georgia, Hong Kong, India, Indonesia, Israel, Japan, Mexico, Malaysia, New Zealand, Philippines, Singapore, South Africa, South Korea, and Ukraine. We have filed patent applications in the United States and other selected countries covering

certain salts and polymorphs of cobimetinib that, if issued, are anticipated to expire in approximately 2036. We have filed patent applications in the United States and other selected countries covering certain synthetic methods related to making cobimetinib, which if, issued, are anticipated to expire in approximately 2033. Cobimetinib is licensed to Genentech in the United States and to Roche outside of the United States.

We have pending patent applications in the United States and European Union covering the composition-of-matter of our other drug candidates in clinical or preclinical development that, if issued, are anticipated to expire between 2023 and 2030.

We have obtained licenses from various parties that give us rights to technologies that we deem to be necessary or desirable for our research and development. These licenses (both exclusive and non-exclusive) may require us to pay royalties as well as upfront and milestone payments.

Employees

As of December 31, 2016, we had 287 full-time equivalent employees, all of which are located in the U.S. None of our employees are represented by a labor union, and we consider our employee relations to be good.

Corporate Information

We were incorporated in Delaware in November 1994 as Exelixis Pharmaceuticals, Inc. and changed our name to Exelixis, Inc. in February 2000. Our principal executive offices are located at 210 East Grand Ave., South San Francisco, California 94080. Our telephone number is (650) 837-7000. We maintain a site on the worldwide web at www.exelixis.com; however, information found on our website is not incorporated by reference into this report.

We make available free of charge on or through our website our Securities and Exchange Commission, or SEC, filings, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Further, copies of our filings with the SEC are available at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. The SEC maintains a site on the worldwide web that contains reports, proxy and information statements and other information regarding our filings at www.sec.gov.

ITEM 1A. RISK FACTORS

Item 1A. Risk Factors

In addition to the factors discussed elsewhere in this report, the following are important factors that could cause actual results or events to differ materially from those contained in any forward-looking statements made by us or on our behalf. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not currently known to us or that we deem immaterial also may impair our business operations. If any of the following risks or such other risks actually occur, our business could be harmed.

Risks Related to Our Business and Industry

Our future prospects are critically dependent upon the commercial success of CABOMETYX for advanced RCC and the further clinical development and commercial success of cabozantinib in additional indications.

Our mission is to maximize the clinical and commercial potential of cabozantinib and cobimetinib and position the Exelixis business for future growth through the resumption of our discovery efforts and the expansion of our development pipeline. We anticipate that for the foreseeable future our ability to generate meaningful revenue to fund our commercial operations and our development and discovery programs is dependent upon the successful commercialization of CABOMETYX for the treatment of advanced RCC in territories where it has been or may soon be approved. The commercial potential of CABOMETYX for the treatment of advanced RCC remains subject to a variety of factors, most importantly, CABOMETYX's perceived benefit/risk profile as compared to the benefit/risk profiles of other treatments available or currently in development for the treatment of advanced RCC. If revenue from CABOMETYX decreases, we may need to reduce our operating expenses or raise additional funds to execute our business plan, which would have a material adverse effect on our business and financial condition, results of operations and growth prospects. Furthermore, as a consequence of our

exclusive collaboration agreement with Ipsen, we rely heavily upon Ipsen's regulatory, commercial, medical affairs, and other expertise and resources for commercialization of CABOMETYX in territories outside of the United States and Japan. If Ipsen is unable to, or does not invest the resources necessary to, successfully commercialize CABOMETYX for the treatment of advanced RCC in the European Union and other international territories where it may be approved, this could reduce the amount of revenue we are due to receive under our collaboration agreement with Ipsen, thus resulting in harm to our business and operations.

We also believe that there are commercial opportunities for cabozantinib in therapeutic indications beyond advanced RCC, and we are pursuing these opportunities by dedicating substantial proprietary resources to developing cabozantinib into a broad and significant oncology franchise. Even following the approval of CABOMETYX for the treatment of advanced RCC in the United States and European Union, our success remains contingent upon, among other things, successful clinical development, regulatory approval and market acceptance of cabozantinib in additional indications, such as first-line RCC, advanced HCC, NSCLC, and other forms of cancer. With top-line results from CELESTIAL anticipated in 2017, we expect growth of the cabozantinib oncology franchise to be most immediately impacted by the clinical trial results of cabozantinib in advanced HCC. However, the historical rate of failures for product candidates in clinical development is high. Should we prove unsuccessful in the further development of cabozantinib beyond MTC or advanced RCC, we may be unable to execute our business plan and our revenues and financial condition would be materially adversely affected.

We are heavily dependent on our partner, Genentech (a member of the Roche group), for the successful development, regulatory approval and commercialization of cobimetinib.

The terms of our collaboration agreement with Genentech provide them with exclusive authority over the global development and commercialization plans for cobimetinib and the execution of those plans. We have no effective influence over those plans and are heavily dependent on Genentech's decision making. The collaboration agreement provides that we are entitled to a share of U.S. profits and losses received in connection with commercialization of cobimetinib. We are also entitled to low double-digit royalties on ex-U.S. net sales of cobimetinib. In both cases, we are heavily dependent on Genentech's internal accounting procedures for determining how much, if any, profit we may derive from the collaboration. In connection with the commercialization of Cotellic, we believed Genentech's pricing of, and cost and revenue allocations for, Cotellic, as determined exclusively by Genentech, have been contrary to the applicable terms of the collaboration agreement. We raised this concern with Genentech, along with other material concerns regarding Genentech's performance under the collaboration agreement, but were unable to come to resolution on any of these issues. Accordingly, on June 3, 2016, following a 30 day dispute resolution period, we filed a demand for arbitration asserting claims against Genentech related to its clinical development, pricing and commercialization of Cotellic, and cost and revenue allocations in connection with Cotellic's commercialization in the United States. Soon thereafter, Genentech asserted a counterclaim for breach of contract seeking monetary damages and interest related to the cost allocations under the collaboration agreement. On December 29, 2016, Genentech withdrew its counterclaim against us and stated that it would unilaterally change its approach to allocation of promotional expenses arising from commercialization of the Cotellic plus Zelboraf combination therapy, both retrospectively and prospectively. Notwithstanding Genentech's change of approach, other significant issues remain in dispute between the parties. Genentech's action does not address the claims in our demand for arbitration related to Genentech's clinical development of cobimetinib, or pricing and promotional costs for Cotellic in the United States, nor does it fully resolve claims over revenue allocation. And, Genentech has not clarified how it intends to allocate promotional costs incurred with respect to the promotion of other combination therapies that include cobimetinib for other indications that will be developed or are in development and may be approved. As a result, we will continue to press our position for the arbitral panel to obtain a just resolution of these claims. The ultimate outcome and timing of the arbitration is difficult to predict.

We are also completely dependent upon Genentech to develop cobimetinib further. Any significant changes to Genentech's business strategy and priorities, over which we have no control, could adversely affect Genentech's willingness or ability to complete their obligations under our collaboration agreement and result in harm to our business and operations. Subject to contractual diligence obligations, Genentech has complete control over and financial responsibility for cobimetinib's development program and regulatory strategy and execution, and we are not able to control the amount or timing of resources that Genentech will devote to the product. Of particular significance are Genentech's development efforts with respect to the combination of cobimetinib with immuno-oncology agents, a promising and competitive area of clinical research. Regardless of Genentech's efforts and expenditures for the further development of cobimetinib, the results of such additional clinical investigation may not prove positive and may not produce label expansions or approval in additional indications.

The commercial success of cabozantinib, as CABOMETRYX tablets for advanced RCC and as COMETRIQ capsules for MTC, or if approved for additional indications, will depend upon the degree of market acceptance among physicians, patients, health care payers, and the medical community.

Our ability to commercialize cabozantinib, as CABOMETRYX tablets for advanced RCC and COMETRIQ capsules for MTC, or if approved for additional indications, will be highly dependent upon the extent to which cabozantinib gains market acceptance among physicians, patients, health care payers such as Medicare, Medicaid and commercial plans and the medical community. If cabozantinib does not achieve an adequate level of acceptance, we may not generate significant future product revenues. The degree of market acceptance of CABOMETRYX, COMETRIQ and other cabozantinib products, if approved, will depend upon a number of factors, including:

- the effectiveness, or perceived effectiveness, of cabozantinib in comparison to competing products;
- the safety of cabozantinib, including the existence of serious side effects of cabozantinib and their severity in comparison to those of any competing products;
- cabozantinib's relative convenience and ease of administration;
- unexpected results connected with analysis of data from future or ongoing clinical trials;
- the timing of cabozantinib label expansions for additional indications, if any, relative to competitive treatments;
- the price of cabozantinib relative to competitive therapies and any new government initiatives affecting pharmaceutical pricing;
- the strength of CABOMETRYX sales efforts, marketing, medical affairs and distribution support;
- the sufficiency of commercial and government insurance coverage and reimbursement; and
- our ability to enforce our intellectual property rights with respect to cabozantinib.

If we are unable to maintain or scale adequate sales, marketing, market access and distribution capabilities or enter into or maintain agreements with third parties to do so, we may be unable to commercialize cabozantinib successfully.

In connection with the FDA's approval of CABOMETRYX for the treatment of patients with advanced RCC, we substantially increased our sales, marketing, market access, medical affairs and product distribution capabilities. Establishing and maintaining these capabilities are expensive and time-consuming. Such expenses may be disproportionate compared to the revenues we may be able to generate on sales of cabozantinib, which may have an adverse impact on our results of operations. Also, to the extent that the commercial opportunities for cabozantinib grows over time, we may not properly judge the requisite size and experience of the commercialization teams or the scale of distribution necessary to market and sell cabozantinib successfully. If we are unable to scale our organization appropriately, we may not be able to maximize product revenues and our business may be adversely affected.

We currently rely on a single third party logistics provider (with two distribution locations) to handle shipping and warehousing for our commercial supply of both CABOMETRYX and COMETRIQ in the U.S. While we have expanded our U.S. distribution and pharmacy channels in connection with the approval of CABOMETRYX by the FDA for the treatment of patients with advanced RCC in the United States, we still rely on a relatively limited distribution network to dispense COMETRIQ in fulfillment of prescriptions in the United States. Furthermore, we rely on our collaboration partners for the commercialization and distribution of CABOMETRYX and COMETRIQ in territories outside of the United States, as well as for access and distribution activities for the approved products under the NPU program.

Our current and anticipated future dependence upon the activities, and legal and regulatory compliance, of these or other third parties, may adversely affect our future profit margins and our ability to supply cabozantinib to the marketplace on a timely and competitive basis. For example, if a warehouse of our third party logistics provider suffers a fire or damage from another type of disaster, a significant portion of the commercial supply of CABOMETRYX and COMETRIQ could be destroyed, resulting in a disruption in our commercialization efforts. These or other third parties may not be able to provide services in the time we require to meet our commercial timelines and objectives or to meet regulatory requirements. We may not be able to maintain or renew our arrangements with third parties, or enter into new arrangements, on acceptable terms, or at all. Third parties could terminate or decline to renew our arrangements based on their own business priorities, at a time that is costly or inconvenient for us. If we are unable to contract for logistics services or distribution of cabozantinib on acceptable terms, our commercialization efforts may be delayed or otherwise adversely affected.

We are subject to certain healthcare laws, regulation and enforcement; our failure to comply with those laws could have a material adverse effect on our results of operations and financial condition.

We are subject to certain healthcare laws and regulations and enforcement by the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include, without limitation:

- the federal Anti-Kickback Statute, or AKS, which governs our business activities, including our marketing practices, educational programs, pricing policies, and relationships with healthcare providers or other entities. The AKS prohibits, among other things, persons and entities from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs. Remuneration is not defined in the AKS and has been broadly interpreted to include anything of value, including for example, gifts, discounts, coupons, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payments, ownership interests and providing anything at less than its fair market value. The AKS has been broadly interpreted to apply to manufacturer arrangements with prescribers, purchasers and formulary managers, among others;
- the FDCA and its regulations which prohibit, among other things, the introduction or delivery for introduction into interstate commerce of any food, drug, device, or cosmetic that is adulterated or misbranded;
- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent, or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- the Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and their implementing regulations, which impose certain requirements relating to the privacy, security and transmission of individually identifiable health information;
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payer, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts;
- the Foreign Corrupt Practices Act, a U.S. law which regulates certain financial relationships with foreign government officials (which could include, for example, certain medical professionals);
- federal and state consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- federal and state government price reporting laws that require us to calculate and report complex pricing metrics to government programs, where such reported prices may be used in the calculation of reimbursement and/or discounts on our marketed drugs (participation in these programs and compliance with the applicable requirements may subject us to potentially significant discounts on our products, increased infrastructure costs, and could potentially affect our ability to offer certain marketplace discounts); and
- federal and state financial transparency laws, which generally require certain types of expenditures in the United States to be tracked and reported (compliance with such requirements may require investment in infrastructure to ensure that tracking is performed properly, and some of these laws result in the public disclosure of various types of payments and relationships with healthcare providers and healthcare entities, which could potentially have a negative effect on our business and/or increase enforcement scrutiny of our activities).

In addition, certain marketing practices, including off-label promotion, may also violate certain federal and state healthcare fraud and abuse laws, FDA rules and regulations, as well as false claims laws, including the civil False Claims Act. Suits filed under the civil False Claims Act, known as “*qui tam*” actions, can be brought by any individual on behalf of the government and such individuals, commonly known as “whistleblowers,” may share in any amounts paid by the entity to the government in fines or settlement. The filing of *qui tam* actions has caused a number of pharmaceutical, medical device and other healthcare companies to have to defend a civil False Claims Act action. When an entity is determined to have violated the civil False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we, or our officers or employees, may be subject to penalties, including administrative civil and criminal penalties, damages, fines, withdrawal of regulatory approval, the curtailment or restructuring of our operations, the exclusion from participation in Medicare, Medicaid and other federal and state healthcare programs, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, any of which could adversely affect our ability to sell our products or operate our business and also adversely affect our financial results. Defending against any such actions can be costly, time-consuming and may require significant financial and personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

Numerous federal and state laws, including state security breach notification laws, state health information privacy laws and federal and state consumer protection laws, govern the collection, use and disclosure of personal information. Other countries also have, or are developing, laws governing the collection, use and transmission of personal information. In addition, most healthcare providers who are expected to prescribe our products and from whom we obtain patient health information are subject to privacy and security requirements under HIPAA. Although we are not directly subject to HIPAA, we could be subject to criminal penalties if we knowingly obtain individually identifiable health information from a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing amount of focus on privacy and data protection issues with the potential to affect our business, including recently enacted laws in a majority of states requiring security breach notification. These laws could create liability for us or increase our cost of doing business. International laws, such as the EU Data Privacy Directive (95/46/EC) and Swiss Federal Act on Data Protection, regulate the processing of personal data within the European Union and between countries in the European Union and countries outside of the European Union, including the United States. Failure to provide adequate privacy protections and maintain compliance with safe harbor mechanisms could jeopardize business transactions across borders and result in significant penalties.

If we are unable to obtain both adequate coverage and adequate reimbursement from third-party payers for CABOMETYX or COMETRIQ, our revenues and prospects for profitability will suffer.

Our ability to successfully commercialize CABOMETYX or COMETRIQ is highly dependent on the extent to which coverage and reimbursement is, and will be, available from third-party payers, including governmental payers, such as Medicare and Medicaid, and private health insurers. Patients may not be capable of paying for CABOMETYX or COMETRIQ themselves and may rely on third-party payers to pay for, or subsidize, the costs of their medications, among other medical costs. If third-party payers do not provide coverage or reimbursement for CABOMETYX or COMETRIQ, our revenues and prospects for profitability will suffer. In addition, even if third-party payers provide some coverage or reimbursement for CABOMETYX or COMETRIQ, the availability of such coverage or reimbursement for prescription drugs under private health insurance and managed care plans often varies based on the type of contract or plan purchased. There has been negative publicity regarding, and increasing legislative and enforcement interest in the United States with respect to, drug pricing and the use of specialty pharmacies, which may result in physicians being less willing to participate in our patient access programs and thereby limit our ability to increase patient access and adoption of cabozantinib. Specifically, there have been several recent U.S. Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the price of drugs under Medicare, and reform government program reimbursement methodologies for drugs. If future legislation were to impose direct governmental price controls and access restrictions, it could have a significant adverse impact on our business and financial results.

In addition, in some foreign countries, particularly in the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, price negotiations with governmental authorities can take six to twelve months or longer after marketing authorization is granted for a product, which has the potential to substantially delay broad availability of the product in some of those countries. To obtain reimbursement and/or pricing approval in some countries, we and our collaboration partner, Ipsen, may be required to conduct a clinical trial that compares the cost effectiveness of CABOMETYX to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in the commercialization of CABOMETYX. Third-party payers are challenging the prices charged for medical products and services, and many third-party payers limit reimbursement for newly-approved health care products. In particular, third-party payers may limit the indications for which they will reimburse patients who use CABOMETYX or COMETRIQ. Cost-control initiatives could decrease the price we and our collaboration partner, Ipsen, might establish for CABOMETYX, which would result in lower product revenues to us.

Current healthcare laws and regulations and future legislative or regulatory reforms to the healthcare system may affect our ability to sell CABOMETYX and COMETRIQ profitably.

The United States and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell CABOMETYX and COMETRIQ profitably. Among policy makers and payers in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of PPACA. The Budget Resolution is not a law; however, it is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of PPACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of PPACA that are repealed. Moreover, certain politicians, including the President, have announced plans to regulate the prices of pharmaceutical products. We cannot know what form any such legislation may take or the market's perception of how such legislation would affect us. Any reduction in reimbursement from government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may limit our ability to generate revenue or commercialize our current products and/or those for which we may receive regulatory approval in the future.

As a result of the overall trend towards cost-effectiveness criteria and managed healthcare in the United States, third-party payers are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new drugs. They may use tiered reimbursement and may adversely affect demand for CABOMETYX or COMETRIQ by placing a particular product in an expensive tier. They may also refuse to provide any coverage for uses of approved products for medical indications other than those for which the FDA has granted market approvals. As a result, significant uncertainty exists as to whether and how much third-party payers will reimburse for newly approved drugs, which in turn will put pressure on the pricing of drugs. We also anticipate pricing pressures in connection with the sale of CABOMETYX and COMETRIQ due to the increasing influence of health maintenance organizations and additional legislative proposals. Due to the volatility in the current economic and market dynamics, we are unable to predict the impact of any unforeseen or unknown legislative, regulatory, third-party payer or policy actions, which may include cost containment and healthcare reform measures. Such policy actions could have a material adverse impact on our revenues and prospects for profitability.

Pricing for pharmaceutical products has come under increasing scrutiny by governments, legislative bodies and enforcement agencies. These activities may result in actions that have the effect of reducing our revenue or harming our business or reputation.

Many companies in our industry have received a governmental request for documents and information relating to drug pricing and patient support programs. We may become subject to similar requests, which would require us to incur significant expense and result in distraction for our management team. Additionally, to the extent there are findings, or even allegations, of improper conduct on the part of the company, such findings could further harm our business, reputation and/or prospects. It is possible that such inquiries could result in negative publicity or other negative actions that could harm our reputation; changes in our product pricing and distribution strategies; reduced demand for our approved products and/or reduced reimbursement of approved products, including by federal health care programs such as Medicare and Medicaid and state health care programs.

In addition, the Trump Administration has indicated an interest in taking measures pertaining to drug pricing, including potential proposals relating to Medicare price negotiations, and importation of drugs from other countries. At this time, it is unclear whether any of these proposals will be pursued and how they would impact our products or our future product candidates.

Our competitors may develop products and technologies that impair the value of cabozantinib, cobimetinib and any future product candidates.

The pharmaceutical, biopharmaceutical and biotechnology industries are highly diversified and are characterized by rapid technological change. In particular, the area of novel oncology therapies is a rapidly evolving and competitive field. Specifically, the indication of advanced RCC is highly competitive and several novel therapies and combinations of therapies are in advanced stages of clinical development in this indication, and may compete with or displace cabozantinib. We face, and will continue to face, intense competition from biotechnology, biopharmaceutical and pharmaceutical companies, as well as

academic research institutions, clinical reference laboratories and government agencies that are pursuing research activities similar to ours. Some of our competitors have entered into collaborations with leading companies within our target markets, including some of our existing collaborators. Some of our competitors are further along in the development of their products than we are. Delays in the development of cabozantinib or cobimetinib for the treatment of additional tumor types, for example, could allow our competitors to bring products to market before us. Our future success will depend upon our ability to maintain a competitive position with respect to technological advances and the shifting landscape of therapeutic strategy following the advent of immunotherapy. Our products may become less marketable if we are unable to successfully adapt our development strategy to address the likelihood that this new approach to treating cancer with immuno-oncology agents will become prevalent in indications for which our products are approved, most notably advanced RCC, and in additional indications where we may seek regulatory approval. Furthermore, the complexities of such a strategy may require collaboration with some of our competitors.

The markets for which we intend to pursue regulatory approval of cabozantinib and for which Roche and Genentech intend to pursue regulatory approval for cobimetinib are highly competitive. Further, our competitors may be more effective at using their technologies to develop commercial products. Many of the organizations competing with us have greater capital resources, larger research and development staff and facilities, more experience in obtaining regulatory approvals and more extensive product manufacturing and commercial capabilities than we do. As a result, our competitors may be able to more easily develop technologies and products that would render our technologies and products, and those of our collaborators, obsolete and noncompetitive. There may also be drug candidates of which we are not aware at an earlier stage of development that may compete with cabozantinib, cobimetinib, and our other product candidates.

If competitors use litigation and regulatory means to obtain approval for generic versions of cabozantinib, our business will suffer.

Under the FDCA, the FDA can approve an ANDA for a generic version of a branded drug without the applicant undertaking the human clinical testing necessary to obtain approval to market a new drug. The FDA can also approve a 505(b)(2) NDA that relies on the agency's findings of safety and/or effectiveness for a previously approved drug. The filing of an ANDA or 505(b)(2) NDA with respect to cabozantinib could have an adverse impact on our stock price. Moreover, if any such ANDAs or 505(b)(2) NDAs were to be approved and the patents covering cabozantinib were not upheld in litigation, or if a generic competitor is found not to infringe these patents, the resulting generic competition would negatively affect our business, financial condition and results of operations. In this regard, generic equivalents, which must meet the same quality standards as the branded drugs, would be significantly less costly than ours to bring to market. Companies that produce generic equivalents are generally able to offer their products at lower prices. Thus, regardless of the regulatory approval pathway, after the introduction of a generic competitor, a significant percentage of the sales of any branded product are typically lost to the generic product.

Clinical testing of product candidates is a lengthy, costly, complex and uncertain process and may fail to demonstrate safety and efficacy.

Clinical trials are inherently risky and may reveal that a product candidate, even if it is approved for other indications, is ineffective or has an unacceptable safety profile that may significantly decrease the likelihood of regulatory approval in a new indication. For example, COMET-1 and COMET-2, our two phase 3 pivotal trials of cabozantinib in metastatic castration-resistant prostate cancer, or mCRPC, failed to meet their respective primary endpoints of demonstrating a statistically significant increase in OS for patients treated with cabozantinib as compared to prednisone and to demonstrate improvement in pain response for patients treated by cabozantinib as compared to mitoxantrone/prednisone. Based on the outcome of the COMET trials, we deprioritized the clinical development of cabozantinib in mCRPC.

The results of preliminary studies do not necessarily predict clinical or commercial success, and later-stage clinical trials may fail to confirm the results observed in earlier-stage trials or preliminary studies. Although we have established timelines for manufacturing and clinical development of our product candidates based on existing knowledge of our compounds in development and industry metrics, we may not be able to meet those timelines.

We may experience numerous unforeseen events, during or as a result of clinical testing, that could delay or prevent commercialization of our product candidates, including:

- lack of efficacy or harmful side effects;
- negative or inconclusive clinical trial results may require us to conduct further testing or to abandon projects that we had expected to be promising;
- our competitors may discover or commercialize other compounds or therapies that show significantly improved safety or efficacy compared to our product candidates;

- our inability to identify and maintain a sufficient number of trial sites, many of which may already be engaged in other clinical trial programs;
- patient registration or enrollment in our clinical testing may be lower than we anticipate, resulting in the delay or cancellation of clinical testing;
- failure of our third-party contract research organization or investigators to satisfy their contractual obligations, including deviating from trial protocol; and
- regulators or institutional review boards may withhold authorization to commence or conduct clinical trials of a product candidate, or delay, suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or their determination that participating patients are being exposed to unacceptable health risks.

If we were to have significant delays in or termination of our clinical testing of our product candidates as a result of any of the events described above or otherwise, our expenses could increase and our ability to generate revenues could be impaired, either of which could adversely impact our financial results.

We may not be able to rapidly or effectively continue the further development of our product candidates or meet current or future requirements of the FDA or regulatory authorities in other jurisdictions, including those identified based on our discussions with the FDA or such other regulatory authorities. Our planned clinical trials may not begin on time, or at all, may not be completed on schedule, or at all, may not be sufficient for registration of our product candidates or may not result in an approvable product.

Completion of clinical trials may take several years or more, but the length of time generally varies substantially according to the type, complexity, novelty and intended use of the product candidate. The duration and the cost of clinical trials may vary significantly over the life of a project as a result of factors relating to the clinical trial, including, among others:

- the number of patients who ultimately participate in the clinical trial;
- the duration of patient follow-up that is appropriate in view of the results or required by regulatory authorities;
- the number of clinical sites included in the trials; and
- the length of time required to enroll suitable patient subjects.

Any delay could limit our ability to generate revenues, cause us to incur additional expense and cause the market price of our common stock to decline significantly. Our partners under our collaboration agreements may experience similar risks with respect to the compounds we have out-licensed to them. If any of the events described above were to occur with such programs or compounds, the likelihood of receipt of milestones and royalties under such collaboration agreements could decrease.

The regulatory approval processes of the FDA and comparable foreign regulatory authorities are lengthy and uncertain, and may not result in the necessary regulatory approvals for our product candidates, which could adversely affect our business.

The activities associated with the research, development and commercialization of our products and product candidates, are subject to extensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. We have only limited experience in preparing and filing the applications necessary to gain regulatory approvals. The process of obtaining regulatory approvals in the United States and other foreign jurisdictions is expensive, and often takes many years, if approval is obtained at all, and can vary substantially based upon the type, complexity and novelty of the product candidates involved. For example, before an NDA or sNDA can be submitted to the FDA, or MAA to the EMA or any application or submission to regulatory authorities in other jurisdictions, the product candidate must undergo extensive clinical trials, which can take many years and require substantial expenditures.

Any clinical trial may fail to produce results satisfactory to the FDA or regulatory authorities in other jurisdictions. For example, the FDA could determine that the design of a clinical trial is inadequate to produce reliable results. The regulatory process also requires preclinical testing, and data obtained from preclinical and clinical activities are susceptible to varying interpretations. The FDA has substantial discretion in the approval process and may refuse to approve any NDA or decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. For example, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of cabozantinib for any individual, additional indications.

In addition, delays or rejections may be encountered based upon changes in regulatory policy for product approval during the period of product development and regulatory agency review, which may cause delays in the approval or rejection of an application for our product candidates.

Even if the FDA or a comparable authority in another jurisdiction approves cabozantinib for an indication beyond advanced RCC and MTC, or one of our other product candidates, the approval may be limited, imposing significant restrictions on the indicated uses, conditions for use, labeling, distribution, advertising, promotion, marketing and/or production of the product and could impose ongoing requirements for post-approval studies, including additional research and development and clinical trials. For example, in connection with the FDA's approval of COMETRIQ for the treatment of progressive, metastatic MTC, we are subject to post-marketing requirement to conduct a clinical study comparing a lower dose of cabozantinib to the approved dose of 140 mg daily cabozantinib in progressive, metastatic MTC. Failure to complete any post-marketing requirements in accordance with the timelines and conditions set forth by the FDA could significantly increase costs or delay, limit or eliminate the commercialization of cabozantinib. Further, these agencies may also impose various administrative, civil or criminal sanctions for failure to comply with regulatory requirements, including withdrawal of product approval.

We may be unable to expand our development pipeline, which could limit our growth and revenue potential.

We are committed to the discovery, development and promotion of new medicines with the potential to improve care and outcomes for people with cancer. In this regard, we recently resumed internal drug discovery efforts with the goal of identifying new product candidates to advance into clinical trials. Internal discovery efforts to identify new product candidates require substantial technical, financial and human resources. These internal discovery efforts may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for a number of reasons, including the research methodology used may not be successful in identifying potential product candidates, or potential product candidates may, on further study, be shown to have inadequate efficacy, harmful side effects, suboptimal pharmaceutical profile or other characteristics suggesting that they are unlikely to be effective products. Apart from our internal discovery efforts, our strategy to expand our development pipeline is also dependent on our ability to successfully identify and acquire or in-license relevant product candidates. However, the in-licensing and acquisition of product candidates is a competitive area, and many other companies are pursuing the same or similar product candidates to those that we may consider attractive. Established companies, in particular, may have a competitive advantage over us due to their size, financial resources and more extensive clinical development and commercialization capabilities. Furthermore, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We may also be unable to in-license or acquire a relevant product candidate on acceptable terms that would allow us to realize an appropriate return on our investment. If we are unable to develop suitable product candidates through internal discovery effort or if we are unable to successfully obtain rights to suitable product candidates, our business, financial condition and prospects for growth could suffer. Even if we succeed in our efforts to obtain rights to suitable product candidates, the competitive business environment may result in higher acquisition or licensing costs.

With respect to acquisitions, we may not be able to integrate the target company successfully into our existing business, maintain the key business relationships of the target, or retain key personnel of an acquired business. Furthermore, we could assume unknown or contingent liabilities or incur unanticipated expenses. Any acquisitions or investments made by us also could result in our spending significant amounts, issuing dilutive securities, assuming or incurring significant debt obligations and contingent liabilities, incurring large one-time expenses and acquiring intangible assets that could result in significant future amortization expense and significant write-offs, any of which could harm our operating results.

Risks Related to Our Capital Requirements and Financial Results

If additional capital is not available to us, we may be forced to limit the expansion of our product development programs or commercialization efforts.

As of December 31, 2016, we had \$479.6 million in cash and investments, which included \$393.8 million available for operations, \$81.6 million of compensating balance investments that we are required to maintain on deposit with Silicon Valley Bank, and \$4.2 million of long-term restricted investments. Our business operations grew substantially during 2016. In order to continue to grow the business and maximize the clinical and commercial opportunities for cabozantinib and cobimetinib, we plan to continue to execute on the U.S. launch of CABOMETYX, while reinvesting in our product pipeline through the continued development of cabozantinib, continued research and development efforts, as well as through in-licensing and acquisition efforts. Our ability to execute on these business objectives will depend on many factors including but not limited to:

- the commercial success of both CABOMETYX and COMETRIQ and the revenues we generate from those approved products;
- costs associated with maintaining our expanded sales, marketing, medical affairs and distribution capabilities for CABOMETYX in advanced RCC and COMETRIQ in the approved MTC indications;
- the achievement of stated regulatory and commercial milestones under our collaboration with Ipsen;

- the commercial success of Cotellic and the calculation of our share of related profits and losses for the commercialization of Cotellic in the U.S. and royalties from Cotellic sales outside the U.S. under our collaboration with Genentech;
- the outcome of our arbitration against Genentech in which we have asserted claims related to Genentech's clinical development, pricing and commercialization of Cotellic, and cost and revenue allocations arising from Cotellic's commercialization in the United States;
- the potential regulatory approval of cabozantinib as a treatment for previously untreated advanced RCC and in other indications, both in the United States and abroad;
- future clinical trial results, notably the results from CELESTIAL, our phase 3 pivotal trial in patients with advanced HCC;
- our future investments in the expansion of our pipeline through drug discovery and corporate development activities;
- our repayment and any potential mandatory prepayment of the Secured Convertible Notes due 2018, or the Deerfield Notes, (see "Note 7. Debt" to our "Notes to Consolidated Financial Statements" contained in Part II, Item 8 of this Annual Report on Form 10-K for a description of these notes), which mature on July 1, 2018, and which we intend to repay on or about July 1, 2017;
- our ability to control costs;
- our ability to remain in compliance with, or amend or cause to be waived, financial covenants contained in agreements with third parties;
- the cost of clinical drug supply for our clinical trials;
- trends and developments in the pricing of oncologic therapeutics in the United States and abroad, especially in the European Union;
- scientific developments in the market for oncologic therapeutics and the timing of regulatory approvals for competing oncologic therapies; and
- the filing, maintenance, prosecution, defense and enforcement of patent claims and other intellectual property rights.

We have a history of net losses and may incur net losses in the future, and may be unable to achieve and maintain profitability.

We have incurred net losses since inception through December 31, 2016, with the exception of the 2011 fiscal year. For the year ended December 31, 2016, we incurred a net loss of \$70.2 million and as of December 31, 2016, we had an accumulated deficit of \$2.0 billion. These losses have had an adverse effect on our stockholders' equity (deficit) and working capital. Because of the numerous risks and uncertainties associated with developing and commercializing drugs, we are unable to predict the extent of any future losses. Excluding fiscal 2011, our research and development expenditures and selling, general and administrative expenses have exceeded our revenues for each fiscal year, and we expect to spend significant additional amounts to fund the continued development and commercialization of cabozantinib. In addition, we plan to expand our product pipeline through the resumption of drug discovery and product acquisition and in-licensing. As a result, we expect to continue to incur substantial operating expenses and, consequently, we will need to generate substantial revenues to achieve and maintain profitability.

Since the launch of our first commercial product in January 2013, through December 31, 2016, we have generated an aggregate of \$209.7 million in net product revenues, including \$135.4 million for the year ended December 31, 2016. Other than sales of CABOMETYX and COMETRIQ, we have derived substantially all of our revenues since inception from collaborative arrangements, including upfront and milestone payments and research funding we earn from any products developed from the collaborative research. The amount of our net profits or losses will depend, in part, on: the level of sales of CABOMETYX and COMETRIQ in the United States; achievement of clinical, regulatory and commercial milestones and the amount of royalties, if any, from sales of CABOMETYX and COMETRIQ under our collaboration with Ipsen; our share of the net profits and losses for the commercialization of Cotellic in the U.S. under our collaboration with Genentech; the amount of royalties from Cotellic sales outside the U.S. under our collaboration with Genentech; other license and contract revenues; and, the level of our expenses, including commercialization activities for cabozantinib and any pipeline expansion efforts.

Our significant level of indebtedness could limit cash flow available for our operations and expose us to risks that could adversely affect our business, financial condition and results of operations.

We have significant indebtedness and substantial debt service requirements as a result of the Deerfield Notes and our loan and security agreement with Silicon Valley Bank. As of December 31, 2016, our total consolidated indebtedness through

maturity was \$205.0 million (excluding trade payables). Our outstanding debt under our loan and security agreement with Silicon Valley Bank of \$81.6 million will become due and payable in May 2018. We may also incur additional indebtedness to meet future financing needs. If we incur additional indebtedness, it would increase our interest expense, leverage and operating and financial costs.

Our current and any potential future indebtedness could have significant negative consequences for our business, results of operations and financial condition, including:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, thereby reducing the amount of our cash flow available for other purposes, including clinical trials, research and development, capital expenditures, working capital and other general corporate purposes;
- limiting our flexibility in planning for, or reacting to, changes in our business;
- dilution experienced by our existing stockholders as a result of a conversion of the Deerfield Notes, at our discretion, into shares of common stock; and
- placing us at a possible competitive disadvantage with less leveraged competitors and competitors that may have better access to capital resources.

We cannot assure you that we will continue to maintain sufficient cash reserves or that our business will generate cash flow from operations at levels sufficient to permit us to pay principal, premium, if any, and interest on our indebtedness, or that our cash needs will not increase. If we are unable to generate sufficient cash flow or otherwise obtain funds necessary to make required payments or planned early repayments, or if we fail to comply with the various covenants imposed under the terms of the Deerfield Notes, or any indebtedness which we have incurred or may incur in the future, we would be in default, which would permit the holders of the Deerfield Notes or other indebtedness to accelerate the maturity of such notes or other indebtedness and could cause defaults under the Deerfield Notes, or our other indebtedness. Any default under the Deerfield Notes, or any indebtedness that we have incurred or may incur in the future could have a material adverse effect on our business, results of operations and financial condition.

We are exposed to risks related to foreign currency exchange rates.

Most of our foreign expenses incurred are associated with establishing and conducting clinical trials for cabozantinib. The amount of these expenses will be impacted by fluctuations in the currencies of those countries in which we conduct clinical trials. Our agreements with the foreign sites that conduct such clinical trials generally provide that payments for the services provided will be calculated in the currency of that country, and converted into U.S. dollars using various exchange rates based upon when services are rendered or the timing of invoices. When the U.S. dollar weakens against foreign currencies, the U.S. dollar value of the foreign-currency denominated expense increases, and when the U.S. dollar strengthens against these currencies, the U.S. dollar value of the foreign-currency denominated expense decreases. Consequently, changes in exchange rates may affect our financial position and results of operations.

Global credit and financial market conditions could negatively impact the value of our current portfolio of cash equivalents, short-term investments or long-term investments and our ability to meet our financing objectives.

Our cash and cash equivalents are maintained in highly liquid investments with remaining maturities of 90 days or less at the time of purchase. Our short-term and long-term investments consist primarily of readily marketable debt securities with remaining maturities of more than 90 days at the time of purchase. While as of the date of this report we are not aware of any downgrades, material losses, or other significant deterioration in the fair value of our cash equivalents, short-term investments or long-term investments since December 31, 2016, no assurance can be given that a deterioration in conditions of the global credit and financial markets would not negatively impact our current portfolio of cash equivalents or investments or our ability to meet our financing objectives.

Our financial results are impacted by management's selection of accounting methods and certain assumptions and estimates.

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Our management must exercise judgment in selecting and applying many of these accounting policies and methods so they comply with generally accepted accounting principles and reflect management's judgment of the most appropriate manner to report our financial condition and results of operations. In some cases, management must select the accounting policy or method to apply from two or more alternatives, any of which may be reasonable under the circumstances, yet may result in our reporting materially different results than would have been reported under a different alternative.

Certain accounting policies are critical to the presentation of our financial condition and results of operations. The preparation of our financial statements requires us to make significant estimates, assumptions and judgments that affect the amounts of assets, liabilities, revenues and expenses and related disclosures. Significant estimates that may be made by us include assumptions used in the determination of revenue recognition, discounts and allowances from gross revenue, inventory and stock-based compensation. Although we base our estimates and judgments on historical experience, our interpretation of existing accounting literature and on various other assumptions that we believe to be reasonable under the circumstances, if our assumptions prove to be materially incorrect, actual results may differ materially from these estimates.

In addition, future changes in financial accounting standards may cause adverse, unexpected revenue fluctuations and affect our financial position or results of operations. New pronouncements and varying interpretations of pronouncements have occurred with frequency in the past and are expected to occur again in the future and as a result we may be required to make changes in our accounting policies. Those changes could adversely affect our reported revenues and expenses, prospects for profitability or financial position. For example, in May 2014, the Financial Accounting Standards Board issued an Accounting Standards Update entitled Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, or ASU 2014-09, which will replace existing revenue recognition guidance in U.S. generally accepted accounting pronouncements when it becomes effective for us in the first quarter of fiscal year 2018. We do not expect that ASU 2014-09 will have a material impact on the recognition of revenue from product sales. We are still in the process of evaluating the effect that this guidance will have on revenue recognition from our collaboration and license agreements, such as our arrangements with Ipsen and Genentech. In any event, we will continue to evaluate the impact of the new standard on all of our revenues, including those mentioned above, and our preliminary assessments may change in the future based on our continuing evaluation. The application of existing or future financial accounting standards, particularly those relating to the way we account for revenues and costs, could have a significant impact on our reported results.

Risks Related to Our Relationships with Third Parties

We are dependent upon our collaborations with major companies, which subjects us to a number of risks.

We have established collaborations with leading pharmaceutical and biotechnology companies, including, Ipsen, Genentech, Daiichi Sankyo, Merck (known as MSD outside of the United States and Canada), BMS and Sanofi for the development and ultimate commercialization of certain compounds generated from our research and development efforts. Our dependence on our relationships with existing collaborators for the development and commercialization of compounds under the collaborations subjects us to, and our dependence on future collaborators for development and commercialization of additional compounds will subject us to, a number of risks, including:

- we are not able to control the amount and timing of resources that our collaborators or potential future collaborators will devote to the development or commercialization of drug candidates or to their marketing and distribution;
- we are not able to control the U.S. commercial resourcing decisions made and resulting costs incurred by Genentech for cobimetinib, which reasonable costs we are obligated to share, in part, under our collaboration agreement with Genentech;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a drug candidate, repeat or conduct new clinical trials or require a new formulation of a drug candidate for clinical testing;
- disputes may arise between us and our collaborators that result in the delay or termination of the research, development or commercialization of our drug candidates, or that diminish or delay receipt of the economic benefits we are entitled to receive under the collaboration, or that result in costly litigation or arbitration that diverts management's attention and resources;
- collaborators may experience financial difficulties;
- collaborators may not be successful in their efforts to obtain regulatory approvals in a timely manner, or at all;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- collaborators may not comply with applicable healthcare regulatory laws;
- business combinations or significant changes in a collaborator's business strategy may adversely affect a collaborator's willingness or ability to complete its obligations under any arrangement;
- a collaborator could independently move forward with a competing drug candidate developed either independently or in collaboration with others, including our competitors;

- we may be precluded from entering into additional collaboration arrangements with other parties in an area or field of exclusivity;
- future collaborators may require us to relinquish some important rights, such as marketing and distribution rights; and
- collaborations may be terminated or allowed to expire, which would delay, and may increase the cost of development of our drug candidates.

If any of these risks materialize, we may not receive collaboration revenue or otherwise realize anticipated benefits from such collaborations, our product development efforts could be delayed and our business, operating results and financial condition could be adversely affected.

If third parties upon which we rely do not perform as contractually required or expected, we may not be able to obtain regulatory approval for or commercialize cabozantinib for the treatment of additional indications beyond advanced RCC and MTC.

We do not have the ability to conduct clinical trials for cabozantinib independently, including our post-marketing commitments in connection with the approvals of CABOMETYX in advanced RCC and COMETRIQ in progressive, metastatic MTC, so we rely on independent third parties for the performance of these trials, such as the U.S. federal government (including NCI-CTEP, a department of the NIH, with whom we have our CRADA), third-party contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties must be replaced or if the quality or accuracy of the data they generate or provide is compromised due to their failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our preclinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for or commercialize cabozantinib for additional indications beyond the advanced RCC and MTC.

We lack the manufacturing capabilities necessary for us to produce cabozantinib for clinical development or for commercial sale and rely on third parties to do so, which subjects us to various risks.

We do not own or operate manufacturing or distribution facilities or resources for clinical or commercial production and distribution of CABOMETYX and COMETRIQ. Instead, we have multiple contractual agreements in place with third party CMOs who, on our behalf, manufacture clinical and commercial supplies of CABOMETYX and COMETRIQ, and will continue to do so for the foreseeable future. To establish and manage this supply chain requires a significant financial commitment and the creation and maintenance of numerous third-party contractual relationships. Although we maintain significant resources to directly oversee the business activities and relationships with companies in our supply chain effectively, we do not have direct control over their operations. Our third party manufacturers may not be able to produce material on a timely basis or manufacture material with the required quality standards, or in the quantity required to meet our development and commercial needs and applicable regulatory requirements. Additionally, as part of our collaboration with Ipsen, we are responsible for the manufacturing and supply of finished, labeled cabozantinib products to Ipsen through the end of the second quarter of 2018. Failure to meet our supply obligations under the collaboration would impair Ipsen's ability to successfully commercialize cabozantinib and reduce revenues to which we are entitled under the collaboration.

If our third party contract manufacturers and suppliers do not continue to supply us with our products or product candidates in a timely fashion and in compliance with applicable quality and regulatory requirements, or otherwise fail or refuse to comply with their obligations to us under our supply and manufacturing arrangements, we may not have adequate remedies for any breach, and their failure to supply us could impair or preclude our ability to meet our and/or Ipsen's commercial needs, or our supply needs for clinical trials.

Risks Related to Our Intellectual Property

Data breaches and cyber-attacks could compromise our intellectual property or other sensitive information and cause significant damage to our business and reputation.

In the ordinary course of our business, we collect, maintain and transmit sensitive data on our networks and systems, including our intellectual property and proprietary or confidential business information (such as research data and personal information) and confidential information with respect to our customers, clinical trial patients and our business partners. We have also outsourced significant elements of our information technology infrastructure and, as a result, third parties may or could have access to our confidential information. The secure maintenance of this information is critical to our business and reputation. We believe that companies have been increasingly subject to a wide variety of security incidents, cyber-attacks and other attempts to gain unauthorized access. These threats can come from a variety of sources, ranging in sophistication from an

individual hacker to a state-sponsored attack and motive (including corporate espionage). Cyber threats may be generic, or they may be custom-crafted against our information systems. Cyber-attacks continue to become more prevalent and much harder to detect and defend against. Our network and storage applications and those of our vendors may be subject to unauthorized access by hackers or breached due to operator error, malfeasance or other system disruptions. It is often difficult to anticipate or immediately detect such incidents and the damage caused by such incidents. These data breaches and any unauthorized access or disclosure of our information or intellectual property could compromise our intellectual property and expose sensitive business information. A data security breach could also lead to public exposure of personal information of our clinical trial patients, customers and others. Cyber-attacks could cause us to incur significant remediation costs, result in product development delays, disrupt key business operations and divert attention of management and key information technology resources. Our network security and data recovery measures and those of our vendors may not be adequate to protect against such security breaches and disruptions. These incidents could also subject us to liability, expose us to significant expense and cause significant harm to our reputation and business.

If we are unable to adequately protect our intellectual property, third parties may be able to use our technology, which could adversely affect our ability to compete in the market.

Our success will depend in part upon our ability to obtain patents and maintain adequate protection of the intellectual property related to our technologies and products. The patent positions of biopharmaceutical companies, including our patent position, are generally uncertain and involve complex legal and factual questions. We will be able to protect our intellectual property rights from unauthorized use by third parties only to the extent that our technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. We will continue to apply for patents covering our technologies and products as, where and when we deem appropriate. However, these applications may be challenged or may fail to result in issued patents. Our issued patents have been and may in the future be challenged by third parties as invalid or unenforceable under U.S. or foreign laws, or they may be infringed by third parties. As a result, we are from time to time involved in the defense and enforcement of our patents or other intellectual property rights in a court of law, U.S. Patent and Trademark Office inter partes review or reexamination proceeding, foreign opposition proceeding or related legal and administrative proceeding in the United States and elsewhere. The costs of defending our patents or enforcing our proprietary rights in post-issuance administrative proceedings and litigation may be substantial and the outcome can be uncertain. An adverse outcome may allow third parties to use our intellectual property without a license and negatively impact our business.

In addition, because patent applications can take many years to issue, third parties may have pending applications, unknown to us, which may later result in issued patents that cover the production, manufacture, commercialization or use of our product candidates. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. Furthermore, others may independently develop similar or alternative technologies or design around our patents. In addition, our patents may be challenged or invalidated or may fail to provide us with any competitive advantages, if, for example, others were the first to invent or to file patent applications for closely related inventions.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. Many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties (for example, the patent owner has failed to “work” the invention in that country or the third party has patented improvements). In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of the patent. Compulsory licensing of life-saving drugs is also becoming increasingly popular in developing countries either through direct legislation or international initiatives. Such compulsory licenses could be extended to include our products or product candidates, which could limit our potential revenue opportunities. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the aggressive enforcement of patent and other intellectual property protection, which makes it difficult to stop infringement. We rely on trade secret protection for some of our confidential and proprietary information. We have taken security measures to protect our proprietary information and trade secrets, but these measures may not provide adequate protection. While we seek to protect our proprietary information by entering into confidentiality agreements with employees, collaborators and consultants, we cannot assure you that our proprietary information will not be disclosed, or that we can meaningfully protect our trade secrets. In addition, our competitors may independently develop substantially equivalent proprietary information or may otherwise gain access to our trade secrets.

Litigation or third-party claims of intellectual property infringement could require us to spend substantial time and money and adversely affect our ability to develop and commercialize products.

Our commercial success depends in part upon our ability to avoid infringing patents and proprietary rights of third parties and not to breach any licenses that we have entered into with regard to our technologies and the technologies of third parties. Other parties have filed, and in the future are likely to file, patent applications covering products and technologies that

we have developed or intend to develop. If patents covering technologies required by our operations are issued to others, we may have to obtain licenses from third parties, which may not be available on commercially reasonable terms, or at all, and may require us to pay substantial royalties, grant a cross-license to some of our patents to another patent holder or redesign the formulation of a product candidate so that we do not infringe third-party patents, which may be impossible to obtain or could require substantial time and expense. Third parties may accuse us of employing their proprietary technology without authorization. In addition, third parties may obtain patents that relate to our technologies and claim that use of such technologies infringes on their patents. Regardless of their merit, such claims could require us to incur substantial costs, including the diversion of management and technical personnel, in defending ourselves against any such claims or enforcing our patents. In the event that a successful claim of infringement is brought against us, we may be required to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, or at all. Defense of any lawsuit or failure to obtain any of these licenses could adversely affect our ability to develop and commercialize products.

We may be subject to damages resulting from claims that we, our employees or independent contractors have wrongfully used or disclosed alleged trade secrets of their former employers.

Many of our employees and independent contractors were previously employed at universities or other biotechnology, biopharmaceutical or pharmaceutical companies, including our competitors or potential competitors. We may be subject to claims that these employees, independent contractors or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers, or used or sought to use patent inventions belonging to their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and divert management's attention. If we fail in defending such claims, in addition to paying money claims, we may lose valuable intellectual property rights or personnel. A loss of key research personnel and/or their work product could hamper or prevent our ability to commercialize certain product candidates, which could severely harm our business.

Risks Related to Employees and Location

If we are unable to manage our growth, our business, financial condition, results of operations and prospects may be adversely affected.

We have experienced and expect to continue to experience growth in the number of our employees and in the scope of our operations. This growth places significant demands on our management, operational and financial resources, and our current and planned personnel, systems, procedures and controls may not be adequate to support our growth. To effectively manage our growth, we must continue to improve existing, and implement new, operational and financial systems, procedures and controls and must expand, train and manage our growing employee base, and there can be no assurance that we will effectively manage our growth without experiencing operating inefficiencies or control deficiencies. We expect that we may need to increase our management personnel to oversee our expanding operations, and recruiting and retaining qualified individuals is difficult. In addition, the physical expansion of our operations may lead to significant costs and may divert our management and capital resources. If we are unable to manage our growth effectively, or are unsuccessful in recruiting qualified management personnel, our business, financial condition, results of operations and prospects may be adversely affected.

The loss of key personnel or the inability to retain and, where necessary, attract additional personnel could impair our ability to operate and expand our operations.

We are highly dependent upon the principal members of our management, as well as clinical, commercial and scientific staff, the loss of whose services might adversely impact the achievement of our objectives. Also, we may not have sufficient personnel to execute our business plan. Retaining and, where necessary, recruiting qualified clinical, commercial and scientific personnel will be critical to support activities related to advancing the development program for cabozantinib and our other compounds, successfully executing upon our commercialization plan for cabozantinib and our internal proprietary research and development efforts. Competition is intense for experienced clinical, commercial and scientific personnel, and we may be unable to retain or recruit such personnel with the expertise or experience necessary to allow us to successfully develop and commercialize our products. Further, all of our employees are employed "at will" and, therefore, may leave our employment at any time.

Our collaborations with outside scientists may be subject to restriction and change.

We work with scientific and clinical advisors and collaborators at academic and other institutions that assist us in our research and development efforts. These advisors and collaborators are not our employees and may have other commitments that limit their availability to us. Although these advisors and collaborators generally agree not to do competing work, if a conflict of interest between their work for us and their work for another entity arises, we may lose their services. In such a

circumstance, we may lose work performed by them, and our development efforts with respect to the matters on which they were working may be significantly delayed or otherwise adversely affected. In addition, although our advisors and collaborators sign agreements not to disclose our confidential information, it is possible that valuable proprietary knowledge may become publicly known through them.

Our headquarters are located near known earthquake fault zones, and the occurrence of an earthquake or other disaster could damage our facilities and equipment, which could harm our operations.

Our headquarters are located in South San Francisco, California, and therefore our facilities are vulnerable to damage from earthquakes. We do not carry earthquake insurance. We are also vulnerable to damage from other types of disasters, including fire, floods, power loss, communications failures, terrorism and similar events since any insurance we may maintain may not be adequate to cover our losses. If any disaster were to occur, our ability to operate our business at our facilities could be seriously, or potentially completely, impaired. In addition, the unique nature of our research activities could cause significant delays in our programs and make it difficult for us to recover from a disaster. Accordingly, an earthquake or other disaster could materially and adversely harm our ability to conduct business.

Facility security breaches may disrupt our operations, subject us to liability and harm our operating results.

Any break-in or trespass at our facilities that results in the misappropriation, theft, sabotage or any other type of security breach with respect to our proprietary and confidential information, including research or clinical data, or that results in damage to our research and development equipment and assets, could subject us to liability and have a material adverse impact on our business, operating results and financial condition.

Risks Related to Environmental and Product Liability

We use hazardous chemicals and radioactive and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development processes involve the controlled use of hazardous materials, including chemicals and radioactive and biological materials. Our operations produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. We may face liability for any injury or contamination that results from our use or the use by third parties of these materials, and such liability may exceed our insurance coverage and our total assets. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development and production efforts.

In addition, our collaborators may use hazardous materials in connection with our collaborative efforts. In the event of a lawsuit or investigation, we could be held responsible for any injury caused to persons or property by exposure to, or release of, these hazardous materials used by these parties. Further, we may be required to indemnify our collaborators against all damages and other liabilities arising out of our development activities or products produced in connection with these collaborations.

We face potential product liability exposure far in excess of our limited insurance coverage.

We may be held liable if any product we or our collaborators develop or commercialize causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing or sale. Regardless of merit or eventual outcome, product liability claims could result in decreased demand for our products and product candidates, injury to our reputation, withdrawal of patients from our clinical trials, product recall, substantial monetary awards to third parties and the inability to commercialize any products that we may develop. These claims might be made directly by consumers, health care providers, pharmaceutical companies or others selling or testing our products. We have obtained limited product liability insurance coverage for our clinical trials and commercial activities for cabozantinib in the amount of \$20.0 million per occurrence and \$20.0 million in the aggregate. However, our insurance may not reimburse us or may not be sufficient to reimburse us for expenses or losses we may suffer. Moreover, if insurance coverage becomes more expensive, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. On occasion, juries have awarded large judgments in class action lawsuits for claims based on drugs that had unanticipated side effects. In addition, the pharmaceutical, biopharmaceutical and biotechnology industries, in general, have been subject to significant medical malpractice litigation. A successful product liability claim or series of claims brought against us could harm our reputation and business and would decrease our cash reserves.

Risks Related to Our Common Stock

We expect that our quarterly results of operations will fluctuate, and this fluctuation could cause our stock price to decline, causing investor losses.

Our quarterly operating results have fluctuated in the past and are likely to fluctuate in the future. A number of factors, many of which we cannot control, could subject our operating results to volatility, including:

- the commercial success of both CABOMETYX and COMETRIQ and the revenues we generate from those approved products;
- customer ordering patterns for CABOMETYX and COMETRIQ, which may vary significantly from period to period;
- the overall level of demand for CABOMETYX and COMETRIQ, including the impact of any competitive products and the duration of therapy for patients receiving CABOMETYX or COMETRIQ;
- costs associated with maintaining our expanded sales, marketing, medical affairs and distribution capabilities for CABOMETYX, COMETRIQ and Cotellic;
- our ability to obtain regulatory approval for cabozantinib as a treatment of first-line advanced RCC;
- the achievement of stated regulatory and commercial milestones, under our collaboration with Ipsen;
- the outcome of our arbitration against Genentech in which we have asserted claims related to Genentech's clinical development, pricing and commercialization of Cotellic, and cost and revenue allocations arising from Cotellic's commercialization in the United States;
- the progress and scope of other development and commercialization activities for cabozantinib and our other compounds;
- future clinical trial results, notably the results from CELESTIAL, our phase 3 pivotal trial in patients with advanced HCC;
- our future investments in the expansion of our pipeline through drug discovery and corporate development activities;
- the inability to obtain adequate product supply for any approved drug product or inability to do so at acceptable prices;
- recognition of upfront licensing or other fees or revenues;
- payments of non-refundable upfront or licensing fees, or payment for cost-sharing expenses, to third parties;
- the introduction of new technologies or products by our competitors;
- the timing and willingness of collaborators to further develop or, if approved, commercialize our product candidates out-licensed to them;
- the termination or non-renewal of existing collaborations or third party vendor relationships;
- regulatory actions with respect to our product candidates and any approved products or our competitors' products;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- the timing and amount of expenses incurred for clinical development and manufacturing of cabozantinib;
- adjustments to expenses accrued in prior periods based on management's estimates after the actual level of activity relating to such expenses becomes more certain;
- the impairment of acquired goodwill and other assets;
- additions and departures of key personnel;
- general and industry-specific economic conditions that may affect our or our collaborators' research and development expenditures; and
- other factors described in this "Risk Factors" section.

Due to the possibility of fluctuations in our revenues and expenses, we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. As a result, in some future quarters, our operating results may not meet the expectations of securities analysts and investors, which could result in a decline in the price of our common stock.

Our stock price may be extremely volatile.

The trading price of our common stock has been highly volatile, and we believe the trading price of our common stock will remain highly volatile and may fluctuate substantially due to factors such as the following, many of which we cannot control:

- adverse results or delays in our or our collaborators' clinical trials;
- the announcement of FDA approval or non-approval, or delays in the FDA review process, of cabozantinib or our collaborators' product candidates or those of our competitors or actions taken by regulatory agencies with respect to our, our collaborators' or our competitors' clinical trials;
- the commercial success of both CABOMETYX and COMETRIQ and the revenues we generate from those approved products;
- the timing of achievement of our clinical, regulatory, partnering and other milestones, such as the commencement of clinical development, the completion of a clinical trial, the filing for regulatory approval or the establishment of collaborative arrangements for cabozantinib or any of our other programs or compounds;
- actions taken by regulatory agencies with respect to cabozantinib or our clinical trials for cabozantinib;
- the announcement of new products by our competitors;
- quarterly variations in our or our competitors' results of operations;
- developments in our relationships with our collaborators, including the termination or modification of our agreements;
- the announcement of an in-licensed product candidate or strategic acquisition;
- conflicts or litigation with our collaborators, including the outcome of our arbitration with Genentech regarding Cotellic;
- litigation, including intellectual property infringement and product liability lawsuits, involving us;
- failure to achieve operating results projected by securities analysts;
- changes in earnings estimates or recommendations by securities analysts;
- the satisfaction of outstanding debt obligations or entry into new financing arrangements;
- developments in the biotechnology, biopharmaceutical or pharmaceutical industry;
- sales of large blocks of our common stock or sales of our common stock by our executive officers, directors and significant stockholders;
- departures of key personnel or board members;
- FDA or international regulatory actions;
- third-party coverage and reimbursement policies;
- disposition of any of our technologies or compounds; and
- general market, economic and political conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

These factors, as well as general economic, political and market conditions, may materially adversely affect the market price of our common stock. In addition, the stock markets in general, and the markets for biotechnology and pharmaceutical stocks in particular, have historically experienced significant volatility that has often been unrelated or disproportionate to the operating performance of particular companies. For example, negative publicity regarding drug pricing and price increases by pharmaceutical companies has negatively impacted, and may continue to negatively impact, the markets for biotechnology and pharmaceutical stocks. Likewise, as a result of the United Kingdom's pending withdrawal from the European Union and/or significant changes in U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade and health care spending and delivery, including the potential repeal and/or replacement of all or portions of PPACA or greater restrictions on free trade stemming from Trump Administration policies, the financial markets could experience significant volatility that could also negatively impact the markets for biotechnology and pharmaceutical stocks. These broad market fluctuations have adversely affected and may in the future adversely affect the trading price of our common stock. Excessive volatility may continue for an extended period of time following the date of this report.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs and divert management's attention and resources, which could have a material and adverse effect on our business.

Future sales of our common stock or conversion of the Deerfield Notes, or the perception that such sales or conversions may occur, may depress our stock price.

A substantial number of shares of our common stock are reserved for issuance upon the exercise of stock options, upon vesting of restricted stock unit, or RSU, awards, upon a purchase under our employee stock purchase program, upon exercise of certain outstanding warrants and upon conversion of the Deerfield Notes. The issuance and sale of substantial amounts of our common stock, including upon conversion of the Deerfield Notes, or the perception that such issuances and sales may occur, could adversely affect the market price of our common stock and impair our ability to raise capital through the sale of additional equity or equity-related securities in the future at a time and price that we deem appropriate.

Certain provisions applicable to the Deerfield Notes could delay or prevent an otherwise beneficial takeover or takeover attempt.

Certain provisions applicable to the Deerfield Notes and the note purchase agreement governing the Deerfield Notes, could make it more difficult or more expensive for a third party to acquire us. For example, if an acquisition event constitutes a Major Transaction under the note purchase agreement governing the Deerfield Notes, holders of the Deerfield Notes will have the right to require us to purchase their notes in cash. In this case, and in other cases, our obligations under the Deerfield Notes and the note purchase agreement governing the Deerfield Notes, could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent or deter attempts by our stockholders to replace or remove our current management, which could cause the market price of our common stock to decline.

Provisions in our corporate charter and bylaws may discourage, delay or prevent an acquisition of us, a change in control, or attempts by our stockholders to replace or remove members of our current Board of Directors. Because our Board of Directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. These provisions include:

- a classified Board of Directors;
- a prohibition on actions by our stockholders by written consent;
- the inability of our stockholders to call special meetings of stockholders;
- the ability of our Board of Directors to issue preferred stock without stockholder approval, which could be used to institute a “poison pill” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our Board of Directors;
- limitations on the removal of directors; and
- advance notice requirements for director nominations and stockholder proposals.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Our ability to use net operating losses to offset future taxable income may be subject to limitations.

Under the Internal Revenue Code, or the Code, and similar state provisions, certain substantial changes in our ownership could result in an annual limitation on the amount of net operating loss carry-forwards that can be utilized in future years to offset future taxable income. The annual limitation may result in the expiration of net operating losses and credit carry-forwards before utilization. We concluded, as of December 31, 2016, that an ownership change, as defined under Section 382, had not occurred. However, if there is an ownership change under Section 382 of the Code in the future, we may not be able to utilize a material portion of our net operating losses, or NOLs. Furthermore, our ability to utilize our NOLs is conditioned upon our attaining profitability and generating United States federal taxable income. As described above, we have incurred significant net losses since our inception; thus, we do not know whether or when we will generate the United States federal taxable income necessary to utilize our NOLs. A full valuation allowance has been provided for the entire amount of our NOLs.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease a total of 247,027 square feet of office and laboratory facilities in South San Francisco, California. The leased premises comprise four buildings and are covered by three lease agreements, as follows:

- The first two leases cover two buildings for a total of 130,964 square feet and expire in May 2017. We have subleased a total of 93,243 square feet of portions of these buildings to five different subtenants. The terms of the subleases expire at the end of our lease terms.
- The third lease covers two buildings for a total of 116,063 square feet and expires in June 2018. We have one five-year options to extend the term of the lease prior to expiration.

We believe that our leased facilities have sufficient space to accommodate our current needs.

ITEM 3. LEGAL PROCEEDINGS

On June 3, 2016, we filed a Demand for Arbitration before JAMS in San Francisco, California asserting claims against Genentech (a member of the Roche Group) related to its clinical development, pricing and commercialization of Cotellic, and cost and revenue allocations arising from Cotellic's commercialization in the United States.

In December 2006, we entered into a worldwide collaboration for the development and commercialization of cobimetinib with Genentech. The terms of the collaboration agreement provide Genentech with authority over the global development and commercialization plans for cobimetinib and the execution of those plans. The collaboration agreement further provides that we are entitled to an initial equal share of U.S. profits and losses for cobimetinib, with our share decreasing as sales increase, as well as low double-digit royalties on ex-U.S. net sales of cobimetinib. To date, cobimetinib has been approved for use exclusively in combination with Zelboraf (vemurafenib) and launched by Genentech in the United States and multiple other territories, including the European Union, Canada, Australia and Brazil as a treatment for patients with advanced melanoma harboring a BRAF V600E or V600K mutation. It is marketed as Cotellic.

Our arbitration demand asserts that Genentech has breached the parties' contract for, amongst other breaches, failing to meet its diligence and good faith obligations. The demand seeks various forms of declaratory, monetary, and equitable relief, including without limitation that the cost and revenue allocations for Cotellic be shared equitably consistent with the collaboration agreement's terms, along with attorneys' fees and costs of the arbitration.

On July 13, 2016, Genentech asserted a counterclaim for breach of contract seeking monetary damages and interest related to the cost allocations under the collaboration agreement. On December 29, 2016, Genentech withdrew its counterclaim against us and stated that it would unilaterally change its approach to allocation of promotional expenses arising from commercialization of the Cotellic plus Zelboraf combination therapy, both retrospectively and prospectively. We believe this revised allocation approach substantially reduced our exposure to costs associated with promotion of the Cotellic plus Zelboraf combination in the United States. Notwithstanding Genentech's change of approach, other significant issues remain in dispute between the parties. Genentech's action does not address the claims in our demand for arbitration related to Genentech's clinical development of cobimetinib, or pricing and promotional costs for Cotellic in the United States, nor does it fully resolve claims over revenue allocation. And, Genentech has not clarified how it intends to allocate promotional costs incurred with respect to the promotion of other combination therapies that include cobimetinib for other indications that will be developed or are in development and may be approved. As a result, we will continue to press our position for the arbitral panel to obtain a just resolution of these claims. The ultimate outcome and timing of the arbitration is difficult to predict.

We may from time to time become a party to other legal proceedings arising in the ordinary course of business.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

Our common stock has traded on the NASDAQ Global Select Market (formerly the NASDAQ National Market) under the symbol "EXEL" since April 11, 2000. The following table sets forth, for the periods indicated, the high and low intraday sales prices for our common stock as reported by the NASDAQ Global Select Market:

	Common Stock Price	
	High	Low
Year ended December 30, 2016:		
Quarter ended April 1, 2016	\$ 5.85	\$ 3.55
Quarter ended July 1, 2016	\$ 8.19	\$ 4.11
Quarter ended September 30, 2016	\$ 15.58	\$ 7.93
Quarter ended December 30, 2016	\$ 18.29	\$ 10.04
Year ended January 1, 2016:		
Quarter ended April 3, 2015	\$ 3.16	\$ 1.54
Quarter ended July 3, 2015	\$ 4.18	\$ 2.51
Quarter ended October 2, 2015	\$ 6.81	\$ 3.31
Quarter ended January 1, 2016	\$ 6.42	\$ 4.70

On February 16, 2017, the last reported sale price on the NASDAQ Global Select Market for our common stock was \$22.65 per share.

Holders

On February 16, 2017, there were 448 holders of record of our common stock. The number of record holders is based upon the actual number of holders registered on our books at such date and does not include holders of shares in "street names" or persons, partnerships, associations, corporations or other entities identified in security position listings maintained by depository trust companies.

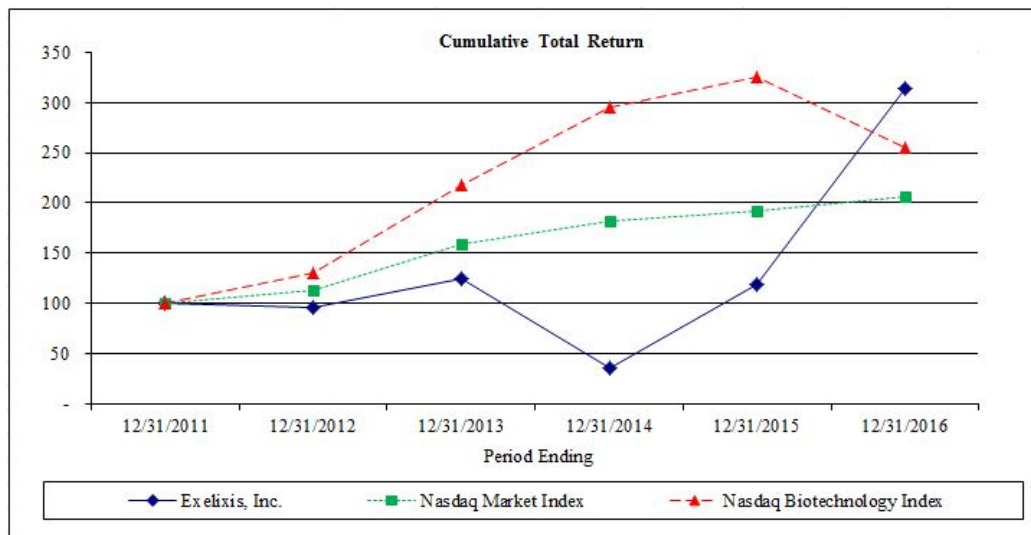
Dividends

Since inception, we have not paid dividends on our common stock. We currently intend to retain all future earnings, if any, for use in our business and currently do not plan to pay any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our Board of Directors. Our loan and security agreement with Silicon Valley Bank restricts our ability to pay dividends and make distributions. In addition, our note purchase agreement with Deerfield restricts our ability to make distributions.

Performance Graph

This performance graph shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities under that Section and shall not be deemed to be incorporated by reference into any filing of ours under the Securities Act of 1933, as amended.

The following graph compares, for the five year period ended December 31, 2016, the cumulative total stockholder return for our common stock, the NASDAQ Stock Market (U.S. companies) Index, or the NASDAQ Market Index, and the NASDAQ Biotechnology Index. The graph assumes that \$100 was invested on December 31, 2011 in each of our common stock, the NASDAQ Market Index and the NASDAQ Biotechnology Index and assumes reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.



	December 31,					
	2011	2012	2013	2014	2015	2016
Exelixis, Inc.	100	95	125	35	119	315
NASDAQ Market Index	100	114	160	181	192	207
NASDAQ Biotechnology Index	100	130	218	295	326	256

ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial information has been derived from our audited consolidated financial statements. The financial information as of December 31, 2016 and 2015 and for the years ended, December 31, 2016, 2015, and 2014 are derived from audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The financial information as of December 31, 2014, 2013 and 2012, and for each of the years ended December 31, 2013 and 2012, are derived from audited consolidated financial statements not included in this Annual Report on Form 10-K, which have been revised as described below. The following Selected Financial Data should be read in conjunction with “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Item 8. Financial Statements and Supplementary Data” included elsewhere in this Annual Report on Form 10-K. The historical results are not necessarily indicative of the results of operations to be expected in the future.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
(In thousands, except per share data)					
Consolidated Statements of Operations Data:					
Revenues	\$ 191,454	\$ 37,172	\$ 25,111	\$ 31,338	\$ 47,450
Operating expenses:					
Cost of goods sold	6,552	3,895	2,043	1,118	—
Research and development	95,967	96,351	189,101	178,763	128,878
Selling, general and administrative	116,145	57,305	50,829	50,958	31,837
Restructuring charge	914	1,042	7,596	1,231	9,171
Total operating expenses	219,578	158,593	249,569	232,070	169,886
Loss from operations	(28,124)	(121,421)	(224,458)	(200,732)	(122,436)
Other expense, net ⁽¹⁾	(42,098)	(40,268)	(37,021)	(37,556)	(22,792)
Loss before taxes	(70,222)	(161,689)	(261,479)	(238,288)	(145,228)
Income tax provision (benefit)	—	55	(182)	(96)	107
Net loss ⁽¹⁾	\$ (70,222)	\$ (161,744)	\$ (261,297)	\$ (238,192)	\$ (145,335)
Net loss per share, basic and diluted ⁽¹⁾	\$ (0.28)	\$ (0.77)	\$ (1.34)	\$ (1.29)	\$ (0.91)
Shares used in computing basic and diluted loss per share amounts	250,531	209,227	194,299	184,062	160,138

	December 31,				
	2016	2015	2014	2013	2012
(In thousands)					
Consolidated Balance Sheet Data:					
Cash and investments	\$ 479,554	\$ 253,310	\$ 242,760	\$ 415,862	\$ 633,961
Working capital (deficit)	\$ 200,215	\$ 126,414	\$ (3,188)	\$ 178,756	\$ 350,837
Total assets	\$ 597,541	\$ 332,342	\$ 323,269	\$ 497,951	\$ 714,142
Long-term obligations ⁽¹⁾	\$ 237,635	\$ 420,897	\$ 312,163	\$ 395,599	\$ 394,311
Accumulated deficit ⁽¹⁾	\$ (1,983,147)	\$ (1,912,925)	\$ (1,751,181)	\$ (1,489,884)	\$ (1,251,692)
Total stockholders’ equity (deficit) ⁽¹⁾	\$ 89,318	\$ (140,806)	\$ (159,324)	\$ 14,498	\$ 238,127

(1) Prior periods have been revised to reflect the correction of the accounting for non-cash interest expense associated with the 2019 Notes. See “Note 1. Organization and Summary of Significant Accounting Policies - Correction of an Immaterial Error” in the “Notes to the Consolidated Financial Statements” for additional information on the correction.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Some of the statements under in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" are forward-looking statements. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry and involve known and unknown risks, uncertainties and other factors that may cause our company's or our industry's results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied in, or contemplated by, the forward-looking statements. Words such as "believe," "anticipate," "expect," "intend," "plan," "focus," "goal," "objective," "will," "may" "would," "could," "estimate," "predict," "target," "potential," "continue," or the negative of such terms or other similar expressions identify forward-looking statements. Our actual results and the timing of events may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such a difference include those discussed in "Item 1A. Risk Factors" as well as those discussed elsewhere in this Annual Report on Form 10-K. These and many other factors could affect our future financial and operating results. We undertake no obligation to update any forward-looking statement to reflect events after the date of this report.

We have adopted a 52- or 53-week fiscal year policy that generally ends on the Friday closest to December 31st. Fiscal year 2014, a 53-week year, ended on January 2, 2015; fiscal year 2015, a 52-week year, ended on January 1, 2016; fiscal year 2016, a 52-week year, ended on December 30, 2016; and fiscal year 2017, a 52-week year, will end on December 29, 2017. For convenience, references in this report as of and for the fiscal years ended January 2, 2015, January 1, 2016, and December 30, 2016 are indicated as being as of and for the years ended December 31, 2014, 2015, and 2016, respectively. The quarterly period ended January 2, 2015 is a 14-week fiscal quarter; all other interim periods presented are 13-week fiscal quarters.

Overview

We are a biopharmaceutical company committed to the discovery, development and commercialization of new medicines to improve care and outcomes for people with cancer. Since its founding in 1994, three products discovered at Exelixis have progressed through clinical development, received regulatory approval, and entered the commercial marketplace. Two are derived from cabozantinib, an inhibitor of multiple tyrosine kinases including MET, AXL, and VEGF receptors: CABOMETYX™ tablets approved for previously treated advanced kidney cancer and COMETRIQ® capsules approved for progressive, metastatic medullary thyroid cancer. The third product, Cotellic®, is a formulation of cobimetinib, a selective inhibitor of MEK, marketed under a collaboration with Genentech (a member of the Roche Group), and is approved as part of a combination regimen to treat advanced melanoma. Both cabozantinib and cobimetinib have shown potential in a variety of forms of cancer and are the subjects of broad clinical development programs.

While our commercialization efforts for CABOMETYX and COMETRIQ are focused in the United States, the products are marketed for their approved indications outside of the United States and Japan under our collaboration agreement with Ipsen. We are also closely working with Ipsen and our other cabozantinib collaboration partner, Takeda, on the further global development and commercialization of cabozantinib.

Beyond the FDA-approved indications of cabozantinib for second-line advanced RCC and progressive, metastatic MTC, we are engaged in a broad development program composed of over 45 ongoing or planned clinical trials in additional tumor types, many of which are conducted through our CRADA with NCI-CTEP or our IST program. The most notable studies at this time are CELESTIAL, our company-sponsored phase 3 trial of cabozantinib in advanced HCC, for which we anticipate results in 2017, and CABOSUN, a randomized phase 2 trial comparing cabozantinib to sunitinib in the first-line treatment of intermediate- or poor-risk RCC patients, being conducted by The Alliance through our CRADA with NCI-CTEP. In May 2016, The Alliance informed us that CABOSUN met its primary endpoint demonstrating a statistically significant and clinically meaningful improvement of PFS compared with sunitinib. Based on these results, we are working towards the submission of a sNDA in 2017 for cabozantinib as a treatment for first-line advanced RCC. Cabozantinib has demonstrated clinical activity as a single agent in advanced RCC, and we are interested in further examining its potential in combination with immunotherapies to treat this serious disease. Building on the available preclinical and clinical observations that cabozantinib results in a more immunopromissive tumor environment potentially resulting in cooperative activity of cabozantinib in combination with immune check point inhibitors, in collaboration with BMS, we plan to evaluate the combination of cabozantinib with nivolumab or nivolumab and ipilimumab in various tumor types, including a phase 3 trial in first-line advanced RCC, as well as studies in bladder cancer and HCC.

In addition to these advances connected with cabozantinib, significant progress continues to be made with respect to the clinical development, regulatory status and commercial potential of cobimetinib under our collaboration agreement with

Genentech. For additional information on the cobimetinib development program, see “Part I. Item 1. Business - Cobimetinib Development Program.”

Additional information regarding our business is included in Part I, Item 1, “Business,” included in this Annual Report on Form 10-K.

During 2016, we significantly grew our commercial organization and positioned the business to be able to drive towards and support an expanded product pipeline. Below is a summary of our significant business developments:

- In February 2016, we entered into a collaboration and license agreement with Ipsen for the commercialization and further development of cabozantinib. Pursuant to the terms of the collaboration agreement, Ipsen received exclusive commercialization rights for current and potential future cabozantinib indications outside of the United States, Canada and Japan. The collaboration agreement was subsequently amended in December 2016 to include commercialization rights in Canada.
- In April 2016, based on results of our phase 3 pivotal trial METEOR, which met its primary endpoint of improving PFS, as well as its secondary endpoints of improving OS and ORR, the FDA approved CABOMETYX for the treatment of patients with advanced RCC who have received prior anti-angiogenic therapy.
- In May 2016, we announced that CABOSUN met its primary endpoint, demonstrating a statistically significant and clinically meaningful improvement in PFS compared with sunitinib in patients with advanced intermediate- or poor-risk RCC. Based on these results, we are working towards the submission of a sNDA in the third quarter of 2017 for cabozantinib as a treatment for first-line advanced RCC.
- In June 2016, we presented results from our phase 3 pivotal trial METEOR at the ASCO 2016 Annual Meeting, showing that CABOMETYX demonstrated a statistically significant and clinically meaningful increase in OS. Compared with everolimus, CABOMETYX was associated with a 34% reduction in the rate of death and median OS was 21.4 months for patients receiving CABOMETYX versus 16.5 months for those receiving everolimus (HR=0.66, 95% CI 0.53-0.83, P=0.0003).
- In June 2016, our collaboration partner Genentech announced preliminary results from a phase 1b trial evaluating the safety and clinical activity of the combination of cobimetinib with atezolizumab in patients with metastatic CRC, which included 23 patients with advanced CRC (22 with mutant KRAS and one with wild-type KRAS). The ORR for the combination was 17%, including four confirmed PRs; additionally five patients achieved SD. Responses were seen in tumors with the microsatellite stable, or MSS, phenotype, which comprises 95% of CRC. MSS CRC has historically been refractory to immuno-oncology agents. The median duration of response was not yet reached, with a range of 5.4 months to more than 11.1 months. No dose-limiting toxicities were observed.
- In September 2016, the EC approved CABOMETYX for the treatment of adult patients with advanced RCC following prior VEGF-targeted therapy and in December 2016, Ipsen recorded its first commercial sales in Europe.
- In October 2016, we announced positive results from the NCI-CTEP-sponsored phase 1 trial of cabozantinib in combination with nivolumab in patients with previously treated genitourinary tumors.
- In November 2016, we announced Genentech’s efforts to advance the development program for cobimetinib, through the initiation and announcement of multiple phase 3 pivotal trials exploring the combination of cobimetinib with other targeted and immuno-oncology agents for the treatment of melanoma and CRC.
- In January 2017, we entered into a collaboration and license agreement with Takeda for the commercialization and further clinical development of cabozantinib in Japan.

2016 Financial Highlights

- Our total net product revenue increased by \$101.2 million, or 296%, in 2016 compared to 2015, primarily due to the commercial launch of CABOMETYX as a treatment for patients with advanced RCC in April 2016 and, to a lesser extent, an increase in COMETRIQ product sales.
- Our collaboration revenue increased by \$53.1 million in 2016 compared to 2015, primarily due to upfront payments and milestones received as a result of entering into our collaboration and license agreement with Ipsen.
- Cash and investments increased to \$479.6 million at December 31, 2016 as compared to \$253.3 million at December 31, 2015.
- Between August and November 2016, we retired all \$287.5 million of the 2019 Notes through privately negotiated exchange transactions and redemption procedures provided for by the 2019 Notes. For additional information on the retirement of the 2019 Notes, see “Note 7. Debt,” to our “Notes to Consolidated Financial Statements contained in Part II, Item 8 of this Annual Report on Form 10-K.

2017 Outlook

In 2017, our key objective is to maximize the clinical and commercial opportunities for cabozantinib and cobimetinib as oncology franchises. On the commercial front, we plan to continue to execute on the U.S. launch of CABOMETYX as a treatment for patients with advanced RCC and increase sales of COMETRIQ and Cotellic, while supporting our collaboration partners on the execution of their commercial plans. From the research and development perspective, we intend to continue to invest in our cabozantinib development program, while driving toward the expansion of our product pipeline through the measured resumption of drug discovery activities and the evaluation of potential in-licensing and acquisition opportunities that align with our oncology drug development expertise.

We anticipate that we will continue to face a number of challenges and risks to our business that may impact our ability to execute on our 2017 business objectives. In particular, we anticipate that for the foreseeable future our ability to generate meaningful revenue to fund our commercial operations and our development and discovery programs is dependent upon the successful commercialization of CABOMETYX for the treatment of advanced RCC in territories where it has been or may soon be approved. The commercial potential of CABOMETYX for the treatment of advanced RCC remains subject to a variety of factors, most importantly, CABOMETYX's perceived benefit/risk profile as compared to the benefit/risk profiles of other treatments available or currently in development for the treatment of advanced RCC. Our ability to generate meaningful product revenue from CABOMETYX is also affected by a number of other factors, including the extent to which coverage and reimbursement for CABOMETYX is available from government and other third-party payers. Obtaining and maintaining appropriate coverage and reimbursement for CABOMETYX is increasingly challenging due to, among other things, the attention being paid to healthcare cost containment and other potential austerity measures being discussed in the U.S. and worldwide, as well as increasing policy interest in the U.S. with respect to pharmaceutical drug pricing practices. Our ability to fulfill the commercial potential of cabozantinib also depends on our ability to expand the compound's use by generating data in clinical development that will support regulatory approval of cabozantinib in additional indications. Our immediate focus in this regard is a potential regulatory approval of our sNDA for cabozantinib for first-line advanced RCC based upon data from CABOSUN. This approval represents a greater challenge than others because CABOSUN was not originally designed as a registrational trial. However, given the positive nature of CABOSUN results, we are planning to submit a sNDA to the FDA. Achievement of our 2017 business objectives will also depend on our ability to adapt our development and commercialization strategy to navigate the increasing prevalence of immunotherapy competition, as well as the use of combination therapy to treat cancer. Furthermore, our research and development objectives may be curtailed as a result of operational challenges related to organizational growth as we resume drug discovery activities, and we may be unable to successfully identify appropriate candidates for in-licensing or acquisition.

Some of these challenges and risks are specific to our business, and others are common to companies in the pharmaceutical industry with development and commercial operations. For a complete discussion of challenges and risks we face, see in Part I, Item 1A, "Risk Factors" of this Annual Report on Form 10-K.

Results of Operations – Comparison of Years Ended December 31, 2016, 2015 and 2014
Revenues

Revenues by category were as follows (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
Gross product revenues	\$ 151,499	\$ 36,650	\$ 28,963
Discounts and allowances	(16,124)	(2,492)	(3,852)
Net product revenues	135,375	34,158	25,111
Royalty and product supply revenues, net	2,795	14	—
License revenues ⁽¹⁾	13,284	—	—
Contract revenues ⁽²⁾	40,000	3,000	—
Collaboration revenues	56,079	3,014	—
Total revenues	\$ 191,454	\$ 37,172	\$ 25,111
Dollar change	\$ 154,282	\$ 12,061	
Percentage change	415%	48%	

(1) Includes amortization of upfront payments.

(2) Includes milestone payments.

Net product revenues by product were as follows (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
CABOMETYX	\$ 93,481	\$ —	\$ —
COMETRIQ	41,894	34,158	25,111
Net product revenues	\$ 135,375	\$ 34,158	\$ 25,111
Dollar change	\$ 101,217	\$ 9,047	
Percentage change	296%	36%	

The increase in net product revenues for the year ended December 31, 2016, as compared to 2015, was primarily due to the impact of the commercial launch of CABOMETYX in late April 2016, and, to a lesser extent, an increase in demand for COMETRIQ. CABOMETYX was approved by the FDA on April 25, 2016 as a treatment for patients with advanced RCC who have received prior anti-angiogenic therapy. Net product revenues for CABOMETYX during 2016 were also favorably impacted by the build of channel inventory by the specialty pharmacies and distributors to whom we sell CABOMETYX in connection with its initial launch. The 23% increase in net product revenues for COMETRIQ for the year ended December 31, 2016, as compared to 2015, was primarily due to a 15% increase in the number of COMETRIQ units sold and to a lesser extent, an increase in the average selling price of the product. The 36% increase in net product revenues for the year ended December 31, 2015, as compared to 2014, was primarily due to a 26% increase in the number of COMETRIQ units sold and, to a lesser extent, the impact of a change to the “sell-in” method which resulted in the one-time recognition of \$2.6 million of deferred revenue attributable to sales to the specialty pharmacy that sells COMETRIQ in the U.S. in the first quarter of 2015. The COMETRIQ sales volume increases in both periods were driven by increased product demand.

Royalty and product supply revenues, net for the years ended December 31, 2016 and 2015 primarily includes recognition of \$2.8 million and \$14 thousand, respectively, of royalties on ex-U.S. net sales of Cotellic following Genentech’s launch of the product in late 2015. There was no such royalty and product supply revenue during the comparable period in 2014.

License revenues for the year ended December 31, 2016 consisted of the recognition of \$13.3 million of the upfront payments and non-substantive milestone received in 2016 in connection with our collaboration and license agreement with Ipsen. The upfront payment of \$200.0 million, received in the first quarter of 2016, the \$60.0 million milestone we achieved upon the approval of cabozantinib by the EMA in second-line RCC, and the \$10.0 million upfront payment received in

December 2016 in consideration for the commercialization rights in Canada are being recognized ratably over the remaining term of the collaboration agreement. The collaboration agreement continues through early 2030, which is the current estimated patent expiration of cabozantinib in the European Union. There was no such license revenue during the comparable periods in 2015 and 2014.

Contract revenues for the year ended December 31, 2016 reflect recognition of two \$10.0 million milestones for the first commercial sales of CABOMETYX by Ipsen in Germany and the United Kingdom, \$15.0 million from a milestone payment earned from Daiichi Sankyo related to its worldwide license of our compounds that modulate mineralocorticoid receptor, including CS-3150/esaxerenone (a specific rotational isomer of XL550) in September 2016 and \$5.0 million from a milestone payment earned from Merck related to its worldwide license of our PI3K-d program in July 2016. Contract revenues for the year ended December 31, 2015 reflect a \$3.0 million contingent payment from Merck related to that same license. There was no such contract revenue during the comparable period in 2014.

Total revenues by significant customer were as follows (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
Diplomat Specialty Pharmacy	\$ 63,826	\$ 30,856	\$ 24,832
Ipsen	33,252	—	—
Others, individually less than 10% of total revenues for all periods presented	94,376	6,316	279
Total revenues	<u>\$ 191,454</u>	<u>\$ 37,172</u>	<u>\$ 25,111</u>

We recognize net product revenue net of discounts and allowances that are further described in “Note 1. Organization and Summary of Significant Accounting Policies” to our “Notes to Consolidated Financial Statements” contained in Part II, Item 8 of this Annual Report on Form 10-K. The activities and ending reserve balances for each significant category of discount and allowance were as follows (dollars in thousands):

	Customer credits and co-pay assistance	Rebates	Chargebacks	Returns	Total
Balance at December 31, 2014	\$ 2,320	\$ 484	\$ (10)	\$ —	\$ 2,794
Provision related to sales made in:					—
Current period	1,014	1,539	69	38	2,660
Prior periods	—	(197)	10	—	(187)
Payments	(3,003)	(935)	(30)	—	(3,968)
Balance at December 31, 2015	331	891	39	38	1,299
Provision related to sales made in:					—
Current period	5,721	5,105	5,297	359	16,482
Prior periods	2	(313)	(39)	(8)	(358)
Payments	(4,779)	(3,056)	(3,976)	(38)	(11,849)
Balance at December 31, 2016	<u>\$ 1,275</u>	<u>\$ 2,627</u>	<u>\$ 1,321</u>	<u>\$ 351</u>	<u>\$ 5,574</u>

The balance at December 31, 2014 consisted primarily of a project management fee payable to Sobi which was paid during the year ended December 31, 2015. Other activity during 2015 was related to discounts and allowances on product sales of COMETRIQ through a single specialty pharmacy. The growth in the ending reserve balances and the activity for the year ended December 31, 2016 resulted from the increase in discounts and allowances on increased product sales through an expanded distribution network, which includes five specialty pharmacies and three specialty distributors, which we implemented following the launch of CABOMETYX and the continued distribution of COMETRIQ through one specialty pharmacy and one specialty distributor.

Cost of Goods Sold

The cost of goods sold and our gross margins were as follows (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
Cost of goods sold	\$ 6,552	\$ 3,895	\$ 2,043
Gross margin	95%	89%	92%

Cost of goods sold is related to our product revenues and consists primarily of a 3% royalty payable to GlaxoSmithKline on net sales of any product incorporating cabozantinib, indirect labor costs, the cost of manufacturing, write-downs related to expiring and excess inventory, and other third party logistics costs of our product. Portions of the manufacturing costs for inventory were incurred prior to the regulatory approval of CABOMETYX and COMETRIQ and, therefore, were expensed as research and development costs when those costs were incurred, rather than capitalized as inventory. The sale of products containing previously expensed materials resulted in a 7%, 6% and 9% reduction in the Cost of goods sold during the years ended December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016, we have \$1.2 million in previously expensed materials that will not be charged to Costs of goods sold in future periods. Cost of goods sold also includes write-downs related to excess and expiring inventory. Such write-downs were \$0.5 million for the year ended December 31, 2016 as compared to \$1.2 million for 2015 and \$0.2 million for 2014. Gross margin percentage is net product revenues less cost of goods sold, divided by net product revenues.

The increase in Cost of goods sold was primarily related to the launch of CABOMETYX during the year ended December 31, 2016 and increases in the number of units of COMETRIQ sold during the years ended December 31, 2016 and 2015, as compared to the preceding periods. The increase in gross margins for the year ended December 31, 2016, as compared to 2015, was related to the change in product mix as CABOMETYX has a lower manufacturing cost than COMETRIQ. The decrease in gross margins for the year ended December 31, 2015, as compared to 2014, was related to the increase in write-downs related to excess and expiring inventory, described above.

Research and Development Expenses

Total research and development expenses were as follows (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
Research and development expenses	\$ 95,967	\$ 96,351	\$ 189,101
Dollar change	\$ (384)	\$ (92,750)	
Percentage change	less than 1%	(49)%	

Research and development expenses consist primarily of clinical trial expenses, personnel expenses, stock-based compensation, consulting and outside services, the allocation of general corporate costs, and temporary personnel expenses.

The nominal decrease in research and development expenses for the year ended December 31, 2016, as compared to 2015, was primarily related to clinical trial costs, which includes services performed by third-party contract research organizations and other vendors who support our clinical trials. The decrease in clinical trial costs was \$8.9 million for the year ended December 31, 2016, as compared to 2015. The decrease in clinical trial costs was predominantly due to decreases in costs related to METEOR, our phase 3 pivotal trial in advanced RCC and was partially offset by increases in costs related to CELESTIAL, our phase 3 pivotal trial in advanced HCC. Decreases in research and development expenses for the year ended December 31, 2016, as compared to 2015, also related to a decrease in the allocation of general corporate costs and stock-based compensation. The allocation of general corporate costs decreased by \$4.2 million for the year ended December 31, 2016 as compared to the comparable period in 2015, primarily due to headcount growth in the selling, general and administrative functions. Stock-based compensation decreased by \$2.3 million for the year ended December 31, 2016 as compared to the comparable period in 2015, primarily due to the 2015 recognition of stock-based compensation expenses for performance-based stock-options tied to the positive top-line data received from the METEOR trial and the anticipated acceptance of our NDA filing with the FDA which was partially offset by a bonus to our employees in the form of fully-vested RSU during 2016. These decreases were almost entirely offset by increases in personnel expenses and consulting and outside services. Personnel and related expenses increased by \$12.8 million for the year ended December 31, 2016 as compared to the comparable period in 2015 primarily due to the hiring of medical science liaisons as a result of the launch of CABOMETYX and an increase in the accrual for corporate bonuses. Consulting and outside services increased by \$2.1

million for the year ended December 31, 2016 as compared to the comparable period in 2015 primarily due to increases in activities related to medical affairs and drug safety.

The decrease in research and development expenses for the year ended December 31, 2015, as compared to 2014, was primarily related to a decrease in clinical trial costs, which includes services performed by third-party CROs and other vendors that support our clinical trials. The decrease in clinical trial costs was \$70.3 million for the year ended December 31, 2015, as compared to 2014. The decrease in clinical trial costs was predominantly due to decreases in costs related to COMET-1 and COMET-2, our phase 3 pivotal trials in mCRPC which we terminated in September 2014, METEOR, our phase 3 pivotal trial in advanced RCC, and a reduction of general program level costs; the decrease in costs related to METEOR included the impact of a \$9.8 million decrease in comparator drug purchases.

Decreases in research and development expenses for the year ended December 31, 2015, as compared to 2014, also related to personnel expenses, consulting and outside services and temporary personnel. Personnel expenses decreased by \$16.6 million for the year ended December 31, 2015, as compared to 2014 primarily due to workforce reductions undertaken as a consequence of the failure of COMET-1. The allocation of general corporate costs decreased by \$8.6 million for the year ended December 31, 2015 as compared to the comparable period in 2014, primarily due to headcount growth in the selling, general and administrative functions. Consulting and outside services decreased by \$3.6 million primarily as a result of decreases in clinical development consulting activities and the use of outside medical safety liaisons. Temporary personnel decreased by \$2.9 million due to a decrease in clinical trial activities performed by those personnel. Those decreases were partially offset by increases in stock-based compensation and regulatory filing fees. Stock-based compensation increased by \$8.4 million primarily due to expense recognized for performance-based stock-options described above. Regulatory filing fees of \$2.4 million were paid to the FDA in 2015 in connection with the filing of our NDA.

We are focusing our development and commercialization efforts primarily on cabozantinib to maximize the therapeutic and commercial potential of this compound, and as a result, we expect our near-term research and development expenses to relate to the clinical development of cabozantinib. We expect to continue to incur significant development costs for cabozantinib in future periods as we evaluate its potential in a broad development program comprising approximately 45 ongoing or planned clinical trials across multiple indications. The most notable study of this program is our company-sponsored phase 3 trial of cabozantinib in advanced HCC called CELESTIAL. In addition, postmarketing commitments in connection with the approval of COMETRIQ in progressive, metastatic MTC dictate that we conduct an additional study in that indication. As a result, we expect our research and development expenses to increase as we continue to develop cabozantinib and our pipeline.

We do not have reliable estimates regarding the timing of our clinical trials. We estimate that typical phase 1 clinical trials last approximately one year, phase 2 clinical trials last approximately one to two years and phase 3 clinical trials last approximately two to four years. However, the length of time may vary substantially according to factors relating to the particular clinical trial, such as the type and intended use of the drug candidate, the clinical trial design and the ability to enroll suitable patients.

We do not have reliable estimates of total costs for a particular drug candidate, or for cabozantinib for a particular indication, to reach the market. Our potential therapeutic products are subject to a lengthy and uncertain regulatory process that may involve unanticipated additional clinical trials and may not result in receipt of the necessary regulatory approvals. Failure to receive the necessary regulatory approvals would prevent us from commercializing the product candidates affected. In addition, clinical trials of our potential product candidates may fail to demonstrate safety and efficacy, which could prevent or significantly delay regulatory approval. A discussion of the risks and uncertainties with respect to our research and development activities, including completing the development of our product candidates, and the consequences to our business, financial position and growth prospects can be found in "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K.

Selling, General and Administrative Expenses

Total selling, general and administrative expenses were as follows (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
Selling, general and administrative expenses	\$ 116,145	\$ 57,305	\$ 50,829
Dollar change	\$ 58,840	\$ 6,476	
Percentage change	103%	13%	

Selling, general and administrative expenses consist primarily of personnel expenses, consulting and outside services, stock-based compensation, travel and entertainment, facility costs, legal and accounting costs, and marketing.

The increase in selling, general and administrative expenses for the year ended December 31, 2016, as compared to 2015, was primarily related to personnel expenses, consulting and outside services, travel and entertainment, the allocation of general corporate costs, and stock-based compensation. Personnel expenses increased by \$44.1 million for the year ended December 31, 2016, as compared to 2015, primarily due to an increase in headcount connected with the build-out of our U.S. commercial organization as a result of the launch of CABOMETYX as well as an increase in incentive compensation and the accrual for corporate bonuses. Consulting and outside services increased by \$16.0 million for the year ended December 31, 2016, as compared to 2015, primarily due to costs incurred supporting the commercialization and launch of CABOMETYX. Travel and entertainment increased by \$5.5 million for the year ended December 31, 2016, as compared to 2015, primarily due to travel incurred by our U.S. commercial organization. The allocation of general corporate costs to research and development and cost of goods sold decreased by \$3.9 million for the year ended December 31, 2016, as compared to 2015, primarily due to headcount growth in the selling, general and administrative functions. Stock-based compensation increased by \$3.3 million for the year ended December 31, 2016, as compared to 2015, primarily due to headcount growth and a bonus paid to our employees in the form of fully-vested RSUs which was partially offset by the 2015 recognition of expenses for performance-based stock-options described above. These increases were partially offset by a decrease in marketing expenses.

Marketing expenses includes our share of losses under our collaboration agreement with Genentech. On June 3, 2016, following a 30 day dispute resolution period, we filed a demand for arbitration asserting claims against Genentech related to its clinical development, pricing and commercialization of Cotellic, and cost and revenue allocations in connection with Cotellic's commercialization in the United States. Soon thereafter, Genentech asserted a counterclaim for breach of contract seeking monetary damages and interest related to the cost allocations under the collaboration agreement. On December 29, 2016, Genentech withdrew its counterclaim against us in the ongoing JAMS arbitration concerning alleged breaches of the parties' collaboration agreement. When notifying the arbitral panel and us of this unilateral action, Genentech further stated that it changed, both retroactively and prospectively, the manner in which it allocates promotional expenses of the Cotellic plus Zelboraf combination therapy. As a result of Genentech's decision to change its cost allocation approach, we are relieved of our obligation to pay \$18.7 million of disputed costs that had been accrued by us as of September 30, 2016. We have invoiced Genentech for certain expenses, with interest, that we had previously paid. Accordingly, during the year ended December 31, 2016, we offset selling, general and administrative expenses with a \$13.3 million recovery for disputed losses under the collaboration agreement that had been recognized prior to 2016. During the year ended December 31, 2016, we also recognized a loss of \$4.5 million for 2016 activities under the collaboration agreement as computed under Genentech's revised cost allocation approach. In total, we have recorded a net cost recovery of \$8.8 million during the year ended December 31, 2016 for the collaboration agreement. In comparison, during 2015 marketing expenses included losses of \$16.6 million under the collaboration agreement.

The increase in selling, general and administrative expenses for the year ended December 31, 2015, as compared to 2014, was primarily related to increases in marketing costs and stock-based compensation. Marketing expenses increased by \$10.2 million, which includes our share of losses under our collaboration agreement with Genentech totaling \$16.6 million. Stock-based compensation, increased by \$3.5 million primarily due to expense recognized for performance-based stock-options tied to the positive top-line data received from the METEOR trial and the anticipated acceptance of our NDA filing with the FDA. Those increases were partially offset by decreases in personnel costs, consulting and outside services, facilities costs and patent and other legal and accounting fees. Personnel expenses decreased by \$5.7 million primarily due to workforce reductions undertaken as a consequence of the failure of COMET-1. Consulting and outside services decreased by \$3.3 million as a result of decreases in marketing research activities and reductions in outside services for buildings we are no longer occupying. Facilities costs decreased by \$2.8 million primarily as a result of facilities we have vacated in connection with our 2014 Restructuring (see "Note 3. Restructurings" to our "Notes to Consolidated Financial Statements" contained in Part II, Item 8 of this Annual Report on Form 10-K for a description of these costs). Patent and other legal and accounting fees decreased by \$2.0 million primarily due to decreases in activities related to patent filings and defense.

We expect our Selling, general and administrative expenses will increase as we continue to support our ongoing activities related to the commercialization of CABOMETYX. Those expenses may increase further commensurate with potential expanded sales opportunities.

Total Other Expense, net

Certain historical amounts in other expense, net have been revised to reflect the correction of the accounting for non-cash interest expense associated with the 2019 Notes. See "Note 1. Organization and Summary of Significant Accounting

Policies - Correction of an Immaterial Error” in the “Notes to the Consolidated Financial Statements” for additional information on the correction.

Total other expense, net, were as follows (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
Interest income and other, net	\$ 4,863	\$ 412	\$ 4,341
Interest expense	(33,060)	(40,680)	(41,362)
Loss on extinguishment of debt	(13,901)	—	—
Total other expense, net	\$ (42,098)	\$ (40,268)	\$ (37,021)
Dollar change	\$ (1,830)	\$ (3,247)	
Percentage change	5%	9%	

Total other expense, net consists primarily of the loss on extinguishment of debt, interest expense incurred on our debt, gains on the sale of equity investments, unrealized gains and losses from the fair value re-measurement of a warrant, foreign exchange fluctuations and interest income earned on our cash and investments.

The increase in Total other expense, net for the year ended December 31, 2016, as compared to 2015, was primarily related to the \$13.9 million loss associated with the conversion and redemption of \$286.9 million in aggregate principal amount of the 2019 Notes for 54,009,279 shares of our Common Stock. See “Note 7. Debt” in our “Notes to Consolidated Financial Statements” for more information on the conversions.

Interest expense is comprised of interest accrued on the 2019 Notes, the Deerfield Notes and the Silicon Valley Bank term loan. (see “Note 7. Debt” to our “Notes to Consolidated Financial Statements” contained in Part II, Item 8 of this Annual Report on Form 10-K for a description of these debt instruments, including the conversions and redemption of the 2019 Notes). Interest expenses decreased by \$7.6 million for the year ended December 31, 2016, as compared to 2015, primarily due to the conversions and redemption of the 2019 Notes. We expect our interest expense will continue to decrease as a result of the full year impact of the interest savings from the conversions and redemption of the 2019 Notes, the maturity of the Silicon Valley Bank term loan and the anticipated prepayment of the Deerfield Notes on or about July 1, 2017.

Interest income and other, net for the year ended December 31, 2016 includes a \$2.5 million gain on the sale of our 9% interest in Akarna Therapeutics, Ltd, which we acquired in 2015 in exchange for intellectual property rights related to a compound discovered by us. During 2014, Interest income and other, net includes an \$0.8 million gain for a purchase price adjustment resulting from the resolution of contingencies related to the September 2011 sale of our remaining interest in another business. There were no such gains during 2015.

Interest income and other, net for the years ended December 31, 2015 and 2014 include \$0.5 million in unrealized losses and \$1.8 million in unrealized gains, respectively, on the revaluation of the 2014 Warrants; there were no such gains or losses during 2016. (see “Note 7. Debt” to our “Notes to Consolidated Financial Statements” contained in Part II, Item 8 of this Annual Report on Form 10-K for a description of the 2014 Warrants).

Liquidity and Capital Resources

We have incurred net losses since inception through December 31, 2016, with the exception of the 2011 fiscal year. For the year ended December 31, 2016, we incurred a net loss of \$70.2 million and as of December 31, 2016, we had an accumulated deficit of \$2.0 billion. These losses have had an adverse effect on our stockholders’ equity (deficit) and working capital. Because of the numerous risks and uncertainties associated with developing and commercializing drugs, we are unable to predict the extent of any future losses. Excluding fiscal 2011, our research and development expenditures and selling, general and administrative expenses have exceeded our revenues for each fiscal year, and we expect to spend significant additional amounts to fund the continued development and commercialization of cabozantinib during 2017. In addition, we intend to expand our product pipeline through the measured resumption of drug discovery and product acquisition and in-licensing. As a result, we expect to continue to incur substantial operating expenses and, consequently, we will need to generate substantial revenues to achieve and maintain profitability.

Since the launch of our first commercial product in January 2013, through December 31, 2016, we have generated an aggregate of \$209.7 million in net product revenues, including \$135.4 million for the year ended December 31, 2016. Other than sales of CABOMETYX and COMETRIQ, we have derived substantially all of our revenues since inception from

collaborative arrangements, including upfront and milestone payments and research funding and through the public sale of our common stock. The amount of our net profits or losses will depend, in large part, on: the level of sales of CABOMETYX and COMETRIQ in the U.S.; achievement of clinical, regulatory and commercial milestones and the amount of royalties, if any, from sales of CABOMETYX and COMETRIQ under our collaboration agreements with Ipsen and Takeda; our share of the net profits and losses for the commercialization of Cotellic in the U.S. under our collaboration with Genentech; the amount of royalties from Cotellic sales outside the U.S. under our collaboration with Genentech; other license and contract revenues; and, the level of our expenses, including commercialization activities for cabozantinib and any pipeline expansion efforts.

As of December 31, 2016, we had \$479.6 million in cash and investments, which included \$393.8 million available for operations, \$81.6 million of compensating balance investments that we are required to maintain on deposit with Silicon Valley Bank, and \$4.2 million of long-term restricted investments. We anticipate that our current cash and cash equivalents, and short-term investments available for operations, product revenues and collaboration revenues, will enable us to maintain our operations for a period of at least 12 months following the filing date of this report. The sufficiency of our cash resources depends on numerous assumptions, including assumptions related to product sales, operating expenses, the repayment of both the Deerfield Notes and our term loan from Silicon Valley Bank, as well as the other factors set forth in “Risk Factors” under the headings “Risks Related to our Capital Requirements and Financial Results,” in Part I, Item 1A of this Annual Report on Form 10-K. Our assumptions may prove to be wrong or other factors may adversely affect our business, and as a result we may not have the cash resources to fund our planned operations, which would have a material adverse effect on our business. In addition, we may choose to raise additional funds through the issuance of equity or debt due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current and future operating plans. For example, we may choose to raise additional capital to fund in-licensing or product acquisition opportunities.

Sources and Uses of Cash

The following table summarizes our cash flow activities (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Net loss	\$ (70,222)	\$ (161,744)	\$ (261,297)
Adjustments to reconcile net loss to net cash used in operating activities	49,251	46,004	36,169
Changes in operating assets and liabilities	227,267	(25,845)	(10,277)
Net cash provided by (used in) operating activities	206,296	(141,585)	(235,405)
Net cash (used in) provided by investing activities	(216,048)	50,077	146,330
Net cash provided by financing activities	19,804	152,747	65,492
Net increase (decrease) in cash and cash equivalents	10,052	61,239	(23,583)
Cash and cash equivalents at beginning of year	141,634	80,395	103,978
Cash and cash equivalents at end of year	<u>\$ 151,686</u>	<u>\$ 141,634</u>	<u>\$ 80,395</u>

Operating Activities

Our operating activities provided cash of \$206.3 million for the year ended December 31, 2016, compared to \$141.6 million cash used in 2015 and \$235.4 million cash used in 2014.

Cash provided by operating activities for the year ended December 31, 2016 was primarily a result of \$280.0 million in upfront and milestone payments received from Ipsen under our collaboration and license agreement and cash receipts from our net product revenues of \$135.4 million. Those proceeds were partially offset by operating expenses of \$219.6 million for the period, less non-cash expenses for stock-based compensation totaling \$22.9 million and the amortization of debt discount, debt issuance costs and accrual of interest paid in kind totaling \$16.4 million. Our operating expenses were largely attributable to the development and commercialization of cabozantinib. In addition, cash provided by operating activities also increased as a result of a \$16.7 million increase in accrued compensation and benefits and a \$6.8 million increase in other liabilities which was partially offset by a \$37.0 million increase in trade and other receivables, a \$10.9 million decrease in the accrued partnership liability and a \$3.9 million decrease in accrued clinical trial liabilities.

Cash used in operating activities for the year ended December 31, 2015 related primarily to our \$158.6 million operating expenses for the period, less \$37.2 million in revenues for the period and non-cash expenses for accretion of debt discount and interest paid in kind totaling \$20.9 million on the Deerfield Notes and the 2019 Notes and stock-based compensation totaling \$22.0 million. In addition to current period operating expenses, we made cash payments that resulted in a \$23.5 million reduction in accrued clinical trial liabilities and an \$8.8 million reduction in restructuring liabilities, which was partially offset by a \$10.2 million increase in our accrued collaboration liability.

Cash used in operating activities for the year ended December 31, 2014 related primarily to our \$249.6 million in operating expenses for the period, less non-cash expenses for accretion of debt discount totaling \$22.3 million on the Deerfield Notes and the 2019 Notes, stock-based compensation totaling \$10.0 million and depreciation and amortization totaling \$2.4 million. Our operating expenses were largely attributable to the development of cabozantinib. In addition, we made cash payments that resulted in a \$13.2 million reduction in accounts payable and other accrued expenses during the period and paid \$10.2 million for restructuring activities, which was partially offset by a \$6.6 million increase in accrued clinical trial liabilities.

Operating cash flows can differ from our consolidated net loss as a result of differences in the timing of cash receipts and earnings recognition and non-cash charges.

Investing Activities

Our investing activities resulted in a \$216.0 million use of cash for the year ended December 31, 2016, as compared to providing cash of \$50.1 million for 2015 and \$146.3 million for 2014.

Cash used by investing activities for the year ended December 31, 2016 was primarily due to investment purchases of \$377.8 million, less cash from the maturity of unrestricted and restricted investments of \$158.6 million.

Cash provided by investing activities for the year ended December 31, 2015 was primarily due to the maturity of unrestricted and restricted investments of \$198.7 million, less investment purchases of \$149.6 million.

Cash provided by investing activities for the year ended December 31, 2014 was primarily due to the maturity of unrestricted and restricted investments of \$273.2 million, less investment purchases of \$127.7 million.

Financing Activities

Our financing activities provided cash of \$19.8 million for the year ended December 31, 2016, compared to \$152.7 million for 2015, and \$65.5 million for 2014.

Cash provided by financing activities for the year ended December 31, 2016 was the result of the issuance of common stock under our equity incentive plans totaling \$27.5 million which was partially offset by cash payments from the conversion and redemption of the 2019 Notes totaling \$7.7 million.

Cash provided by our financing activities for the year ended December 31, 2015 was primarily due to the issuance of 28,750,000 shares of common stock in July 2015 for net proceeds of \$145.6 million and \$10.9 million in proceeds from the exercise of stock options, which was partially offset by principal payments on debt of \$4.4 million.

Cash provided by our financing activities for the year ended December 31, 2014 was primarily due to the issuance of 10,000,000 shares of common stock in January 2014 for net proceeds of \$75.6 million. The cash provided by the issuance of common stock was partially offset by principal payments on debt of \$11.7 million.

Proceeds from these financing activities have historically been used for general working capital purposes, such as product commercialization and research and development activities and other general corporate purposes. However, during the next two years, we will be required to make significant payments to satisfy our outstanding debt obligations. On May 31, 2017, we will be required to pay the principal balance of \$80.0 million plus accrued and unpaid interest on our term loan with Silicon Valley Bank and on July 1, 2018 we will be required to pay the principal balance of \$125.0 million including interest paid in kind, plus accrued and unpaid coupon interest on the Deerfield Notes. We intend to repay the Deerfield Notes early, on or about July 1, 2017, at a prepayment price equal to 105% of the outstanding principal amount of the notes, plus accrued and unpaid interest to the date of repayment. We expect that cash and cash equivalents and short-term investments held at December 31, 2016 will be used to repay the debt. See "Note 7. Debt" to our "Notes to Consolidated Financial Statements" contained in Part II, Item 8 of this Annual Report on Form 10-K for additional details on these debt arrangements.

Off-Balance Sheet Arrangements

As of December 31, 2016, we did not have any material off-balance-sheet arrangements, as defined by applicable SEC regulations.

Contractual Obligations

We have contractual obligations in the form of convertible notes, loans payable, operating leases and purchase obligations. The following chart details our contractual obligations, including any potential accrued or accreted interest, as of December 31, 2016 (in thousands):

Contractual Obligations	Payments Due by Period			
	Total	Less than 1 year	1-3 Years	More than 3 years
Deerfield notes ⁽¹⁾	\$ 124,972	\$ —	\$ 124,972	\$ —
Loans payable ⁽²⁾	80,000	80,000	—	—
Operating leases ⁽³⁾	11,481	8,474	3,007	—
Purchase obligations ⁽⁴⁾	1,112	1,112	—	—
Total contractual cash obligations	\$ 217,565	\$ 89,586	\$ 127,979	\$ —

- (1) Due date is based on our contractual obligations under the Deerfield Notes. We intend to repay the Deerfield Notes on or about July 1, 2017 and as a result, we have classified the Deerfield Notes as a current liability as of December 31, 2016. See “Note 7. Debt” of the Notes to Consolidated Financial Statements regarding the terms of the Deerfield Notes.
- (2) Consists of our obligations under our loan from Silicon Valley Bank. See “Note 7. Debt” of the Notes to Consolidated Financial Statements regarding the terms of our loan from Silicon Valley Bank.
- (3) The operating lease payments do not include \$1.2 million to be received in 2017 in connection with the subleases of our South San Francisco buildings.
- (4) At December 31, 2016, we had firm purchase commitments related to manufacturing and maintenance of inventory. These commitments include a portion of our 2017 contractual minimum purchase obligation. Our actual purchases are expected to significantly exceed these amounts.

In connection with the sale of our plant trait business in 2007, we agreed to indemnify the purchaser and its affiliates up to a specified amount if they incur damages due to any infringement or alleged infringement of certain patents. We have certain collaboration licensing agreements, which contain standard indemnification clauses. Such clauses typically indemnify the customer or vendor for an adverse judgment in a lawsuit in the event of our misuse or negligence. We consider the likelihood of an adverse judgment related to an indemnification agreement to be remote. Furthermore, in the event of an adverse judgment, any losses under such an adverse judgment may be substantially offset by applicable corporate insurance.

Critical Accounting Estimates

The preparation of our consolidated financial statements is in conformity with accounting principles generally accepted in the U.S. which requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures. An accounting policy is considered to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, and if different estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact our consolidated financial statements. On an ongoing basis, management evaluates its estimates including, but not limited to, those related to revenue recognition, including deductions from revenues (such as rebates, chargebacks, sales returns and sales allowances), the period of performance, identification of deliverables and evaluation of milestones with respect to our collaborations, the amounts of revenues and expenses under our profit and loss sharing agreement, recoverability of inventory, certain accrued liabilities including the accrued clinical trial liability, the valuation of the debt and equity components of our convertible debt and stock-based compensation. We base our estimates on historical experience and on various other market-specific and other relevant assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our senior management has discussed the development, selection and disclosure of these estimates with the Audit Committee of our Board of Directors. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies reflect the more significant judgments and estimates used in the preparation of our Consolidated Financial Statements. For a complete description of our significant accounting policies, see “Note 1 - Organization and Summary of Significant Accounting Policies” in the “Notes to Consolidated Financial Statements” included in this Annual Report on Form 10-K.

Revenue Recognition

Net Product Revenues and Discounts and Allowances

We recognize net product revenues when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed or determinable and collectability is reasonably assured. We calculate gross product revenues based on the price that we charge to the specialty pharmacies and distributors in the U.S. We estimate our domestic net product revenues by deducting from our gross product revenues (a) trade allowances, such as discounts for prompt payment, (b) estimated government rebates and chargebacks, (c) certain other fees paid to specialty pharmacies and distributors and (d) returns. Discounts and allowances are complex and significant judgment by management. Estimates are assessed each period and updated to reflect current information.

We initially record estimates for these deductions at the time we recognize the gross revenue. Our estimates for these deductions are based on third party market research data for competitor products for the treatment of advanced RCC, customer and payer data received from the specialty pharmacies and distributors whom sell our product and historical utilization rates. Based in part on the availability of this third party market research data and historical data for COMETRIQ, we made the determination during 2016 that we had sufficient experience and data to reasonably estimate expected future returns and the discounts and allowances due to payers at the time of shipment to the specialty pharmacy or distributor, and therefore record revenue for CABOMETYX product sales using the “sell-in” revenue recognition model. We update our estimates on a recurring basis as new information becomes available. See “Note 1. Organization and Summary of Significant Accounting Policies” to our Consolidated Financial Statements for a further description of our discounts and allowances.

Collaboration Revenues

Revenues from collaboration agreements primarily consist of upfront license fees, milestone, royalty and/or product supply payments. These arrangements have multiple elements and our deliverables may include intellectual property rights, distribution rights, delivery of manufactured product, commercial and development activities and participation on joint steering, commercial and development committees. In order to account for these arrangements, we identify the deliverables and evaluate whether the delivered elements have value to our collaboration partner on a stand-alone basis and represent separate units of accounting. Analyzing the arrangement to identify deliverables requires the use of judgment, and each deliverable may be an obligation to deliver future goods or services, a right or license to use an asset, or another performance obligation. If we determine that multiple deliverables exist, the consideration is allocated to one or more units of accounting based upon the best estimate of the selling price of each deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither vendor-specific or third-party evidence is available. A delivered item or items that do not qualify as a separate unit of accounting within the arrangement shall be combined with the other applicable undelivered items within the arrangement. The allocation of arrangement consideration and the recognition of revenue then shall be determined for those combined deliverables as a single unit of accounting. For a combined unit of accounting, non-refundable upfront fees are recognized in a manner consistent with the final deliverable, which has generally been ratably over the period of our continued involvement. Amounts received in advance of performance are recorded as deferred revenue. The determination of deliverables and the allocation of consideration using selling prices and the period of our continued involvement may involve significant judgments and estimates that will impact revenue recognition. Often, the term of our continued involvement is not contractually defined and an estimate of the term of our total obligation must be made. Therefore, any changes in the expected term of our continued involvement will impact revenue recognition for the given period.

Royalty revenues, and U.S. profits and losses under the collaboration agreement with Genentech, are based on amounts reported to us by our collaboration partners and are recorded when such information becomes available to us; for Ipsen, this occurs in the current quarter, and for Genentech, this occurs in the following quarter. We base our estimates on the best information available at the time provided to us by our collaboration partners. However, additional information may subsequently become available to us, which may allow us to make a more accurate estimate in future periods. In this event, we are required to record adjustments to collaboration revenue in future periods when the actual level of activity becomes more certain. Such increases or decreases in revenue are generally considered to be changes in estimates and will be reflected in collaboration revenues in the period they become known.

Inventory

We consider regulatory approval of product candidates to be uncertain and product manufactured prior to regulatory approval may not be sold unless regulatory approval is obtained. As such, the manufacturing costs for product candidates

incurred prior to regulatory approval are not capitalized as inventory, but rather are expensed as research and development costs. When regulatory approval is obtained, capitalization of inventory may begin.

We value inventory at the lower of cost or net realizable value. We determine the cost of inventory using the standard-cost method, which approximates actual cost based on a first-in, first-out method. We analyze our inventory levels quarterly and write down inventory subject to expiry in excess of expected requirements, or that has a cost basis in excess of its expected net realizable value. The related costs are recognized as cost of goods sold in the Consolidated Statements of Operations.

On a quarterly basis, we analyze our estimated production levels for the following twelve month period, which is our normal operating cycle and reclassify inventory we do not expect to use within the next twelve months into Other long-term assets in the Consolidated Balance Sheets.

Clinical Trial Accruals

All of our clinical trials have been executed with support from contract research organizations, or CROs, and other vendors. We accrue costs for clinical trial activities performed by CROs based upon the estimated amount of work completed on each trial. For clinical trial expenses, the significant factors used in estimating accruals include the number of patients enrolled, the activities to be performed for each patient, the number of active clinical sites, and the duration for which the patients will be enrolled in the trial. We monitor patient enrollment levels and related activities to the extent possible through internal reviews, correspondence with CROs and review of contractual terms. We base our estimates on the best information available at the time. However, additional information may become available to us, which may allow us to make a more accurate estimate in future periods. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. There were no such significant reductions during the years ended December 31, 2016, 2015 or 2014.

Stock Option Valuation

Our estimate of compensation expense requires us to determine the appropriate fair value model and a number of complex and subjective assumptions including our stock price volatility, employee exercise patterns, future forfeitures and related tax effects. The most significant assumptions are our estimates of the expected volatility and the expected term of the stock option. In addition, we are required to estimate the expected forfeiture rate, including assessing the likelihood of achieving our goals for performance-based stock options, and recognize expense only for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the stock-based compensation expense could be significantly different from what we have recorded in the current period. The value of a stock option is derived from its potential for appreciation. The more volatile the stock, the more valuable the option becomes because of the greater possibility of significant changes in stock price. Because there is a market for options on our common stock, we have considered implied volatilities as well as our historical realized volatilities when developing an estimate of expected volatility. The expected option term also has a significant effect on the value of the option. The longer the term, the more time the option holder has to allow the stock price to increase without a cash investment and thus, the more valuable the option. Further, lengthier option terms provide more opportunity to exploit market highs. However, empirical data show that employees, for a variety of reasons, typically do not wait until the end of the contractual term of a nontransferable option to exercise. Accordingly, companies are required to estimate the expected term of the option for input to an option-pricing model. As required under generally accepted accounting principles, we review our valuation assumptions at each grant date and, as a result, from time to time we will likely change the valuation assumptions we use to value stock options granted in future periods. The assumptions used in calculating the fair value of stock options represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. As of December 31, 2016, \$23.9 million of total unrecognized compensation expense related to stock options was expected to be recognized over a weighted-average period of 2.90 years and \$13.9 million of total unrecognized compensation expense relating to RSUs was expected to be recognized over 3.28 years. See "Note 10. Employee Benefit Plans" of the Notes to Consolidated Financial Statements for a further discussion on stock-based compensation.

Recent Accounting Pronouncements

For a description of the expected impact of recent accounting pronouncements, see "Note 1 - Organization and Summary of Significant Accounting Policies" in the "Notes to Consolidated Financial Statements" included in this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio and our long-term debt. As of December 31, 2016 and 2015, we had cash and investments of \$479.6 million and \$253.3 million, respectively. Our investments are subject to interest rate risk, and our interest income may fluctuate due to changes in U.S. interest rates. We manage market risk through diversification requirements mandated by our investment policy, which limits the amount of our portfolio that can be invested in a single issuer. We limit our credit risk by limiting purchases to high-quality issuers. At December 31, 2016 and 2015, we had debt outstanding of \$189.1 million and \$417.9 million, respectively. Our payment commitments associated with these debt instruments are primarily fixed and consist of interest payments, principal payments, or a combination of both. The fair value of our investments and our debt will fluctuate with movements of interest rates. We have estimated the effects on our interest rate sensitive assets and liabilities based on a one percentage point hypothetical adverse change in interest rates as of December 31, 2016 and 2015. For our investments, the estimated effects of hypothetical interest rate changes are obtained from the same third-party pricing sources we use to value our investments. For debt instruments, we determine the estimated effects of hypothetical interest rate changes using the same present value model we use to determine the fair of value of those instruments. As of December 31, 2016 and 2015, a decrease in the interest rates of one percentage point would have had a net adverse change in the fair value of interest rate sensitive assets and liabilities of \$0.3 million and \$8.7 million, respectively.

In addition, we have exposure to fluctuations in certain foreign currencies in countries in which we conduct clinical trials. Most of our foreign expenses incurred were associated with establishing and conducting clinical trials for cabozantinib at sites outside of the U.S. Our agreements with the foreign sites that conduct such clinical trials generally provide that payments for the services provided will be calculated in the currency of that country, and converted into U.S. dollars using various exchange rates based upon when services are rendered or the timing of invoices. When the U.S. dollar weakens against foreign currencies, the U.S. dollar value of the foreign-currency denominated expense increases, and when the U.S. dollar strengthens against these currencies, the U.S. dollar value of the foreign-currency denominated expense decreases. As of December 31, 2016 and 2015, approximately \$2.2 million and \$3.2 million, respectively, of our clinical accrual balance was owed in foreign currencies. An adverse change of one percentage point in the foreign currency exchange rates would not have resulted in a material impact for any periods presented. We recorded a \$0.2 million loss, a \$0.1 million gain and a \$0.5 million gain relating to foreign exchange fluctuations for the years ended December 31, 2016, 2015 and 2014, respectively.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**EXELIXIS, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	68
Consolidated Balance Sheets	69
Consolidated Statements of Operations	70
Consolidated Statements of Comprehensive Loss	70
Consolidated Statements of Stockholders' Equity (Deficit)	71
Consolidated Statements of Cash Flows	72
Notes to Consolidated Financial Statements	74

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Exelixis, Inc.

We have audited the accompanying consolidated balance sheets of Exelixis, Inc. as of December 30, 2016 and January 1, 2016, and the related consolidated statements of operations, comprehensive loss, stockholders' equity (deficit) and cash flows for each of the three fiscal years in the period ended December 30, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Exelixis, Inc. at December 30, 2016 and January 1, 2016, and the consolidated results of its operations and its cash flows for each of the three fiscal years in the period ended December 30, 2016, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Exelixis, Inc.'s internal control over financial reporting as of December 30, 2016, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 27, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Redwood City, California
February 27, 2017

EXELIXIS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31,	
	2016	2015
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 151,686	\$ 141,634
Short-term investments	268,117	25,426
Trade and other receivables	42,246	5,183
Inventory	3,338	2,616
Prepaid expenses and other current assets	5,416	3,806
Total current assets	470,803	178,665
Long-term investments	55,601	83,600
Long-term restricted cash and investments	4,150	2,650
Property and equipment, net	2,071	1,434
Goodwill	63,684	63,684
Other long-term assets	1,232	2,309
Total assets	\$ 597,541	\$ 332,342
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	\$ 6,565	\$ 6,401
Accrued compensation and benefits	20,334	3,629
Accrued clinical trial liabilities	14,131	18,071
Accrued collaboration liability	—	10,938
Current portion of convertible notes	109,122	—
Current portion of term loan payable	80,000	—
Current portion of deferred revenue	19,665	—
Other current liabilities	20,771	13,212
Total current liabilities	270,588	52,251
Long-term portion of convertible notes	—	337,937
Long-term portion of term loan payable	—	80,000
Long-term portion of deferred revenue	237,094	—
Other long-term liabilities	541	2,960
Total liabilities	508,223	473,148
Commitments (Note 13)		
Stockholders' equity (deficit):		
Preferred stock, \$0.001 par value, 10,000,000 shares authorized and no shares issued	—	—
Common stock, \$0.001 par value; 400,000,000 shares authorized; issued and outstanding: 289,923,798 and 227,960,943 shares at December 31, 2016 and 2015, respectively	290	228
Additional paid-in capital	2,072,591	1,772,123
Accumulated other comprehensive loss	(416)	(232)
Accumulated deficit	(1,983,147)	(1,912,925)
Total stockholders' equity (deficit)	89,318	(140,806)
Total liabilities and stockholders' equity (deficit)	\$ 597,541	\$ 332,342

The accompanying notes are an integral part of these consolidated financial statements.

EXELIXIS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended December 31,		
	2016	2015	2014
Revenues:			
Net product revenues	\$ 135,375	\$ 34,158	\$ 25,111
Collaboration revenues	56,079	3,014	—
Total revenues	<u>191,454</u>	<u>37,172</u>	<u>25,111</u>
Operating expenses:			
Cost of goods sold	6,552	3,895	2,043
Research and development	95,967	96,351	189,101
Selling, general and administrative	116,145	57,305	50,829
Restructuring charges	914	1,042	7,596
Total operating expenses	<u>219,578</u>	<u>158,593</u>	<u>249,569</u>
Loss from operations	(28,124)	(121,421)	(224,458)
Other expense, net:			
Interest income and other, net	4,863	412	4,341
Interest expense	(33,060)	(40,680)	(41,362)
Loss on extinguishment of debt	(13,901)	—	—
Total other expense, net	<u>(42,098)</u>	<u>(40,268)</u>	<u>(37,021)</u>
Loss before income taxes	(70,222)	(161,689)	(261,479)
Income tax provision (benefit)	—	55	(182)
Net loss	<u>\$ (70,222)</u>	<u>\$ (161,744)</u>	<u>\$ (261,297)</u>
Net loss per share, basic and diluted	\$ (0.28)	\$ (0.77)	\$ (1.34)
Shares used in computing basic and diluted net loss per share	250,531	209,227	194,299

The accompanying notes are an integral part of these consolidated financial statements.

EXELIXIS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Net loss	\$ (70,222)	\$ (161,744)	\$ (261,297)
Other comprehensive loss ⁽¹⁾	(184)	(111)	(267)
Comprehensive loss	<u>\$ (70,406)</u>	<u>\$ (161,855)</u>	<u>\$ (261,564)</u>

(1) Other comprehensive loss consisted solely of unrealized losses, net on available-for-sale securities arising during the periods presented. There were no reclassification adjustments to net loss resulting from realized gains or losses on the sale of securities and there was no income tax expense related to other comprehensive loss during those years.

The accompanying notes are an integral part of these consolidated financial statements.

EXELIXIS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share data)

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total Stockholders' Equity (Deficit)
Balance at December 31, 2013	184,533,651	\$ 184	\$ 1,504,052	\$ 146	\$(1,489,884)	\$ 14,498
Net loss	—	—	—	—	(261,297)	(261,297)
Other comprehensive loss	—	—	—	(267)	—	(267)
Sale of shares of common stock, net	10,000,000	10	75,633	—	—	75,643
Issuance of common stock under stock plans	1,362,118	2	2,091	—	—	2,093
Stock-based compensation expense	—	—	10,006	—	—	10,006
Balance at December 31, 2014	195,895,769	196	1,591,782	(121)	(1,751,181)	(159,324)
Net loss	—	—	—	—	(161,744)	(161,744)
Other comprehensive loss	—	—	—	(111)	—	(111)
Sale of shares of common stock, net	28,750,000	29	145,620	—	—	145,649
Warrants transferred from other long-term liabilities	—	—	1,470	—	—	1,470
Issuance of common stock under stock plans	3,315,174	3	11,274	—	—	11,277
Stock-based compensation expense	—	—	21,977	—	—	21,977
Balance at December 31, 2015	227,960,943	228	1,772,123	(232)	(1,912,925)	(140,806)
Net loss	—	—	—	—	(70,222)	(70,222)
Other comprehensive loss	—	—	—	(184)	—	(184)
Issuance of common stock in settlement of convertible notes	54,009,279	54	253,026	—	—	253,080
Issuance of common stock under stock plans	7,953,576	8	24,530	—	—	24,538
Stock-based compensation expense	—	—	22,912	—	—	22,912
Balance at December 31, 2016	289,923,798	\$ 290	\$ 2,072,591	\$ (416)	\$(1,983,147)	\$ 89,318

The accompanying notes are an integral part of these consolidated financial statements.

EXELIXIS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net loss	\$ (70,222)	\$ (161,744)	\$ (261,297)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	1,002	1,406	2,391
Stock-based compensation expense	22,912	21,977	10,006
Loss on extinguishment of debt	13,901	—	—
Amortization of debt discounts and debt issuance costs	8,432	17,041	22,289
Accrual of interest paid in kind	8,008	3,817	—
Gain on sale of business and other equity investment	(2,494)	(112)	(838)
Changes in the fair value of warrants	—	548	(1,840)
Other	(2,510)	1,327	4,161
Changes in assets and liabilities:			
Trade and other receivables	(37,002)	(646)	(941)
Inventory	(722)	(235)	509
Prepaid expenses and other current assets	(1,610)	(325)	1,526
Other long-term assets	1,077	1,340	(2,149)
Accounts payable	164	(12)	(2,932)
Accrued compensation and benefits	16,705	279	(9,447)
Accrued clinical trial liabilities	(3,940)	(23,474)	6,587
Accrued collaboration liability	(10,938)	10,206	732
Deferred revenue	256,759	(2,582)	1,133
Other current and long-term liabilities	6,774	(10,396)	(5,295)
Net cash provided by (used in) operating activities	206,296	(141,585)	(235,405)
Cash flows from investing activities:			
Purchases of property and equipment	(1,703)	(447)	(474)
Proceeds from sale of property and equipment	97	1,346	392
Proceeds from sale of business and other equity investments	2,494	95	838
Proceeds from maturities of restricted cash and investments	7,150	19,789	20,354
Purchase of restricted cash and investments	(8,650)	(5,650)	(8,143)
Proceeds from sale of investments	2,266	—	—
Proceeds from maturities of investments	151,485	178,936	252,891
Purchases of investments	(369,187)	(143,992)	(119,528)
Net cash (used in) provided by investing activities	(216,048)	50,077	146,330
Cash flows from financing activities:			
Proceeds from issuance of common stock, net	—	145,649	75,643
Proceeds from exercise of stock options	25,327	10,911	120
Proceeds from employee stock purchase plan	2,187	568	1,438
Principal payments on debt	—	(4,381)	(11,709)
Redemption of convertible notes	(575)	—	—
Payments on conversion of convertible notes	(7,135)	—	—
Net cash provided by financing activities	19,804	152,747	65,492
Net increase (decrease) in cash and cash equivalents	10,052	61,239	(23,583)
Cash and cash equivalents at beginning of year	141,634	80,395	103,978
Cash and cash equivalents at end of year	\$ 151,686	\$ 141,634	\$ 80,395

(Continued on next page)

EXELIXIS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)
(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Supplemental cash flow disclosure:			
Cash paid for interest	\$ 21,044	\$ 19,822	\$ 19,109
Cash paid for taxes	\$ 190	\$ 192	\$ 60
Non-cash financing activity:			
Issuance of common stock in settlement of convertible notes	\$ 286,925	\$ —	\$ —
Issuance of warrants in connection with amendment to convertible notes	\$ —	\$ —	\$ 2,762

The accompanying notes are an integral part of these consolidated financial statements

EXELIXIS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization

Exelixis, Inc. (“Exelixis,” “we,” “our” or “us”) is a biopharmaceutical company committed to the discovery, development and commercialization of new medicines to improve care and outcomes for people with cancer. Since its founding in 1994, three products discovered at Exelixis have progressed through clinical development, received regulatory approval, and entered the commercial marketplace. Two are derived from cabozantinib, an inhibitor of multiple tyrosine kinases including MET, AXL, and VEGF receptors: CABOMETYX™ tablets approved for previously treated advanced kidney cancer and COMETRIQ® capsules approved for progressive, metastatic medullary thyroid cancer. The third product, Cotellic®, is a formulation of cobimetinib, a selective inhibitor of MEK, marketed under a collaboration with Genentech (a member of the Roche Group), and is approved as part of a combination regimen to treat advanced melanoma.

Basis of Consolidation

The consolidated financial statements include the accounts of Exelixis and those of our wholly-owned subsidiaries. These entities’ functional currency is the U.S. dollar. All intercompany balances and transactions have been eliminated.

Basis of Presentation

We have adopted a 52- or 53-week fiscal year policy that generally ends on the Friday closest to December 31st. Fiscal year 2014, a 53-week year, ended on January 2, 2015; fiscal year 2015, a 52-week year, ended on January 1, 2016; fiscal year 2016, a 52-week year, ended on December 30, 2016; and fiscal year 2017, a 52-week year, will end on December 29, 2017. For convenience, references in this report as of and for the fiscal years ended January 2, 2015, January 1, 2016, and December 30, 2016 are indicated as being as of and for the years ended December 31, 2014, 2015, and 2016, respectively. The quarterly period ended January 2, 2015 is a 14-week fiscal quarter; all other interim periods presented are 13-week fiscal quarters.

Use of Estimates

The preparation of our consolidated financial statements is in conformity with accounting principles generally accepted in the United States (“U.S.”) which requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures. On an ongoing basis, management evaluates its estimates including, but not limited to, those related to revenue recognition, including deductions from revenues (such as rebates, chargebacks, sales returns and sales allowances), the period of performance, identification of deliverables and evaluation of milestones with respect to our collaborations, the amounts of revenues and expenses under our profit and loss sharing agreement, recoverability of inventory, certain accrued liabilities including the accrued clinical trial liability, the valuation of the debt and equity components of our convertible debt and stock-based compensation. We base our estimates on historical experience and on various other market-specific and other relevant assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ materially from those estimates.

Correction of an Immaterial Error

During the third quarter of 2016, we identified errors in the Consolidated Balance Sheets and Consolidated Statements of Operations, Comprehensive Loss and Cash Flows for 2015, 2014, 2013, and 2012, and in the unaudited interim Condensed Consolidated Balance Sheets and Condensed Consolidated Statements of Operations, Comprehensive Loss and Cash Flows for all prior interim fiscal periods from September 30, 2012 through June 30, 2016. Specifically, in 2012 we incorrectly calculated 1) the allocation between Additional paid-in capital and Convertible notes of the \$287.5 million aggregate principal amount from our 4.25% Convertible Senior Subordinated Notes due 2019 (“2019 Notes”); and 2) the amortization of the debt discount associated with the 2019 Notes during 2012 and all subsequent periods.

Having evaluated the materiality of these errors from a quantitative and qualitative perspective, management concluded that although the accumulation of these errors was significant to the three and nine months ended September 30, 2016, the correction of these errors was not material to any individual prior period, and did not have an effect on the trend of financial results, taking into account the requirements of the Securities and Exchange Commission (“SEC”) Staff Accounting Bulletin No. 99, *Materiality* and Staff Accounting Bulletin No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements*. Because management has concluded that these errors are not

material, we will correct them prospectively when the consolidated balance sheets, statements of operations, comprehensive loss and cash flows for such periods are included in future filings.

Following are the amounts (in thousands, except per share amounts) that should have been reported for the affected line items of the statements of operations, statements of comprehensive loss and statements of cash flows:

	Year ended December 31,			
	2015	2014	2013	2012
Statements of Operations:				
Interest expense, overstated by \$7,993, \$7,245, \$6,568, \$2,310 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ (40,680)	\$ (41,362)	\$ (38,779)	\$ (24,778)
Total other expense, net, overstated by \$7,993, \$7,245, \$6,568, \$2,310 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ (40,268)	\$ (37,021)	\$ (37,556)	\$ (22,792)
Net loss, overstated by \$7,993, \$7,245, \$6,568, \$2,310 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ (161,744)	\$ (261,297)	\$ (238,192)	\$ (145,335)
Net loss per share, basic and diluted, overstated by \$0.04, \$0.04, \$0.04, \$0.01 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ (0.77)	\$ (1.34)	\$ (1.29)	\$ (0.91)
Statements of Comprehensive Loss:				
Comprehensive loss, overstated by \$7,993, \$7,245, \$6,568, \$2,310 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ (161,855)	\$ (261,564)	\$ (237,954)	\$ (145,289)
Statements of Cash Flows⁽¹⁾:				
Net loss, overstated by \$7,993, \$7,245, \$6,568, \$2,310 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ (161,744)	\$ (261,297)	\$ (238,192)	\$ (145,335)
Accretion of debt discount and debt issuance costs, overstated by \$7,993, \$7,245, \$6,568, \$2,310 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ 17,041	\$ 22,289	\$ 19,722	\$ 12,442

(1) The error did not impact our net cash provided by or used in operating activities, financing activities or investing activities for any of the periods presented.

Following are the amounts (in thousands) that should have been reported for the affected line items of the balance sheets and statements of stockholders' (deficit) equity:

	December 31,			
	2015	2014	2013	2012
Balance Sheets:				
Long-term portion of convertible notes, understated by \$36,502, \$44,494, \$51,739, \$58,307 as of December 31, 2015, 2014, 2013 and 2012, respectively	\$ 337,937	\$ 223,629	\$ 301,550	\$ 291,828
Liabilities, understated by \$36,502, \$44,494, \$51,739, \$58,307 as of December 31, 2015, 2014, 2013 and 2012, respectively	\$ 473,148	\$ 482,592	\$ 483,452	\$ 476,015
Additional paid-in capital, overstated by \$60,618 as of all dates presented	\$ 1,772,123	\$ 1,591,782	\$ 1,504,052	\$ 1,489,727
Accumulated deficit, overstated by \$24,116, \$16,124, \$8,879, \$2,310 as of December 31, 2015, 2014, 2013 and 2012, respectively	\$ (1,912,925)	\$ (1,751,181)	\$ (1,489,884)	\$ (1,251,692)
Stockholders' equity (deficit), misstated by \$36,502, \$44,494, \$51,739, \$58,307 as of December 31, 2015, 2014, 2013 and 2012, respectively	\$ (140,806)	\$ (159,324)	\$ 14,498	\$ 238,127
Statements of Stockholders' Equity (Deficit):				
Net loss, overstated by \$7,993, \$7,245, \$6,568, \$2,310 for the years ended December 31, 2015, 2014, 2013 and 2012, respectively	\$ (161,744)	\$ (261,297)	\$ (238,192)	\$ (145,335)
Additional paid-in capital, overstated by \$60,618 as of all dates presented	\$ 1,772,123	\$ 1,591,782	\$ 1,504,052	\$ 1,489,727
Accumulated deficit, overstated by \$24,116, \$16,124, \$8,879, \$2,310 as of December 31, 2015, 2014, 2013 and 2012, respectively	\$ (1,912,925)	\$ (1,751,181)	\$ (1,489,884)	\$ (1,251,692)
Stockholders' equity (deficit), misstated by \$36,502, \$44,494, \$51,739, \$58,307 as of December 31, 2015, 2014, 2013 and 2012, respectively	\$ (140,806)	\$ (159,324)	\$ 14,498	\$ 238,127

These errors did not affect any other caption or total in our annual consolidated financial statements.

Reclassifications

Certain prior period amounts in the Consolidated Financial Statements have been reclassified to conform to current period presentation. We reclassified \$3.2 million and \$1.4 million of Current portion of restructuring and Long-term portion of restructuring as of December 31, 2015 to Other current liabilities and Other long-term liabilities, respectively, in the accompanying Consolidated Balance Sheets. We have also reclassified balances between line items within the Changes in assets and liabilities in the accompanying Statements of Cash Flows for the years ended December 31, 2015 and 2014 to conform the presentation of those line items to the corresponding presentation of assets and liabilities in our accompanying Balance Sheets.

Segment Information

We operate as a single reportable segment.

Cash and Investments

We consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. Cash equivalents include investments in high-grade, short-term money market funds, commercial paper and municipal securities, which are subject to minimal credit and market risk.

We have designated all investments as available-for-sale and therefore, such investments are reported at fair value, with unrealized gains and losses recorded in accumulated other comprehensive loss. For securities sold prior to maturity, the cost of securities sold is based on the specific identification method. Realized gains and losses on the sale of investments are recorded in interest and other income, net.

We classify those investments we do not require for use in current operations that mature in more than 12 months as Long-term investments on our Consolidated Balance Sheets. Additionally, those investments that collateralize loan balances with terms that extend 12 months or longer were classified as long-term investments even if the investment's remaining term to maturity was one year or less; they are not restricted to withdrawal.

All of our investments are subject to a quarterly impairment review. We recognize an impairment charge when a decline in the fair value of an investment below its cost basis is judged to be other-than-temporary. Factors considered in determining whether a loss is temporary include the length of time and extent to which the investments fair value has been less than their cost basis, the financial condition and near-term prospects of the issuer, extent of the loss related to credit of the issuer, the expected cash flows from the security, our intent to sell the security and whether or not we will be required to sell the security before we are able to recovery our carrying value. During the years ended December 31, 2016, 2015 and 2014, we did not record any other-than-temporary impairment charges on our available-for-sale securities.

Fair Value Measurements

Fair value reflects the amounts that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). We disclose the fair value of financial instruments for assets and liabilities for which the value is practicable to estimate. For those financial instruments measured and recorded at fair value on a recurring basis, we also provide fair value hierarchy information in these Notes to Consolidated Financial Statements. The fair value hierarchy has the following three levels:

Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities that the reporting entity can access at the measurement date.

Level 2 – observable inputs, other than quoted prices in active markets for identical assets and liabilities that are observable either directly or indirectly. These inputs include using prices from independent pricing services based on quoted prices in active markets for similar instruments or on industry models using data inputs, such as interest rates and prices that can be directly observed or corroborated in active markets.

Level 3 – unobservable inputs.

A review of the fair value hierarchy classification is conducted on a quarterly basis. Changes in the observability of valuation inputs may result in a reclassification of levels for certain investments within the fair value hierarchy. During the years ended December 31, 2016, 2015 and 2014, there were no such reclassifications.

Inventory

We value inventory at the lower of cost or net realizable value. We determine the cost of inventory using the standard-cost method, which approximates actual cost based on a first-in, first-out method. We analyze our inventory levels quarterly and write down inventory subject to expiry in excess of expected requirements, or that has a cost basis in excess of its expected net realizable value. The related costs are recognized as cost of goods sold in the Consolidated Statements of Operations.

On a quarterly basis, we analyze our estimated production levels for the following twelve month period, which is our normal operating cycle and reclassify inventory we do not expect to use within the next twelve months into Other long-term assets in the Consolidated Balance Sheets.

We consider regulatory approval of product candidates to be uncertain and product manufactured prior to regulatory approval may not be sold unless regulatory approval is obtained. As such, the manufacturing costs for product candidates incurred prior to regulatory approval are not capitalized as inventory but are expensed as research and development costs. When regulatory approval is obtained, we begin capitalization of inventory related costs.

Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over the following estimated useful lives:

Equipment and furniture	5 years
Computer equipment and software	3 years
Leasehold improvements	Shorter of lease life or 7 years

Capitalized software includes certain internal use computer software costs.

Repairs and maintenance costs are charged to expense as incurred.

Goodwill

Goodwill amounts have been recorded as the excess purchase price over tangible assets, liabilities and intangible assets acquired based on their estimated fair value. Goodwill is not subject to amortization. We assess the recoverability of our goodwill annually, or more frequently whenever events or changes in circumstances indicate that the carrying amount of a reporting unit may exceed its fair value. The assessment of recoverability may first consider qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. A quantitative assessment is performed if the qualitative assessment results in a more-likely-than-not determination or if a qualitative assessment is not performed. The quantitative assessment considers whether the carrying amount of a reporting unit exceeds its fair value, in which case an impairment charge is recorded to the extent the carrying amount of the reporting unit's goodwill exceeds its implied fair value. We continue to operate in one segment, which is also considered to be our sole reporting unit and therefore, goodwill was tested for impairment at the enterprise level as of December 31, 2016 and 2015. We did not recognize any impairment charges in any of the periods presented.

Long-Lived Assets

Long-lived assets include property and equipment. The carrying value of our long-lived assets is reviewed for impairment whenever events or changes in circumstances indicate that the asset may not be recoverable. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount.

Revenue Recognition

We recognize revenue from product sales and from license fees, milestones and royalties earned on research and collaboration arrangements.

Net Product Revenues

We recognize revenue when it is both realized or realizable and earned, meaning persuasive evidence of an arrangement exists, delivery has occurred, title has transferred, the price is fixed or determinable, there are no remaining customer acceptance requirements, and collectability of the resulting receivable is reasonably assured. For product sales to specialty pharmacies and distributors in the U.S., this generally occurs upon delivery of the product. For product sales to our former distribution partner, Swedish Orphan Biovitrum ("Sobi"), this generally occurred when Sobi accepted the product.

In the U.S., we sell our products, CABOMETYX and COMETRIQ, to specialty pharmacies and distributors that benefit from customer incentives and have a right of return under certain circumstances. Prior to 2015, COMETRIQ had limited sales history and we could not reliably estimate expected future returns, discounts and rebates of the product at the time the product was sold to a single specialty pharmacy, therefore we recognized revenue when the specialty pharmacy provided the product to a patient based on the fulfillment of a prescription. This is frequently referred to as the "sell-through" revenue recognition model. In January 2015, we established that we had sufficient historical experience and data to reasonably estimate expected future returns of COMETRIQ and the discounts and rebates due to payers at the time of shipment to the specialty pharmacy. Accordingly, beginning in January 2015 we began to recognize revenue upon delivery to the specialty pharmacy. This approach is frequently referred to as the "sell-in" revenue recognition model. In connection with the change in the timing of recognition of COMETRIQ sales in the U.S., we recorded a one-time adjustment to recognize revenue that had previously been deferred under the "sell-through" revenue recognition model, resulting in the additional recognition of gross product revenues of \$2.6 million for the year ended December 31, 2015; there were no such additional amounts recorded during 2016 or 2014.

In determining discounts and allowances for the initial launch and sale of CABOMETYX, in addition to using payer data received from the specialty pharmacies and distributors that sell CABOMETYX and historical data for COMETRIQ, we also utilized claims data from third party sources for competitor products for the treatment of advanced renal cell carcinoma ("RCC"). Based in part on the availability of this third party data, we made the determination that we had sufficient experience and data to reasonably estimate expected future returns and the discounts and allowances due to payers at the time of shipment to the specialty pharmacy or distributor, and therefore record revenue for the product using the "sell-in" revenue recognition model. Net product revenues during the year ended December 31, 2016 were impacted by the build of channel inventory related to the initial launch period for CABOMETYX.

We also utilized the “sell-in” revenue recognition model for product sales to Sobi for all periods presented. As described further in “Note 2 - Collaboration Agreements”, under the terms of our collaboration and license agreement with Ipsen for the commercialization and further development of cabozantinib, we provided Sobi with a notice of termination of our commercialization agreement for COMETRIQ which became effective November 1, 2016.

Product Sales Discounts and Allowances

We calculate gross product revenues based on the price that we charge to the specialty pharmacies and distributors in the U.S. We estimate our domestic net product revenues by deducting from our gross product revenues (a) trade allowances, such as discounts for prompt payment, (b) estimated government rebates and chargebacks, (c) certain other fees paid to specialty pharmacies and distributors and (d) returns. Discounts and allowances for foreign sales for the years ended December 31, 2015 and 2014 included portions of a one-time \$2.4 million project management fee payable to our European distribution partner upon its achievement of a cumulative revenue goal. During 2014, we determined that the achievement of the revenue goal was probable and therefore we recorded \$2.3 million of the \$2.4 million project management fee, of which \$0.7 million would have been recorded in 2013 had the cumulative revenue goal been determined to be probable in that period. During 2015 we recorded an additional \$0.1 million of the project management fee.

We initially record estimates for these deductions at the time we recognize the gross revenue. We update our estimates on a recurring basis as new information becomes available.

Customer Credits: The specialty pharmacies and distributors in the U.S. receive a discount of 2% for prompt payment. We expect the specialty pharmacies and distributors will earn 100% of its prompt payment discounts and, therefore, we deduct the full amount of these discounts from total product sales when revenues are recognized.

Mandated Rebates: Allowances for rebates include mandated discounts under the Medicaid Drug Rebate Program and other government programs. Rebate amounts owed after the final dispensing of the product to a benefit plan participant are based upon contractual agreements or legal requirements with public sector benefit providers, such as Medicaid. The allowance for rebates is based on statutory discount rates and expected utilization. Our estimates for the expected utilization of rebates are based on third party market research data and customer and payer data received from the specialty pharmacies and distributors and historical utilization rates. Rebates are generally invoiced by the payer and paid in arrears, such that the accrual balance consists of an estimate of the amount expected to be incurred for the current quarter’s shipments to our customers, plus an accrual balance for known prior quarter’s unpaid rebates. If actual future rebates vary from estimates, we may need to adjust our accruals, which would affect net revenue in the period of adjustment.

Chargebacks: Chargebacks are discounts that occur when contracted customers purchase directly from a specialty pharmacy or distributor. Contracted customers, which currently consist primarily of Public Health Service institutions, non-profit clinics, Federal government entities purchasing via the Federal Supply Schedule and Group Purchasing Organizations, generally purchase the product at a discounted price. The specialty pharmacy or distributor, in turn, charges back to us the difference between the price initially paid by the specialty pharmacy and the discounted price paid to the specialty pharmacy by the customer. The allowance for chargebacks is based on an estimate of sales to contracted customers.

Medicare Part D Coverage Gap: In the U.S., the Medicare Part D prescription drug benefit mandates manufacturers to fund 50% of the Medicare Part D insurance coverage gap for prescription drugs sold to eligible patients. Our estimates for expected Medicare Part D coverage gap are based in part on third party market research data and on customer and payer data received from specialty pharmacies and distributors. Funding of the coverage gap is invoiced and paid in arrears so that the accrual balance consists of an estimate of the amount expected to be incurred for the current quarters’ shipments to patients, plus an accrual balance for prior sales. If actual future funding varies from estimates, we may need to adjust our accruals, which would affect net revenue in the period of adjustment.

Co-payment Assistance: Patients who have commercial insurance and meet certain eligibility requirements may receive co-payment assistance. We accrue a liability for co-payment assistance based on actual program participation and estimates of program redemption using customer data provided by the specialty pharmacies and distributors.

Collaboration Revenues

We enter into collaboration agreements under which we may obtain upfront license fees, milestone, royalty and/or product supply payments. These arrangements have multiple elements and our deliverables may include intellectual property rights, distribution rights, delivery of manufactured product, commercial and development activities and participation on joint steering, commercial and development committees. In order to account for these arrangements, we identify the deliverables and evaluate whether the delivered elements have value to our collaboration partner on a stand-alone basis and represent separate units of accounting. Analyzing the arrangement to identify deliverables requires the use of judgment, and each deliverable may

be an obligation to deliver future goods or services, a right or license to use an asset, or another performance obligation. If we determine that multiple deliverables exist, the consideration is allocated to one or more units of accounting based upon the best estimate of the selling price of each deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither vendor-specific or third-party evidence is available. A delivered item or items that do not qualify as a separate unit of accounting within the arrangement shall be combined with the other applicable undelivered items within the arrangement. The allocation of arrangement consideration and the recognition of revenue then shall be determined for those combined deliverables as a single unit of accounting. For a combined unit of accounting, non-refundable upfront fees are recognized in a manner consistent with the final deliverable, which has generally been ratably over the period of our continued involvement. Amounts received in advance of performance are recorded as deferred revenue. Upfront fees are classified as Collaboration revenues in our Consolidated Statements of Operations.

Royalty revenues, and U.S. profits and losses under the collaboration agreement with Genentech, are based on amounts reported to us by our collaboration partners and are recorded when such information becomes available to us; for Ipsen, this occurs in the current quarter, and for Genentech, this occurs in the following quarter. We base our estimates on the best information available at the time provided to us by our collaboration partners. However, additional information may subsequently become available to us, which may allow us to make a more accurate estimate in future periods. In this event, we are required to record adjustments to collaboration revenue in future periods when the actual level of activity becomes more certain. Such increases or decreases in revenue are generally considered to be changes in estimates and will be reflected in collaboration revenues in the period they become known. We consider sales-based contingent payments to be royalty revenue which is generally recognized at the date the contingency is achieved. Royalty revenue is included in Collaboration revenues in our Consolidated Statements of Operations.

For product supplied to Ipsen, which began during the year ended December 31, 2016, we record revenue at the time the product is delivered. Once title has transferred to Ipsen, the product is generally no longer subject to return. See "Note 2. Collaboration Agreements - Ipsen Collaboration" for a description of our product supply agreement with Ipsen.

For certain milestone payments under collaboration agreements, we have made a policy election to recognize revenue using the milestone method. Under the milestone method a payment that is contingent upon the achievement of a substantive milestone is recognized in its entirety in the period in which the milestone is achieved. A milestone is an event: (i) that can be achieved based in whole or in part on either our performance or on the occurrence of a specific outcome resulting from our performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) that would result in additional payments being due to us. The determination that a milestone is substantive requires estimation and judgment and is made at the inception of the arrangement. Milestones are considered substantive when the consideration earned from the achievement of the milestone is: (i) commensurate with either our performance to achieve the milestone or the enhancement of value of the item delivered as a result of a specific outcome resulting from our performance to achieve the milestone, (ii) relates solely to past performance and (iii) reasonable relative to all deliverables and payment terms in the arrangement. In making the determination as to whether a milestone is substantive or not, we consider all facts and circumstances relevant to the arrangement, including factors such as the scientific, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required to achieve the respective milestone and whether any portion of the milestone consideration is related to future performance or deliverables.

Non-substantive milestone payments are recognized as revenues over the estimated period of our continued involvement. We may also receive milestone payments after the end of our continued involvement. In such circumstances, we would recognize 100% of the milestone revenues when the contingency is achieved. Milestones payments, when recognized as revenue, are classified as Collaboration revenues in our Consolidated Statements of Operations.

Under the terms of our collaboration agreement with Genentech for cobimetinib, we are also entitled to a share of U.S. profits and losses received in connection with commercialization of cobimetinib. We are entitled to low double-digit royalties on ex-U.S. net sales. See "Note 2. Collaboration Agreements" for additional information about our collaboration agreement with Genentech. We have determined that we are an agent under the agreement and therefore revenues are recorded net of costs incurred. We record U.S. profits and losses under the collaboration agreement in the period earned based on our estimate of those amounts. As of December 31, 2016, we have not recognized a profit for any year to date period from the commercialization of cobimetinib in the U.S. Until we have recognized a profit under the agreement, losses are recognized as Selling, general and administrative expenses in our Consolidated Statements of Operations. In connection with our agreement to co-promote with Genentech, we are responsible for providing up to 25% of the sales force necessary to assist with the promotion of cobimetinib. Genentech reimburses us for these costs which we include as a reduction of our Selling, general and administrative costs when the obligations are incurred or we become entitled to the cost recovery.

Patient Assistance Programs

We provide CABOMETYX and COMETRIQ at no cost to eligible patients who have no insurance and meet certain financial and clinical criteria through our patient assistance programs. We record the cost of the product as a selling, general and administrative expense at the time the product is shipped to the specialty pharmacy for patient assistance use.

Cost of Goods Sold

Cost of goods sold is related to our product revenues and consists primarily of a 3% royalty on net sales of any product incorporating cabozantinib payable to GlaxoSmithKline, indirect labor costs, the cost of manufacturing, write-downs related to expiring and excess inventory, and other third party logistics costs of our product. A portion of the manufacturing costs for product sales were incurred prior to regulatory approval of COMETRIQ and CABOMETYX and therefore, were expensed as research and development costs when those costs were incurred, rather than capitalized as inventory.

In accordance with our product development and commercialization agreement with GlaxoSmithKline, we are required to pay GlaxoSmithKline a 3% royalty on the Net Sales of any product incorporating cabozantinib, including COMETRIQ and CABOMETYX. Net Sales is defined in the product development and commercialization agreement as the gross invoiced sales price less customer credits, rebates, chargebacks, shipping costs, customs duties, and sales tax and other similar tax payments we are required to make.

Research and Development Expenses

Research and development costs are expensed as incurred and include costs associated with research performed pursuant to collaborative agreements. Research and development costs consist of direct and indirect internal costs related to specific projects as well as fees paid to other entities that conduct certain research activities on our behalf.

Substantial portions of our preclinical studies and all of our clinical trials have been executed with support from third-party contract research organizations (“CROs”) and other vendors. We accrue expenses for preclinical studies performed by our vendors based on certain estimates over the term of the service period and adjust our estimates as required. We accrue expenses for clinical trial activities performed by CROs based upon the estimated amount of work completed on each trial. For clinical trial expenses, the significant factors used in estimating accruals include the number of patients enrolled, the number of active clinical sites, and the duration for which the patients will be enrolled in the trial. We monitor patient enrollment levels and related activities to the extent possible through internal reviews, correspondence with CROs and review of contractual terms. We base our estimates on the best information available at the time. However, additional information may become available to us which may allow us to make a more accurate estimate in future periods. In this event, we may be required to record adjustments to research and development expenses in future periods when the actual level of activity becomes more certain. Such increases or decreases in costs will be reflected in research and development expenses in the period first known.

Net Income (Loss) Per Share

Basic net income (loss) per share is computed by dividing the net income (loss) allocated to common shares for the period by the weighted average number of shares of common stock outstanding during the period. Diluted net income (loss) per share gives effect to potential incremental common shares issuable upon the exercise of stock options and warrants, and shares issuable pursuant to restricted stock units (“RSUs”) (calculated based on the treasury stock method), and upon conversion of our convertible debt (calculated using an as-if-converted method) as long as such shares are not anti-dilutive.

Foreign Currency Translation and Remeasurement

Monetary assets and liabilities denominated in currencies other than the functional currency are remeasured using exchange rates in effect at the end of the period and related gains or losses are recorded in interest income and other, net. Gains and losses on the remeasurement of monetary assets and liabilities were not material for any of the years presented. We do not have any nonmonetary assets or liabilities denominated in currencies other than the U.S. dollar.

Stock-Based Compensation

Stock-based compensation expense is based on the grant date fair value; the grant date fair value of RSUs is estimated as the value of the underlying shares of our common stock and the grant date fair value of stock-options is estimated using the Black-Scholes Merton option pricing model. Because there is a market for options on our common stock, we have considered implied volatilities as well as our historical realized volatilities when developing an estimate of expected volatility. We estimate the term using historical data. We recognize compensation expense on a straight-line basis over the requisite service period. Compensation expense relating to awards subject to performance conditions is recognized if it is probable that the performance goals will be achieved on a straight-line basis through the anticipated achievement date of the performance objectives. The

probability of achievement is assessed on a quarterly basis. The total number of awards expected to vest is adjusted for estimated forfeitures. We have elected to use the simplified method to calculate the beginning pool of excess tax benefits.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, (“ASU 2014-09”). In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which delays the effective date of ASU 2014-09 by one year. ASU 2014-09, as amended, becomes effective for us in the first quarter of fiscal year 2018, but allows us to adopt the standard one year earlier. We currently plan to adopt ASU 2014-09 in the first quarter of fiscal year 2018. ASU 2014-09 also permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). We currently anticipate adopting ASU 2014-09 using the modified retrospective method.

The core principle of ASU 2014-09 is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing U.S. generally accepted accounting pronouncements. We do not expect that ASU 2014-09 will have a material impact on the recognition of revenue from product sales. We are still in the process of evaluating the effect that this guidance will have on revenue recognition from our collaboration agreements such as our arrangements with Ipsen and Genentech. We expect our evaluation to be completed by the end of the second quarter of 2017.

In April 2015, the FASB issued ASU No. 2015-05, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement*, (“ASU 2015-05”). ASU 2015-05 provides guidance to customers about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the customer should account for the arrangement as a service contract. ASU 2015-05 was effective for all interim and annual reporting periods beginning after December 15, 2015 and therefore we adopted ASU 2015-05 in 2016 on a prospective basis. The adoption of ASU 2015-05 did not have a material impact on our Consolidated Financial Statements during the period of adoption and is not expected to have a material effect on our Consolidated Financial Statements in future periods.

In July 2015, the FASB issued ASU No. 2015-11, *Inventory: Simplifying the Measurement of Inventory*, (“ASU No. 2015-11”). ASU No. 2015-11 requires inventory measurement at the lower of cost and net realizable value. ASU No. 2015-11 is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted by all entities as of the beginning of an interim or annual reporting period. We are in the process of assessing the impact, if any, of ASU No. 2015-11 on our Consolidated Financial Statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, (“ASU 2016-02”). Under ASU 2016-02, a lessee will be required to recognize assets and liabilities for leases with lease terms of more than 12 months. Recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification as a finance or operating lease. ASU 2016-02 will require both types of leases to be recognized on the balance sheet. The ASU also will require disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative requirements, providing additional information about the amounts recorded in the financial statements. ASU 2016-02 is effective for us for all interim and annual reporting periods beginning after December 15, 2018. Early adoption is permitted. We are in the process of assessing the impact of ASU No. 2016-02 on our Consolidated Financial Statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, (“ASU 2016-09”). ASU 2016-09 is aimed at the simplification of several aspects of the accounting for employee share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for all interim and annual reporting periods beginning after December 15, 2016. Early adoption is permitted. We do not expect the adoption of ASU 2016-09 to have a material impact on our Consolidated Financial Statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the FASB Emerging Issues Task Force)*, (“ASU 2016-15”). ASU 2016-15 addresses eight specific cash flow issues including debt prepayment or debt extinguishment costs, settlement of zero-coupon

debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing and contingent consideration payments made after a business combination. ASU 2016-15 is effective for all interim and annual reporting periods beginning after December 15, 2017. Early adoption is permitted. We do not expect the adoption of ASU 2016-15 to have a material impact on our Consolidated Statements of Cash Flows.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force)*, (“ASU 2016-18”). ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for all interim and annual reporting periods beginning after December 15, 2017. Early adoption is permitted. We do not expect the adoption of ASU 2016-18 to have a material impact on our Consolidated Statements of Cash Flows.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, (“ASU 2017-04”). ASU 2017-04 eliminated Step 2 from the goodwill impairment test. Instead, under the amendments in ASU 2017-04, an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. Additionally, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. ASU 2017-04 is effective for all interim and annual reporting periods beginning after December 15, 2019. Early adoption is permitted. We do not expect the adoption of ASU 2017-04 to have a material impact on our Consolidated Financial Statements.

NOTE 2. COLLABORATION AGREEMENTS

Ipsen Collaboration

In February 2016, we entered into a collaboration and license agreement with Ipsen for the commercialization and further development of cabozantinib. Pursuant to the terms of the collaboration agreement, Ipsen received exclusive commercialization rights for current and potential future cabozantinib indications outside of the U.S., Canada and Japan. The collaboration agreement was subsequently amended in December 2016 to include commercialization rights in Canada (the “Amendment”). We have also agreed to collaborate with Ipsen on the development of cabozantinib for current and potential future indications.

In consideration for the exclusive license and other rights contained in the collaboration and license agreement, Ipsen paid us an upfront nonrefundable payment of \$200.0 million in March 2016. Additionally, as a result of the Amendment, we received a \$10.0 million upfront nonrefundable payment from Ipsen in December 2016. As a result of the approval of cabozantinib in second-line RCC by the European Commission in September 2016, we received a \$60.0 million milestone in November 2016. We are also eligible to receive additional development and regulatory milestones, totaling up to \$254.0 million, including, milestone payments of \$10.0 million and \$40.0 million upon the filing and the approval of cabozantinib in second-line hepatocellular carcinoma (“HCC”) with the European Medicines Agency (“EMA”), and additional milestones for other future indications and/or jurisdictions. In the fourth quarter of 2016 we achieved two \$10.0 million milestones for the first commercial sales of CABOMETYX in Germany and the United Kingdom. The collaboration agreement also provides that we will be eligible to receive contingent payments of up to \$544.7 million associated with the achievement of specified levels of Ipsen sales to end users. We will also receive royalties on net sales of cabozantinib outside of the U.S. and Japan. We will receive a 2% royalty on the initial \$50.0 million of net sales, and a 12% royalty on the next \$100.0 million of net sales. After the initial \$150.0 million of sales, we will receive a tiered royalty of 22% to 26% on annual net sales; these tiers will reset each calendar year. We are primarily responsible for funding cabozantinib related development costs for existing trials; global development costs for potential future trials will be shared between the parties, with Ipsen to reimburse us for 35% of such costs. Pursuant to the terms of the collaboration agreement, we will remain responsible for the manufacture and supply of cabozantinib for all development and commercialization activities under the collaboration agreement. As part of the collaboration agreement, we entered into a supply agreement which provides that through the end of the second quarter of 2018, we will supply finished, labeled product to Ipsen for distribution in the territories outside of the U.S. and Japan at our cost, as defined in the agreement, which excludes, among other items, the 3% royalty we are required to pay GlaxoSmithKline on Ipsen’s Net Sales of any product incorporating cabozantinib. From the end of the second quarter of 2018 forward, we will continue to manufacture cabozantinib tablets and capsules while Ipsen will be responsible for packaging and labeling the products in territories where they have been approved outside of the U.S. and Japan, as applicable.

The collaboration agreement contains multiple elements, and the deliverables under the collaboration agreement consist of intellectual property licenses, delivery of products and/or materials containing cabozantinib to Ipsen for all development and commercial activities, research and development services, and participation on the joint steering and development committees (as defined in the collaboration agreement). These deliverables are non-contingent in nature. We determined that these deliverables do not have stand-alone value, because each one of them has value only if we meet our obligation to provide Ipsen with cabozantinib, which is deemed to be the predominant deliverable under the collaboration agreement. We also determined that the level of effort required of us to meet our obligations under the collaboration agreement is not expected to vary significantly over the life of the collaboration agreement. Accordingly, we combined these deliverables into a single unit of accounting and allocated the entire arrangement consideration to that combined unit of accounting. As a result, the upfront payment of \$200.0 million, received in the first quarter of 2016 and the \$10.0 million upfront payment received in December 2016 in consideration for the development and commercialization rights in Canada are being recognized ratably over the remaining term of the collaboration agreement. The collaboration agreement continues through early 2030, which is the current estimated patent expiration of cabozantinib in the European Union. At the time we entered into the agreement, we also determined that the \$60.0 million milestone we achieved upon the approval of cabozantinib by the EC in second-line RCC was not substantive due to the relatively low degree of uncertainty and relatively low amount of effort required on our part to achieve the milestone as of the date of the collaboration agreement; the \$60.0 million was deferred as of the date of the EMA's approval of cabozantinib in second-line RCC in September 2016 and is being recognized ratably over the remaining term of the collaboration agreement. The two \$10.0 million milestones for the first commercial sales of CABOMETYX in Germany and the United Kingdom were determined to be substantive at the time we entered into the collaboration agreement and were recognized as collaboration revenues in the fourth quarter of 2016. We determined that the remaining development and regulatory milestones are substantive and will be recognized as revenue in the periods in which they are achieved. We consider the contingent payments due to us upon the achievement of specified sales volumes to be similar to royalty payments. Subsequent to February 29, 2016, we transferred the intellectual property rights to Ipsen, and participated in regulatory filing activities and planning for the production, delivery and distribution of manufactured product. As a result of these activities, we began to recognize of the upfront payment under the collaboration agreement at that time.

During the year ended December 31, 2016, collaboration revenues under the collaboration agreement were as follows (in thousands):

	Year Ended December 31, 2016
Milestones achieved	\$ 20,000
Amortization of upfront payments and deferred milestone	13,284
Royalty revenue	175
Product supply agreement revenue	1,612
Cost of supplied product	(1,555)
Royalty payable to GlaxoSmithKline on net sales by Ipsen	(264)
Collaboration revenues under the collaboration agreement	<u>\$ 33,252</u>

As of December 31, 2016, short-term and long-term deferred revenue relating to the collaboration agreement was \$19.6 million and \$237.1 million, respectively.

In connection with the establishment of the collaboration agreement, we provided Sobi with a notice of termination of our distribution and commercialization agreement for COMETRIQ. Effective November 1, 2016, Ipsen became responsible for the distribution and commercialization of COMETRIQ for the approved medullary thyroid carcinoma indication in territories previously supported by Sobi. Pursuant to our commercialization agreement with Sobi, we were required to pay a \$2.9 million termination fee during the year ended December 31, 2016, which was included in Selling, general and administrative expenses in the accompanying Consolidated Statements of Operations. Additionally, we were also required to issue a \$0.4 million credit for unsold product to Sobi during the year ended December 31, 2016, which is included as a reduction of Net product revenues in the accompanying Consolidated Statements of Operations.

Genentech Collaboration

In December 2006, we out-licensed the development and commercialization of cobimetinib to Genentech pursuant to a worldwide collaboration agreement. The FDA approved cobimetinib in the U.S. under the brand name Cotellic on November 10, 2015. It is indicated in combination with Zelboraf as a treatment for patients with BRAF V600E or V600K mutation-positive advanced melanoma. Cotellic in combination with Zelboraf has also been approved in Switzerland, the European Union, Canada, Australia and Brazil for use in the same indication. Under the terms of the agreement, we were responsible for developing cobimetinib through the determination of the maximum-tolerated dose in a phase 1 clinical trial, and Genentech had the option to co-develop cobimetinib, which Genentech could exercise after receipt of certain phase 1 data from us. In March 2008, Genentech exercised its option to co-develop cobimetinib. In March 2009, we granted to Genentech an exclusive worldwide revenue-bearing license to cobimetinib, at which point Genentech became responsible for completing the phase 1 clinical trial and subsequent clinical development.

Under the terms of our collaboration agreement with Genentech for cobimetinib, we are entitled to a share of U.S. profits and losses received in connection with commercialization of cobimetinib. The profit and loss share has multiple tiers: we are entitled to 50% of profits and losses from the first \$200.0 million of U.S. actual sales, decreasing to 30% of profits and losses from U.S. actual sales in excess of \$400.0 million. In addition, we are entitled to low double-digit royalties on ex-U.S. net sales. In November 2013, we exercised an option under the collaboration agreement to co-promote in the U.S. Following the approval of Cotellic in the U.S. in November 2015, we began fielding 25% of the sales force promoting Cotellic in combination with Zelboraf as a treatment for patients with BRAF V600E or V600K mutation-positive advanced melanoma.

On June 3, 2016, following a 30 day dispute resolution period, we filed a demand for arbitration asserting claims against Genentech related to its clinical development, pricing and commercialization of Cotellic, and cost and revenue allocations in connection with Cotellic’s commercialization in the United States. Soon thereafter, Genentech asserted a counterclaim for breach of contract seeking monetary damages and interest related to the cost allocations under the collaboration agreement. On December 29, 2016, Genentech withdrew its counterclaim against us in the ongoing JAMS arbitration concerning alleged breaches of the parties’ collaboration agreement. When notifying the arbitral panel and us of this unilateral action, Genentech further stated that it changed, both retroactively and prospectively, the manner in which it allocates promotional expenses of the Cotellic plus Zelboraf combination therapy. As a result of Genentech’s decision to change its cost allocation approach, we are relieved of our obligation to pay \$18.7 million of disputed costs that had been accrued by us as of September 30, 2016. We have invoiced Genentech for certain expenses, with interest, that we had previously paid. Accordingly, during the year ended December 31, 2016, we offset Selling, general and administrative expenses with a \$13.3 million recovery for disputed losses that had been recognized prior to 2016. During the year ended December 31, 2016, we also recognized a loss under the collaboration agreement of \$4.5 million for 2016 activities under the collaboration agreement as computed under Genentech’s revised cost allocation approach. Taken together, we have recorded a net cost recovery of \$8.8 million during the year ended December 31, 2016 under the collaboration agreement.

During the years ended December 31, 2016, 2015 and 2014, collaboration revenues and (loss) net cost recovery under the collaboration agreement were as follows (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Collaboration revenues:			
Royalty revenues on ex-U.S. sales of COTELLIC	\$ 2,827	\$ 14	\$ —
(Loss) net cost recovery under the collaboration agreement included in Selling, general and administrative expenses	\$ 8,771	\$ (16,600)	\$ (2,916)

The (loss) net cost recovery under the collaboration agreement includes personnel and other costs we have incurred to co-promote Cotellic plus Zelboraf in the U.S. As of December 31, 2015, a portion of the liability for those costs, identified as Accrued collaboration liability on the accompanying Consolidated Balance Sheets, included commercialization expenses that Genentech had allocated to the collaboration but remained under discussion between us and Genentech.

Other Collaborations

We have established collaborations with other leading pharmaceutical and biotechnology companies, including Daiichi Sankyo Company Limited (“Daiichi Sankyo”), Merck (known as MSD outside of the U.S. and Canada), Bristol-Myers Squibb Company (“BMS”), Sanofi and GlaxoSmithKline, for various compounds and programs in our portfolio.

Pursuant to these collaborations, we have fully out-licensed compounds or programs to a partner for further development and commercialization. Under each of our collaborations, we are entitled to receive milestones and royalties.

With respect to our partnered compounds, other than cabozantinib and cobimetinib, we are eligible to receive potential contingent payments totaling approximately \$2.2 billion in the aggregate on a non-risk adjusted basis, of which 9% are related to clinical development milestones, 42% are related to regulatory milestones and 49% are related to commercial milestones, all to be achieved by the various licensees, which may not be paid, if at all, until certain conditions are met.

Daiichi Sankyo

In March 2006, we entered into a collaboration agreement with Daiichi Sankyo for the discovery, development and commercialization of novel therapies targeted against the mineralocorticoid receptor (“MR”), a nuclear hormone receptor implicated in a variety of cardiovascular and metabolic diseases. Under the terms of the agreement, we granted to Daiichi Sankyo an exclusive, worldwide license to certain intellectual property primarily relating to compounds that modulate MR, including CS-3150/esaxerenone (a specific rotational isomer of XL550). Daiichi Sankyo is responsible for all further preclinical and clinical development, regulatory, manufacturing and commercialization activities for the compounds and we do not have rights to reacquire such compounds, except as described below.

We are eligible to receive additional development, regulatory and commercialization milestone payments of up to \$130.0 million. In addition, we are also entitled to receive royalties on any sales of certain products commercialized under the collaboration. Daiichi Sankyo may terminate the agreement upon ninety days’ written notice in which case Daiichi Sankyo’s payment obligations would cease, its license relating to compounds that modulate MR would terminate and revert to us and we would receive, subject to certain terms and conditions, licenses from Daiichi Sankyo to research, develop and commercialize compounds that were discovered under the collaboration.

We recognized contract revenues of \$15.0 million from milestone payments during the year ended December 31, 2016 under our collaboration agreement with Daiichi Sankyo. We did not recognize any such revenue during the years ended December 31, 2015 and 2014.

Merck

In December 2011, we entered into an agreement with Merck pursuant to which we granted Merck an exclusive worldwide license to our PI3K-delta (“PI3K-d”) program, including XL499 and other related compounds. Pursuant to the terms of the agreement, Merck has sole responsibility to research, develop, and commercialize compounds from our PI3K-d program. The agreement became effective in December 2011.

We will be eligible to receive payments associated with the successful achievement of potential development and regulatory milestones for multiple indications of up to \$231.0 million. We will also be eligible to receive payments for combined sales performance milestones of up to \$375.0 million and royalties on net-sales of products emerging from the agreement. Contingent payments associated with milestones achieved by Merck and royalties are payable on compounds emerging from our PI3K-d program or from certain compounds that arise from Merck’s internal discovery efforts targeting PI3K-d during a certain period.

We recognized contract revenues of \$5.0 million and \$3.0 million from milestone payments during the years ended December 31, 2016 and 2015, respectively, under our collaboration agreement with Merck. We did not recognize any such revenue during the year ended December 31, 2014.

Bristol-Myers Squibb

ROR Collaboration Agreement

In October 2010, we entered into a worldwide collaboration with BMS pursuant to which each party granted to the other certain intellectual property licenses to enable the parties to discover, optimize and characterize ROR antagonists that may subsequently be developed and commercialized by BMS. Since the collaborative research period ended in July 2013, BMS has and will continue to have sole responsibility for any further research, development, manufacture and commercialization of products developed under the collaboration and will bear all costs and expenses associated with those activities.

For each product developed by BMS under the collaboration, we will be eligible to receive payments upon the achievement by BMS of development and regulatory milestones of up to \$252.5 million in the aggregate and

commercialization milestones of up to \$150.0 million in the aggregate, as well as royalties on commercial sales of any such products.

We did not recognize any revenue under our ROR collaboration agreement with BMS during the three years ended December 31, 2016.

LXR Collaboration Agreement

In December 2005, we entered into a collaboration agreement with BMS for the discovery, development and commercialization of novel therapies targeted against LXR, a nuclear hormone receptor implicated in a variety of cardiovascular and metabolic disorders. This agreement became effective in January 2006, at which time we granted BMS an exclusive worldwide license with respect to certain intellectual property primarily relating to compounds that modulate LXR. The research term expired in January 2010 and we transferred the technology to BMS in 2011 to enable it to continue the LXR program. We have been advised that BMS is continuing additional preclinical research on the program.

Under the collaboration agreement, BMS is required to pay us contingent amounts associated with development and regulatory milestones of up to \$53.0 million per product for up to two products from the collaboration. In addition, we are also entitled to receive payments associated with sales milestones of up to \$310.0 million and royalties on sales of any products commercialized under the collaboration.

We did not recognize any revenue under our LXR collaboration agreement with BMS during the three years ended December 31, 2016.

Sanofi

In May 2009, we entered into a global license agreement with Sanofi for SAR245408 (XL147) and SAR245409 (XL765), leading inhibitors of phosphoinositide-3 kinase ("PI3K"), and a broad collaboration for the discovery of inhibitors of PI3K for the treatment of cancer. The license agreement and collaboration agreement became effective on July 7, 2009.

We will be eligible to receive contingent payments associated with development, regulatory and commercial milestones under the license agreement of \$745.0 million in the aggregate, as well as royalties on sales of any products commercialized under the license.

We did not recognize any revenue under our collaboration agreement with Sanofi during the three years ended December 31, 2016.

GlaxoSmithKline

In October 2002, we established a collaboration with GlaxoSmithKline to discover and develop novel therapeutics in the areas of vascular biology, inflammatory disease and oncology. Under the terms of the product development and commercialization agreement, GlaxoSmithKline had the right to choose cabozantinib for further development and commercialization, but notified us in October 2008 that it had waived its right to select the compound for such activities. As a result, we retained the rights to develop, commercialize, and license cabozantinib, subject to payment to GlaxoSmithKline of a 3% royalty on net sales of any product incorporating cabozantinib. The product development and commercialization agreement was terminated during 2014, although GlaxoSmithKline will continue to be entitled to a 3% royalty on net sales of any product incorporating cabozantinib, including COMETRIQ and CABOMETYX.

In connection with the sales of COMETRIQ and CABOMETYX, during the years ended December 31, 2016, 2015 and 2014 we recorded \$4.3 million, \$1.0 million and \$0.7 million, respectively, in royalties payable to GlaxoSmithKline. Royalty expense is included in Cost of goods sold for sales by us and as a reduction of Collaboration revenue for sales by Ipsen in the accompanying Consolidated Statements of Operations.

NOTE 3. RESTRUCTURINGS

Between March 2010 and May 2013, we implemented five restructurings (which we refer to collectively as the "2010 Restructurings") to manage costs and as a consequence of our decision in 2010 to focus our proprietary resources and development efforts on the development and commercialization of cabozantinib. The aggregate reduction in headcount from the 2010 Restructurings was 429 employees. Charges and credits related to the 2010 Restructurings were recorded in periods other than those in which the 2010 Restructurings were implemented as a result of sublease activities for certain of our buildings in South San Francisco, California, changes in assumptions regarding anticipated sublease activities, the effect of the passage of time on our discounted cash flow computations, previously planned employee terminations, and sales of excess equipment and other assets.

In September 2014, as a consequence of the failure of COMET-1, one of our two phase 3 pivotal trials of cabozantinib in metastatic castration-resistant prostate cancer, we initiated a restructuring (which we refer to as the “2014 Restructuring”) to reduce our workforce. The aggregate reduction in headcount from the 2014 Restructuring was 143 employees. The principal objective of the 2014 Restructuring was to enable us to focus our financial resources on the phase 3 pivotal trials of cabozantinib in advanced RCC and advanced HCC.

The total outstanding current and long-term restructuring liability is included in Other current liabilities and Other long-term liabilities, respectively, on the accompanying Consolidated Balance Sheets. The changes of these liabilities and the cumulative restructuring charge from inception to date are summarized in the following table (in thousands):

	2010 Restructurings		2014 Restructuring			Total
	Facility Charges	Other	Employee Severance and Other Benefits	Facility Charges	Other	
Restructuring liability as of December 31, 2013	\$ 13,460	\$ 12	\$ —	\$ —	\$ —	\$ 13,472
Restructuring charge (recovery)	1,626	(117)	5,775	65	247	7,596
Proceeds from sale of assets	—	199	—	—	100	299
Other cash payments, net	(5,644)	(8)	(4,507)	(65)	(12)	(10,236)
Other items	12	(86)	22	—	(288)	(340)
Restructuring liability as of December 31, 2014	9,454	—	1,290	—	47	10,791
Restructuring charge (recovery)	757	—	(269)	1,582	(1,028)	1,042
Proceeds from sale of assets	—	—	—	—	1,325	1,325
Other cash payments, net	(6,449)	—	(1,021)	(1,357)	—	(8,827)
Other items	325	—	—	278	(344)	259
Restructuring liability as of December 31, 2015	4,087	—	—	503	—	4,590
Restructuring charge	902	—	—	12	—	914
Other cash payments, net	(4,039)	—	—	(500)	(34)	(4,573)
Other items	975	—	—	—	34	1,009
Restructuring liability as of December 31, 2016	\$ 1,925	\$ —	\$ —	\$ 15	\$ —	\$ 1,940
Restructuring charge (recovery) from implementation to date	\$ 32,517	\$ 23,933 ⁽¹⁾	\$ 5,506	\$ 1,659	\$ (781) ⁽¹⁾	\$ 62,834

(1) Other restructuring charge from implementation to date for the 2010 Restructurings includes \$21.7 million in charges related to employee severance and other benefits for periods ended prior to December 31, 2013. The remainder of Other activity for both restructurings relates primarily to the impairment and sale of property and equipment.

The restructuring charge for the year ended December 31, 2016 included \$0.8 million in charges related to a tenant’s default on an existing sublease which was partially offset by a \$0.1 million recovery related to a new sublease executed in July 2016. The restructuring charge for the year ended December 31, 2015 included \$1.6 million in additional charges due to the partial termination of one of our building leases and additional facility-related charges related to the decommissioning and exit of certain buildings, which was partially offset by \$1.0 million in recoveries recorded in connection with the sale of excess equipment and other assets that had previously been fully depreciated and the reversal of severance charges recorded in 2014 for employees that were recalled in 2015. The restructuring charge for the year ended December 31, 2014 includes \$5.8 million of employee severance and other benefits and we recorded charges of \$0.3 million for property and equipment write-downs and other charges. The charges for all periods presented include the effect of the passage of time on our discounted cash flow computations (“accretion expense”) for the exit, in prior periods, of certain of our South San Francisco buildings and changes in estimates regarding future subleases.

We expect to pay accrued facility charges of \$1.9 million, net of cash received from our subtenants, through the end of the lease terms of the buildings, all of which end in May 2017.

NOTE 4. CASH AND INVESTMENTS

Cash and Investments Available-for-Sale

The following tables summarize cash and cash equivalents, investments, and restricted cash and investments by balance sheet line item as of December 31, 2016 and 2015 (in thousands):

	December 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents	\$ 151,686	\$ —	\$ —	\$ 151,686
Short-term investments	268,234	13	(130)	268,117
Long-term investments	55,792	1	(192)	55,601
Long-term restricted investments	4,150	—	—	4,150
Total cash and investments	\$ 479,862	\$ 14	\$ (322)	\$ 479,554

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Cash and cash equivalents	\$ 141,634	\$ —	\$ —	\$ 141,634
Short-term investments	25,484	5	(63)	25,426
Long-term investments	83,665	2	(67)	83,600
Long-term restricted investments	2,650	—	—	2,650
Total cash and investments	\$ 253,433	\$ 7	\$ (130)	\$ 253,310

Under our loan and security agreement with Silicon Valley Bank, we are required to maintain compensating balances on deposit in one or more investment accounts with Silicon Valley Bank or one of its affiliates. The total collateral balances were \$81.6 million as of both December 31, 2016 and 2015 and are reflected in our Consolidated Balance Sheets in short-term investments as of December 31, 2016 and long-term investments as of December 31, 2015; the change in classification from long-term to short-term was the result of a corresponding change in the classification for our term loan payable to Silicon Valley Bank which matures in May 2017. See "Note 7. Debt" for more information regarding the collateral balance requirements under our Silicon Valley Bank loan and security agreement.

The following table summarizes our cash equivalents and investments by security type as of December 31, 2016 and 2015. The amounts presented exclude cash, but include investments classified as cash equivalents (in thousands):

	December 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Money market funds	\$ 71,457	\$ —	\$ —	\$ 71,457
Commercial paper	165,375	—	—	165,375
Corporate bonds	152,712	3	(308)	152,407
U.S. Treasury and government sponsored enterprises	70,730	11	(14)	70,727
Total investments	\$ 460,274	\$ 14	\$ (322)	\$ 459,966

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Money market funds	\$ 72,000	\$ —	\$ —	\$ 72,000
Commercial paper	78,155	—	—	78,155
Corporate bonds	72,205	4	(118)	72,091
U.S. Treasury and government sponsored enterprises	28,434	1	(12)	28,423
Marketable equity securities	16	2	—	18
Total investments	\$ 250,810	\$ 7	\$ (130)	\$ 250,687

There were no gains or losses on the sales of investments available-for-sale during the years ended December 31, 2016, 2015 and 2014.

All of our investments are subject to a quarterly impairment review. During the years ended December 31, 2016, 2015 and 2014 we did not record any other-than-temporary impairment charges on our available-for-sale securities. As of December 31, 2016, there were 86 investments in an unrealized loss position with gross unrealized losses of \$322,000 and an aggregate fair value of \$172.1 million. The investments in an unrealized loss position comprise corporate bonds with an aggregate fair value of \$143.5 million and the remainder comprises primarily securities issued by U.S. Treasury and government sponsored enterprises. The unrealized losses were not attributed to credit risk, but rather associated with the changes in interest rates. Based on the scheduled maturities of our investments, we concluded that the unrealized losses in our investment securities are not other-than-temporary, as it is more likely than not that we will hold these investments for a period of time sufficient for a recovery of our cost basis.

The following summarizes the fair value of securities classified as available-for-sale by contractual maturity as of December 31, 2016 (in thousands):

	Mature within One Year	After One Year through Two Years	Fair Value
Money market funds	\$ 71,457	\$ —	\$ 71,457
Commercial paper	165,375	—	165,375
Corporate bonds	99,455	52,952	152,407
U.S. Treasury and government sponsored enterprises	68,078	2,649	70,727
Total	\$ 404,365	\$ 55,601	\$ 459,966

Cash is excluded from the table above.

The classification of certain compensating balances and restricted investments are dependent upon the term of the underlying restriction on the asset and not the maturity date of the investment. Therefore, certain long-term investments and long-term restricted cash and investments have contractual maturities within one year.

Other Cost Method Equity Investments

During the year ended December 31, 2016 we recognized a \$2.5 million gain on the sale of our 9% interest in Akarna Therapeutics, Ltd. The gain on the sale is included in Interest income and other, net in our Consolidated Statements of Operations. The gain on sale of other cost method equity investments was either nominal or zero during the years ended December 31, 2015 and 2014.

As of December 31, 2016 and 2015, the carrying values of such investments were \$0.

NOTE 5. INVENTORY

Inventory consists of the following (in thousands):

	December 31,	
	2016	2015
Raw materials	\$ 863	\$ 1,037
Work in process	2,343	2,251
Finished goods	738	583
Total	3,944	3,871
Less: non-current portion included in Other long-term assets	(606)	(1,255)
Inventory	\$ 3,338	\$ 2,616

We generally relieve inventory on a first-expiry, first-out basis. A portion of the manufacturing costs for inventory were incurred prior to regulatory approval of CABOMETYX and COMETRIQ and, therefore, were expensed as research and development costs when those costs were incurred, rather than capitalized as inventory. Write-downs related to expiring and excess inventory are charged to cost of goods sold. Such write-downs were \$0.5 million and \$1.2 million for the years ended December 31, 2016 and 2015, respectively. The non-current portion of inventory is recorded within Other long-term assets on the accompanying Consolidated Balance Sheets and is comprised of a portion of the active pharmaceutical ingredient that is included in raw materials and work in process inventories.

NOTE 6. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following (in thousands):

	December 31,	
	2016	2015
Laboratory equipment	\$ 4,310	\$ 4,749
Computer equipment and software	13,738	11,890
Furniture and fixtures	2,240	2,253
Leasehold improvements	6,646	6,395
Construction-in-progress	19	456
	26,953	25,743
Less: accumulated depreciation and amortization	(24,882)	(24,309)
Property and equipment, net	\$ 2,071	\$ 1,434

For the years ended December 31, 2016, 2015 and 2014, we recorded depreciation expense of \$1.0 million, \$1.4 million and \$2.4 million, respectively.

For the year ended 2014, we recorded an asset impairment charge of \$0.7 million in connection with the Restructurings. There were no such charges in 2016 or 2015. In 2015 and 2014, the gain on the sale of excess equipment was \$1.0 million and \$0.6 million, respectively. There were no such gains in 2016. Cash proceeds on sales were \$0.1 million, \$1.3 million and \$0.4 million during 2016, 2015 and 2014, respectively. The impairment and subsequent sale of excess equipment was a result of the 2010 restructurings, as described further in "Note 3 - Restructurings". The asset impairment charge, net of the gain on the sale of such assets was recorded as a Restructuring charge (recovery) in our Consolidated Statements of Operations.

NOTE 7. DEBT

The amortized carrying amount of our debt consists of the following (in thousands):

	December 31,	
	2016	2015
Secured Convertible Notes due 2018 (“Deerfield Notes”)	\$ 109,122	\$ 102,727
Term loan payable	80,000	80,000
2019 Notes	—	235,210
Total debt	189,122	417,937
Less: current portion	(189,122)	—
Long-term debt	\$ —	\$ 417,937

Prior period balances in this Note reflect revisions due to a correction of an immaterial error with regards to the 2019 Notes. The immaterial error resulted in an overstatement of the discount on the 2019 Notes and therefore understated the amortized carrying amount of the 2019 Notes and overstated the related interest expense. See “Note 1. Organization and Summary of Significant Accounting Policies - Correction of an Immaterial Error” for additional information on the correction of the immaterial error.

Deerfield Notes

In June 2010, we entered into a note purchase agreement with Deerfield Private Design Fund, L.P. and Deerfield Private Design International, L.P., (the “Original Deerfield Purchasers”), pursuant to which, on July 1, 2010, we sold to the Original Deerfield Purchasers an aggregate of \$124.0 million principal amount of our Secured Convertible Notes due July 1, 2015, which we refer to as the Original Deerfield Notes, for an aggregate purchase price of \$80.0 million, less closing fees and expenses of approximately \$2.0 million. On August 6, 2012, the parties amended the note purchase agreement to permit the issuance of the 2019 Notes and modify certain optional prepayment rights. The amendment became effective upon the issuance of the 2019 Notes and the payment to the Original Deerfield Purchasers of a \$1.5 million consent fee. On August 1, 2013, the parties further amended the note purchase agreement to clarify certain of our other rights under the note purchase agreement. On January 22, 2014, the note purchase agreement was amended to provide us with an option to extend the maturity date of our indebtedness under the note purchase agreement to July 1, 2018. On July 10, 2014, the parties further amended the note purchase agreement to clarify certain technical provisions. On July 1, 2015, we made a \$4.0 million principal payment and then extended the maturity date of the Original Deerfield Notes from July 1, 2015 to July 1, 2018. In connection with the extension, Deerfield Partners, L.P. and Deerfield International Master Fund, L.P. (the “New Deerfield Purchasers”) acquired the \$100.0 million principal amount of the Original Deerfield Notes and we entered into the Restated Deerfield Notes with each of the New Deerfield Purchasers, representing the \$100.0 million principal amount. We refer to the Original Deerfield Purchasers and the New Deerfield Purchasers collectively as Deerfield, and to the Original Deerfield Notes and Restated Deerfield Notes, collectively as the Deerfield Notes.

As of December 31, 2016 and 2015, the outstanding principal balance on the Deerfield Notes was \$109.8 million and \$103.8 million, respectively, which, subject to certain limitations, is payable in cash or in stock at our discretion. Beginning on July 2, 2015, the outstanding principal amount of the Deerfield Notes bears interest at the rate of 7.5% per annum to be paid in cash, quarterly in arrears, and 7.5% per annum to be paid in kind, quarterly in arrears, for a total interest rate of 15% per annum. Through July 1, 2015, the outstanding principal amount of the Deerfield Notes bore interest in the annual amount of \$6.0 million, payable quarterly in arrears.

We have classified the Deerfield Notes as a current liability as of December 31, 2016 because we intend to repay the Deerfield Notes on or about July 1, 2017 at a prepayment price equal to 105% of the outstanding principal amount of the notes, plus accrued and unpaid interest to the date of repayment. We expect that cash and cash equivalents and short-term investments held at December 31, 2016 will be used to repay the Deerfield Notes.

The following is a summary of interest expense for the Deerfield Notes (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Stated coupon interest	\$ 8,008	\$ 6,792	\$ 6,000
Interest paid in kind	8,008	3,817	—
Amortization of debt discount and debt issuance costs	457	5,461	11,731
Total interest expense	<u>\$ 16,473</u>	<u>\$ 16,070</u>	<u>\$ 17,731</u>

The balance of unamortized fees and costs was \$0.4 million and \$0.7 million as of December 31, 2016 and 2015, respectively, which is recorded as a reduction of the carrying amount of the Deerfield Notes on the accompanying Consolidated Balance Sheets. Effective March 4, 2015, upon notification of our election to extend the maturity date to July 1, 2018, we began to amortize the remaining unamortized discount, fees and costs through July 1, 2018 using the effective interest method and an effective interest rate of 15.2%.

We were required to offer to make an additional mandatory prepayment on the Deerfield Notes in January 2016 and 2015 equal to 15% of certain revenues from collaborative arrangements, which we refer to as “Development/Commercialization Revenue”, received during the prior fiscal year, subject to a maximum prepayment amount of \$27.5 million. The definition of Development/Commercialization Revenue expressly excludes any sale or distribution of drug or pharmaceutical products in the ordinary course of our business, and any proceeds from any Intellectual Property Sale, but would include our share of the net profits from the commercialization of cobimetinib in the U.S. and the receipt of royalties from cobimetinib sales outside the U.S. As a result of the extension of the maturity date of the Deerfield Notes to July 1, 2018, our obligation to make annual mandatory prepayments equal to 15% of Development/Commercialization Revenue received by us during the prior fiscal year will continue to apply in January 2017 and January 2018. We are only obligated to offer to make any such annual mandatory prepayment if the note holders provide notice to us of their election to receive the prepayment. We made no such mandatory prepayments due to the fact that Deerfield elected not to receive the mandatory prepayments in January 2017 or 2016 related to Development/Commercialization Revenue received during the years ended December 31, 2016 and 2015 and we received no such revenues during the fiscal year ended December 31, 2014.

Under the note purchase agreement, we may at our sole discretion, prepay all of the principal amount of the Deerfield Notes at a prepayment price equal to 105% of the outstanding principal amount of the Deerfield Notes, plus all accrued and unpaid interest through the date of such prepayment, plus, if prior to July 1, 2017, all interest that would have accrued on the principal amount of the Deerfield Notes between the date of such prepayment and July 1, 2017, if the outstanding principal amount of the Deerfield Notes as of such prepayment date had remained outstanding through July 1, 2017, plus all other accrued and unpaid obligations, collectively referred to as the Prepayment Price.

In lieu of making any portion of the Prepayment Price or mandatory prepayment in cash, subject to certain limitations (including a cap on the number of shares issuable under the note purchase agreement), we have the right to convert all or a portion of the principal amount of the Deerfield Notes into, or satisfy all or any portion of the Prepayment Price amounts or mandatory prepayment amounts with shares of our common stock. Additionally, in lieu of making any payment of accrued and unpaid interest in respect of the Deerfield Notes in cash, subject to certain limitations, we may elect to satisfy any such payment with shares of our common stock. The number of shares of our common stock issuable upon conversion or in settlement of principal and interest obligations will be based upon the discounted trading price of our common stock over a specified trading period. Upon certain changes of control of Exelixis, a sale or transfer of assets in one transaction or a series of related transactions for a purchase price of more than (i) \$400 million or (ii) 50% of our market capitalization, Deerfield may require us to prepay the Deerfield Notes at the Prepayment Price. Upon an event of default, as defined in the Deerfield Notes, Deerfield may declare all or a portion of the Prepayment Price to be immediately due and payable.

We are required to notify the applicable Deerfield entities of certain sales, assignments, grants of exclusive licenses or other transfers of our intellectual property pursuant to which we transfer all or substantially all of our legal or economic interests, defined as an Intellectual Property Sale, and the Deerfield entities may elect to require us to prepay the principal amount of the Deerfield Notes in an amount equal to (i) 100% of the cash proceeds of any Intellectual Property Sale relating to cabozantinib and (ii) 50% of the cash proceeds of any other Intellectual Property Sale.

In connection with the January 2014 amendment to the note purchase agreement, on January 22, 2014, we issued to the New Deerfield Purchasers two-year warrants, which we refer to as the 2014 Warrants, to purchase an aggregate of 1,000,000 shares of our common stock at an exercise price of \$9.70 per share. Subsequent to our election to extend the maturity date of the Deerfield Notes, the exercise price of the 2014 Warrants was reset to \$3.445 per share and the term was extended by

two years to January 22, 2018. See “Note 8. Common Stock and Warrants” for more information on the valuation of the 2014 Warrants.

In connection with the note purchase agreement, we also entered into a security agreement in favor of Deerfield which provides that our obligations under the Deerfield Notes will be secured by substantially all of our assets except intellectual property. On August 1, 2013, the security agreement was amended to limit the extent to which voting equity interests in any of our foreign subsidiaries shall be secured assets.

The note purchase agreement as amended and the security agreement include customary representations and warranties and covenants made by us, including restrictions on the incurrence of additional indebtedness.

Silicon Valley Bank Loan and Security Agreement

On May 22, 2002, we entered into a loan and security agreement with Silicon Valley Bank for an equipment line of credit. On December 21, 2004, December 21, 2006 and December 21, 2007, we amended the loan and security agreement to provide for additional equipment lines of credit and on June 2, 2010, we further amended the loan and security agreement to provide for a new seven-year term loan in the amount of \$80.0 million. As of both December 31, 2016 and 2015, the outstanding principal balance due under the term loan was \$80.0 million and the lines of credit had been repaid in full. The principal amount outstanding under the term loan accrues interest at 1.0% per annum, which interest is due and payable monthly. We are required to repay the term loan in one balloon principal payment, representing 100% of the principal balance and accrued and unpaid interest, on May 31, 2017. We have the option to prepay all, but not less than all, of the amounts advanced under the term loan, provided that we pay all unpaid accrued interest thereon that is due through the date of such prepayment and the interest on the entire principal balance of the term loan that would otherwise have been paid after such prepayment date until the maturity date of the term loan.

In accordance with the terms of the loan and security agreement, we are required to maintain an amount equal to at least 100%, but not to exceed 107%, of the outstanding principal balance of the term loan under the loan and security agreement on deposit in one or more investment accounts with Silicon Valley Bank or one of its affiliates as support for our obligations under the loan and security agreement (although we are entitled to retain income earned or the amounts maintained in such accounts). Any amounts outstanding under the term loan during the continuance of an event of default under the loan and security agreement will, at the election of Silicon Valley Bank, bear interest at a per annum rate equal to 6.0%. If one or more events of default under the loan and security agreement occurs and continues beyond any applicable cure period, Silicon Valley Bank may declare all or part of the obligations under the loan and security agreement to be immediately due and payable and stop advancing money or extending credit to us under the loan and security agreement.

The total collateral balance as of both December 31, 2016 and 2015 was \$81.6 million and is reflected in our Consolidated Balance Sheet in Short-term investments and Long-term investments as the amounts are not restricted as to withdrawal. However, withdrawal of some or all of this amount such that the collateral balance falls below the required level could result in Silicon Valley Bank declaring the obligation immediately due and payable.

2019 Notes

In August 2012, we issued and sold \$287.5 million aggregate principal amount of the 2019 Notes, for net proceeds of \$277.7 million. The 2019 Notes bore interest at a rate of 4.25% per annum, payable semi-annually in arrears on February 15 and August 15 of each year.

On August 9, 2016 and August 19, 2016 we entered into separate, privately negotiated exchange agreements with certain holders of the 2019 Notes. Under the terms of the exchange agreements, the holders agreed to exchange an aggregate principal amount of \$239.4 million of 2019 Notes held by them for an aggregate of 45,064,455 shares of our common stock. In addition, the holders received inducements of \$6.0 million which included an aggregate cash payment of \$2.4 million and \$3.6 million in interest payments payable on the Deerfield Notes on August 15, 2016. Under the terms of the indenture for the 2019 Notes, subject to certain exceptions, holders who convert between a record date and the related interest payment date would have been required to repay the interest payment received on the related interest payment date. The exchange transactions entered into on August 9, 2016 were structured such that the holders party to those agreements were not required to repay this interest. We have included those payments as an additional inducement and as financing activities in our Consolidated Statement of Cash Flows. Inducements are included in the loss on extinguishment of debt. Following the completion of the exchange transactions, on August 24, 2016, we provided public notice of the redemption of \$48.1 million of the 2019 Notes, representing all remaining notes outstanding. During the redemption period, which ended on November 2, 2016, holders of the 2019 Notes had the option to convert their notes into shares of our common stock, plus cash in lieu of any fractional share, at a conversion rate of 188.2353 shares of common stock per \$1,000 principal amount of the remaining 2019 Notes at any time before close of business on October 31, 2016. On various dates in August, September, October and November of 2016,

subsequent to the announcement of the redemption of all remaining 2019 Notes outstanding, \$47.5 million of additional aggregate principal amount of 2019 Notes were converted by the holders into an aggregate of 8,944,824 shares of our common stock. We recognized an additional loss on extinguishment of debt of \$7.3 million, representing the difference between the total settlement consideration transferred to the holders that was attributed to the liability component of the 2019 Notes, based on the fair value of that component at the time of conversion, and the net carrying value of the liability. The combined issuance of 54,009,279 shares of our common stock pursuant to the conversions of the 2019 Notes resulted in an increase to common stock and additional paid-in capital of \$592.7 million. A portion of the settlement consideration transferred was allocated to the reacquisition of the embedded conversion option, which resulted in a \$342.7 million reduction of additional paid-in capital. In November 2016 we redeemed the remaining \$0.6 million aggregate principal amount of the 2019 Notes in cash for 100% of the principal amount thereof, plus accrued and unpaid interest. Transaction costs incurred with third parties related to the conversion of the 2019 Notes were allocated between the liability and equity components and resulted in an additional \$0.5 million of loss on extinguishment of debt and a \$0.7 million reduction of additional paid-in capital. The following is a summary of loss on extinguishment of debt for the conversion and redemption of the 2019 Notes for the year ended December 31, 2016 (in thousands):

Inducements included in August 9, 2016 and August 19, 2016 agreements:	
Cash inducements	\$ 2,394
Repayments of interest required upon a conversion under the terms of the indenture that were not repaid under the terms of the exchange agreements	3,572
Difference between the total settlement consideration attributed to the liability component of the 2019 Notes and the net carrying value of the liability, described above	7,338
Unamortized discount on redeemed notes	83
Third party costs	514
Loss on extinguishment of debt	<u>\$ 13,901</u>

The following is a summary of the interest expense for the 2019 Notes (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Stated coupon interest	\$ 7,799	\$ 12,218	\$ 12,253
Amortization of debt discount and debt issuance costs	7,975	11,581	10,525
Total interest expense	<u>\$ 15,774</u>	<u>\$ 23,799</u>	<u>\$ 22,778</u>

The balance of unamortized fees and costs was \$4.2 million as of December 31, 2015 which is recorded as a reduction of the carrying amount of the 2019 Notes on the accompanying Consolidated Balance Sheets. There were no such unamortized fees and costs as of December 31, 2016 due to the conversion and redemption of 100% of the 2019 Notes in 2016.

Future Principal Payments

Aggregate contractual future principal payments of our debt are as follows as of December 31, 2016 (in thousands):

Year Ending December 31, ⁽¹⁾	
2017	\$ 80,000
2018	124,972
Thereafter	—

- (1) As described above, we intend to repay the Deerfield Notes, which have a contractual maturity of July 1, 2018, on or about July 1, 2017. The actual timing of payments may differ materially.

NOTE 8. COMMON STOCK AND WARRANTS

Conversion of Debt into Common Stock

In 2016, we issued 54,009,279 shares of our common stock pursuant to the conversion of \$286.9 million of aggregate principal amount of 2019 Notes. The conversions resulted in a \$253.1 million increase to shareholder's equity and a \$13.9 million loss on extinguishment of debt. The Deerfield Notes are, under certain circumstances, convertible into shares of our common stock. See "Note 7. Debt" for more information regarding the conversion features of these instruments.

Sale of Shares of Common Stock

In July 2015, we completed a registered underwritten public offering of 28,750,000 shares of our common stock, including 3,750,000 shares issued under the underwriters' 30-day option to buy shares, at a price of \$5.40 per share pursuant to a shelf registration statement previously filed with the SEC, which was filed and automatically became effective on July 1, 2015. We received \$145.6 million in net proceeds from the offering after deducting the underwriting discount and other estimated expenses.

In January 2014, we completed a registered underwritten public offering of 10,000,000 shares of our common stock at a price of \$8.00 per share pursuant to a shelf registration statement previously filed with the SEC, which the SEC declared effective on June 8, 2012. We received \$75.6 million in net proceeds from the offering after deducting the underwriting discount and related offering expenses.

2014 Warrants

In connection with an amendment to the note purchase agreement for the Original Deerfield Notes, in January 2014 we issued to the New Deerfield Purchasers two-year warrants to purchase an aggregate of 1,000,000 shares of our common stock at an exercise price of \$9.70 per share. Subsequent to our March 2015 notification of our election to extend the maturity date of the Deerfield Notes, the exercise price of the 2014 Warrants was reset to \$3.445 per share and the term was extended by two years to January 22, 2018.

The 2014 Warrants contain certain limitations that prevent the holder from acquiring shares upon exercise that would result in the number of shares beneficially owned by the holder to exceed 9.98% of the total number of shares of our common stock then issued and outstanding. In addition, upon certain changes in control of Exelixis, to the extent the 2014 Warrants are not assumed by the acquiring entity, or upon certain defaults under the 2014 Warrants, the holder has the right to net exercise the 2014 Warrants for shares of common stock, or be paid an amount in cash in certain circumstances where the current holders of our common stock would also receive cash, equal to the Black-Scholes Merton value of the 2014 Warrants.

In connection with the issuance of the 2014 Warrants, we entered into a registration rights agreement with Deerfield, pursuant to which we filed a registration statement with the SEC covering the resale of the shares of common stock issuable upon exercise of the 2014 Warrants.

Due to the potential increase in term and decrease of the exercise price, the 2014 Warrants were included in Other long-term liabilities at their current estimated fair value, which was \$1.5 million and \$0.9 million as of March 18, 2015 and December 31, 2014, respectively. We recorded an unrealized loss of \$0.5 million and an unrealized gain of \$1.8 million on the 2014 Warrants during the years ended December 31, 2015 and 2014, respectively, which is included in Interest income and other, net. Subsequent to our March 2015 notification of our election to extend the maturity date of the Deerfield Notes, the terms of the 2014 Warrants became fixed as of March 18, 2015 and the 2014 Warrants were transferred to Additional paid-in capital as of that date at their then estimated fair value of \$1.5 million.

The warrants are participating securities however the holders do not have a contractual obligation to share in our losses; thus, they have been excluded from our net loss per share calculations.

NOTE 9. FAIR VALUE MEASUREMENTS

The following table sets forth the fair value of our financial assets that were measured and recorded on a recurring basis as of December 31, 2016 and 2015. We did not have any Level 3 investments as of December 31, 2016 or 2015. The amounts presented exclude cash, but include investments classified as cash equivalents (in thousands):

	December 31, 2016		
	Level 1	Level 2	Total
Money market funds	\$ 71,457	\$ —	\$ 71,457
Commercial paper	—	165,375	165,375
Corporate bonds	—	152,407	152,407
U.S. Treasury and government sponsored enterprises	—	70,727	70,727
Total financial assets	\$ 71,457	\$ 388,509	\$ 459,966

	December 31, 2015		
	Level 1	Level 2	Total
Money market funds	\$ 72,000	\$ —	\$ 72,000
Commercial paper	—	78,155	78,155
Corporate bonds	—	72,091	72,091
U.S. Treasury and government sponsored enterprises	—	28,423	28,423
Marketable equity securities	18	—	18
Total financial assets	<u>\$ 72,018</u>	<u>\$ 178,669</u>	<u>\$ 250,687</u>

The following is a reconciliation of changes in the fair value of warrants which are classified as Level 3 in the fair value hierarchy (in thousands):

Balance at December 31, 2014	\$ 921
Unrealized loss at final re-measurement of warrants on March 18, 2015, included in Interest income and other, net	549
Transfer of warrants from Other long-term liabilities to Additional paid-in capital at their estimated fair value upon warrant repricing on March 18, 2015	(1,470)
Balance at December 31, 2015	<u>\$ —</u>

No such activity occurred during the year ended December 31, 2016.

The estimated fair value of our financial instruments that are carried at amortized cost is as follows (in thousands):

	December 31, 2016		December 31, 2015	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Deerfield Notes	\$ 109,122	\$ 121,220	\$ 102,727	\$ 101,096
Term loan payable	\$ 80,000	\$ 79,784	\$ 80,000	\$ 79,815
2019 Notes	\$ —	\$ —	\$ 235,210	\$ 336,260

The carrying amounts of cash, trade and other receivables, accounts payable, accrued collaboration liability, accrued clinical trial liabilities, accrued compensation and benefits, and other liabilities approximate their fair values and are excluded from the tables above.

The following methods and assumptions were used to estimate the fair value of each class of financial instrument for which it is practicable to estimate a value:

- When available, we value investments based on quoted prices for those financial instruments, which is a Level 1 input. Our remaining investments are valued using third-party pricing sources, which use observable market prices, interest rates and yield curves observable at commonly quoted intervals of similar assets as observable inputs for pricing, which is a Level 2 input.
- The 2019 Notes were valued using a third-party pricing model that is based in part on average trading prices, which is a Level 2 input. The 2019 Notes were not marked-to-market and are shown at their initial fair value less the unamortized discount; the portion of the value allocated to the conversion option is included in Stockholders' equity (deficit) on the accompanying Consolidated Balance Sheets.
- We estimate the fair value of our other debt instruments, where possible, using the net present value of the payments. For the Silicon Valley Bank term loan and line of credit, we use an interest rate that is consistent with money-market rates that would have been earned on our non-interest-bearing compensating balances as our discount rate, which is a Level 2 input. For the Deerfield Notes, we used a discount rate of 9.5%, which we estimate as our current borrowing rate for similar debt as of December 31, 2016, which is a Level 3 input.

Financial Assets, Liabilities and Equity Measured on a Nonrecurring Basis

In connection with the conversions for our 2019 Note during 2016, we were required to determine the fair value of the settlement consideration received by the holders and the fair value of the liability component of the 2019 Notes, as of the various settlement dates of the conversions. The following methods and assumptions were used to estimate the fair value of those financial instruments:

- The settlement consideration comprises, in part, shares of our Common Stock. The fair value of our Common Stock was determined based on the closing market price of our Common Stock on the various settlement dates of the conversions, which are level 1 inputs;
- The carrying value of the remaining settlement consideration, which includes cash and the forgiveness of the repayment of certain prior interest payments, approximates fair value;
- We estimated the fair value of the liability component of the 2019 Notes using the net present value of estimated future cash flows through maturity. We used a discount rate of 9.5%, which we estimated as our current borrowing rate for straight debt as of September 30, 2016, which is a Level 3 input.

NOTE 10. EMPLOYEE EQUITY AND BENEFIT PLANS

Equity Incentive Plans

We have several equity incentive plans under which we have granted incentive stock options, non-qualified stock options and RSUs to employees, directors and consultants. The Board of Directors or a designated Committee of the Board is responsible for administration of our employee equity incentive plans and determines the term, exercise price and vesting terms of each option. Stock options have a four-year vesting term, an exercise price equal to the fair market value on the date of grant, and a seven year life from the date of grant. Stock options issued prior to May 2011 have a ten year life from the date of grant. RSUs granted to our employees vest annually over a four year term.

In December 2005, our Board of Directors adopted a Change in Control and Severance Benefit Plan for executives and certain non-executives. Eligible Change in Control and Severance Benefit Plan participants include our employees with the title of vice president and above. If a participant's employment is terminated without cause during a period commencing one month before and ending thirteen months following a change in control, as defined in the plan document, then the Change in Control and Severance Benefit Plan participant is entitled to have the vesting of all of such participant's stock options accelerated with the exercise period being extended to no more than one year.

Employee Stock Purchase Plan

In January 2000, we adopted the 2000 Employee Stock Purchase Plan (the "ESPP"). The ESPP allows for qualified employees (as defined in the ESPP) to purchase shares of our common stock at a price equal to the lower of 85% of the closing price at the beginning of the offering period or 85% of the closing price at the end of each six month purchase period. Compensation expense related to our ESPP was \$1.0 million, \$0.4 million, and \$0.8 million for the years ended December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016, we had 5,487,023 shares available for issuance under our ESPP. We issued 559,936 shares, 324,315 shares, and 669,565 shares of common stock during the years ended December 31, 2016, 2015 and 2014, respectively, pursuant to the ESPP at an average price per share of \$3.91, \$1.75 and \$2.14, respectively.

Stock-Based Compensation

We recorded and allocated employee stock-based compensation expense for our equity incentive plans and our ESPP as follows (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Research and development expense	\$ 9,366	\$ 11,691	\$ 3,245
Selling, general and administrative expense	13,546	10,286	6,783
Restructuring related recovery	—	—	(22)
Total employee stock-based compensation expense	\$ 22,912	\$ 21,977	\$ 10,006

We use the Black-Scholes Merton option pricing model to value our stock options. The weighted average grant-date fair value of our stock options and ESPP purchases was as follows:

	2016	2015	2014
Stock options	\$ 4.77	\$ 2.55	\$ 1.46
ESPP	\$ 2.17	\$ 1.20	\$ 1.28

The fair value of employee stock option awards and ESPP purchases was estimated using the following assumptions:

	Stock Options		
	2016	2015	2014
Risk-free interest rate	1.15%	1.22%	1.80%
Dividend yield	—%	—%	—%
Volatility	76%	93%	85%
Expected life	4.4 years	4.5 years	5.5 years
	ESPP		
	2016	2015	2014
Risk-free interest rate	0.55%	0.15%	0.06%
Dividend yield	—%	—%	—%
Volatility	65%	98%	69%
Expected life	6 months	6 months	6 months

The expected life computation for stock options is based on historical exercise patterns and post-vesting termination behavior. We considered implied volatility as well as our historical volatility in developing our estimate of expected volatility.

A summary of all stock option activity for the year ended December 31, 2016 is presented below (dollars in thousands, except per share amounts):

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Options outstanding at December 31, 2015	27,425,854	\$ 4.22		
Granted	4,200,950	\$ 8.29		
Exercised	(6,239,022)	\$ 4.07		
Forfeited	(307,601)	\$ 4.67		
Expired	(80,516)	\$ 10.49		
Options outstanding at December 31, 2016	24,999,665	\$ 4.91	4.54 years	\$ 250,996
Exercisable at December 31, 2016	17,731,361	\$ 4.01	3.98 years	\$ 193,288

At December 31, 2016, a total of 1,630,271 shares were available for grant under our stock option plans.

The aggregate intrinsic value in the table above represents the total intrinsic value (the difference between our closing stock price on the last trading day of fiscal 2016 and the exercise prices, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on December 31, 2016. The total intrinsic value of options exercised was \$50.0 million and \$2.9 million during the years ended December 31, 2016 and 2015, respectively, and was nominal in 2014. The total estimated fair value of employee options vested and recorded as expense during the years ended December 31, 2016, 2015 and 2014 was \$13.4 million, \$18.9 million and \$8.6 million, respectively.

On April 28, 2016, as a result of the FDA's approval of our New Drug Application "NDA" submission, on March 7, 2016, as a result of the FDA's acceptance of our NDA submission and on July 20, 2015, as a result of positive top-line results from the primary analysis of METEOR, the Compensation Committee of the Board of Directors of Exelixis convened to

determine we had met certain performance objectives for performance-based stock options granted to employees in 2013, 2014 and 2015. As a result of these determinations, 5,870,303 and 6,982,613 performance-based stock options vested during the years ended December 31, 2016 and 2015, respectively. During the years ended December 31, 2016 and 2015 we recognized \$4.1 million and \$13.2 million in stock-based compensation expense for those performance-based stock option grants. Prior to 2015, we had not considered achievement of those performance objectives to be probable and therefore, we did not record any stock-based compensation expense for the performance-based stock options during 2014.

The following table summarizes information about stock options outstanding and exercisable at December 31, 2016:

Exercise Price Range	Options Outstanding			Options Outstanding and Exercisable	
	Number	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$1.46 - \$1.90	8,231,617	4.64 years	\$ 1.77	8,088,721	\$ 1.77
\$2.57 - \$4.05	2,707,474	5.57 years	\$ 3.56	1,130,251	\$ 3.27
\$4.16 - \$5.55	5,957,725	3.58 years	\$ 5.18	4,520,554	\$ 5.31
\$5.61 - \$6.21	4,076,881	6,881	\$ 6.08	1,861,457	\$ 6.00
\$6.25 - \$18.25	4,025,968	4.42 years	\$ 10.67	2,130,378	\$ 8.42
	<u>24,999,665</u>	4.54 years	\$ 4.91	<u>17,731,361</u>	\$ 4.01

As of December 31, 2016, \$23.9 million of total unrecognized compensation expense related to stock options is expected to be recognized over a weighted-average period of 2.90 years.

Cash received from option exercises and purchases under the ESPP in the years ended December 31, 2016, 2015 and 2013 was \$27.5 million, \$11.5 million and \$1.6 million, respectively.

The fair value of RSUs is determined based on the value of the underlying common stock on the date of grant. The expenses relating to these RSUs will be recognized over their respective vesting periods. A summary of all RSU activity was as follows for all periods presented (dollars in thousands, except per share amounts):

	Shares	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Awards outstanding at December 31, 2015	1,002,188	\$ 5.16		
Awarded	3,138,236	\$ 7.58		
Vested and released	(1,640,324)	\$ 4.49		
Forfeited	(30,309)	\$ 4.77		
Awards outstanding at December 31, 2016	<u>2,469,791</u>	\$ 8.69	1.93 years	\$ 36,825

As of December 31, 2016, \$13.9 million of total unrecognized compensation expense related to employee RSUs was expected to be recognized over a weighted-average period of 3.28 years.

401(k) Retirement Plan

We sponsor a 401(k) Retirement Plan (the "401(k) Plan") whereby eligible employees may elect to contribute up to the lesser of 50% of their annual compensation or the statutorily prescribed annual limit allowable under Internal Revenue Service regulations. The 401(k) Plan permits us to make matching contributions on behalf of all participants. We matched 100% of the first 3% of participant contributions into the 401(k) Plan in the form of our common stock. We recorded expense of \$1.1 million, \$0.4 million, and \$1.1 million related to the stock match for the years ended December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016, we had 303,187 shares available for issuance under our 401(k) Plan.

NOTE 11. INCOME TAXES

The income tax (benefit) provision is based on the following loss before income taxes (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Domestic	\$ (70,222)	\$ (150,846)	\$ (230,535)
Foreign	—	(10,843)	(30,944)
Total	\$ (70,222)	\$ (161,689)	\$ (261,479)

Income tax expense (benefit) consists of the following for the periods shown below (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Current:			
Federal	\$ —	\$ —	\$ —
State	—	55	(182)
Total current tax expense	—	55	(182)
Deferred:			
Federal	—	—	—
State	—	—	—
Total deferred tax expense	—	—	—
Income tax provision (benefit)	\$ —	\$ 55	\$ (182)

The 2016 income tax provision relates to state minimum and franchise taxes and were nominal. The 2015 income tax provision relates to state minimum and franchise tax expenses as well as true ups related to prior year tax entries. The 2014 income tax benefit resulted from the lapse of the applicable statute of limitations in California for the 2009 tax year, offset by current year state income tax expense.

A reconciliation of income taxes at the statutory federal income tax rate to our income tax (benefit) provision included in the Consolidated Statements of Operations is as follows (in thousands):

	Year Ended December 31,		
	2016	2015	2014
U.S. federal income tax benefit at statutory rate	\$ (23,876)	\$ (54,974)	\$ (88,903)
Unutilized net operating losses	6,377	51,421	84,985
State tax expense	6,520	55	(182)
Debt extinguishment	4,726	—	—
Non-deductible interest	2,680	3,308	3,598
Stock-based compensation	3,155	195	255
Other	418	50	65
Income tax (benefit) provision	\$ —	\$ 55	\$ (182)

Deferred tax assets and liabilities reflect the net tax effects of net operating loss and tax credit carry-forwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting and the amounts used for income tax purposes.

Our deferred tax assets and liabilities consist of the following (in thousands):

	December 31,	
	2016	2015
Deferred tax assets:		
Net operating loss carry-forwards	\$ 471,327	\$ 464,504
Book over tax depreciation and amortization	70,617	1,752
Tax credit and charitable contribution carry-forwards	64,367	64,350
Amortization of deferred stock compensation – non-qualified	14,780	14,615
Accruals and reserves not currently deductible	8,117	7,775
Other	106	—
Total deferred tax assets	629,314	552,996
Valuation allowance	(629,062)	(536,327)
Net deferred tax assets	252	16,669
Deferred tax liabilities:		
Unrealized gain on derivatives	(252)	(497)
Convertible debt	—	(16,172)
Total deferred tax liabilities	(252)	(16,669)
Net deferred taxes	\$ —	\$ —

Accounting Standards Codification 740 requires that the tax benefit of net operating losses, temporary differences and credit carry forwards be recorded as an asset to the extent that management assesses that realization is "more likely than not." Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carry forward period. Because of the Company's recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance. The valuation allowance increased by \$92.7 million, \$7.9 million and \$88.8 million during 2016, 2015 and 2014, respectively.

At December 31, 2016, we had federal net operating loss carry-forwards of approximately \$1,424 million which expire in the years 2019 through 2036, and federal business tax credits of approximately \$75 million which expire in the years 2020 through 2029. We also had state net operating loss carry-forwards of approximately \$494 million, which expire in the years 2017 through 2036, California research and development tax credits of approximately \$25 million which have no expiration. Included in the federal and state carry-forwards is \$56.9 million related to deductions from the exercise of stock options and the related tax benefit that will result in an increase in additional paid-in capital if and when realized through a reduction of taxes paid in cash.

Under the Internal Revenue Code and similar state provisions, certain substantial changes in our ownership could result in an annual limitation on the amount of net operating loss and credit carry-forwards that can be utilized in future years to offset future taxable income. The annual limitation may result in the expiration of net operating losses and credit carry-forwards before utilization. We completed a Section 382 study through December 31, 2016, and concluded that an ownership change, as defined under Section 382, had not occurred.

Accounting Standards Codification Topic 740-10 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. It also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The following table summarizes the activity related to our unrecognized tax benefits (in thousands):

	Year Ended December 31,		
	2016	2015	2014
Beginning balance	\$ 88,638	\$ 58,215	\$ 55,077
Decrease (increase) relating to prior year provision	(29,110)	21,696	719
Increase relating to current year provision	2,304	8,727	2,706
Reductions based on the lapse of the applicable statutes of limitations	(23)	—	(287)
Ending balance	\$ 61,809	\$ 88,638	\$ 58,215

We do not anticipate that the amount of unrecognized tax benefits existing as of December 31, 2016 will significantly decrease over the next 12 months.

We file U.S. and state income tax returns in jurisdictions with varying statutes of limitations during which such tax returns may be audited and adjusted by the relevant tax authorities. The 1999 through 2015 years generally remain subject to examination by federal and most state tax authorities to the extent of net operating losses and credits generated during these periods and are being utilized in the open tax periods.

NOTE 12. NET LOSS PER SHARE

The following table sets forth a reconciliation of basic and diluted net loss per share (in thousands, except per share amounts):

	Year Ended December 31,		
	2016	2015	2014
Numerator:			
Net loss	\$ (70,222)	\$ (161,744)	\$ (261,297)
Denominator:			
Shares used in computing basic and diluted net loss per share	250,531	209,227	194,299
Net loss per share, basic and diluted	\$ (0.28)	\$ (0.77)	\$ (1.34)

The following table sets forth outstanding potential shares of common stock outstanding as of the dates presented that are not included in the computation of diluted net loss per share because to do so would be anti-dilutive (in thousands):

	December 31,		
	2016	2015	2014
Convertible debt	33,890	88,008	75,734
Outstanding stock options, unvested RSUs and ESPP contributions	27,568	28,470	28,930
Warrants	1,000	1,000	1,000
Total potentially dilutive shares	62,458	117,478	105,664

NOTE 13. COMMITMENTS

Leases

We lease office and research space under operating leases that expire at various dates through the year 2018. Certain operating leases contain renewal provisions and require us to pay other expenses. Aggregate future minimum lease payments under our operating leases are as follows (in thousands):

Year Ending December 31,	Operating Leases (1)
2017	8,474
2018	3,007
	\$ 11,481

(1) Minimum payments have not been reduced by minimum sublease rentals of \$1.2 million due in the future under noncancelable subleases.

The following is a summary of aggregate future minimum lease payments under operating leases at December 31, 2016, by operating lease agreements (in thousands):

	Original Term (Expiration)	Renewal Options	Future Minimum Lease Payments
Building Lease #1 and 2	May 2017	none	\$ 3,425
Building Lease #3	July 2018	1 additional period of 5 years	8,056
Total			\$ 11,481

Rent expense under operating leases was \$6.1 million, \$8.7 million, and \$10.3 million for the years ended December 31, 2016, 2015 and 2014, respectively. Rent expense was recorded net of sublease rental incomes of \$3.6 million, \$5.2 million and \$4.9 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Letters of Credit and Restricted Cash

We entered into a standby letter of credit with a bank in July 2004, which is related to a building lease, with a credit limit of \$0.5 million at both December 31, 2016 and 2015. We entered into two standby letters of credit with a bank in May 2007, which is related to our workers compensation insurance policy, for a combined credit limit of \$0.6 million at both December 31, 2016 and 2015. All three letters of credit are fully collateralized by long-term restricted cash and investments. As of December 31, 2016, the full amount of our three letters of credit was available.

As part of a purchasing card program with a bank we initiated during 2007, we were required to provide collateral in the form of a non-interest bearing certificate of deposit. The collateral at December 31, 2016 and 2015 was \$3.0 million and \$1.5 million, respectively. We recorded these amounts in the Consolidated Balance Sheet as Long-term restricted cash and investments as the certificates of deposit were restricted as to withdrawal.

Indemnification Agreements

In connection with the sale of our plant trait business, we agreed to indemnify the purchaser and its affiliates up to a specified amount if they incur damages due to any infringement or alleged infringement of certain patents. We have certain collaboration licensing agreements that contain standard indemnification clauses. Such clauses typically indemnify the customer or vendor for an adverse judgment in a lawsuit in the event of our misuse or negligence. We consider the likelihood of an adverse judgment related to any of our indemnification agreements to be remote. Furthermore, in the event of an adverse judgment, any losses under such an adverse judgment may be substantially offset by applicable corporate insurance.

NOTE 14. CONCENTRATIONS OF CREDIT RISK

Financial instruments that potentially subject us to concentrations of credit risk are primarily trade and other receivables and investments. Investments consist of money market funds, taxable commercial paper, corporate bonds with high credit quality, and U.S. Treasury and government sponsored enterprises. All investments are maintained with financial institutions that management believes are creditworthy.

Trade and other receivables are unsecured and are concentrated in the pharmaceutical and biotechnology industries. Accordingly, we may be exposed to credit risk generally associated with pharmaceutical and biotechnology companies. We have incurred no bad debt expense since inception. As of December 31, 2016, 27%, 19%, 16% and 13% of our trade receivables are with Diplomat Specialty Pharmacy, Caremark L.L.C., affiliates of McKesson Corporation, and Accredo Health, Incorporated, respectively. All of these customers have historically paid promptly. As of December 31, 2016, we also had a receivable for a \$10.0 million milestone payment from Ipsen which we received subsequent to December 31, 2016.

The following table sets forth the percentage of revenues recognized by customer that represent 10% or more of total revenues:

	Year Ended December 31,		
	2016	2015	2014
Diplomat Specialty Pharmacy	33%	83%	99%
Ipsen	17%	—%	—%

We have operations solely in the U.S., while some of our collaboration partners have headquarters outside of the U.S. and some of our clinical trials for cabozantinib are also conducted outside of the U.S. All of our long-lived assets are located in the U.S.

The following table shows the revenues earned by geographic region. Net product revenues are attributed to regions based on ship-to location. Collaboration revenues are attributed to regions based on the location of the collaboration partner (dollars in thousands):

	Year Ended December 31,		
	2016	2015	2014
U.S.	\$ 140,709	\$ 33,869	\$ 24,832
Europe	35,745	3,303	279
Rest of world	15,000	—	—

We recorded a \$0.2 million loss, a \$0.1 million gain and a \$0.5 million gain relating to foreign exchange fluctuations for the years ended December 31, 2016, 2015 and 2014, respectively.

NOTE 15. SUBSEQUENT EVENT

On January 30, 2017, we entered into a collaboration and license agreement (the “Takeda Collaboration Agreement”) with Takeda Pharmaceutical Company Limited (“Takeda”) for the commercialization and further clinical development of cabozantinib in Japan. Pursuant to the terms of the Takeda Collaboration Agreement, Takeda will have exclusive commercialization rights for current and potential future cabozantinib indications in Japan. The companies have also agreed to collaborate on the future clinical development of cabozantinib in Japan. The parties’ efforts will be governed through a joint executive committee and appropriate subcommittees established to guide and oversee the collaboration’s operation and strategic direction.

In consideration for the exclusive license and other rights contained in the Takeda Collaboration Agreement, Takeda paid us an upfront payment of \$50.0 million in February 2017. We will be eligible to receive development, regulatory and first-sales milestones of up to \$95.0 million related to second-line RCC, first-line RCC and second-line HCC, as well as additional development, regulatory and first-sales milestone payments for potential future indications. The Takeda Collaboration Agreement also provides that we will be eligible to receive pre-specified payments of up to \$83.0 million associated with potential sales milestones. We will also receive royalties on net sales of cabozantinib in Japan at an initial tiered rate of 15% to 24% on net sales for the first \$300.0 million of cumulative net sales. Thereafter, the royalty rate will be adjusted to 20% to 30% on annual net sales.

Takeda will be responsible for 20% of the costs associated with the global cabozantinib development plan, provided Takeda opts in to participate in such trials, and 100% of costs associated with the cabozantinib development activities that are exclusively for the benefit of Japan. Pursuant to the terms of the Takeda Collaboration Agreement, we will remain responsible for the manufacture and supply of cabozantinib for all development and commercialization activities under the collaboration. As part of the collaboration, the parties will enter into a supply agreement covering the manufacture and supply of cabozantinib to Takeda and a quality agreement setting forth in detail the quality assurance arrangements and procedures for our manufacture of cabozantinib.

The Takeda Collaboration Agreement may be terminated for cause by either party based on uncured material breach by the other party, bankruptcy of the other party or for safety reasons. For clarity, Takeda’s failure to achieve specified levels of commercial performance, based upon sales volume and/or promotional effort, during the first six years of the collaboration shall constitute a material breach of the Collaboration Agreement. We may terminate the agreement if Takeda challenges or opposes any patent covered by the Collaboration Agreement. At any time prior to August 1, 2023, the parties may mutually agree to terminate the Collaboration Agreement if Japan’s Pharmaceuticals and Medical Devices Agency is unlikely to grant approval of the marketing authorization application in any cancer indication in Japan. After the commercial launch of cabozantinib in Japan, Takeda may terminate the Collaboration Agreement upon twelve months’ prior written notice following the third anniversary of the first commercial sale of cabozantinib in Japan. Upon termination by either party, all licenses granted by us to Takeda will automatically terminate, and the licenses granted by Takeda to us shall survive such termination and shall automatically become worldwide.

NOTE 16. QUARTERLY FINANCIAL DATA (UNAUDITED)

The following tables summarize the unaudited quarterly financial data for the last two fiscal years (in thousands, except per share data):

	Quarter Ended			
	December 31,	September 30,	June 30,	March 31,
2016:				
Revenues	\$ 77,581	\$ 62,194	\$ 36,252	\$ 15,427
Gross profit	\$ 50,064	\$ 40,287	\$ 30,058	\$ 8,414
Income (loss) from operations	\$ 38,883	\$ 7,264	\$ (25,136)	\$ (49,135)
Net income (loss)	\$ 35,123	\$ (11,284)	\$ (34,838)	\$ (59,223)
Net income (loss) per share, basic and diluted	\$ 0.12	\$ (0.04)	\$ (0.15)	\$ (0.26)
2015:				
Revenues	\$ 9,938	\$ 9,854	\$ 7,992	\$ 9,388
Gross profit	\$ 8,915	\$ 8,434	\$ 7,306	\$ 8,622
Loss from operations	\$ (31,600)	\$ (35,781)	\$ (31,280)	\$ (22,760)
Net loss ⁽¹⁾	\$ (41,568)	\$ (45,542)	\$ (41,389)	\$ (33,245)
Net loss per share, basic and diluted ⁽¹⁾	\$ (0.18)	\$ (0.21)	\$ (0.21)	\$ (0.17)

(1) Prior period balances reflect revisions due to a correction of an immaterial error with regards to the 2019 Notes. The immaterial error resulted in an overstatement of the discount on the 2019 Notes and therefore overstated the related interest expense. Therefore, net loss was overstated by \$2.2 million, \$2.1 million, \$2.1 million, \$2.0 million, \$2.0 million, \$1.9 million for the quarters ended June 30 2016 and March 31, 2016, December 31, 2015, September 30, 2015, June 30 2015 and March 31, 2015, respectively, and net loss per share, basic and diluted was overstated by \$0.01, for each of those quarters. See “Note 1. Organization and Summary of Significant Accounting Policies - Correction of an Immaterial Error” for additional information on the correction of the immaterial error.

The increase in revenues and gross profit for the quarters ended December 31, 2016, September 30, 2016 and June 30, 2016 reflects the impact of the commercial launch of CABOMETYX in late April 2016. Revenues during 2016 also reflect license revenue for the amortization of deferred revenue on the collaboration and license agreement with Ipsen; the deferred revenue for the agreement relates to the upfront payment of \$200.0 million received in the first quarter of 2016, the \$60.0 million milestone we achieved upon the approval of cabozantinib by the EC in second-line RCC, and the \$10.0 million upfront payment received in December 2016 in consideration for the commercialization rights in Canada. Total revenues also include two \$10.0 million milestones achieved during the quarter ended December 31, 2016 for the first commercial sales of CABOMETYX by Ipsen in Germany and the United Kingdom, a \$15.0 million milestone achieved during the quarter ended September 30, 2016 under our collaboration agreement with Daiichi Sankyo and a \$5.0 million milestone achieved during the quarter ended March 31, 2016 under our collaboration agreement with Merck. See “Note 2. Collaboration Agreements” for more information on these collaboration agreements.

As described further in “Note 2. Collaboration Agreements - Genentech Collaboration”, in December 2016 Genentech stated that it changed, both retroactively and prospectively, the manner in which it allocates promotional expenses of the Cotellic plus Zelboraf combination therapy. As a result of Genentech’s decision to change its cost allocation approach, we are relieved of our obligation to pay \$18.7 million of disputed costs that had been accrued by us as of September 30, 2016. We have invoiced Genentech for certain expenses, with interest, that we had previously paid. Accordingly, during the quarter ended December 31, 2016, we offset Selling, general and administrative expenses for a \$23.1 million recovery of net losses, which had been recorded from 2013 through September 30, 2016, including \$13.3 million for losses that we had recognized and recorded prior to 2016.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures. Based on the evaluation of our disclosure controls and procedures (as defined under Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as amended) required by Rules 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934, as amended, our Chief Executive Officer and our Chief Financial Officer have concluded that as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Limitations on the Effectiveness of Controls. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within an organization have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met and, as set forth above, our principal executive officer and principal financial officer have concluded, based on their evaluation as of the end of the period covered by this report, that our disclosure controls and procedures were effective to provide reasonable assurance that the objectives of our disclosure control system were met.

Management's Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed under the supervision of our principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

As of the end of our 2016 fiscal year, management conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework established in the original *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (COSO). Based on this assessment, management has determined that our internal control over financial reporting as of December 30, 2016 was effective. There were no material weaknesses in internal control over financial reporting identified by management.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurances that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

The independent registered public accounting firm Ernst & Young LLP has issued an audit report on our internal control over financial reporting, which is included on the following page.

Changes in Internal Control Over Financial Reporting. There were no changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Exelixis, Inc.

We have audited Exelixis, Inc.'s internal control over financial reporting as of December 30, 2016, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Exelixis, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Exelixis, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 30, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Exelixis, Inc. as of December 30, 2016 and January 1, 2016, and the related consolidated statements of operations, comprehensive loss, stockholders' equity (deficit), and cash flows for each of the three fiscal years in the period ended December 30, 2016 of Exelixis, Inc. and our report dated February 27, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Redwood City, California
February 27, 2017

ITEM 9B. OTHER INFORMATION

Not applicable

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item relating to our directors and nominees, including information with respect to our audit committee, audit committee financial experts and procedures by which stockholders may recommend nominees to our board of directors, is incorporated by reference to the section entitled “Proposal 1 –Election of Class III Directors” appearing in our Proxy Statement for our 2017 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission, or SEC, within 120 days after December 30, 2016, which we refer to as our 2017 Proxy Statement. The information required by this item regarding our executive officers is incorporated by reference to the section entitled “Executive Officers” appearing in our 2017 Proxy Statement. The information required by this item regarding compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, is incorporated by reference to the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” appearing in our 2017 Proxy Statement.

Code of Ethics

We have adopted a Corporate Code of Conduct that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer. The Corporate Code of Conduct is posted on our website at www.exelixis.com under the caption “Investors & Media -- Corporate Governance.”

We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of this Corporate Code of Conduct by posting such information on our website, at the address and location specified above and, to the extent required by the listing standards of the NASDAQ Stock Market, by filing a Current Report on Form 8-K with the SEC, disclosing such information.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to the sections entitled “Compensation of Executive Officers,” “Compensation of Directors,” “Compensation Committee Interlocks and Insider Participation” and “Compensation Committee Report” appearing in our 2017 Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item relating to security ownership of certain beneficial owners and management is incorporated by reference to the section entitled “Security Ownership of Certain Beneficial Owners and Management” appearing in our 2017 Proxy Statement.

Equity Compensation Plan Information

The following table provides certain information about our common stock that may be issued upon the exercise of stock options and other rights under all of our existing equity compensation plans as of December 31, 2016, which consists of our 2000 Equity Incentive Plan, or the 2000 Plan, our 2000 Non-Employee Directors’ Stock Option Plan, or the Director Plan, our 2000 Employee Stock Purchase Plan, or the ESPP, our 2011 Equity Incentive Plan, or the 2011 Plan, our 2014 Equity Incentive Plan, or the 2014 Plan, our 2016 Inducement Award Plan, or 2016 Plan and our 401(k) Retirement Plan, or the 401(k) Plan:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights (1)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by stockholders (2)	28,433,956	\$ 4.84	5,670,544
Equity compensation plans not approved by stockholders (3)	35,500	\$ 14.91	1,749,937
Total	28,469,456	\$ 4.86	7,420,481

- (1) The weighted average exercise price does not take into account the shares subject to outstanding restricted stock units, or RSUs, which have no exercise price.
- (2) Represents shares of our common stock issuable pursuant to the 2000 Plan, the 2011 Plan, the 2014 Plan, the Director Plan and the ESPP.
- (3) Represents shares of our common stock issuable pursuant to the 2016 Plan and 401(k) Plan. We sponsor a 401(k) Plan whereby eligible employees may elect to contribute up to the lesser of 50% of their annual compensation or the statutorily prescribed annual limit allowable under Internal Revenue Service regulations. The 401(k) Plan permits us to make matching contributions on behalf of all participants. We match 100% of the first 3% of participant contributions into the 401(k) Plan in the form of our common stock.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference to the sections entitled “Certain Relationships and Related Party Transactions” and “Proposal 1 – Election of Class III Directors” appearing in our 2017 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference to the section entitled “Proposal 2 – Ratification of Selection of Independent Registered Public Accounting Firm” appearing in our 2017 Proxy Statement.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are being filed as part of this report:

(1) The following financial statements and the Report of Independent Registered Public Accounting Firm are included in Part II, Item 8:

	Page
Report of Independent Registered Public Accounting Firm	<u>68</u>
Consolidated Balance Sheets	<u>69</u>
Consolidated Statements of Operations	<u>70</u>
Consolidated Statements of Comprehensive Loss	<u>70</u>
Consolidated Statements of Stockholders' Equity (Deficit)	<u>71</u>
Consolidated Statements of Cash Flows	<u>72</u>
Notes to Consolidated Financial Statements	<u>74</u>

(2) All financial statement schedules are omitted because the information is inapplicable or presented in the Notes to Consolidated Financial Statements.

(3) See Index to Exhibits at the end of this Report, which is incorporated herein by reference. The Exhibits listed in the accompanying Index to Exhibits are filed as part of this report.

ITEM 16. FORM 10-K SUMMARY

None provided.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized

Date: February 27, 2017.

By: EXELIXIS, INC.
/s/ MICHAEL M. MORRISSEY
Michael M. Morrissey, Ph.D.
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints **MICHAEL M. MORRISSEY, CHRISTOPHER SENNER** and **JEFFREY J. HESSEKIEL** and each or any one of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
<u>/s/ MICHAEL M. MORRISSEY</u> Michael M. Morrissey, Ph.D.	Director, President and Chief Executive Officer (Principal Executive Officer)	February 27, 2017
<u>/s/ CHRISTOPHER SENNER</u> Christopher Senner	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	February 27, 2017
<u>/s/ STELIOS PAPADOPOULOS</u> Stelios Papadopoulos, Ph.D.	Chairman of the Board	February 27, 2017
<u>/s/ CHARLES COHEN</u> Charles Cohen, Ph.D.	Director	February 27, 2017
<u>/s/ CARL B. FELDBAUM</u> Carl B. Feldbaum, Esq.	Director	February 27, 2017
<u>/s/ ALAN M. GARBER</u> Alan M. Garber, M.D., Ph.D.	Director	February 27, 2017

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
<hr/> <i>/s/ VINCENT T. MARCHESI</i> <hr/> Vincent T. Marchesi, M.D., Ph.D.	Director	February 27, 2017
<hr/> <i>/s/ GEORGE POSTE</i> <hr/> George Poste, D.V.M., Ph.D.	Director	February 27, 2017
<hr/> <i>/s/ GEORGE A. SCANGOS</i> <hr/> George A. Scangos, Ph.D.	Director	February 27, 2017
<hr/> <i>/s/ JULIE A. SMITH</i> <hr/> Julie A. Smith	Director	February 27, 2017
<hr/> <i>/s/ LANCE WILLSEY</i> <hr/> Lance Willsey, M.D.	Director	February 27, 2017
<hr/> <i>/s/ JACK L. WYSZOMIERSKI</i> <hr/> Jack L. Wyszomierski	Director	February 27, 2017

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporation by Reference				Filed Herewith
		Form	File Number	Exhibit/Appendix Reference	Filing Date	
3.1	Amended and Restated Certificate of Incorporation of Exelixis, Inc.	10-K	000-30235	3.1	3/10/2010	
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation of Exelixis, Inc.	10-K	000-30235	3.2	3/10/2010	
3.3	Certificate of Amendment of Amended and Restated Certificate of Incorporation of Exelixis, Inc.	8-K	000-30235	3.1	5/25/2012	
3.4	Certificate of Ownership and Merger Merging X-Cepto Therapeutics, Inc. with and into Exelixis, Inc.	8-K	000-30235	3.2	10/15/2014	
3.5	Certificate of Change of Registered Agent and/or Registered Office of Exelixis, Inc.	8-K	000-30235	3.1	10/15/2014	
3.6	Amended and Restated Bylaws of Exelixis, Inc.	8-K	000-30235	3.1	12/5/2011	
4.1	Specimen Common Stock Certificate.	S-1, as amended	333-96335	4.1	4/7/2000	
4.2	Amended and Restated Secured Convertible Note dated July 1, 2015 in favor of Deerfield Partners, L.P.	10-Q	000-30235	4.2	8/11/2015	
4.3	Amended and Restated Secured Convertible Note dated July 1, 2015 in favor of Deerfield International Master Fund, L.P.	10-Q	000-30235	4.3	8/11/2015	
4.4	Registration Rights Agreement dated January 22, 2014 by and among Exelixis, Inc., Deerfield Partners, L.P. and Deerfield International Master Fund, L.P.	8-K	000-30235	4.2	1/22/2014	
4.5	Form of Warrant to Purchase Common Stock of Exelixis, Inc. issued to OTA LLC	10-Q	000-30235	4.5	11/10/2015	
10.1†	Form of Indemnity Agreement.	S-1, as amended	333-96335	10.1	3/17/2000	
10.2†	2000 Equity Incentive Plan.	10-Q	000-30235	10.1	5/3/2007	
10.3†	Form of Stock Option Agreement under the 2000 Equity Incentive Plan (early exercise permissible).	10-Q	000-30235	10.2	11/8/2004	
10.4†	Form of Stock Option Agreement under the 2000 Equity Incentive Plan (early exercise may be restricted).	8-K	000-30235	10.1	12/15/2004	
10.5†	2000 Non-Employee Directors' Stock Option Plan.	10-K	000-30235	10.6	2/20/2014	
10.6†	Form of Stock Option Agreement under the 2000 Non-Employee Directors' Stock Option Plan.	10-K	000-30235	10.7	2/22/2011	
10.7†	2000 Employee Stock Purchase Plan.	Schedule 14A	000-30235	A	4/13/2016	
10.8†	2011 Equity Incentive Plan.	8-K	000-30235	10.1	5/24/2011	

Exhibit Number	Exhibit Description	Incorporation by Reference				Filed Herewith
		Form	File Number	Exhibit/Appendix Reference	Filing Date	
10.9 [†]	Form of Stock Option Agreement under the 2011 Equity Incentive Plan	10-Q	000-30235	10.3	8/4/2011	
10.10 [†]	Form of Restricted Stock Unit Agreement under the 2011 Equity Incentive Plan	10-Q	000-30235	10.4	8/4/2011	
10.11 [†]	Exelixis, Inc. 2014 Equity Incentive Plan	8-K	000-30235	10.1	5/29/2014	
10.12 [†]	Form of Stock Option Agreement under the Exelixis, Inc. 2014 Equity Incentive Plan	10-Q	000-30235	10.2	7/31/2014	
10.13 [†]	Form of Stock Option Agreement (International) under the Exelixis, Inc. 2014 Equity Incentive Plan	10-Q	000-30235	10.3	7/31/2014	
10.14 [†]	Form of Stock Option Agreement (Non-Employee Director) under the Exelixis, Inc. 2014 Equity Incentive Plan	10-Q	000-30235	10.4	7/31/2014	
10.15 [†]	Form of Restricted Stock Unit Agreement under the Exelixis, Inc. 2014 Equity Incentive Plan	10-Q	000-30235	10.5	7/31/2014	
10.16 [†]	Form of Restricted Stock Unit Agreement (Non-Employee Director) under the Exelixis, Inc. 2014 Equity Incentive Plan	8-K	000-30235	10.1	10/16/2014	
10.17 [†]	Non-Employee Director Equity Compensation Policy under the Exelixis, Inc. 2014 Equity Incentive Plan					X
10.18 [†]	Exelixis, Inc. 2016 Inducement Award Plan	8-K	000-30235	10.1	11/22/2016	
10.19 [†]	Form of Stock Option Agreement under the 2016 Inducement Award Plan	8-K	000-30235	10.2	11/22/2016	
10.20 [†]	Form of Restricted Stock Unit Agreement under the 2016 Inducement Award Plan	8-K	000-30235	10.2	11/22/2016	
10.21 [†]	Offer Letter Agreement, dated February 3, 2000, between Michael Morrissey, Ph.D., and Exelixis, Inc.	10-Q	000-30235	10.43	8/5/2004	
10.22 [†]	Offer Letter Agreement, dated June 30, 2015, between Christopher Senner, and Exelixis, Inc.	10-Q	000-30235	10.5	11/10/2015	
10.23 [†]	Offer Letter Agreement, dated June 20, 2006, between Exelixis, Inc. and Gisela M. Schwab, M.D.	8-K	000-30235	10.1	6/26/2006	
10.24 [†]	Offer Letter Agreement, dated February 10, 2014, between Exelixis, Inc. and Jeffrey J. Hesekiel.	10-Q	000-30235	10.4	5/1/2014	
10.25 [†]	Offer Letter Agreement, dated August 11, 2000, between Exelixis, Inc. and Peter Lamb.	10-K	000-30235	10.24	2/29/2016	
10.26 [†]	Offer Letter Agreement, dated August 19, 2010, between Exelixis, Inc. and Patrick J. Haley					X

Exhibit Number	Exhibit Description	Incorporation by Reference				Filed Herewith
		Form	File Number	Exhibit/Appendix Reference	Filing Date	
10.27 [†]	Resignation Agreement dated July 22, 2010, by and between Exelixis, Inc. and George A. Scangos	10-Q	000-30235	10.1	11/4/2010	
10.28 [†]	Compensation Information for Named Executive Officers (2016 cash bonus and 2017 compensation)	8-K	000-30235	Item 5.02 disclosure	2/27/2017	
10.29 [†]	Compensation Information for Non-Employee Directors.					X
10.30 [†]	Exelixis, Inc. Change in Control and Severance Benefit Plan, as amended and restated.	10-Q	000-30235	10.2	10/27/2011	
10.31	Lease Agreement, dated May 27, 2005, between Exelixis, Inc. and Britannia Pointe Grand Limited Partnership.	8-K	000-30235	10.1	5/27/2005	
10.32	Loan and Security Agreement, dated May 22, 2002, by and between Silicon Valley Bank and Exelixis, Inc.	10-Q	000-30235	10.34	8/6/2002	
10.33	Loan Modification Agreement, dated December 21, 2004, between Silicon Valley Bank and Exelixis, Inc.	8-K	000-30235	10.1	12/23/2004	
10.34	Amendment No. 7, dated December 21, 2006, to the Loan and Security Agreement, dated May 22, 2002, between Silicon Valley Bank and Exelixis, Inc.	8-K	000-30235	10.1	12/27/2006	
10.35	Amendment No. 8, dated December 21, 2007, to the Loan and Security Agreement, dated May 22, 2002, between Silicon Valley Bank and Exelixis, Inc.	8-K	000-30235	10.1	12/26/2007	
10.36	Amendment No. 9, dated December 22, 2009, to the Loan and Security Agreement, dated May 22, 2002, between Silicon Valley Bank and Exelixis, Inc.	8-K	000-30235	10.1	12/23/2009	
10.37*	Amendment No. 10, dated June 2, 2010, to the Loan and Security Agreement, dated May 22, 2002, by and between Silicon Valley Bank and Exelixis, Inc.	10-Q	000-30235	10.3	8/5/2010	
10.38*	Amendment No. 11, dated August 18, 2011, to the Loan and Security Agreement, dated May 22, 2002, by and between Silicon Valley Bank and Exelixis, Inc.	10-Q	000-30235	10.7	10/27/2011	
10.39	Note Purchase Agreement, dated June 2, 2010, by and between Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P. and Exelixis, Inc.	10-Q	000-30235	10.1	8/5/2010	
10.40	Consent and Amendment dated as of August 6, 2012 to Note Purchase Agreement, dated as of June 2, 2010, between Exelixis, Inc., Deerfield Private Design Fund, L.P. and Deerfield Private Design International, L.P.	8-K	000-30235	10.1	8/6/2012	

Exhibit Number	Exhibit Description	Incorporation by Reference			Filed Herewith	
		Form	File Number	Exhibit/Appendix Reference		
10.41	Amendment No. 2 dated as of August 1, 2013 to Note Purchase Agreement, dated as of June 2, 2010, between Exelixis, Inc., Deerfield Private Design Fund, L.P. and Deerfield Private Design International, L.P.	10-Q	000-30235	10.1	10/30/2013	
10.42	Amendment No. 3 dated as of January 22, 2013 to Note Purchase Agreement, dated as of June 2, 2010, by and among Exelixis, Inc., Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P., Deerfield Partners L.P. and Deerfield International Master Fund, L.P.	8-K	000-30235	10.1	1/22/2014	
10.43	Amendment No. 4 dated as of July 10, 2014 to Note Purchase Agreement, dated as of June 2, 2010, by and among Exelixis, Inc., Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P., Deerfield Partners L.P. and Deerfield International Master Fund, L.P.	10-Q	000-30235	10.1	11/4/2014	
10.44	Security Agreement, dated July 1, 2010, by and between Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P. and Exelixis, Inc.	10-Q	000-30235	10.2	8/5/2010	
10.45**	Cooperative Research and Development Agreement for Extramural-PHS Clinical Research by and between The U.S. Department of Health and Human Services, as represented by National Cancer Institute, an Institute, Center, or Division of the National Institutes of Health and Exelixis, Inc. dated October 5, 2011					X
10.46	Amendment #1 dated April 16, 2013, to Cooperative Research and Development Agreement for Extramural-PHS Clinical Research by and between The U.S. Department of Health and Human Services, as represented by National Cancer Institute, an Institute, Center, or Division of the National Institutes of Health and Exelixis, Inc. dated October 5, 2011					X
10.47	Amendment #2 dated July 18, 2016, to Cooperative Research and Development Agreement for Extramural-PHS Clinical Research by and between The U.S. Department of Health and Human Services, as represented by National Cancer Institute, an Institute, Center, or Division of the National Institutes of Health and Exelixis, Inc. dated October 5, 2011					X

Exhibit Number	Exhibit Description	Incorporation by Reference			Filed Herewith
		Form	File Number	Exhibit/Appendix Reference	
10.48*	Collaboration and License Agreement dated February 29, 2016 by and between Exelixis, Inc. and Ipsen Pharma SAS	10-Q/A	000-30235	10.3	9/30/2016
10.49**	First Amendment dated December 20, 2016, to the Collaboration and License Agreement dated February 29, 2016, by and between Exelixis, Inc. and Ipsen Pharma SAS				X
10.50*	Supply Agreement dated February 29, 2016, by and between Exelixis, Inc. and Ipsen Pharma SAS	10-Q/A	000-30235	10.4	9/30/2016
10.51**	Collaboration Agreement, dated December 22, 2006, between Exelixis, Inc. and Genentech, Inc.				X
10.52**	First Amendment, dated March 13, 2008, to the Collaboration Agreement, dated December 22, 2006, between Exelixis, Inc. and Genentech, Inc.				X
10.53	Second Amendment, dated April 30, 2010, to the Collaboration Agreement, dated December 22, 2006, between Exelixis, Inc. and Genentech, Inc.	10-Q	000-30235	10.5	8/5/2010
12.1	Statement Re Computation of Earnings to Fixed Charges				X
21.1	Subsidiaries of Exelixis, Inc.				X
23.1	Consent of Independent Registered Public Accounting Firm.				X
24.1	Power of Attorney (contained on signature page).				X
31.1	Certification required by Rule 13a-14(a) or Rule 15d-14(a).				X
31.2	Certification required by Rule 13a-14(a) or Rule 15d-14(a).				X
32.1†	Certification by the Chief Executive Officer and the Chief Financial Officer of Exelixis, Inc., as required by Rule 13a-14(b) or 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. 1350).				X
101.INS	XBRL Instance Document				X
101.SCH	XBRL Taxonomy Extension Schema Document				X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				X
101.DEF	XBRL Taxonomy Extension Definition Linkbase				X
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				X

† Management contract or compensatory plan.

* Confidential treatment granted for certain portions of this exhibit.

** Confidential treatment requested for certain portions of this exhibit.

‡ This certification accompanies this Annual Report on Form 10-K, is not deemed filed with the SEC and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of this Annual Report on Form 10-K), irrespective of any general incorporation language contained in such filing.

EXELIXIS, INC.
NON-EMPLOYEE DIRECTOR EQUITY COMPENSATION POLICY

ADOPTED BY THE BOARD OF DIRECTORS: FEBRUARY 28, 2014
AMENDED BY THE SPECIAL COMMITTEE OF THE BOARD OF DIRECTORS: MARCH 28, 2014
AMENDED BY THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS: OCTOBER 14, 2014
AMENDED BY THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS: JANUARY 4, 2016
AMENDED BY THE BOARD OF DIRECTORS: FEBRUARY 23, 2017

Each member of the board of directors (the “**Board**”) of Exelixis, Inc. (the “**Company**”) who is not an Employee (as defined in the Exelixis, Inc. 2014 Equity Incentive Plan (the “**2014 Plan**”)) (each, a “**Non-Employee Director**”) will be eligible to receive equity compensation as set forth in this Exelixis, Inc. Non-Employee Director Equity Compensation Policy (this “**Policy**”). The Initial Option Grants, Initial RSU Grants, Annual Option Grants and Annual RSU Grants (each as defined below) described in this Policy will be granted automatically and without further action of the Board to each Non-Employee Director who is eligible to receive such equity compensation, unless such Non-Employee Director declines the receipt of such equity compensation by written notice to the Company; *provided, however*, that notwithstanding the foregoing or anything in this Policy to the contrary, any equity grants scheduled to be granted on a certain date pursuant to this Policy will not be granted automatically if (i) the number of shares available for issuance under the 2014 Plan is insufficient to make all such grants on such date or (ii) making any such grants would exceed any applicable limits in the 2014 Plan. This Policy will become effective on the date of the annual meeting of the Company’s stockholders held in 2014, provided that the 2014 Plan is approved by the Company’s stockholders at such annual meeting, and will remain in effect until it is revised or rescinded by further action of the Board. Capitalized terms not explicitly defined in this Policy but defined in the 2014 Plan will have the same definitions as in the 2014 Plan.

The equity grants described in this Policy will be granted under the 2014 Plan and will be subject to the terms and conditions of (i) the 2014 Plan, (ii) the forms of grant notices and agreements approved by the Board for the grant of equity to Non-Employee Directors and (iii) this Policy.

(a) Initial Grants. Each person who is elected or appointed for the first time to be a Non-Employee Director automatically will be granted, upon the date of his or her initial election or appointment to be a Non-Employee Director, equity grants with a combined total dollar value of \$400,000, which will be divided between approximately 50% in the form of a nonstatutory stock option (an “**Initial Option Grant**”) and approximately 50% in the form of a restricted stock unit award (an “**Initial RSU Grant**”), based on the valuation methodology established by the Board. The number of shares of Common Stock subject to each Initial Option Grant and Initial RSU Grant will be based on such methodology and the average of the daily closing sales prices of the Common Stock for all of the trading days during the 30 calendar day period ending on (and including) the last calendar day immediately prior to the grant date of such Initial Option Grant and Initial RSU Grant.

(b) Annual Grants. On the day following each annual meeting of the Company’s stockholders, each person who is then a Non-Employee Director automatically will be granted equity grants with a combined total dollar value of \$250,000, which will be divided between approximately 50% in the form of a nonstatutory stock option (an “**Annual Option Grant**”) and approximately 50% in the form of a restricted stock unit award (an “**Annual RSU Grant**”), based on the valuation methodology established by the Board; *provided, however*, that each Non-Employee Director may instead elect to receive 100% of such equity grants in the form of a nonstatutory stock option (in which case, the term “Annual Option Grant” will refer to such nonstatutory stock option). Any such election must be made by a Non-Employee Director by the date required by the Company and will remain in effect until revoked by such Non-Employee Director, provided that any such revocation is made by the date required by the Company. The number of shares of Common Stock subject to each Annual Option Grant and Annual RSU Grant, if any, will be based on such methodology and the average of the daily closing sales prices of the Common Stock for all of the trading days during the 30 calendar

day period ending on (and including) the last calendar day immediately prior to the grant date of such Annual Option Grant and Annual RSU Grant, if any.

(c) Terms of Options.

(i) Exercise Price. The exercise price of each Initial Option Grant and Annual Option Grant will be equal to 100% of the Fair Market Value of the Common Stock subject to such option on the date such option is granted.

(ii) Exercisability and Vesting. Subject to Section (e) below, each Initial Option Grant and Annual Option Grant will be fully exercisable upon grant and will vest as follows:

(A) Each Initial Option Grant will provide for vesting of 1/4th of the shares subject to such option on the first anniversary of the date of grant and 1/48th of the shares subject to such option each month thereafter, subject to the Non-Employee Director's Continuous Service through such dates.

(B) Each Annual Option Grant will provide for vesting of 1/12th of the shares subject to such option each month after the date of grant, subject to the Non-Employee Director's Continuous Service through such dates.

(d) Terms of RSUs.

(i) Vesting. Subject to Section (e) below, each Initial RSU Grant and Annual RSU Grant will vest as follows:

(A) Each Initial RSU Grant will provide for vesting of 1/4th of the shares subject to such award on each of the first four anniversaries of the date of grant, subject to the Non-Employee Director's Continuous Service through such dates.

(B) Each Annual RSU Grant will provide for vesting of 100% of the shares subject to such award on the first anniversary of the date of grant, subject to the Non-Employee Director's Continuous Service through such date.

(ii) Delivery of Shares. The shares subject to each Initial RSU Grant and Annual RSU Grant will be delivered on the applicable vesting date or as soon as administratively practicable thereafter.

(e) Corporate Transaction. The provisions in this Section (e) will apply to each Initial Option Grant, Initial RSU Grant, Annual Option Grant, Annual RSU Grant and any other equity award granted to a Non-Employee Director under the 2014 Plan (an "**Other Equity Grant**") and will supersede Section 9(c) of the 2014 Plan in its entirety.

(i) Asset Sale, Merger, Consolidation or Reverse Merger. In the event of (i) a sale, lease or other disposition of all or substantially all of the assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise, then any surviving corporation or acquiring corporation shall assume any Stock Awards outstanding under the 2014 Plan or shall substitute similar stock awards (including awards to acquire the same consideration paid to the stockholders in the transaction described in this Section (e)(i) for those outstanding under the 2014 Plan). In the event any surviving corporation or acquiring corporation refuses to assume such Stock Awards or to substitute similar stock awards for those outstanding under the 2014 Plan, then with respect to Stock Awards held by Participants whose Continuous Service has not terminated prior to consummation of such event, the vesting of such Stock Awards and any shares of Common Stock acquired under such Stock Awards (and, if applicable, the time during which such Stock Awards may be exercised) shall be accelerated in full, and the Stock Awards shall terminate if not exercised at or prior to consummation of such event. With respect to

any other Stock Awards outstanding under the 2014 Plan, such Stock Awards shall terminate if not exercised prior to consummation of such event.

(ii) Securities Acquisition. In the event of an acquisition by any person, entity or group within the meaning of Section 13(d) or 14(d) of the Exchange Act, or any comparable successor provisions (excluding any employee benefit plan, or related trust, sponsored or maintained by the Company or an Affiliate) of the beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act, or comparable successor rule) of securities of the Company representing at least fifty percent (50%) of the combined voting power entitled to vote in the election of Directors and provided that such acquisition is not a result of, and does not constitute a transaction described in, Section (e)(i) above, then with respect to Stock Awards held by Participants whose Continuous Service has not terminated prior to consummation of such event, the vesting of such Stock Awards and any shares of Common Stock acquired under such Stock Awards (and, if applicable, the time during which such Stock Awards may be exercised) shall be accelerated in full.

(f) Change in Control. Section 9(d)(i) of the 2014 Plan will not apply to any Initial Option Grant, Initial RSU Grant, Annual Option Grant, Annual RSU Grant or Other Equity Grant.

August 17, 2010

Patrick J. Haley
168 29th Street, Apt. #2
San Francisco, CA 94110

Dear PJ:

We are proud to invite you to join our team.

Our offer of employment is to join Exelixis, Inc. Your title will be that of Director, Marketing, in our Strategic Marketing department reporting to Gautam Kollu, Vice President, Strategic Marketing in our Strategic Marketing department. Other terms of employment include:

Compensation: Your base salary will be seven thousand one hundred fifteen dollars and thirty nine cents (\$7,115.39) per pay period. We are on a bi-weekly pay schedule. This equates to a base compensation of one hundred eighty five thousand dollars and fourteen cents (\$185,000.14) on an annual basis. This is an exempt position. You will receive a sign-on bonus of twenty thousand dollars (\$20,000.00), minus all applicable taxes, payable on the first pay date after hire. Should you elect to voluntarily terminate employment with the Company within twelve (12) months of your hire date, the sign-on bonus will be entirely re-paid by you to the Company on your last date of employment.

Equity: As an inducement that we understand is material to your entering into employment with Exelixis, you will be eligible to receive a restricted stock unit award for ten thousand (10,000) shares of Exelixis common stock pursuant to our Inducement Award Plan and subject to approval by the Compensation Committee of the Board of Directors. Approved awards typically are granted on the quarterly grant date established by the Compensation Committee of the Board of Directors first occurring following date of hire, provided that you remain employed on that date. The standard vesting schedule for our restricted stock unit awards is 1/4th on the first established quarterly vesting date following the one year anniversary of your hire date and 1/16th of the original number of shares subject to the award on each succeeding quarterly vesting date thereafter until fully-vested, provided that vesting ceases upon termination of employment.

Benefits: All full-time employees of Exelixis, Inc. enjoy a generous benefits package, which is outlined on the attached Summary of Benefits.

Performance Review: Focal reviews will take place annually. If eligible for a performance review increase, the merit increase will be effective in March.

Bonus Target: You will be eligible for a bonus target of 13%.

Start Date: September 7, 2010

Confidentiality and Company Policies: As you are aware, it is very important for us to protect our confidential information and proprietary material. Therefore, as a condition of employment, you will need to sign the attached Confidential Disclosure Agreement. You will also be required to abide by the Company's policies and procedures, including the Code of Business Conduct and Ethics.

Reference Verification: This offer is contingent upon verification of your references.

Background Check: This offer is contingent upon successfully passing your background check.

Other: This offer expires on Wednesday, August 25, 2010 unless accepted by you prior to this date. In addition to performing the duties and responsibilities of your position, you will be expected to perform other duties and responsibilities that may be assigned to you from time to time. No provision of this letter shall be construed to create or express an implied employment contract for a specific period of time. Either you or the Company may terminate this employment relationship at any time, with or without cause. This letter shall be governed by the laws of the State of California. Also, by signing this letter, you are indicating that you are legally authorized to work in the U.S.

Employment Authorization: Our offer of employment is at will and contingent upon your ability to document your employment authorization in the United States. If you are unable to document your right to work within the United States within three days of your date of hire, your employment will be terminated.

You may accept this offer of employment by signing both copies of this letter and Proprietary Information and Invention Agreements and returning one of each in the envelope provided to Lea Davis, Senior Human Resources Generalist, 210 East Grand Avenue, South San Francisco, CA 94083.

PJ, we look forward to your coming on board.

Sincerely,

/s/ LEA DAVIS

Lea Davis
Senior Director, Human Resources

ACCEPTED BY:

/s/ PJ HALEY

PJ Haley

8/19/2010

Date

Enclosures:

Benefit Summary
Confidentiality Agreement
DE-4 (optional)
Direct Deposit Form (optional)
Employee Information Form
I-9
Insider Trading Policy
W-4
Holiday Schedule
Payroll Schedule
Sign-on Promissory Note

COMPENSATION INFORMATION FOR NON-EMPLOYEE DIRECTORS

2017 Cash Compensation for Non-Employee Directors

Board of Directors	Retainer Fee	\$25,000
	Additional Chair Retainer Fee	\$30,000
	Regular Meeting Fee	\$2,500
	Special Meeting Fee ⁽¹⁾	\$1,000
Audit Committee	Retainer Fee	\$6,000
	Additional Chair Retainer Fee	\$15,000
	Meeting Fee ⁽²⁾	\$1,000
Compensation Committee	Retainer Fee	\$5,000
	Additional Chair Retainer Fee	\$10,000
	Meeting Fee ⁽²⁾	\$1,000
Nominating & Corporate Governance Committee	Retainer Fee	\$5,000
	Additional Chair Retainer Fee	\$10,000
	Meeting Fee ⁽²⁾	\$1,000
Research & Development Committee	Retainer Fee	\$10,000
	Additional Chair Retainer Fee	\$10,000
	Meeting Fee ⁽²⁾	\$5,000

⁽¹⁾ Meeting at which minutes are generated.

⁽²⁾ In-person meeting or teleconference at which minutes are generated.

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit 10.45

PUBLIC HEALTH SERVICE
COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT
FOR EXTRAMURAL-PHS CLINICAL RESEARCH

This Agreement is based on the model Cooperative Research and Development Agreement (“CRADA”) adopted by the U.S. Public Health Service (“PHS”) Technology Transfer Policy Board for use by components of the National Institutes of Health (“NIH”), the Centers for Disease Control and Prevention (“CDC”), and the Food and Drug Administration (“FDA”), which are agencies of the PHS within the Department of Health and Human Services (“HHS”).

This Cover Page identifies the Parties to this CRADA:

The U.S. Department of Health and Human Services, as represented by
National Cancer Institute
an Institute, Center, or Division (hereinafter referred to as the “IC”) of the
National Institutes of Health

and

Exelixis, Inc.,
hereinafter referred to as the “Collaborator,”
having offices at 210 East Grand Avenue, South San Francisco, CA 94080,
created and operating under the laws of Delaware.

**COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT
FOR EXTRAMURAL-PHS CLINICAL RESEARCH**

Article 1. Introduction

This CRADA between IC and Collaborator will be effective when signed by the Parties, which are identified on both the Cover Page and the Signature Page (page 34). The official contacts for the Parties are identified on the Contacts Information Page (page 35). Publicly available information regarding this CRADA appears on the Summary Page (page 36). The research and development activities that will be undertaken by IC, NCI Investigators, and Collaborator in the course of this CRADA are detailed in the Research Plan, attached as Appendix A. The staffing, funding, and materials contributions of the Parties are set forth in Appendix B. An example of typical terms for a Material Transfer Agreement (“MTA”) for the transfer of Investigational Agent from NCI to NCI Extramural Investigators is attached as Appendix C. For this Agreement, IC means National Cancer Institute (NCI). Since CTEP and DCTD (defined below) within the NCI are responsible for the Research Plan, IC, NCI, DCTD and CTEP may be used interchangeably in this Agreement when a specific program is responsible for an activity.

Article 2. Definitions

The terms listed in this Article will carry the meanings indicated throughout the CRADA. To the extent a definition of a term as provided in this Article is inconsistent with a corresponding definition in the applicable sections of either the United States Code (U.S.C.) or the Code of Federal Regulations (C.F.R.), the definition in the U.S.C. or C.F.R. will control.

“**Adverse Event**” or “**AE**” means any untoward medical occurrence associated with the use of a drug in humans, whether or not considered drug related, as defined under 21 C.F.R §312.32. See also FDA Good Clinical Practice Guideline (International Conference on Harmonisation (ICH) E6: “Good Clinical Practice: Consolidated Guidance, 62 Federal Register 25, 691 (1997)).

“**Affiliate**” means any corporation or other business entity controlled by, controlling, or under common control with Collaborator at any time during the term of the CRADA. For this purpose, “control” means direct or indirect beneficial ownership of at least fifty percent (50%) of the voting stock or at least fifty percent (50%) interest in the income of the corporation or other business entity.

“**Annual Report**” means the report of progress of an IND-associated investigation that the Sponsor must submit to the FDA within sixty (60) days of the anniversary of the effective date of the IND (pursuant to 21 C.F.R. § 312.33).

“**Background Invention**” means an Invention conceived and first actually reduced to practice before the Effective Date.

“**Clinical Investigator**” means, in accordance with 21 C.F.R. § 312.3, an individual who actually conducts a clinical investigation, that is, who directs the administration or dispensation of Test Article to a Human Subject, and who assumes responsibility for studying Human Subjects, for recording and ensuring the integrity of research data, and for protecting the welfare and safety of Human Subjects. For clarity, all Clinical Investigators will either be NCI Extramural Investigators or NCI Intramural Investigators.

“**Clinical Research Site(s)**” means the site(s) at which the Protocol(s) described in the Research Plan will be performed.

“**Collaborator Confidential Information**” means scientific, business and financial information disclosed by or on behalf of Collaborator in writing and marked or otherwise identified as confidential. Collaborator

Confidential Information does not include CRADA Data, descriptions of CRADA Materials, and Raw Data.

“Collaborator Materials” means all tangible materials not first produced in the performance of this CRADA that are owned or controlled by Collaborator and used in the performance of the Research Plan. The term “Collaborator Materials” does not include Test Article (defined below).

“Confidential Information” means Collaborator Confidential Information, IC Confidential Information, Protocols, the Research Plan, or Identifiable Private Information, provided that Confidential Information does not include:

- (a) information that is publicly known or that is available from public sources;
- (b) information that has been made available by the disclosing Party to others without a confidentiality obligation;
- (c) information that is already known by the receiving Party without obligations of confidentiality, or information that is independently created or compiled by the receiving Party without reference to or use of the information provided under this CRADA; or
- (d) information that is subsequently disclosed to the receiving Party by a third party without obligations of confidentiality.

“Contract” means a Funding Agreement that is a research and development mechanism that provides that the contractor perform for the benefit of the Government, with an expectation of completion of the stated research goals and the delivery of a report, data, materials or other product. Generally, Contracts are administered under the Federal Acquisition Regulations (FAR) codified at Title 48 C.F.R., Chapter 1 or the Health Services Acquisition Regulations (HSAR) codified at Title 48 C.F.R., Chapter 3.

“Cooperative Agreement” means a Funding Agreement that is a species of a Grant, whereby the funding Federal agency intends to be substantially involved in carrying out the research program.

“Cooperative Research and Development Agreement” or **“CRADA”** means an agreement, entered into pursuant to the Federal Technology Transfer Act of 1986, as amended (15 U.S.C. §§ 3710a *et seq.*), and Executive Order 12591 of April 10, 1987.

“CRADA Collaborator Principal Investigator(s)” or **“CRADA Collaborator PI(s)”** means the person(s) who will be responsible for the scientific and technical conduct of the Research Plan on behalf of the CRADA Collaborator.

“CRADA Data” means information developed by or on behalf of either or both Parties (including by NCI Investigators) in the performance of the Research Plan, excluding Raw Data.

“CRADA Materials” means all tangible materials first produced in the performance of the Research Plan other than CRADA Data, Raw Data, Collaborator Materials or Test Article. CRADA Materials do not include specimens collected from Human Subjects.

“CRADA Subject Invention” means any Invention that is conceived or first actually reduced to practice in the performance of the Research Plan by or on behalf of either or both Parties.

“CTA” means Clinical Trial Agreement.

“**CTEP**” means the Cancer Therapy Evaluation Program, DCTD, NCI, a program within NCI which plans, assesses and coordinates all aspects of clinical trials including extramural clinical research programs, internal resources, treatment methods and effectiveness, and compilation and exchange of data.

“**DCTD**” means Division of Cancer Treatment and Diagnosis, NCI.

“**DCTD Clinical Support Assays**” means [*]. DCTD’s work may include such activities as [*]. These studies will be performed by DCTD employees and contractors who are obligated to assign any and all intellectual property to PHS. Although DCTD Clinical Support Assays are non-clinical in nature, for the purpose of this CRADA they are treated separately from Non-Clinical Studies (defined below) as the approval process and oversight for DCTD Clinical Support Assays and Non-Clinical Studies are different.

“**DTP**” means Developmental Therapeutics Program, DCTD, NCI, the program within the NCI which coordinates pre-clinical development of agents to be evaluated in DCTD-sponsored clinical trials.

“**Effective Date**” means the date of the last signature of the Parties executing this Agreement.

“**Funding Agreement**” means a Contract, Grant, or Cooperative Agreement entered into between a Federal agency and another party for the performance of experimental, developmental or research work funded in whole or in part by the Federal Government.

“**Government**” means the Government of the United States of America.

“**Grant**” means a Funding Agreement that is an award of financial assistance which may be provided for support of basic research in a specific field of interest to the funding Federal agency.

“**Human Subject**” means, in accordance with the definition in 45 C.F.R. § 46.102(f), a living individual about whom an investigator conducting research obtains:

- (a) data through intervention or interaction with the individual; or
- (b) Identifiable Private Information.

“**IC Confidential Information**” means scientific information disclosed by or on behalf of IC in writing and marked or otherwise identified as confidential. IC Confidential Information does not include CRADA Data, descriptions of CRADA Materials, and Raw Data.

“**IC Materials**” means all tangible materials not first produced in the performance of this CRADA that are owned or controlled by IC and used in the performance of the Research Plan.

“**Identifiable Private Information**” or “**IPI**” about a Human Subject means private information from which the identity of the subject is or may readily be ascertained. Regulations defining and governing this information include 45 C.F.R. Part 46 and 21 C.F.R. Part 50.

“**IND**” means an “**Investigational New Drug Application**,” filed in accordance with 21 C.F.R. Part 312 under which clinical investigation of an experimental drug or biologic (Test Article) is performed in Human Subjects in the United States or intended to support a United States licensing action.

“**Institutional Review Board**” or “**IRB**” means, in accordance with 45 C.F.R. Part 46, 21 C.F.R. part 56, and other applicable regulations, an independent body comprising medical, scientific, and nonscientific members, whose responsibility is to ensure the protection of the rights, safety, and well-being of the Human Subjects involved in a study.

“Invention” means any invention or discovery that is or may be patentable or otherwise protected under Title 35 of the United States Code, or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act, 7 U.S.C. §§ 2321 *et seq.*

“Investigator’s Brochure” means, in accordance with the definition in 21 C.F.R. § 312.23(a)(5), a document containing information about the Test Article, including animal screening, preclinical toxicology, and detailed pharmaceutical data, including a description of possible risks and side effects to be anticipated on the basis of prior experience with the drug or related drugs, and precautions, such as additional monitoring, to be taken as part of the investigational use of the drug.

“Joint CRADA Subject Inventions” means all CRADA Subject Inventions invented jointly by IC employees together with employees, contractors or agents of Collaborator.

“Multi-Party Data” means data from studies sponsored by NCI pursuant to CTAs or CRADAs, where such data are collected under Protocols and Non-Clinical Studies involving combinations of investigational agents supplied from more than one CTA or CRADA collaborator.

“NCI Extramural Investigator” means an investigator who is not an NCI employee and who is supported by NCI Funding Agreements, together with all personnel assisting the investigator in the performance of research under this CRADA.

“NCI Intramural Investigator” means an investigator who is an NCI employee, as well as all personnel assisting the investigator in the performance of research under this CRADA.

“NCI Investigator” means any NCI Intramural Investigator, NCI Extramural Investigator, Non-Clinical Investigator or an investigator who conducts the DCTD Clinical Support Assays, together with all personnel assisting an investigator with the conduct of DCTD Clinical Support Assays.

“NIH CRADA Extramural Investigator/Officer(s)” means the IC extramural staff who are responsible for the conduct and/or management of the CRADA on behalf of the NIH IC. All NIH CRADA Extramural Investigator/Officer(s) are employees of IC. In the case of this CRADA, the NIH CRADA Extramural Investigator is [*] and the NIH CRADA Extramural Officer is [*].

“Non-Clinical Investigator” means any individual who conducts, directs, or assumes responsibility for Non-Clinical Studies, together with all personnel assisting such individual in the performance of Non-Clinical Studies. Non-Clinical Investigators will be either NCI Intramural Investigators or NCI Extramural Investigators.

“Non-Clinical Studies” means exploratory *in vitro*, *in vivo*, and *ex vivo* studies using defined biological models including [*]. Non-Clinical Studies may include [*]. This defined term shall be limited to studies under this CRADA. Non-Clinical Studies can be performed by Clinical Investigators or Non-Clinical Investigators. Non-Clinical Studies under this CRADA shall not include DCTD Clinical Support Assays.

“Patent” means any issued United States patent, any international counterpart(s), and any corresponding grant(s) by a non-U.S. government in place of a patent.

“Patent Application” means an application for patent protection for a CRADA Subject Invention with the United States Patent and Trademark Office (“U.S.P.T.O.”) or the corresponding patent-issuing authority of another nation.

“**Placebo**” means an inactive substance identical in appearance to the material being tested that is used to distinguish between drug action and suggestive effect of the material under study.

“**Protocol**” means the formal, detailed description of a clinical study involving Human Subjects to be performed as provided for in the Research Plan. It describes the objective(s), design, methodology, statistical considerations, and organization of a clinical study involving Human Subjects. For the purposes of this CRADA, the term Protocol includes any and all associated documents, including informed consent forms, to be provided to Human Subjects and potential participants in the study.

“**Protocol Review Committee**” (or “**PRC**”) means the CTEP/DCTD committee that reviews and approves studies involving NCI investigational agents and/or activities supported by NCI.

“**Raw Data**” means the primary quantitative and empirical data first collected from experiments and clinical trials conducted within the scope of this CRADA. Raw Data includes case report forms.

“**Research Plan**” means the statement in Appendix A of the respective research and development commitments of the Parties. The Research Plan should describe the provisions for sponsoring the IND, clinical and safety monitoring, and data management.

“**Secondary Data**” means data that is generated through research utilizing non-publicly available CRADA Data, de-identified Raw Data and/or human biological specimens from Protocols conducted under the CRADA Research Plan.

“**Sponsor**” means, in accordance with the definition in 21 C.F.R. § 312.3, an organization or individual who assumes legal responsibility for supervising or overseeing clinical trials with Test Articles, and is sometimes referred to as the IND holder.

“**Steering Committee**” means the research and development team whose composition and responsibilities with regard to the research performed under this CRADA are described in Appendix A.

“**Summary Data**” means any extract or summary of the Raw Data generated either by, or on behalf of, IC or by, or on behalf of, Collaborator. Summary Data may include extracts or summaries that incorporate IPI.

“**Test Article**” means, in accordance with 21 C.F.R. § 50.3(j), any drug (including a biological product), medical device, food additive, color additive, electronic product, or any other article subject to regulation under the Federal Food, Drug, and Cosmetic Act that is intended for administration to humans or animals, including a drug or biologic as identified in the Research Plan, that is used within the scope of the Research Plan. The Test Article may also be referred to as Investigational Agent, Study Material, or Study Product. For this Agreement, Test Article, Investigational Agent, Study Material or Study Product means XL184 (cabozantinib) provided by or on behalf of Collaborator.

Article 3. Cooperative Research and Development

3.1 **Performance of Research and Development.** The research and development activities to be carried out under this CRADA will be performed solely by the Parties identified on the Cover Page, as well as by NCI Investigators as described in the Research Plan. However, NCI Extramural Investigators are not Parties to the CRADA, and this CRADA does not grant to Collaborator any rights to Inventions made by NCI Extramural Investigators. The NIH CRADA Extramural Investigator/Officers and CRADA Collaborator PIs will be responsible for coordinating the scientific and technical conduct of this project on behalf of their employers. Any Collaborator employees who will work at IC facilities will be required to sign a Guest Researcher or Special Volunteer Agreement appropriately modified in view of the terms of this CRADA.

- 3.2 **Research Plan.** The Parties recognize that the Research Plan describes the collaborative research and development activities they will undertake and that interim research goals set forth in the Research Plan are good faith guidelines. Should events occur that require modification of these goals, then by mutual agreement the Parties can modify them through an amendment, according to Paragraph 13.6.
- 3.3 **Use and Disposition of Collaborator Materials and IC Materials.** The Parties agree to use Collaborator Materials and IC Materials only in accordance with the Research Plan and Protocol(s), not to transfer these materials to third parties except in accordance with the Research Plan and Protocol(s) or as approved by the owning or providing Party, and, upon expiration or termination of the CRADA, to dispose of these materials as directed by the owning or providing Party.
- 3.4 **Third-Party Rights in Collaborator's CRADA Subject Inventions.** If Collaborator has received (or will receive) support of any kind from a third party in exchange for rights in any of Collaborator's CRADA Subject Inventions, Collaborator agrees to ensure that its obligations to the third party are both consistent with Articles 6 through 8 and subordinate to Article 7 of this CRADA.
- 3.5 **Disclosures to IC.** Prior to execution of this CRADA, Collaborator agrees to disclose to IC all instances in which outstanding royalties are due under a PHS license agreement and in which Collaborator had a PHS license terminated in accordance with 37 C.F.R. § 404.10. These disclosures will be treated as Collaborator Confidential Information upon request by Collaborator in accordance with the definition in Article 2 and Paragraphs 8.3 and 8.4.
- 3.6 **Clinical Investigator Responsibilities.** The Clinical Investigator will be required to submit, or to arrange for submission of, each Protocol associated with this CRADA to all appropriate IRBs, and for ensuring that the IRBs are notified of the role of Collaborator in the research. In addition to the Protocol, all associated documents, including informational documents and advertisements, must be reviewed and approved by the appropriate IRB(s) before starting the research at each Clinical Research Site. The research will be done in strict accordance with the Protocol(s) and no substantive changes in a finalized Protocol will be made unless mutually agreed upon, in writing, by the Parties. Research will not commence (or will continue unchanged, if already in progress) until each substantive change to a Protocol, including those required by either the FDA or the IRB, has been integrated in a way acceptable to the Parties, submitted to the FDA (if applicable) and approved by the appropriate IRBs.
- 3.7 **Investigational New Drug Applications.**

3.7.1 DCTD, NCI, as indicated in the Research Plan, will prepare and submit all IND(s), and all Clinical Investigators participating in DCTD-sponsored clinical trials must have completed registration documents on file (1572 forms) with CTEP.

3.7.2 To support the DCTD IND(s), Collaborator agrees to provide to DCTD background data and information necessary to support the IND(s). Collaborator further agrees to provide a letter of cross-reference to all pertinent regulatory filings, including an IND sponsored by Collaborator, as necessary to support the DCTD IND(s). Collaborator's employees will be reasonably available to respond to inquiries from the FDA regarding information and data contained in the Collaborator's IND, or other information and data provided to DCTD by the Collaborator pursuant to this Article 3. If DCTD has provided information or data to assist Collaborator in any of Collaborator's IND filings, DCTD will provide a letter of cross-reference to its IND(s) and respond to inquiries related to information provided by DCTD, as applicable.

3.7.3 If Collaborator supplies Collaborator Confidential Information to DCTD in support of an IND filed by DCTD, this information will be protected in accordance with the corresponding confidentiality provisions of Article 8.

3.7.4 During the term of this CRADA, Collaborator may sponsor its own clinical trials and hold its own IND for studies performed outside the scope of this CRADA. These studies, however, should not adversely affect the ability to accomplish the goal of the Research Plan, for example, by competing for the same study population. All data from those clinical trials are proprietary to Collaborator for purposes of this CRADA. Collaborator will permit DCTD to review and use the summary and safety data from any such trials in its possession solely as necessary for regulatory purposes for DCTD-sponsored clinical trials which are conducted under this CRADA. For clarity, Collaborator is not required to generate any data summaries to provide to DCTD, and is only obligated to provide those summaries that have already been created by or on behalf of Collaborator.

3.7.5 In the event that Canadian Clinical Research Sites are participating in DCTD-sponsored clinical trials, Collaborator will need to assist in the submission of the regulatory documents to the Canadian Health Products and Food Branch to allow for such participation. This may include providing a letter of cross-reference to an existing Clinical Trials Application, including supporting documentation on the production of the Investigational Agent. The forms and procedures for preparing Canadian Clinical Trials Application are available at <http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/form/index-eng.php>. Notwithstanding the foregoing, no Canadian Clinical Research Sites may participate in any DCTD-sponsored clinical trials without the mutual agreement of the Parties.

3.7.6 In the event that other international Clinical Research Sites are participating in DCTD-sponsored Protocols, Collaborator will assist such international Clinical Research Sites in the submission of necessary regulatory documents to allow for such participation. The international participant will work directly with the Collaborator to obtain the necessary regulatory documents other than the IB (as defined in Paragraph 3.8.7) or Certificate of Analysis of the Investigational Agent, which may be provided by DCTD with Collaborator's approval. Notwithstanding the foregoing, no international Clinical Research Sites may participate in any DCTD-sponsored clinical trials without the Collaborator's consent, which consent may be withheld at Collaborator's discretion.

3.8 Investigational Agent Information and Supply.

3.8.1 Collaborator agrees to provide DCTD without charge and on a schedule that will ensure adequate and timely performance of the research, a sufficient quantity of formulated and acceptably labeled, clinical-grade Investigational Agent (and, if required by the Protocol(s), Placebo) to complete clinical trial(s) under Protocol(s) mutually agreed to and approved under this CRADA. Investigational Agent should be suitable for shipment to all countries and sites participating in DCTD-sponsored clinical trials approved under this CRADA. DCTD does not maintain country-specific Investigational Agent supplies. Collaborator will provide a Certificate of Analysis to DCTD for each lot of the Investigational Agent provided. It is understood that DCTD shall take responsibility for and reasonable steps to maintain appropriate records and assure appropriate supply, handling, storage, distribution and usage of these materials in accordance with the terms of this Agreement, the Protocol(s), the Material Safety Data Sheet provided by Collaborator, and any applicable laws and regulations relating thereto.

3.8.2 DCTD will provide updated forecasts of amounts of Investigational Agent anticipated for ongoing and anticipated clinical studies under mutually agreed upon Protocol(s) and, in any event, will notify Collaborator of the quantity of Investigational Agent required to maintain adequate supply for each

clinical study to be conducted under such Protocol(s) at least [*] before the date on which Collaborator is required to supply such Investigational Agent for use in such studies. Collaborator further agrees to provide draft Investigational Agent labels to the NCI Pharmaceutical Management Branch (PMB) for review and agrees to reasonable labeling revisions to comply with DCTD label guidelines. NCI NSC (National Service Center) numbers will be required to be on the label of Investigational Agent for all DCTD-sponsored clinical trials.

- 3.8.3 Collaborator agrees to provide without charge Investigational Agent or unformulated analytical grade Investigational Agent or metabolites, if available, to DCTD to supply to NCI Investigators for the performance of mutually agreed upon Non-Clinical Studies, such as [*]. These studies will be approved by the PRC and conducted according to Protocols approved by both Parties.
- 3.8.4 Collaborator agrees to allow Investigational Agent to be distributed to NCI Investigators for mutually agreeable Non-Clinical Studies [*]. These may include non-clinical studies [*]. Each such Non-Clinical Study will be proposed by the NCI Investigator and, in order to proceed, must be approved by both NCI and Collaborator. These studies will be conducted according to Non-Clinical Study proposals approved by both Parties.
- 3.8.5 All NCI Extramural Investigators who will receive Investigational Agent for Non-Clinical Studies as provided in Paragraph 3.8.3 as necessary and appropriate or Paragraph 3.8.4 above must first sign Material Transfer Agreements (MTAs) substantially in the form attached hereto as Appendix C that acknowledge the proprietary nature of the Investigational Agent to Collaborator and include intellectual property and publication provisions. Collaborator acknowledges that the MTA attached hereto as Appendix C is acceptable to Collaborator. NCI will notify Collaborator if an NCI Extramural Investigator wants to make any material changes to such MTA (e.g., modifications to the confidentiality, publication, indemnification or intellectual property provisions), and Collaborator will have the right to approve or reject such changes. Investigational Agent will not be distributed to an NCI Extramural Investigator for Non-Clinical Studies unless and until such investigator signs an MTA that is acceptable to Collaborator.
- 3.8.6 Collaborator agrees to provide Investigational Agent to DCTD for DCTD to conduct DCTD Clinical Support Assays [*]; provided, however, that the total amount of Investigational Agent required to be provided by Collaborator to DCTD and used to conduct DCTD Clinical Support Assays under this Paragraph 3.8.6 will [*].
- 3.8.7 Collaborator agrees to provide to the PMB the Investigator's Brochure (IB) for Investigational Agent and all subsequent revisions/editions. In addition to being filed with the CTEP IND, the IB will be on file in the PMB and will be distributed to all NCI Investigators participating in a clinical trial using the Investigational Agent under this CRADA. Distribution will be accompanied by a statement about the confidentiality of the document and it is anticipated that distribution will be electronic. All electronic distribution will be done using Adobe Acrobat PDF. Any IB received by the PMB that is not in this format will be converted before distribution. Hard copy IBs should be sent to IB Coordinator, Pharmaceutical Management Branch, CTEP, DCTD, NCI, 6130 Executive Blvd, Room 7149, Rockville, MD 20852. Electronic versions should be emailed to the IB Coordinator at IBCoordinator@mail.nih.gov.
- 3.9 **Investigational Agent Delivery and Usage.** Collaborator will ship the Investigational Agent and, if required, Placebo for use in mutually agreed Protocol(s) under the Research Plan to NCI or its designee in containers marked in accordance with 21 C.F.R. § 312.6. NCI agrees that the Clinical Investigators will keep appropriate records and take reasonable steps to ensure that the Investigational Agent is used in accordance with the Protocol(s) and applicable FDA regulations. In addition, NCI agrees that the

Investigational Agent (and all Collaborator Confidential Information relating to the Investigational Agent) will be used solely for the conduct of the CRADA research and development activities. Furthermore, NCI agrees that no analysis or modification of the Investigational Agent will be performed without Collaborator's prior written consent. Upon the completion of the Research Plan or termination of this Agreement, any unused quantity of Investigational Agent will be returned to Collaborator or disposed as directed by Collaborator at Collaborator's expense. [*].

3.10 Auditing and Monitoring.

3.10.1 DCTD, NCI will be primarily responsible for monitoring Clinical Research Sites and for assuring the quality of all clinical data, unless otherwise stated in the Research Plan. Auditing will comply with the DCTD guidelines as described on the CTEP website at: <http://ctep.cancer.gov/branches/ctmb/clinicalTrials/monitoring.htm>. NCI clinical trials must be conducted in accordance with Good Clinical Practices promulgated by the FDA ("FDA GCP").

3.10.2 Subject to the restrictions in Paragraph 8.10 concerning IPI, and with reasonable advance notice and at reasonable times, IC will seek permission for Collaborator or its designee(s) to access Clinical Research Sites to audit the conduct of the research at times convenient to Clinical Research Sites, and to obtain updates on ongoing clinical trials. Collaborator may also make arrangements with IC to audit Raw Data and source documents, at the completion of a Protocol and at Collaborator's expense, to the extent necessary to verify compliance with FDA GCP and the Protocol(s).

3.11 **FDA Meetings/Communications.** All formal meetings with the FDA concerning any clinical trial within the scope of the Research Plan will be discussed by Collaborator and IC in advance. The Parties acknowledge that day-to-day DCTD communications with the FDA regarding clinical Protocols under the CRADA may not be considered as formal meetings with the FDA. However, DCTD will inform and discuss with Collaborator the outcome of informal communications. Each Party reserves the right to take part in setting the agenda for, to attend, and to participate in these meetings. The Sponsor of a clinical trial conducted under this CRADA will provide the other Party with copies of FDA meeting minutes, all transmittal letters for IND submissions, IND safety reports, formal questions and responses that have been submitted to the FDA, Annual Reports, and official FDA correspondence, pertaining either to the INDs for such clinical trial conducted under this CRADA or to the Clinical Investigators on Protocols performed in accordance with the Research Plan, except to the extent that those documents contain the proprietary information of a third party or dissemination is prohibited by law.

3.12 **Steering Committee and CRADA Research.** The Parties agree to establish a Steering Committee comprising at least the NIH CRADA Extramural Investigator/Officers and CRADA Collaborator PIs to conduct and monitor the proposed and ongoing clinical studies and non-clinical research of the Investigational Agent in accordance with the CRADA Research Plan. Members of the Steering Committee shall continue to remain employed by their respective employers under their respective terms of employment and, if a member ceases to be employed by a Party, such member shall be replaced with a new member that is an employee of such Party.

In addition to the Steering Committee, a Project Team comprising NCI and Collaborator scientific members for the purpose of discussing the DCTD Clinical Support Assays will be assembled. This Project Team will be a collaborative body responsible for reviewing and approving projects described under "Respective Contributions of the Parties" of Appendix A of this CRADA, which outlines the DCTD Clinical Support Assays. Manuscripts and presentations related to these studies will be handled in accordance with Paragraph 8.7 of this CRADA.

Article 4. Reports

- 4.1 **Interim Research and Development Reports.** The NIH CRADA Extramural Investigator/Officers and CRADA Collaborator PIs should exchange information regularly (e.g., at least [*], or as appropriate for the stage of the research being conducted under the CRADA), in writing. This exchange may be accomplished through meeting minutes, detailed correspondence, circulation of draft manuscripts, Steering Committee reports, copies of Annual Reports and any other reports updating the progress of the CRADA research. However, the Parties must exchange updated Investigator's Brochure, safety, formulation and preclinical data, and toxicology findings related to the Investigational Agent as they become available.
- 4.2 **Final Research and Development Reports.** IC will provide to Collaborator final reports of the results of all studies conducted under the Research Plan as they become available and, for those final reports that have not been provided by IC during the term of the CRADA, within six (6) months after the expiration or termination of this CRADA. These reports will set forth the technical progress made; any publications arising from the research; and the existence of invention disclosures of potential CRADA Subject Inventions and/or any corresponding Patent Applications. [*].
- 4.3 **Fiscal Reports.** If Collaborator has agreed to provide funding to IC under this CRADA and upon the request of Collaborator, then concurrent with the provision of final research and development reports according to Paragraph 4.2, IC will submit to Collaborator a statement of all costs incurred by IC for the CRADA. If the CRADA has been terminated, IC will specify any costs incurred before the date of termination for which IC has not received funds from Collaborator in accordance with Paragraph 5.3, as well as for all reasonable termination costs including the cost of returning Collaborator property or removal of abandoned Collaborator property, for which Collaborator will be responsible.
- 4.4 **Safety Reports.** DCTD shall report all serious and unexpected possible, probable and definite Adverse Events to the FDA in accordance with the reporting obligations of 21 CFR 312.32 and will, within 24 hours of notification to the FDA, forward a copy of all such reports to Collaborator. All other Adverse Event reports received by DCTD shall be reported to the FDA consistent with 21 CFR 312.32 and 312.33. DCTD will forward a copy of such reports to Collaborator (drugsafety@exelixis.com) within 24 hours of providing such reports to the FDA. In the event that Collaborator informs the FDA or any other regulatory authority of any serious and unexpected Adverse Events, Collaborator must notify the NCI within 24 hours of informing the FDA or any other regulatory authority of such Adverse Events by sending the reports to CTEPSupportAE@tech-res.com. NCI will then notify the Clinical Investigator(s) conducting studies under DCTD-sponsored Protocols, if appropriate.
- 4.5 **Annual Reports.** DCTD will provide to Collaborator a copy of the Annual Report concurrently with the submission of the Annual Report to the FDA. Such Annual Reports will be CRADA Data, and will be kept confidential by the Parties in accordance with Article 8. Collaborator will provide DCTD with a copy of its Annual Report to the FDA if Collaborator is sponsoring studies of Investigational Agent under its own IND outside the scope of the Research Plan, which Annual Report will be Collaborator Confidential Information.

Article 5. Staffing, Financial, and Materials Obligations

- 5.1 **IC and Collaborator Contributions.** The contributions of any staff, funds, materials, and equipment by the Parties are set forth in Appendix B. The Federal Technology Transfer Act of 1986, 15 U.S.C. § 3710a(d)(1) prohibits IC from providing funds to Collaborator for any research and development activities under this CRADA.

- 5.2 **IC Staffing.** No IC employees will devote 100% of their effort or time to the research and development activities under this CRADA. IC will not use funds provided by Collaborator under this CRADA for IC personnel to pay the salary of any permanent IC employee. Although personnel hired by IC using CRADA funds will focus principally on CRADA research and development activities, Collaborator acknowledges that these personnel may nonetheless make contributions to other research and development activities, and the activities will be outside the scope of this CRADA. IC personnel will not use the Investigational Agent to perform any research and development activities outside the scope of this CRADA.
- 5.3 **Collaborator Funding.** Collaborator acknowledges that Government funds received by Collaborator from an agency of the Department of Health and Human Services may not be used to fund IC under this CRADA. If Collaborator has agreed to provide funds to IC then the payment schedule appears in Appendix B and Collaborator will make payments according to that schedule. If Collaborator fails to make any scheduled payment, IC will not be obligated to perform any of the research and development activities specified herein or to take any other action required by this CRADA until the funds are received. IC will use these funds exclusively for the purposes of this CRADA. IC will maintain separate and distinct current accounts, records, and other evidence supporting its financial obligations under this CRADA and, upon written request, will provide to the Collaborator a Fiscal Report according to Paragraph 4.3, which delineates all payments made and all obligated expenses, along with the Final Research Report described in Paragraph 4.2.
- 5.4 **Capital Equipment.** Collaborator's commitment, if any, to provide IC with capital equipment to enable the research and development activities under the Research Plan appears in Appendix B. If Collaborator transfers to IC the capital equipment or provides funds for IC to purchase it, then IC will own the equipment. If Collaborator loans capital equipment to IC for use during the CRADA, Collaborator will be responsible for paying all costs and fees associated with the transport, installation, maintenance, repair, removal, or disposal of the equipment, and IC will not be liable for any damage to the equipment.

Article 6. Intellectual Property

- 6.1 **Ownership of CRADA Subject Inventions, CRADA Data, and CRADA Materials.** Subject to the Collaborator option described in Paragraph 7.2, the Government license described in Paragraph 7.5, the sharing requirements and the regulatory filing requirements of Paragraphs 8.1 and 8.2, the producing Party will retain sole ownership of and title to all CRADA Subject Inventions, all copies of CRADA Data, Raw Data and all CRADA Materials, in each case produced solely by its employee(s) or, in the case of Collaborator, produced solely by Collaborator's employees, contractors or agents. The Parties will own jointly (with each owning an undivided interest) all CRADA Subject Inventions invented jointly by IC employees together with employees, contractors or agents of Collaborator ("Joint CRADA Subject Inventions") and all CRADA Materials developed jointly by one or more IC employees and one or more of Collaborator's employees, contractors or agents. The rights of any NCI Extramural Investigator in data it generates will not be affected by this CRADA. The Parties acknowledge that the individuals performing DCTD Clinical Support Assays will be NCI Intramural Investigators or will be IC contractors who are obligated to assign any and all CRADA Subject Inventions and related intellectual property to NIH, in which case such CRADA Subject Inventions and related intellectual property are subject to the Collaborator option described in Paragraph 7.2.
- 6.2 **Reporting.** The Parties will promptly report to each other in writing each CRADA Subject Invention reported by their respective personnel, and any Patent Applications filed thereon, resulting from the research and development activities conducted under this CRADA. Each Party will report all CRADA Subject Inventions to the other Party in sufficient detail to determine inventorship, which will be determined in accordance with U.S. patent law. These reports will be treated as Confidential Information in

accordance with Article 8. Formal reports will be made by and to the Patenting and Licensing Offices identified on the Contacts Information Page herein.

- 6.3 **Filing of Patent Applications.** Each Party will make timely decisions regarding the filing of Patent Applications on the CRADA Subject Inventions made solely by its employee(s), and will notify the other Party in advance of filing. Collaborator will have the first opportunity to file a Patent Application on Joint CRADA Subject Inventions and will notify PHS of its decision whether to file within [*] of the applicable Invention being reported or at least thirty (30) days before any patent filing deadline, whichever occurs sooner. If Collaborator fails to notify PHS of its decision within that time period or notifies PHS of its decision not to file a Patent Application, then PHS has the right to file a Patent Application on the Joint CRADA Subject Invention. Neither Party will be obligated to file a Patent Application. However, if PHS elects not to file a Patent Application on a CRADA Subject Invention made solely by IC employees, PHS may agree to permit Collaborator, at Collaborator's election and expense, to undertake the preparation, filing, prosecution, and maintenance of such Patent Application and PHS will execute all documents and take such other acts reasonably necessary to enable Collaborator to assume responsibility for filing, prosecuting, and maintaining such Patent Application and any resulting Patents. Such permissions will be at the discretion of the NIH OTT and will not be unreasonably withheld. In the event that PHS elects to file a Patent Application on a CRADA Subject Invention made solely by IC employees, PHS agrees to use reasonable efforts to discuss a patent filing strategy with Collaborator reasonably in advance of filing such Patent Application. Collaborator will place the following statement in any Patent Application it files on a CRADA Subject Invention: "This invention was created in the performance of a Cooperative Research and Development Agreement with the **National Institutes of Health**, an Agency of the Department of Health and Human Services. The Government of the United States has certain rights in this invention." If either Party files a Patent Application on a Joint CRADA Subject Invention, then the filing Party will include a statement within the Patent Application that clearly identifies the Parties and states that the Joint CRADA Subject Invention was made under this CRADA.
- 6.4 **Patent Expenses.** Unless agreed otherwise, the Party filing a Patent Application will pay all preparation and filing expenses, prosecution fees, issuance fees, post issuance fees, patent maintenance fees, annuities, interference expenses, and attorneys' fees for that Patent Application and any resulting Patent(s). However, a Party will have the right to elect to cease prosecuting a Patent Application or maintaining any resulting Patent(s) directed to a Joint CRADA Subject Invention, provided that such Party provides at least [*] notice to the other Party of such election and, if requested by the other Party, executes all documents and takes such other acts reasonably necessary (e.g., assign its interest) to enable the other Party to assume, at the other Party's expense, the responsibility for filing, prosecuting, and maintaining the Patent Application and any resulting Patent(s). If a license to any CRADA Subject Invention is granted to Collaborator pursuant to Paragraph 7.2(a)(i), 7.2(a)(ii) or Paragraph 7.2(c), then Collaborator will be responsible for all out-of-pocket expenses and fees, past and future, in connection with the preparation, filing, prosecution, and maintenance of any Patent Applications and Patents claiming exclusively licensed CRADA Subject Inventions and will be responsible for a pro-rated share, divided equally among all licensees, of those out-of-pocket expenses and fees for non-exclusively licensed CRADA Subject Inventions. Collaborator may waive its non-exclusive or exclusive option rights or disclaim its exclusive or non-exclusive license for Patent Application(s) or Patent(s) at any time with respect to one or more countries, and incur no subsequent financial obligation for those Patent Application(s) or Patent(s).
- 6.5 **Prosecution of Patent Applications.** Except with respect to CRADA Subject Inventions conceived and reduced to practice solely by Collaborator's employees, contractors or agents, the Party filing a Patent Application for a CRADA Subject Invention will provide the non-filing Party with a copy of any official communication relating to prosecution of the Patent Application within [*] of transmission of the communication. Each Party will also provide the other Party, at the other Party's request, with copies of material documents retained in the applicable Patent Application or Patent file for such Invention. The

Parties agree to consult with each other regarding the prosecution of Patent Applications directed to CRADA Subject Inventions made solely by IC employees and CRADA Subject Inventions made jointly by IC employees together with employees, contractors or agents of the Collaborator. If Collaborator elects to file and prosecute Patent Applications on Joint CRADA Subject Inventions, then Collaborator agrees to use the U.S.P.T.O. Customer Number Practice and/or grant PHS a power(s) of attorney (or equivalent) necessary to assure PHS access to its intellectual property rights in these Patent Applications. PHS and Collaborator will cooperate with each other to obtain necessary signatures on Patent Applications, assignments, or other documents.

Article 7. Licensing

- 7.1 **Background Inventions.** Other than as specifically stated in this Article 7, nothing in this CRADA will be construed to grant any rights in one Party's Background Invention(s) to the other Party, except to the extent necessary for the Parties to conduct the research and development activities described in the Research Plan during the term of the CRADA.
- 7.2 **Collaborator's License Option to CRADA Subject Inventions.** With respect to Government rights to any CRADA Subject Invention made solely by an IC employee(s) or a Joint CRADA Subject Invention for which a Patent Application has been filed, PHS hereby offers to the Collaborator the following options and grants:
- 7.2(a). For CRADA Subject Inventions that would be described in Patent Applications that claim the use and/or the composition of the Investigational Agent(s): PHS hereby grants to Collaborator: (i) an option to elect a royalty-free (except for patent prosecution and maintenance fees for Patent Applications and Patents claiming such Inventions, which will be pro-rated and divided equally among all licensees), world-wide, non-exclusive license for commercial purposes with the right to sublicense to Affiliates or collaborators working on behalf of Collaborator for Collaborator's development purposes; (ii) a time limited option to negotiate an exclusive, or co-exclusive, if applicable, world-wide, royalty bearing license for commercial purposes, including the right to grant sublicenses, on terms to be negotiated in good faith by the Collaborator(s) and PHS; and (iii) at Collaborator's request, a paid-up, nonexclusive, royalty-free, world-wide license for research purposes only. NIH retains the right to make and use any Inventions covered by this Paragraph 7.2(a) for all non-profit research, including for educational purposes and to permit other educational and non-profit institutions to do so.
- 7.2(b). For CRADA Subject Inventions pursuant to research under this CRADA not covered under Paragraph 7.2(a), including those that use non-publicly available CRADA Data or specimens from patients treated with Investigational Agent under the CRADA, (including specimens obtained from NCI CTEP-funded tissue banks) PHS hereby grants to Collaborator: (i) a paid-up nonexclusive, nontransferable, royalty-free, world-wide license for research purposes only; and (ii) a nonexclusive, royalty-free, world-wide license to (a) disclose such Inventions to a regulatory authority when seeking marketing authorization of the Investigational Agent, and (b) disclose such Inventions on a product insert or other promotional material regarding the Investigational Agent after having obtained marketing authorization from a regulatory authority. Notwithstanding the above, PHS is under no obligation to file a Patent Application or maintain patent prosecution for any such Inventions.
- 7.2(c). In addition, for Inventions made by NIH's Intramural Investigator(s) or any other employees or agents of IC, which are or may be patentable or otherwise protectable, as a result of research utilizing the Investigational Agent(s), unreleased or non-publicly available CRADA Data or Investigational Agent-treated specimens outside the scope of approval granted by the NCI CTEP (Unauthorized Inventions): PHS agrees, at Collaborator's request, to grant to Collaborator a royalty-free (except for all out of pocket Patent prosecution and maintenance costs for Patent Applications and Patents claiming such inventions, which

will be pro-rated and divided equally among all licensees) exclusive or co-exclusive commercial license to Unauthorized Inventions. NIH will retain a non-exclusive, sublicensable royalty free license to practice such Inventions for Government purposes.

7.2(d). In addition to the license options to CRADA Subject Invention(s) contained in Paragraphs 7.2(b) and 7.2(c) above, PHS hereby grants to Collaborator an exclusive option to CRADA Subject Inventions to elect an exclusive or nonexclusive commercialization license to such Inventions. The field of use of this license option will not exceed the scope of the Research Plan.

- 7.3 **Exercise of Collaborator's License Option.** To exercise the option(s) or grant(s) set forth in Paragraph 7.2, Collaborator must submit a written notice to the PHS Patenting and Licensing Contact identified on the Contacts Information Page (and provide a copy to the IC Contact for CRADA Notices) within three (3) months after either (i) Collaborator receives written notice from PHS that a Patent Application has been filed or (ii) the date on which Collaborator files a Patent Application. The written notice exercising the option(s) will include a completed "Application for License to Public Health Service Inventions" and will initiate a negotiation period that expires [*] after the date of exercise of the option. If PHS has not responded in writing to the last proposal by Collaborator within this [*] period, the negotiation period will be extended to expire one (1) month after PHS so responds, during which month Collaborator may accept in writing the final license proposal of PHS. If PHS and Collaborator fail to reach agreement within [*], (or such additional period as described above) on the terms for an exclusive license for a particular Paragraph 7.2(a) Invention, then for a period of [*] thereafter PHS agrees not to offer to license the Paragraph 7.2(a) Invention to any third party on materially better terms than those last offered to Collaborator without first offering such terms to Collaborator, in which case Collaborator will have a period of [*] in which to accept or reject the offer. In the absence of Collaborator's exercise of the option with respect to a CRADA Subject Invention, or upon election of a nonexclusive license to such Invention, PHS will be free to license the CRADA Subject Invention to others. These time periods may be extended at the sole discretion of PHS upon good cause shown in writing by Collaborator, provided that [*].
- 7.4 **Government License in IC Sole CRADA Subject Inventions and Joint CRADA Subject Inventions.** Pursuant to 15 U.S.C. § 3710a(b)(1)(A), for CRADA Subject Inventions owned solely by IC or Joint CRADA Subject Inventions and licensed pursuant to an option in Paragraph 7.2, Collaborator grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice the CRADA Subject Invention or have the CRADA Subject Invention practiced throughout the world by or on behalf of the Government for research or other Government purposes. In the exercise of this license, the Government will not publicly disclose trade secrets or commercial or financial information that is privileged or confidential within the meaning of 5 U.S.C. § 552(b)(4) or which would be considered privileged or confidential if it had been obtained from a non-federal party.
- 7.5 **Government License in Collaborator Sole CRADA Subject Inventions.** Pursuant to 15 U.S.C. § 3710a(b)(2), for CRADA Subject Inventions made solely by an employee of Collaborator, Collaborator grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice the CRADA Subject Invention or have the CRADA Subject Invention practiced throughout the world by or on behalf of the Government for research or other Government purposes. In the exercise of this license, the Government will not publicly disclose trade secrets or commercial or financial information that is privileged or confidential within the meaning of 5 U.S.C. § 552(b)(4) or which would be considered privileged or confidential if it had been obtained from a non-federal party.
- 7.6 **Third Party License.** Pursuant to 15 U.S.C. § 3710a(b)(1)(B), if PHS grants Collaborator an exclusive, or co-exclusive, license to a CRADA Subject Invention made solely by an IC employee or a Joint CRADA Subject Invention, the Government will retain the right to require Collaborator to grant to a responsible applicant a nonexclusive, partially exclusive, or exclusive sublicense to use the CRADA Subject Invention

in Collaborator's licensed field of use on terms that are reasonable under the circumstances; or, if Collaborator fails to grant a license, to grant a license itself. The exercise of these rights by the Government will only be in exceptional circumstances and only if the Government determines (i) the action is necessary to meet health or safety needs that are not reasonably satisfied by Collaborator, (ii) the action is necessary to meet requirements for public use specified by federal regulations, and such requirements are not reasonably satisfied by Collaborator; or (iii) Collaborator has failed to comply with an agreement containing provisions described in 15 U.S.C. § 3710a(c)(4)(B). The determination made by the Government under this Paragraph is subject to administrative appeal and judicial review under 35 U.S.C. § 203(2).

- 7.7 **Third-Party Rights In IC Sole CRADA Subject Inventions.** For a CRADA Subject Invention conceived prior to the Effective Date solely by an IC employee that is first actually reduced to practice after the Effective Date in the performance of the Research Plan, the option offered to Collaborator in Paragraph 7.2 may be restricted if, prior to the Effective Date, PHS filed a Patent Application and has either offered or granted a license in the CRADA Subject Invention to a third party. Collaborator nonetheless retains the right to apply for a license to any such CRADA Subject Invention in accordance with the terms and procedures of 35 U.S.C. § 209 and 37 C.F.R. Part 404.
- 7.8 **Joint CRADA Subject Inventions Not Exclusively Licensed by Collaborator.** If Collaborator does not acquire an exclusive commercialization license to a Joint CRADA Subject Invention in all fields of use then, for those fields of use not exclusively licensed to Collaborator, each Party will have the right to use the Joint CRADA Subject Invention and to license its use to others, and each Party will cooperate with the other, as necessary, to fulfill international licensing requirements. The Parties may agree to a joint licensing approach for any remaining fields of use.

Article 8. Rights of Access and Publication

- 8.1 **Right of Access to CRADA Data and CRADA Materials.** IC and Collaborator agree to exchange all CRADA Data and to share all CRADA Materials. Both Parties agree that they will not disclose CRADA Data to third parties until it is published in accordance with Paragraph 8.7, except as necessary to perform its obligations under this CRADA or as expressly permitted in Paragraph 8.2. In addition, IC represents that NCI Extramural Investigators are subject to obligations to keep CRADA Data confidential until it is published in accordance with Paragraph 8.7. If the CRADA is terminated, each Party agrees to provide CRADA Materials in quantities needed to complete all active Protocols or Protocols that have commenced or been approved by the PRC and Collaborator in accordance with the procedures set forth in the Research Plan prior to such termination. Such provision will occur before the termination date of the CRADA or sooner, if required by the Research Plan. However, if a Party terminates the CRADA in accordance with Paragraph 10.3 because of the other Party's material breach, the terminating Party will have no obligation to provide CRADA Materials for the completion of the Research Plan. If Collaborator possesses any human biological specimens from clinical trials under the CRADA, the specimens must be handled as described in the Protocol or as otherwise directed by IC before the termination date of the CRADA.
- 8.2 **Use of CRADA Data and CRADA Materials.** The Parties will be free to utilize CRADA Data and CRADA Materials internally for their own purposes, consistent with their obligations under this CRADA. IC may share CRADA Data or CRADA Materials with any NCI Extramural Investigators it has engaged to conduct the CRADA research and development activities, provided the obligations of this Paragraph 8.2 are simultaneously conveyed and such NCI Extramural Investigators agree to comply with such obligations. Collaborator may share CRADA Data or CRADA Materials with any contractors, Affiliates, collaboration/development partners or agents it has engaged to conduct the CRADA research and development activities, as well as with Collaborator's licensees and contractors, provided the obligations of this Paragraph 8.2 are simultaneously conveyed and such third parties agree to comply with such obligations. In addition,

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010

Page 16 of 34 *Confidential*

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Collaborator may share CRADA Data or CRADA Materials with governmental regulatory authorities (including the FDA) for the purpose of developing, seeking regulatory approval for and commercializing the Investigational Agent or pharmaceutical products containing the Investigational Agent, including in connection with regulatory filings. Collaborator shall not transfer CRADA Data to any third party other than those set forth in this Paragraph without the written permission of the NCI. Following NCI's permission, Collaborator and such third party shall enter into a Confidential Disclosure Agreement with confidentiality terms at least as stringent as those set forth herein, and Collaborator can then transfer the data to such third party.

8.2.1 CRADA Data, Raw Data and Secondary Data.

Collaborator and IC will use reasonable efforts to keep CRADA Data and Secondary Data confidential until published as permitted under this CRADA or until corresponding Patent Applications are filed. To the extent permitted by law, each Party will have the right to use any and all CRADA Data in and for any regulatory filing by or on behalf of the Party. NCI will make CRADA Data, Raw Data and Secondary Data in NCI's possession and control available to Collaborator for its own use and for Collaborator's use for seeking regulatory approval to market and for commercialization of Investigational Agent and pharmaceutical products containing Investigational Agent.

8.2.2 CRADA Materials.

Collaborator and IC will use reasonable efforts to keep descriptions of CRADA Materials confidential until published as permitted under this CRADA or until corresponding Patent Applications are filed and published. Collaborator acknowledges that the basic research mission of PHS includes sharing with third parties for further research those research resources made in whole or in part with NIH funding. Consistent with this mission and the tenets articulated in "Sharing of Biomedical Research Resources: Principles and Guidelines for Recipients of NIH Research Grants and Contracts," December 1999, available at http://ott.od.nih.gov/NewPages/RTguide_final.html, following publication either Party may make available to third parties for further research those CRADA Materials made jointly by both PHS and Collaborator. Notwithstanding the above, if those joint CRADA Materials are the subject of a pending Patent Application or a Patent, or were created using a patent-pending or patented material or technology, the Parties may agree to restrict distribution or freely distribute them. Each Party may distribute those CRADA Materials made solely by the other Party only upon written consent from that other Party or that other Party's designee.

8.3 **Confidential Information.** Each Party agrees to limit its disclosure of Confidential Information to the amount necessary to carry out the Research Plan, and will place a confidentiality notice on all this information. A Party orally disclosing Confidential Information to the other Party will identify the disclosure as confidential at the time of oral disclosure and summarize the disclosure in writing and provide it to the other Party. Each Party receiving Confidential Information agrees to use it only for the purposes described in the Research Plan or as otherwise permitted in this Agreement. Either Party may object to the designation of information as Confidential Information by the other Party. Notwithstanding anything to the contrary in this CRADA, the restrictions on use and disclosure of Confidential Information under this CRADA shall not apply to Collaborator's use and disclosure of Collaborator Confidential Information or to IC's use and disclosure of IC Confidential Information.

8.4 **Protection of Confidential Information.** Confidential Information will not be disclosed, copied, reproduced or otherwise made available by a Party to any other person or entity without the other Party's consent or as permitted under this CRADA except as required by a court or administrative body of competent jurisdiction, by federal or other applicable law or regulation, or as necessary for Patent filings and/or prosecution in accordance with Article 6. A Party shall be permitted to disclose Confidential

Information consisting of information necessary for the safe handling, potential hazards or cautionary warnings of Investigational Agent, and/or use of the Investigational Agent or materials related to the Investigational Agent to those individuals who have a need to know such information in connection with the performance of the Research Plan. Each Party agrees to use reasonable efforts to maintain the confidentiality of Confidential Information, which will in no instance be less effort than the Party uses to protect its own Confidential Information. Each Party agrees that a Party will not be liable for the disclosure of that portion of the Confidential Information which, after notice to and consultation with the other Party, such Party determines may not be lawfully withheld, provided the other Party has been given a reasonable opportunity to seek a court order to enjoin disclosure. Each Party will use reasonable efforts to limit the disclosure and maintain confidentiality of Confidential Information disclosed as permitted in this Paragraph 8.4 to the extent possible. Disclosure of Confidential Information in accordance with this Paragraph 8.4 will not otherwise affect the confidential nature of the information.

- 8.5 **Human Subject Protection.** The research to be conducted under this CRADA involves Human Subjects or human tissues within the meaning of 45 C.F.R. Part 46, and all research to be performed under this CRADA will conform to applicable federal laws and regulations. Additional information is available from the HHS Office for Human Research Protections (<http://www.hhs.gov/ohrp/>).
- 8.6 **Duration of Confidentiality Obligation.** Collaborator Confidential Information that is a trade secret, or commercial or financial information under the meaning of 5 U.S.C. Section 552(b)(4), shall not be disclosed by IC. The obligation to maintain the confidentiality of all Confidential Information will expire at the earlier of the date when the information is no longer Confidential Information as defined in Article 2 or [*] years after the expiration or termination date of this CRADA, except for IPI, for which the obligation to maintain confidentiality will extend indefinitely. Collaborator may request an extension to this term when necessary to protect Confidential Information relating to products not yet commercialized.
- 8.7 **Publication.** The Parties are encouraged to make publicly available the results of their research and development activities. [*]. Before Collaborator or NCI (including an NCI Investigator) submits a paper or abstract for publication about a CRADA Subject Invention, CRADA Data, or CRADA Materials, the other Party will have thirty (30) days to review proposed manuscripts and three (3) days to review proposed abstracts to assure that Confidential Information is protected. NCI will ensure that Collaborator Confidential Information identified by Collaborator is excised from a proposed publication. Either Party may request in writing that a proposed publication be delayed for up to thirty (30) additional days as necessary to file a Patent Application. If a CRADA Subject Invention disclosed in a proposed publication is solely owned by IC pursuant to Paragraph 6.1, NCI will refrain from publication of such proposed manuscript or presentation until such time as PHS has filed a Patent Application covering such invention. Manuscripts to be submitted for publication by NCI Investigators will be sent to NCI's Regulatory Affairs Branch NCICTEPubs@mail.nih.gov for forwarding to Collaborator for review as soon as they are received and in compliance with the timelines outlined above. Abstracts to be presented by NCI Investigators will be sent to NCI's Regulatory Affairs Branch NCICTEPubs@mail.nih.gov for forwarding to Collaborator as soon as they are received, preferably no less than [*] prior to submission, but prior to presentation or publication, to allow for preservation of U.S. or foreign patent rights. All publications made under this Paragraph 8.7 will contain an appropriate acknowledgement of each Party's contributions under this CRADA.
- 8.8 **Clinical Investigators' Research and Non-Clinical Investigators' Development Activities.** In pursuing the development of Investigational Agent pursuant to this CRADA, NCI may utilize NCI Extramural Investigators for part or all of the completion of the Research Plan, which may cover Non-Clinical Studies and clinical studies, through Funding Agreements and MTAs. Participation in DCTD-sponsored clinical trials by NCI Extramural Investigators shall be determined after competitive solicitation and review of Protocol Letters of Intent (LOIs) and Protocols by CTEP, NCI and Collaborator. All Funding Agreements

and MTAs for the conduct of extramural Non-Clinical Studies and clinical trials will include the Intellectual Property Option to Collaborator (including any updates) (web site: http://ctep.cancer.gov/industryCollaborations2/intellectual_property.htm). Although this CRADA does not grant to Collaborator any rights to Inventions made or Raw Data generated by NCI Extramural Investigators, as they are not parties to this CRADA, NCI agrees that:

- 8.8.1 With regard to Collaborator Confidential Information, NCI will require the NCI Investigators to agree to confidentiality provisions at least as restrictive as those provided in this CRADA, and to Collaborator's use of CRADA Data for obtaining regulatory approval for marketing Investigational Agent or pharmaceutical products containing Investigational Agent. In addition, NCI will assure that the NCI Extramural Investigators are aware of their obligations to provide to Collaborator Raw Data or any other data in the possession of NCI Extramural Investigators working with Investigational Agent under a Funding Agreement or MTA as requested by Collaborator in accordance with Paragraph 8.8.2.
- 8.8.2 If Collaborator wants access to Raw Data or any other data in the possession of the NCI Investigators working with Investigational Agent under a Funding Agreement or other agreements, Collaborator must first contact the Regulatory Affairs Branch (RAB), CTEP, NCI Telephone 301-496-7912; anshers@mail.nih.gov. Subsequent to authorization by RAB, which authorization will not be unreasonably withheld, Collaborator may directly contact the NCI Investigators. Collaborator will bear any costs associated with providing the Raw Data in formats customized for Collaborator, which costs will be paid by Collaborator directly to the NCI Investigators.
- 8.8.3 If Collaborator abandons development or commercialization of Investigational Agent without the transfer of its development or commercialization efforts to another party within [*] of abandonment, NCI has the right to make CRADA Data and Raw Data available to a third party. NCI will notify Collaborator of its intention to provide such data to a third party. For purposes of this Paragraph 8.8.3, Collaborator shall not be deemed to have abandoned development or commercialization of Investigational Agent so long as either (a) Collaborator devotes at least [*] to the development or commercialization of Investigational Agent during [*], or (b) a third party is actively conducting research relating to Investigational Agent under an agreement with Collaborator.
- 8.8.4 IC will promptly provide to Collaborator a copy of all Invention disclosures IC receives from NCI Extramural Investigators.
- 8.8.5 If NCI discovers that an NCI Extramural Investigator that is conducting any portion of the Research Plan breaches any of the provisions of its Funding Agreement or MTA regarding its work with Investigational Agent, NCI will discuss with Collaborator an appropriate resolution to such breach and shall take appropriate action as necessary to rectify such breach.

8.9 **Multi-Party Data Rights.** For clinical Protocol(s) or Non-Clinical Study(ies) under the Research Plan where Investigational Agent is used in combination with another investigational agent supplied to NCI pursuant to a CTA or CRADA between NCI and an entity not a Party to this CRADA (such entity, hereinafter referred to as a "Third Party") the access and use of Multi-Party Data by the Collaborator and the Third Party shall be co-exclusive as follows:

- 8.9.1 NCI will provide both Collaborator and the Third Party with notice regarding the existence and nature of the agreements governing their collaborations with NIH, the design of the proposed combination Protocol(s) or Non-Clinical Study(ies), and the existence of any obligations that

might restrict NCI's participation in the proposed combination Protocols or Non-Clinical Study(ies).

8.9.2 Collaborator shall agree to permit use of the Multi-Party Data from these trials by the Third Party to the extent necessary to allow the Third Party to develop, obtain regulatory approval for, or commercialize its own investigational agent(s). However, this provision will not apply unless the Third Party also agrees to Collaborator's reciprocal use of Multi-Party Data.

8.9.3 Collaborator and the Third Party must agree in writing prior to the commencement of the combination Protocol(s) by signing the drug approval form for clinical studies or Non-Clinical Study(ies) that each will use the Multi-Party Data solely for the development, regulatory approval, and commercialization of its own investigational agent(s).

8.10 **Access, review and receipt of Identifiable Private Information.** Collaborator access to and review of Identifiable Private Information shall be only for on-site quality auditing, or as necessary for purposes of satisfying FDA or other health authorities' reporting requirements, and for internal research purposes, directly related to obtaining regulatory approval of Investigational Agent. Collaborator is prohibited from access, review, receipt, or use of such information for other purposes. All IRB approved Protocols and informed consent documents related to this research project will clearly describe this practice. The Protocol and the informed consent must clearly state (i) the existence of the Collaborator; (ii) the Collaborator's access to and permitted uses of Identifiable Private Information; and (iii) the extent to which confidentiality will be maintained. For clinical Protocol(s) involving a Third Party, the other party's access, review, receipt, or use of Identifiable Private Information shall be subject to the same limitations as described in this Paragraph 8.10.

Article 9. Representations and Warranties

9.1 **Representations of IC.** IC hereby represents to Collaborator that:

9.1.1 IC has the requisite power and authority to enter into this CRADA and to perform according to its terms, and that IC's official signing this CRADA has authority to do so.

9.1.2 To the best of its knowledge and belief, neither IC nor any of its personnel involved in this CRADA is presently subject to debarment or suspension by any agency of the Government. Should IC or any of its personnel involved in this CRADA be debarred or suspended during the term of this CRADA, IC will notify Collaborator within thirty (30) days of receipt of final notice. IC requires all NCI Extramural Investigators performing any part of the Research Plan to assure that they and their respective personnel involved in the performance of the Research Plan are not subject to debarment or suspension by any agency of the Government, and to notify IC if they or any of their personnel involved in the performance of the Research Plan are debarred or suspended during the term of the CRADA. IC will notify Collaborator promptly if it receives notice that any NCI Extramural Investigators performing any part of the Research Plan are debarred or suspended.

9.2 **Representations and Warranties of Collaborator.** Collaborator hereby represents and warrants to IC that:

9.2.1 Collaborator has the requisite power and authority to enter into this CRADA and to perform according to its terms, and that Collaborator's official signing this CRADA has authority to do so.

9.2.2 Neither Collaborator nor any of its personnel involved in this CRADA, including Affiliates, agents, and contractors, are presently subject to debarment or suspension by any agency of the

Government. Should Collaborator or any of its personnel involved in this CRADA be debarred or suspended during the term of this CRADA, Collaborator will notify IC within thirty (30) days of receipt of final notice.

- 9.2.3 Subject to Paragraph 12.3, and if and to the extent Collaborator has agreed to provide funding under Appendix B, Collaborator is financially able to satisfy these obligations in a timely manner.
- 9.2.4 The Investigational Agent provided for use in clinical studies under the Research Plan has been produced in accordance with the FDA's current Good Manufacturing Practices set out in 21 C.F.R. §§ 210-211, and ICH Q7, and meets the specifications cited in the Certificate of Analysis and Investigator's Brochure provided.

Article 10. Expiration and Termination

- 10.1 **Expiration.** Unless terminated earlier as permitted in this CRADA, this CRADA will expire on the last date of the term set forth on the Summary Page. In no case will the term of this CRADA extend beyond the term indicated on the Summary Page unless it is extended in writing in accordance with Paragraph 13.6.
- 10.2 **Termination by Mutual Consent.** IC and Collaborator may terminate this CRADA at any time by mutual written consent.
- 10.3 **Unilateral Termination.** Either IC or Collaborator may unilaterally terminate this CRADA (a) at any time by providing written notice at least sixty (60) days before the desired termination date; or (b) upon written notice in the event of a material breach by the other Party that has not been cured within [*] after the breaching Party's receipt of a written notice of such breach provided in accordance with Paragraph 13.8; or (c) immediately upon written notice for Human Subject safety concerns. IC may, at its option, retain funds transferred to IC before unilateral termination by Collaborator for use in completing the Research Plan. If Collaborator terminates this Agreement under subclause (a) of this Paragraph before the completion of all active Protocol(s) or Protocol(s) that have been approved by the PRC and Collaborator in accordance with the procedures set forth in the Research Plan, then Collaborator will supply enough Investigational Agent (and Placebo, if applicable) to complete these Protocol(s).
- 10.4 **Funding for IC Personnel.** If Collaborator has agreed to provide funding for IC personnel and this CRADA is unilaterally terminated by Collaborator before its expiration for any reason other than for an uncured material breach or Human Subject safety concerns, then Collaborator agrees that funds for that purpose will be available to IC for a period of six (6) months after the termination date or until the expiration date of the CRADA, whichever occurs sooner. If there are insufficient funds to cover this expense, Collaborator agrees to pay the difference.
- 10.5 **New Commitments.** Neither Party will incur new expenses related to this CRADA after expiration, or mutual termination, or a notice of a unilateral termination and will, to the extent feasible, cancel all outstanding commitments and contracts by the termination date. Collaborator acknowledges that IC will have the authority to retain and expend any funds previously paid by Collaborator for up to two and one-half (2.5) years subsequent to the expiration or termination date to cover any unpaid costs obligated during the term of the CRADA in undertaking the research and development activities set forth in the Research Plan.

Article 11. Disputes

- 11.1 **Settlement.** Any dispute arising under this CRADA which is not disposed of by agreement of the NIH CRADA Extramural Investigator/Officers and CRADA Collaborator PIs will be submitted jointly to the

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010

Page 21 of 34 **Confidential**

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

signatories of this CRADA. If the signatories, or their designees, are unable to jointly resolve the dispute within thirty (30) days after notification thereof, the Assistant Secretary for Health (or his/her designee or successor) will propose a resolution. Nothing in this Paragraph will prevent any Party from pursuing any additional administrative remedies that may be available and, after exhaustion of such administrative remedies, pursuing all available judicial remedies.

- 11.2 **Continuation of Work.** Pending the resolution of any dispute or claim pursuant to this Article 11, the Parties agree that performance of all obligations will be pursued diligently.

Article 12. Liability

- 12.1 **NO WARRANTIES.** EXCEPT AS SPECIFICALLY STATED IN ARTICLE 9, THE PARTIES MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO ANY MATTER WHATSOEVER, INCLUDING THE CONDITIONS OF THE RESEARCH OR ANY INVENTION OR MATERIAL, WHETHER TANGIBLE OR INTANGIBLE, MADE OR DEVELOPED UNDER OR OUTSIDE THE SCOPE OF THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR ANY INVENTION, MATERIAL OR INVESTIGATIONAL AGENT, OR THAT A TECHNOLOGY OR INVESTIGATIONAL AGENT UTILIZED BY A PARTY IN THE PERFORMANCE OF THE RESEARCH PLAN DOES NOT INFRINGE ANY THIRD-PARTY PATENT RIGHTS.
- 12.2 **Indemnification and Liability.** No indemnification for any loss, claim, damage, or liability is intended or provided by any Party under this Agreement. Each Party will be liable for any loss, claim, damage or liability that said Party incurs in connection with or as a result of its activities under this CRADA, except that IC, as an agency of the Government, assumes liability only to the extent provided under the Federal Tort Claims Act , 28 U.S.C. Chapter 171.
- 12.3 **Force Majeure.** Neither Party will be liable for any unforeseeable event beyond its reasonable control and not caused by its own fault or negligence, which causes the Party to be unable to perform its obligations under this CRADA, and which it has been unable to overcome by the exercise of due diligence. If a *force majeure* event occurs, the Party unable to perform will promptly notify the other Party. It will use its diligent efforts to resume performance as quickly as possible and will suspend performance only for such period of time as is necessary as a result of the *force majeure* event.

Article 13. Miscellaneous

- 13.1 **Governing Law.** The construction, validity, performance and effect of this CRADA will be governed by U.S. federal law, as applied by the federal courts in the District of Columbia. If any provision in this CRADA conflicts with or is inconsistent with any U.S. federal law or regulation, then the U.S. federal law or regulation will preempt that provision.
- 13.2 **Compliance with Law.** IC and Collaborator agree that they will comply with, and advise any individuals they have engaged to conduct the CRADA research and development activities to comply with, all applicable Executive Orders, statutes, and HHS regulations relating to research on human subjects (45 C.F.R. Part 46, 21 C.F.R. Parts 50 and 56) and relating to the appropriate care and use of laboratory animals (7 U.S.C. §§ 2131 *et seq.*; 9 C.F.R. Part 1, Subchapter A), including all applicable federal regulations for the protection of Human Subjects, which may include the Standards for Privacy of Individually Identifiable Health Information set forth in 45 C.F.R. Part 164. Collaborator agrees to ensure that its employees, contractors, and agents who might have access to a “select agent or toxin” (as that term is defined in 42 C.F.R. §§ 73.4-73.5) transferred from IC is properly licensed to receive the “select agent or toxin.”

- 13.3 **Waivers.** None of the provisions of this CRADA will be considered waived by any Party unless a waiver is given in writing to the other Party. The failure of a Party to insist upon strict performance of any of the terms and conditions hereof, or failure or delay to exercise any rights provided herein or by law, will not be deemed a waiver of any rights of any Party.
- 13.4 **Headings.** Titles and headings of the articles and paragraphs of this CRADA are for convenient reference only, do not form a part of this CRADA, and will in no way affect its interpretation.
- 13.5 **Severability.** The illegality or invalidity of any provisions of this CRADA will not impair, affect, or invalidate the other provisions of this CRADA.
- 13.6 **Amendments.** Minor modifications to the Research Plan may be made by the mutual written consent of the NIH CRADA Extramural Investigator/Officers and CRADA Collaborator PIs. Substantial changes to the CRADA Research Plan, changes to the CRADA including extensions of the term, or any changes to the model template MTA will become effective only upon a written amendment signed by the signatories to this CRADA or by their representatives duly authorized to execute an amendment. A change will be considered substantial if it directly expands the range of the potential CRADA Subject Inventions, alters the scope or field of any license option governed by Article 7, or requires a significant increase in the contribution of resources by either Party.
- 13.7 **Assignment.** Neither this CRADA nor any rights or obligations of any Party hereunder shall be assigned or otherwise transferred by either Party without written notification of the other Party in accordance with Paragraph 13.8. The Collaborator acknowledges the applicability of 41 U.S.C. § 15, the Anti Assignment Act, to this Agreement. The Parties agree that the identity of the Collaborator is material to the performance of this CRADA and that the duties under this CRADA are nondelegable.
- 13.8 **Notices.** All notices pertaining to or required by this CRADA will be in writing, signed by an authorized representative of the notifying Party, and delivered by first class registered or certified mail by U.S. Postal Service with return receipt, or by an express/overnight commercial delivery service, prepaid and properly addressed to the other Party at the address designated on the Contacts Information Page, or to any other address designated in writing by the other Party. Notices will be considered timely if received on or before the established deadline date or sent on or before the deadline date as verifiable by U.S. Postal Service postmark or dated receipt from a commercial carrier. Notices regarding the exercise of license options will be made pursuant to Paragraph 7.3. Either Party may change its address by notice given to the other Party in the manner set forth above. All notices will be deemed to have been given on the date received, as evidenced by return receipt of the records of the U.S. Postal Service or other delivery service, as applicable.
- 13.9 **Independent Contractors.** The relationship of the Parties to this CRADA is that of independent contractors and not agents of each other or joint venturers or partners. Each Party will maintain sole and exclusive control over its personnel and operations. If Collaborator elects to perform any portion of the Research Plan through contractors or consultants, Collaborator agrees to incorporate into such contract all provisions necessary to ensure that the work of such contractor(s) or consultant(s) is governed by the terms of the CRADA, including, but not limited to a provision for the assignment of inventions of the contractor(s) or consultant(s) to the Collaborator.

In conducting a portion of the CRADA research, it may be necessary for NCI to utilize the services of NCI Extramural Investigators. As described in Paragraph 8.8, these NCI Extramural Investigators perform under Funding Agreements or MTAs, which include an Intellectual Property Option to Collaborator (web site: http://ctep.cancer.gov/industryCollaborations2/default.htm#guidelines_for_collaborations). The other NCI contractors performing the DCTD Clinical Support Assays, are subject to a Determination of Exceptional Circumstances (35 U.S.C. § 202(a)(ii)), through which their rights in Inventions made using

the Investigational Agent are assigned to the Government. Such Inventions are then subject to the terms of this CRADA as if they were conceived and reduced to practice by IC employees.

- 13.10 **Use of Name; Press Releases.** By entering into this CRADA, the Government does not directly or indirectly endorse any product or service that is or will be provided, whether directly or indirectly related to either this CRADA or to any patent or other intellectual-property license or agreement that implements this CRADA by Collaborator, its successors, assignees, or licensees. Collaborator will not in any way state or imply that the Government or any of its organizational units or employees endorses any product or services. Each Party agrees to provide proposed press releases that reference or rely upon the work under this CRADA to the other Party for review and comment at least five (5) business days before publication. Either Party may disclose the Title and Abstract of the CRADA to the public without the approval of the other Party.
- 13.11 **Reasonable Consent.** Unless otherwise expressly provided in this CRADA, whenever a Party's consent or permission is required under this CRADA, its consent or permission will not be unreasonably withheld or delayed.
- 13.12 **Export Controls.** Collaborator agrees to comply with U.S. export law and regulations, including 21 U.S.C. 382 and 21 CFR Part 312.110. If Collaborator has a need to transfer any CRADA Materials made in whole or in part by IC, or IC Materials, or IC Confidential Information to a person located in a country other than the United States, to an Affiliate organized under the laws of a country other than the United States, or to an employee of Collaborator in the United States who is not a citizen or permanent resident of the United States, Collaborator will acquire any and all necessary export licenses and other appropriate authorizations.
- 13.13 **Entire Agreement.** This CRADA constitutes the entire agreement between the Parties concerning the subject matter of this CRADA and supersedes any prior understanding or written or oral agreement with respect thereto, including the Confidential Disclosure Agreement entered into between Exelixis and The National Cancer Institute effective March 19, 2010 (the "CDA"). For clarity, this CRADA only supersedes the CDA with respect to Confidential Information (as such term is defined in Section 1 of the CDA) disclosed by or on behalf of Collaborator related to the Investigational Agent and/or drug development programs for Investigational Agent, such that all such Confidential Information disclosed under the CDA shall be deemed Collaborator Confidential Information under this CRADA. The CDA shall remain in effect with respect to all Confidential Information disclosed or to be disclosed by or on behalf of Collaborator related to other Collaborator drug development candidates and/or programs.
- 13.14 **Survivability.** The provisions of Paragraphs 3.3, 3.4, 3.7.3, 3.9, 3.10, 3.11, 4.2, 4.3, 4.4, 4.5 (for so long as IC is sponsoring clinical studies of the Investigational Agent under the CRADA), 5.3, 5.4, 6.1-8.10, 10.3-10.5, 11.1, 11.2, 12.1-12.3, 13.1-13.3, 13.5, 13.6, 13.8, 13.9, 13.10 and 13.14 will survive the expiration or early termination of this CRADA.

SIGNATURES BEGIN ON THE NEXT PAGE

SIGNATURE PAGE

ACCEPTED AND AGREED

BY EXECUTING THIS AGREEMENT, EACH PARTY REPRESENTS THAT ALL STATEMENTS MADE HEREIN ARE TRUE, COMPLETE, AND ACCURATE TO THE BEST OF ITS KNOWLEDGE. COLLABORATOR ACKNOWLEDGES THAT IT MAY BE SUBJECT TO CRIMINAL, CIVIL, OR ADMINISTRATIVE PENALTIES FOR KNOWINGLY MAKING A FALSE, FICTITIOUS, OR FRAUDULENT STATEMENT OR CLAIM.

FOR IC:

/s/ JAMES H. DOROSHOW, M.D.

9/29/2011

James H. Doroshow, M.D.
Deputy Director, National Cancer Institute

Date

FOR COLLABORATOR:

/s/ MICHAEL M. MORRISSEY, Ph.D

10/5/2011

Signature

Date

Typed Name: Michael M. Morrissey, Ph.D

Title: President & CEO

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010

Page 25 of 34 **Confidential**

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CONTACTS INFORMATION PAGE

CRADA Notices

For IC:

For Collaborator:

[*]

[*]

Patenting and Licensing

For IC:

For Collaborator (if separate from above):

[*]

[*]

Delivery of Materials Identified In Appendix B (if any)

For IC:

For Collaborator:

N/A

N/A

SUMMARY PAGE

*EITHER PARTY MAY, WITHOUT FURTHER CONSULTATION OR PERMISSION,
RELEASE THIS SUMMARY PAGE TO THE PUBLIC.*

TITLE OF CRADA: Clinical Development of Exelixis, Inc.'s Proprietary Cabozantinib (XL184), a MET and Vascular Endothelial Growth Factor Receptor 2 (VEGFR2)/(Kinase Insert Domain Receptor (KDR) inhibitor, as an Anti-Cancer Agent.

PHS [*] Component: National Cancer Institute
NIH CRADA Extramural Investigator/ [*]
Officer(s):

Collaborator: Exelixis, Inc.

CRADA Collaborator Principal Investigator: [*]

Term of CRADA: five (5) years from the Effective Date

ABSTRACT OF THE RESEARCH PLAN:

Exelixis, Inc. and the National Cancer Institute have entered into a Cooperative Research and Development Agreement ("CRADA") under which they will collaborate on the non-clinical and clinical development of Exelixis Inc.'s proprietary Cabozantinib (XL184), a MET and VEGFR2/KDR inhibitor, as an anti-cancer agent.

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010
Page 27 of 34 **Confidential**

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APPENDIX A: RESEARCH PLAN

Title of CRADA

Clinical Development of Exelixis Inc.'s Proprietary Cabozantinib (XL184), a MET and Vascular Endothelial Growth Factor Receptor 2 (VEGFR2)/Kinase Insert Domain Receptor (KDR) inhibitor, as an Anti-Cancer Agent

[*]

{Redacted content comprises approximately 9 pages}

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010

Page 28 of 34 **Confidential**

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APPENDIX B

Financial and Staffing Contributions of the Parties

For NIH:

[*]

For Collaborator:

[*] {Redacted content comprises approximately 2 pages}

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010

Page 29 of 34 *Confidential*

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APPENDIX C
MATERIAL TRANSFER AGREEMENT

Provider: Division of Cancer Treatment and Diagnosis, National Cancer Institute

Recipient:University School of Medicine

Recipient's Investigator: Dr. John Doe, Ph.D., as an employee of the University School of Medicine

1. Provider agrees to transfer to Recipient's Investigator the following Research Material:

xxxxx mg of XL184 (cabozantinib), an agent proprietary to Exelixis, Inc. (Collaborator)

2. THIS RESEARCH MATERIAL MAY NOT BE USED IN HUMANS. The Research Material will only be used for research purposes by Recipient's Investigator in his/her laboratory, for the Research Project described below, under suitable containment conditions. This Research Material will not be used by for-profit recipients for screening, production or sale, for which a commercialization license may be required. Recipient agrees to comply with all Federal rules and regulations applicable to the Research Project and the handling of the Research Material.

2(a). Is Research Material of human origin?

Yes
No

2(b). If yes in 2(a), was Research Material collected according to 45 CFR Part 46, "Protection of Human Subjects"?

Yes (Please provide Assurance Number:)
No
Not Applicable

3. This Research Material will be used by Recipient's Investigator solely in connection with the following research project ("Research Project") described with specificity as follows (use an attachment page if necessary):

This Research Material will be used for preclinical studies investigating the effects of the Research Material in a cancer cell line.

3(a). Are any materials used in the Research Project of human origin?

Yes
No

3(b). If yes in 3(a), were human-origin materials collected according to 45 CFR Part 46, "Protection of Human Subjects"?

Yes (Please provide Assurance Number:)
No
Not Applicable

4. (a). To the extent permitted by law, Recipient agrees to treat in confidence, for a period of five (5) years from the date of its disclosure, any of Provider's or Collaborator's written information about this Research Material

that is stamped "CONFIDENTIAL" (the "Confidential Information") except for information that was previously known to Recipient or that is or becomes publicly available or which is disclosed to Recipient without a confidentiality obligation. Any oral disclosures to Recipient shall be identified as being CONFIDENTIAL by written notice delivered to Recipient within thirty (30) days after the date of the oral disclosure, and shall be Confidential Information hereunder.

4. (b). Recipient may publish or otherwise publicly disclose the results of the Research Project, however Collaborator will have thirty (30) days to review proposed manuscripts and three (3) days to review proposed abstracts to assure that Confidential Information is protected, except when a shortened time period under court order or the Freedom of Information Act pertains. Collaborator may request in writing that a proposed publication be delayed for up to thirty (30) additional days as necessary to file a Patent Application. Manuscripts to be submitted for publication by Recipient's Investigator will be sent to NCI's Regulatory Affairs Branch [NCICTEPpubs@mail.nih.gov] for forwarding to Collaborator for review as soon as they are received and in compliance with the timelines outlined above. Abstracts to be presented by Recipient's Investigator will be sent to NCI's Regulatory Affairs Branch [NCICTEPpubs@mail.nih.gov] for forwarding to Collaborator as soon as they are received, preferably no less than three days prior to submission, but prior to presentation or publication, to allow for preservation of U.S. or foreign patent rights. In all oral presentations or written publications concerning the Research Project, Recipient will acknowledge Provider's or Collaborator's contribution of this Research Material unless requested otherwise.

5. This Research Material is proprietary to Collaborator. Collaborator has agreed to allow NCI to make its proprietary compound available for this Research Project. Recipient's Investigator agrees to retain control over this Research Material and further agrees not to transfer the Research Material to other people not under her or his direct supervision without advance written approval of Provider. When the Research Project is completed or terminated, the Research Material will be disposed of, if directed by Provider.

6. This Research Material is provided as a service to the research community. IT IS BEING SUPPLIED TO RECIPIENT WITH NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Provider and Collaborator make no representations that the use of the Research Material will not infringe any patent or proprietary rights of third parties.

7. Recipient shall retain title to any patent or other intellectual property rights in inventions made by its employees in the course of the Research Project. Recipient agrees not to claim, infer, or imply endorsement by the Government of the United States of America (hereinafter referred to as "Government") of the Research Project, the institution or personnel conducting the Research Project or any resulting product(s). Unless prohibited by law from doing so, Recipient agrees to hold the Government and Collaborator harmless and to indemnify the Government and Collaborator for all liabilities, demands, damages, expenses and losses arising out of Recipient's use for any purpose of the Research Material.

8. The undersigned Provider and Recipient expressly certify and affirm that the contents of any statements made herein are truthful and accurate.

9. This MTA shall be construed in accordance with Federal law as applied by the Federal courts in the District of Columbia.

10. Results of the Research Project shall be provided to the Provider and Collaborator. Publications shall be provided to Provider and Collaborator as described in Article 4(b).

11. Recipient ("Institution") agrees to notify Provider and Collaborator upon the filing of any patent applications related to research with this Research Material under this Agreement and abide by the following terms of the Intellectual Property Option to Collaborator:

Institution agrees to promptly notify the Provider (NCI) and Collaborator in writing of any inventions, discoveries or innovations made by the Recipient's Investigator or any other employees or agents of Institution, whether patentable or not, which are conceived or first actually reduced to practice pursuant to the Research Project.

For inventions described in patent disclosures that claim the use and/or the composition of the Research Material(s) (Section A Inventions), Institution hereby grants to Collaborator(s): (i) a royalty-free, worldwide, non-exclusive license for commercial purposes with the right to sublicense to affiliates, contractors, licensees or collaborators working on behalf of Collaborator for Collaborator's or Collaborator's licensees' development or commercialization purposes; and (ii) a time limited first option to negotiate an exclusive, or co-exclusive, if applicable, world-wide, royalty bearing license for commercial purposes, including the right to grant sublicenses, subject to any rights of the Government of the United States of America, on terms to be negotiated in good faith by the Collaborator(s) and Institution. If Collaborator accepts the non-exclusive commercial license, the Collaborator agrees to pay all out of pocket patent prosecution and maintenance costs which will be pro-rated and divided equally among all licensees. If Collaborator obtains an exclusive commercial license, in addition to any other agreed upon licensing arrangements such as royalties and due diligence requirements, the Collaborator agrees to pay all out of pocket patent prosecution and maintenance costs. Collaborator(s) will notify Institution, in writing, if it is interested in obtaining a commercial license to any Section A Invention within three (3) months of Collaborator's receipt of a patent application or six (6) months of receipt of an invention report notification of such a Section A Invention. In the event that Collaborator fails to so notify Institution, or elects not to obtain an exclusive license, then Collaborator's option expires with respect to that Section A Invention, and Institution will be free to dispose of its interests in accordance with its policies. If Institution and Collaborator fail to reach agreement within ninety (90) days, (or such additional period as Collaborator and Institution may agree) on the terms for an exclusive license for a particular Section A Invention, then for a period of three (3) months thereafter Institution agrees not to offer to license the Section A Invention to any third party on materially better terms than those last offered to Collaborator without first offering such terms to Collaborator, in which case Collaborator will have a period of thirty (30) days in which to accept or reject the offer. If Collaborator elects to negotiate an exclusive commercial license to a Section A Invention, then Institution agrees to file and prosecute patent application(s) diligently and in a timely manner and to give Collaborator an opportunity to comment on the preparation and filing of any such patent application(s). Notwithstanding the above, Institution is under no obligation to file or maintain patent prosecution for any Section A Invention.

For those inventions not covered by Section A, but are nevertheless conceived or first actually reduced to practice pursuant to the Research Project and to those inventions that are conceived or first actually reduced to practice pursuant to the Research Project that use non-publicly available clinical data or specimens from patients treated with the NCI-provided Research Material (including specimens obtained from NCI DCTD-funded tissue banks) (Section B Inventions), Institution agrees to grant the following to the collaborator: (i) a paid-up nonexclusive nontransferable, royalty-free, world-wide license to all Section B Inventions for research purposes only; and (ii) a nonexclusive, royalty-free, world-wide license to (a) disclose Section B Inventions to a regulatory authority when seeking marketing authorization of the Research Material and (b) disclose Section B Inventions on a product insert or other promotional material regarding the Research Material after having obtained marketing authorization from a regulatory authority. Notwithstanding the above, Institution is under no obligation to file or maintain patent prosecution for any Section B Invention.

For all Section A and Section B Inventions, regardless of Collaborator's decision to seek a commercial license, Institution agrees to grant Collaborator a paid-up, nonexclusive, royalty-free, world-wide license for research purposes only. Institution retains the right to make and use any Section A Invention for all non-profit research, including for educational purposes and to permit other educational and non-profit institutions to do so.

Institution agrees, at Collaborator's request and expense, to grant to Collaborator a royalty-free exclusive or co-exclusive license to inventions made by Institution's Investigator(s) or any other employees or agents of Institution, which are or may be patentable or otherwise protectable, as a result of research utilizing the Research Material(s) outside

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010

Page 32 of 34 *Confidential*

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

the scope of the NCI DCTD Research Project (Unauthorized Inventions). Institution will retain a non-exclusive, non-sub-licensable royalty free license to practice the invention for research use purposes.

Institution agrees to promptly notify NCI DCTD (NCICTEPpubs@mail.nih.gov) and Collaborator(s) in writing of any Section A Inventions, Section B Inventions, and Unauthorized Inventions upon the earlier of: (i) any submission of any invention disclosure to Institution of a Section A, Section B, or Unauthorized Invention, or (ii) the filing of any patent applications of a Section A, Section B, or Unauthorized Invention. Institution agrees to provide a copy of either the invention disclosure or the patent application to the Collaborator and to NCI DCTD, which will treat it in accordance with 37 CFR Part 401. These requirements do not replace any applicable reporting requirements under the Bayh-Dole Act, 35 USC 200-212, and implementing regulations at 37 CFR Part 401.

12. This Agreement shall terminate two (2) years from the date of the last signature below. However, this Agreement may be terminated upon written notice to Institution if the Institution materially breaches any of its obligations hereunder and fails to cure such breach within thirty (30) days after receiving written notice of such breach. The provisions of Sections 4, 5, 7, 9, 10, 11, 12 and 13 will survive the termination of this Agreement.

13. Collaborator is a third party beneficiary under this Agreement and has the right, but is not required, to enforce the provisions of this Agreement.

Signatures Begin on Next Page

PHS ECT-CRADA Case Ref. No. 11-1-00006 MODEL ADOPTED December 8, 2010

Page 33 of 34 **Confidential**

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SIGNATURES

RECIPIENT

Date John Doe, Ph.D.

Date Authorized Signature for Recipient and Title

Recipient's Official and Mailing Address:

John Doe, Ph.D.
Associate Professor
Department of Biochemistry
University School of Medicine
City, State, Zip
Phone:

NATIONAL CANCER INSTITUTE

Date Sherry Ansher, Ph.D.

Associate Chief, Agreement Coordination Group

Date Jason Cristofaro, J.D., Ph.D.
CTEP Alternate Technology Development Coordinator

Please address all correspondence related to this agreement to Sally Hausman at the following address by express mail:

Sally Hausman
Senior Specialist, Research and Development Agreements
Regulatory Affairs Branch
Cancer Therapy Evaluation Program
Executive Plaza North, Suite 7111
6130 Executive Blvd.
Rockville, MD 20852-7181

Any false or misleading statements made, presented, or submitted to the Government, including any relevant omissions, under this Agreement and during the course of negotiation of this Agreement are subject to all applicable civil and criminal statutes including Federal statutes 31 U.S.C. " 3801-3812 (civil liability) and 18 U.S.C. ' 1001 (criminal liability including fine(s) and/or imprisonment).

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Amendment #1

Cooperative Research and Development Agreement #11-1-00006

“Clinical Development of Exelixis Inc.’s Proprietary Cabozantinib (XL184), a MET and Vascular Endothelial Growth Factor Receptor 2 (VEGFR2)/Kinase Insert Domain Receptor (KDR) inhibitor, as an Anti-Cancer Agent”

The purpose of this amendment is to change certain terms of the above-referenced Cooperative Research and Development Agreement (CRADA). These changes are reflected below, and except for these changes, all other provisions of the original CRADA remain in full force and effect. Two originals of this amendment are provided for execution; one is to remain with the National Cancer Institute and the other is to remain with the Collaborator.

The aforementioned CRADA shall be amended as follows:

1. **Article 2, Definitions, “Test Article”** is hereby amended as follows where underlining denotes addition:

“Test Article” means, in accordance with 21 C.F.R. § 50.3(j), any drug (including a biological product), medical device, food additive, color additive, electronic product, or any other article subject to regulation under the Federal Food, Drug, and Cosmetic Act that is intended for administration to humans or animals, including a drug or biologic as identified in the Research Plan, that is used within the scope of the Research Plan. The Test Article may also be referred to as Investigational Agent, Study Material, or Study Product. For this Agreement, Test Article, Investigational Agent, Study Material or Study Product means XL184 (cabozantinib) provided by or on behalf of Collaborator. For purpose of this CRADA, Investigational Agent shall also include pharmacokinetic and pharmacodynamics kits (Kits), and related support services, provided by or on behalf of the Collaborator.

2. **Article 3.8, Investigational Agent Information and Supply** is hereby amended as follows where underlining denotes addition:

3.8.8 Collaborator, or its vendor, will provide Kits directly to the sites in support of the Protocols. The Protocol will contain specific information on the use of the Kits.

SIGNATURES BEGIN ON NEXT PAGE

ACCEPTED AND AGREED TO:

For the National Cancer Institute

/s/ JAMES H. DOROSHOW, M.D.

James H. Doroshow, M.D.
Deputy Director, NCI

3/20/2013

Date

For Collaborator:
Exelixis Inc.

/s/ GISELA M. SCHWAB, M.D.

EVP and CMO

4/16/2013

Date

Amendment #2

**Cooperative Research and Development Agreement #11-1-00006
“Clinical Development of Exelixis Inc.’s Proprietary Cabozantinib (XL184), a MET and
Vascular Endothelial Growth Factor Receptor 2 (VEGFR2)/Kinase Insert Domain
Receptor (KDR) inhibitor, as an Anti-Cancer Agent”**

The purpose of this amendment is to change certain terms of the above-referenced Cooperative Research and Development Agreement (CRADA). These changes are reflected below, and except for these changes, all other provisions of the original CRADA remain in full force and effect. Two originals of this amendment are provided for execution; one is to remain with the National Cancer Institute and the other is to remain with the Collaborator.

The aforementioned CRADA shall be amended as follows:

1. Upon final signature, the term of the Agreement is extended for five (5) years from October 5, 2016 to October 5, 2021.
2. Dr. Jeffrey Abrams is removed as a NCI Principal Investigator. Dr. Margaret Mooney is added as a NCI Principal Investigator.

ACCEPTED AND AGREED TO:

For the National Cancer Institute

/s/ JAMES H. DOROSHOW, M.D.

James H. Doroshow, M.D.
Deputy Director, NCI

7/12/2016

Date

**For Collaborator:
Exelixis Inc.**

/s/ MICHAEL M. MORRISSEY, Ph.D

President & CEO

7/18/2016

Date

FIRST AMENDMENT TO COLLABORATION AND LICENSE AGREEMENT

This **FIRST AMENDMENT TO THE COLLABORATION AND LICENSE AGREEMENT** (the “**Amendment**”) is entered into as of December 20, 2016 (the “**Amendment Effective Date**”) by and between **Exelixis, Inc.**, a Delaware company having an address at 210 East Grand Avenue, South San Francisco, CA 94080, USA (“**Exelixis**”) and **Ipsen Pharma SAS**, a French corporation having an address at 65 Quai Georges Gorse, 92100 Boulogne-Billancourt, France (“**Licensee**”). Exelixis and Licensee may be referred to herein individually as a “**Party**” or collectively as the “**Parties**”.

RECITALS

WHEREAS, Exelixis and Licensee are parties to that certain Collaboration and License Agreement dated February 29, 2016 (the “**License Agreement**”), under which the Parties have been collaborating on the development and commercialization of cabozantinib; and

WHEREAS, the Parties desire to enter into this Amendment to expand the territory in which Licensee has the right to develop and commercialize cabozantinib and amend the continuing rights and obligations of the Parties under the License Agreement, all on the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS.

1.1 Section 1.30 of the License Agreement is hereby deleted in its entirety and replaced with the following:

1.30 “**Exelixis Territory**” means the U.S. and Japan.

1.2 Section 1.55 of the License Agreement is hereby deleted in its entirety and replaced with the following:

1.55 “**Major Market Countries**” means [*].

1.3 Section 1.69 of the License Agreement is hereby deleted in its entirety and replaced with the following:

1.69 “**Region**” means, individually and collectively, the following regions: [*].

1.4 Section 1.71 of the License Agreement is hereby deleted in its entirety and replaced with the following:

“**Regulatory Authority**” means any Governmental Authority that has responsibility in its applicable jurisdiction over the testing, development, manufacture, use, storage, import, transport, promotion, marketing, distribution, offer for sale, sale or other commercialization of pharmaceutical products in a given jurisdiction, including the FDA, the EMA and Health Canada or other foreign equivalent. For countries where governmental approval is required for pricing or reimbursement for a pharmaceutical product to be reimbursed by national health insurance (or its local equivalent), Regulatory Authority shall also include any Governmental Authority whose review or approval of pricing or reimbursement of such product is required.

1.5 “**Health Canada**” means the federal department of the government of Canada having the authority to regulate the sale of medicinal or pharmaceutical products, or any successor agency thereof.

1.6 Unless otherwise defined in this Amendment, all capitalized terms have the meaning as defined in the License Agreement.

2. DEVELOPMENT

2.1 Canada Studies. If any Regulatory Authority in Canada requires one or more additional studies to support any MAA submitted by Licensee for the Product in Canada that are exclusively for the benefit of Canada (the “**Canada Studies**”), such studies shall be deemed Licensee Only Development Work and subject to Licensee’s applicable obligations set forth in the License Agreement, including, without limitation, those obligations set forth in Sections 4.2, 4.5(e), 4.6, 4.7(a), and 4.8. In accordance with Section 3.2(h) of the License Agreement, the JDC shall prepare an amendment(s) to the GDP with respect to any Canada Studies and submit such amendment(s) to the JSC for approval. Exelixis shall, as may be required to enable Licensee to be the Sponsor of the Canada Studies, be subject to Exelixis’ applicable obligations set forth in Section 5.1(b) of the License Agreement. Exelixis shall have the right to use the Data of the Canada Studies generated by Licensee to support its own Development, Regulatory Approval or Commercialization in the Exelixis Territory subject to Section 9.2(b) of the License Agreement.

2.2 Country-Specific Development Work. The phrase “Canada or” in the first sentence of Section 4.5(e) is hereby deleted.

3. REGULATORY ACTIVITIES

3.1 Regulatory Filings. If any Canada Studies are included in the GDP, the GDP shall specify that Licensee shall apply for and hold Regulatory Filings in Canada.

3.2 PVA. As soon as reasonably practicable after the Amendment Effective Date, the Parties shall amend the PVA as necessary to address the modification herein to the Parties’ respective territories.

4. MANUFACTURE AND SUPPLY

4.1 Supply Agreement. As soon as reasonably practicable after the Amendment Effective Date, the Parties shall amend the Supply Agreement as necessary to address the modification herein to the Parties’ respective territories. In particular, the Parties agree that the Supply Agreement will be amended to add [*] reports from the below-referenced tracking system detailing the distribution and sale of product supplied for Canada.

4.2 The following is hereby added to the License Agreement as Sections 2.8(e)-(f):

(e) To enforce the Parties’ respective obligations set forth in Section 2.8(e) of the Agreement, to the extent permitted by Applicable Law, neither Party shall, and shall ensure that its respective Affiliates, permitted Sublicensees, and Third Party distributors will not, either directly or indirectly, advertise, promote, or market Products, including via the Internet, to any Third Party or place of business, residence, or shipping address in the other Party’s territory for the duration of the Royalty Term. The foregoing shall restrict either Party, to the extent permitted by Applicable Law, from engaging in any form of direct or indirect solicitation, advertisement, or promotion in the other Party’s territory. Each Party shall promptly, without any right to remuneration or compensation, forward to the other Party all inquiries regarding the Product by persons or entities whose place of business, residence, or shipping address is in the other Party’s territory.

(f) Licensee will [*]. In the event that Exelixis or Licensee [*], Licensee shall [*].

5. FINANCIAL PROVISIONS

5.1 Amendment Execution Payment. In consideration of the expanded license rights granted by Exelixis to Licensee by virtue of this Amendment, Licensee shall make a one-time, non-refundable, non-creditable payment to Exelixis of ten million dollars (\$10,000,000) within five (5) days after execution of this Amendment.

5.2 Development Milestone Payments. The following is hereby added as Section 9.3(c) of the License Agreement:

9.3(c) Development Milestones Specific to Canada. Subject to the remainder of this Section 9.3(c), Licensee shall pay to Exelixis the non-refundable, non-creditable payment set forth in the table below upon the achievement of the applicable milestone event (whether by or on behalf of Licensee, Exelixis, or their Affiliates, licensee(s) of Exelixis or Sublicensees):

Milestone Event	Milestone Payment
Milestone A: MAA Approval by Health Canada (<i>i.e.</i> , receipt of a “Notice of Compliance”) for a Product for RCC (2 nd line)	\$5,000,000
Milestone B: MAA Approval by Health Canada for a Product for RCC (1 st line)	\$3,000,000*
Milestone C: MAA Approval by Health Canada (<i>i.e.</i> , receipt of a “Notice of Compliance”) for a Product for HCC (2 nd line)	\$2,000,000
Milestone D: MAA Approval by Health Canada (<i>i.e.</i> , receipt of a “Notice of Compliance”) for a Product for the first indication other than RCC or HCC	[\$ *]
Milestone E: MAA Approval by Health Canada (<i>i.e.</i> , receipt of a “Notice of Compliance”) for a Product for the second indication other than RCC or HCC	[\$ *]

(i) *With respect to a Product, if Licensee achieves Milestone A, and as part of such Milestone A, RCC (1st line) is also included in the claims section of the approved label of Milestone A and allows Ipsen to promote the Product for use in RCC (1st line), then Licensee shall pay Exelixis the milestone payment corresponding to Milestone B in addition to the milestone amount owed for achievement of Milestone A. For clarity, in no event shall Licensee be obligated to pay to Exelixis more than a total of \$8,000,000 for the achievement of Milestones A and B with respect to any one Product.

(ii) Subject to Section 9.3(c)(i), each milestone payment shall be paid once for the applicable events described above for each different applicable Product.

5.3 Net Sales Milestones. Section 9.4(b) is hereby deleted in its entirety and replaced with the following:

9.4(b)(i) Net Sales Milestones for Licensee Territory Excluding Canada. Licensee shall pay to Exelixis the one-time, non-refundable, non-creditable payments set forth in the table below when the aggregated Net Sales of all Products in the Licensee Territory, but excluding the Net Sales of all Products in Canada, in any period of four (4) consecutive Calendar Quarters first reach the values indicated in the table below. Once one of the values indicated in the table below is first reached and the corresponding milestone payment is paid by Licensee under this Section 9.4(b)(i) (the “**Previously Achieved Commercial Milestone**”), the period of four (4) consecutive Calendar Quarters to be applied to determine the reaching of a subsequent Net Sales amount in the table below shall only start at the Calendar Quarter immediately following the fourth (4th) Calendar Quarter which served as the period to determine the reaching of the Net Sales amount triggering the Previously Achieved Commercial Milestone. For the avoidance of doubt, each payment in this Section 9.4(b)(i) shall be payable once only, regardless of the number of times such milestone is subsequently achieved.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Aggregate Net Sales of all Products in the Licensee Territory Excluding Canada in Any 4 Consecutive Calendar Quarters	Milestone Payments
Equal or exceed \$[*]	\$[*]
Equal or exceed \$[*]	\$[*]
Equal or exceed \$[*]	\$[*]
Equal or exceed \$[*]	\$[*]
Equal or exceed \$[*]	\$[*]

9.4(b)(ii) Net Sales Milestones for Canada. Licensee shall pay to Exelixis the one-time, non-refundable, non-creditable payments set forth in the table below when the aggregated Net Sales of all Products in Canada in any period of four (4) consecutive Calendar Quarters first reach the values indicated in the table below. Once one of the values indicated in the table below is first reached and the corresponding milestone payment is paid by Licensee under this Section 9.4(b)(ii) (the “**Previously Achieved Commercial Milestone for Canada**”), the period of four (4) consecutive Calendar Quarters to be applied to determine the reaching of a subsequent Net Sales amount in the table below shall only start at the Calendar Quarter immediately following the fourth (4th) Calendar Quarter which served as the period to determine the reaching of the Net Sales amount triggering the Previously Achieved Commercial Milestone for Canada. For the avoidance of doubt, each payment in this Section 9.4(b)(i) shall be payable once only, regardless of the number of times such milestone is subsequently achieved.

Aggregate Net Sales of all Products in Canada in Any 4 Consecutive Calendar Quarters	Milestone Payments
Equal or exceed CAD\$[*]	CAD\$[*]
Equal or exceed CAD\$[*]	CAD\$[*]
Equal or exceed CAD\$[*]	CAD\$[*]

(A) For clarity, the amounts set forth in this Section 9.4(b)(ii) refer to Canadian dollars.

5.4 Notice and Payment for Net Sales Milestones. Section 9.4(c)(ii) is hereby deleted in its entirety and replaced with the following:

(ii) As part of the report in Section 10.1, Licensee shall provide written notice to Exelixis if (1) the aggregated Net Sales of all Products in the Licensee Territory, but excluding the Net Sales of all Products in Canada, in any four (4) consecutive Calendar Quarters first reach the values set forth in Section 9.4(b)(i), or (2) the aggregated Net Sales of all Products in Canada in any four (4) consecutive Calendar Quarters first reach the values set forth in Section 9.4(b)(ii), and Licensee shall pay to Exelixis the corresponding Net Sales milestone payment within [*] after the end of the Calendar Quarter.

5.5 Royalty Rate. Section 9.5(a) is hereby deleted in its entirety and replaced with the following:

9.5(a)(i) Royalty Rate for Licensee Territory Excluding Canada. Subject to the other terms of this Section 9.5, during the Royalty Term, Licensee shall make quarterly non-refundable, non-creditable

royalty payments to Exelixis on the annual Net Sales of all Products sold in the Licensee Territory, but excluding the annual Net Sales of all Products sold in Canada, at the applicable rate set forth below:

Annual Net Sales of all Products in the Licensee Territory Excluding Canada	Royalty Rate
Portion less than or equal to \$[*]	22%
Portion greater than \$[*] and less than or equal to \$[*]	[*]%
Portion greater than \$[*]	26%

9.5(a)(ii) Royalty Rate for Canada. Subject to the other terms of this Section 9.5, during the Royalty Term Licensee shall make quarterly non-refundable, non-creditable royalty payments to Exelixis on the annual Net Sales of all Products sold in Canada at the applicable rate set forth below:

Annual Net Sales of all Products in Canada	Royalty Rate
Portion less than or equal to CAD\$[*]	22%
Portion greater than CAD\$[*] and less than or equal to CAD\$[*]	[*]%
Portion greater than CAD\$[*]	26%

(A) For clarity, the annual Net Sales amounts set forth in this Section 9.4(a)(ii) refer to Canadian dollars.

6. INTELLECTUAL PROPERTY

6.1 Product Trademarks. The following is hereby added as Section 11.6(a)(i):

(i) Without limiting the generality of the foregoing Section 11.6(a), the Parties shall use the trademark Cabometryx® for the Product in Canada to the extent that such trademark is approved for use with the Product by Health Canada or other applicable Regulatory Authority. If Exelixis is unable to obtain or register Cabometryx® for use with the Product in Canada, the Parties shall collaborate to select another Product Mark to be used for the Product in Canada. In accordance with Section 11.6(a), Exelixis shall own the Product Marks used for the Product in Canada and all goodwill in such Products Marks shall accrue to Exelixis.

7. GENERAL PROVISIONS

7.1 Effect of Amendment. Except as provided in Sections 9.4(b)(ii) and 9.5(a)(ii), all references in the Agreement to dollars or “\$” shall remain United States Dollars. Except as expressly modified herein, all terms and conditions set forth in the License Agreement, as in effect on the Amendment Effective Date, shall remain in full force and effect.

7.2 Entire Agreement. The License Agreement as modified by this Amendment is both a final expression of the Parties’ agreement and a complete and exclusive statement with respect to its subject matter. They supersede all prior and contemporaneous agreements and communications, whether written or oral, of the Parties regarding this subject matter.

7.3 Severability. If, for any reason, any part of this Amendment is adjudicated invalid, unenforceable, or illegal by a court of competent jurisdiction, such adjudication shall not, to the extent feasible, affect or impair, in whole or in part, the validity, enforceability, or legality of any remaining portions of this Amendment. All remaining portions shall remain in full force and effect as if the original Amendment had been executed without the invalidated, unenforceable, or illegal part.

7.4 Counterparts; Electronic or Facsimile Signatures. This Amendment may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. This Amendment may be executed and delivered electronically or by facsimile and upon such delivery such electronic or facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other Party.

{SIGNATURE PAGE FOLLOWS}

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

IN WITNESS WHEREOF, the Parties hereto have caused this **Amendment** to be executed and entered into by their duly authorized representatives as of the Amendment Effective Date.

EXELIXIS, INC.

By: /s/ Michael Morrissey
Name: Michael Morrissey, PhD
Title: President & CEO

IPSEN PHARMA S.A.S

By: /s/ Christophe Jean
Name: Christophe Jean
Title: EVP Corporate Strategy & Business Development

{Signature Page to the First Amendment of the Collaboration and License Agreement}

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Exhibit 10.51

COLLABORATION AGREEMENT

THIS COLLABORATION AGREEMENT (this “**Agreement**”) is made and entered into as of December 22, 2006 (the “**Effective Date**”) by and between **EXELIXIS, INC.**, a Delaware corporation having its principal place of business at 170 Harbor Way, P.O. Box 511, South San Francisco, California 94083-0511 (“**Exelixis**”), and **GENENTECH, INC.**, a Delaware corporation having its principal place of business at 1 DNA Way, South San Francisco, California 94080 (“**Genentech**”). Exelixis and Genentech are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties.**”

RECITALS

- A.** Genentech is a health care company that has expertise and capability in researching, developing and marketing human pharmaceuticals.
- B.** Exelixis is a drug discovery company that has expertise and proprietary technology relating to therapeutics that modulate signal transduction pathways involved in oncology and other disease areas.
- C.** Genentech and Exelixis desire to establish a collaborative development and commercialization program under which Genentech would sponsor certain programs at Exelixis for the generation, screening and research validation of therapeutics directed against a signal transduction pathway target important to oncology. In return, Genentech would have the ability to jointly develop such therapeutics with Exelixis, and to commercialize such therapeutics either on its own or, in the United States, through a co-promotion arrangement with Exelixis.

NOW, THEREFORE, the Parties agree as follows:

ARTICLE 1

DEFINITIONS

Capitalized terms used in this Agreement (other than the headings of the Sections or Articles) shall have the following meaning set forth in this Article 1, or, if not listed in this Article 1, the meaning as designated in the text of this Agreement.

1.1 “Actual Sales” has the meaning set forth in **Exhibit A**.

1.2 “Affiliate” means, with respect to a Party, any person, corporation, partnership or other entity that directly or indirectly controls or is controlled by or is under common control with such Party. For purposes of this definition, the term “control” (including, with correlative meaning, the terms “controlled by” or “under common control with”) means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by the ownership of fifty percent (50%) or more of the voting stock of such entity, or by contract or otherwise. In the case of Genentech, for purposes of this Agreement, the term “Affiliate” shall not include Roche Holdings Ltd., Roche Holdings Inc., F. Hoffman-La Roche Ltd., F. Hoffman-La Roche Inc. or any of their Affiliates that is not a Genentech Affiliate.

1.3 “Back-Up Compound” means each of the following: (a) the Existing Back-Ups; and (b) any Program Back-Ups.

1.4 “Back-Up Period” means the period of time beginning on the Effective Date and ending on the later of: (a) [*] after the [*] (as defined in Section [*]; or (b) [*] after the [*]; provided, however, if [*], then such Back-Up Period shall be [*] after the [*].

1.5 “Back-Up Set” has the meaning set forth in Section 3.3(c).

1.6 “Collaboration” means the program established under this Agreement, which includes collaborative research and certain collaborative development of Collaboration Compounds and Licensed Products, and which may include co-promotion of Licensed Products containing those Collaboration Compounds.

1.7 “Collaboration Compounds” means: (a) the Existing Compound (such Existing Compound shall cease to be a Collaboration Compound if and when Genentech fails to exercise its Opt-In rights with respect to such Existing Compound pursuant to Section 3.4(b)); and (b) Back-Up Compounds (such Back-Up Compounds shall cease to be Collaboration Compounds if and when Genentech fails to exercise its Opt-In rights with respect to such Back-Up Compound pursuant to Section 3.4(c)).

1.8 “Collaborative Development Period” means the period of time beginning as of the Effective Date and ending on the latest to occur of: (a) Genentech’s Opt-In under Section 3.4; (b) the end of the Back-Up Period; and (c) Exelixis’ completion or cessation of all activities under any Exelixis Work Plan.

1.9 “Competing Product” means any product that contains, as its active ingredient, [*] identified or optimized [*].

1.10 “Competing Program” has the meaning set forth in Section 3.7.

1.11 “Confidential Information” has the meaning set forth in Section 10.1.

1.12 “Control” means ownership or other legal authority or right of a Party or any of its Affiliates to grant a license or sublicense of intellectual property rights to another Party or its Affiliates, without the grant or such license or sublicense alone constituting a material breach of an agreement between that Party (or its Affiliates) and a Third Party.

1.13 “Cover” means, with respect to a particular Patent and a particular Licensed Product (or a Collaboration Compound, as applicable), that the manufacture, use, sale, offer for sale or importation of such Licensed Product (or Collaboration Compound, as applicable) in a country would infringe a Valid Claim of such Patent in that country.

1.14 “DC” or “Development Criteria” means the set of characteristics agreed upon by the Parties prior to the Effective Date and attached to this Agreement as **Exhibit B**.

1.15 “Derived Inventions” has the meaning set forth in Section 8.5(b).

1.16 “Derived Patents” has the meaning set forth in Section 8.5(b).

1.17 “Development Costs” means the costs actually incurred by or on behalf of a Party for [*].

1.18 “Development End-Point” means a set of characteristics agreed upon by the Parties prior to the Effective Date and attached to this Agreement as **Exhibit D**.

1.19 “Development Plan” has the meaning set forth in Section 3.5.

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[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

1.20 **“Diagnostic Product”** means a product or service, including analysis of human blood or tissue samples, developed or used for the purpose [*].

1.21 **“Diligent Efforts”** means: (a) where applied to carrying out specific tasks and obligations under this Agreement, means deploying appropriate resources [*]; and (b) where applied to development or commercialization of a product, the use of efforts and deployment of resources, [*].

1.22 **“Excluded Compound”** means (a) EXEL-5518 and [*] of EXEL-5518 if and when Genentech fails to exercise its Opt-In rights with respect to the Existing Compound pursuant to Section 3.4(b), and (b) the Back-Up Compounds (for clarity, including [*] thereto) if and when Genentech fails to exercise its Opt-In rights with respect to such Back-Up Compounds pursuant to Section 3.4(c).

1.23 **“Exelixis [*] Patents”** means all Exelixis Licensed Patents that do not Cover [*], but that do Cover [*]: (a) [*] that is [*]; or (b) [*] that is [*] and does not involve the use of a [*], where, for purposes of this Section 1.21, [*] means that the [*] was [*], or is otherwise [*]. For clarity, an Exelixis Licensed Patent Covering [*] shall not be considered an Exelixis Licensed Patent Covering [*].

1.24 **“Exelixis Diagnostic IP”** means either or both: (a) all Information (excluding any Patents) Controlled by Exelixis, including Information Controlled jointly with Genentech, as of the Effective Date or during the term of this Agreement, that (i) [*] for Genentech to develop, manufacture or commercialize a Diagnostic Product and (ii) was developed by Exelixis prior to the Effective Date or pursuant to this Agreement; and (b) all Patents that are Controlled by Exelixis, including Patents Controlled jointly with Genentech, as of the Effective Date or at any time during the term of this Agreement, to the extent such Patents (i) claim an invention made by Exelixis prior to the Effective Date or pursuant to this Agreement and (ii) (1) Cover a Diagnostic Product; [*] for Genentech to develop, manufacture or commercialize any Diagnostic Product.

1.25 **“Exelixis Licensed Know-How”** means all proprietary Information (excluding any Patents) and all proprietary Material Controlled by Exelixis, including proprietary Information and proprietary Material Controlled jointly with Genentech, as of the Effective Date or at any time during the term of this Agreement, that is (a) related to a Collaboration Compound (or a composition containing that Collaboration Compound or the manufacturing or use of that Collaboration Compound) [*] for Genentech to exercise the rights licensed to it under this Agreement or to perform its obligations under this Agreement.

1.26 **“Exelixis Licensed IP”** means the Exelixis Licensed Know-How and the Exelixis Licensed Patents.

1.27 **“Exelixis Licensed Patents”** means all Patents that are Controlled by Exelixis, including Patents Controlled jointly with Genentech, as of the Effective Date or at any time during the term of this Agreement, that: (a) Cover a Collaboration Compound; [*] for Genentech exercise the rights licensed to it under this Agreement or to perform its obligations under the Agreement.

1.28 **“Exelixis Work Plan”** means any written plan agreed by the Parties with respect to, or used by the Parties as the basis of engaging in, any of the following activities: (a) pre-clinical studies and Phase I Clinical Trials of the Existing Compound; and (b) identification, discovery, optimization, research, pre-clinical studies or Phase I Clinical Trials of or related to Back-Up Compounds pursuant to Section 3.3.

1.29 **“Existing Back-Ups”** means [*], and [*].

1.30 **“Existing Compound”** means any or all of the following: (a) EXEL-5518 (or XL-518); and (b) all [*] of EXEL-5518 (or XL-518).

1.31 **“FDA”** means the U.S. Food and Drug Administration, or any successor entity thereto.

1.32 “**Field**” means all human prophylactic and therapeutic uses.

1.33 “**Financial Appendix**” means **Exhibit A** to this Agreement, which sets forth certain terms and conditions related to sharing of costs, expenses and profits for Licensed Product(s) in the Profit-Share Territory.

1.34 “**First Commercial Sale**” means, for any Licensed Product, and on a country-by-country basis in each country in which that Licensed Product is sold, the first arm’s-length sale to a Third Party for use or consumption by an end-user of that Licensed Product in that country, after obtaining Regulatory Approval for sale of that Licensed Product in that country. A First Commercial Sale shall not include a sale of any Licensed Product for use in clinical trials, for research or for other non-commercial uses, or supply of a Licensed Product as part of a compassionate use or similar program.

1.35 “**FTE**” means the equivalent of a full-time employee’s work time over a twelve (12) month period (including normal vacations, sick days and holidays). [*].

1.36 “**GAAP**” means United States generally accepted accounting principles, consistently applied.

1.37 “**Genentech Know-How**” means all proprietary Information (excluding any Patents) and any proprietary Material Controlled by Genentech, including proprietary Information and proprietary Material Controlled jointly with Exelixis, as of the Effective Date or at any time during the term of this Agreement that is: (a) related to an Excluded Compound or Collaboration Compound (or a composition containing that Excluded Compound or Collaboration Compound, or the manufacturing or use of that Excluded Compound or Collaboration Compound); [*] for Exelixis to exercise the rights licensed to it under this Agreement or to perform its obligations under this Agreement, but only to the extent such Information is created, or such Material is synthesized or first produced, by or on behalf of Genentech (solely or jointly with Exelixis) pursuant to performing Genentech’s obligations or exercising Genentech’s rights under the Agreement (including performing Genentech Research).

1.38 “**Genentech Licensed IP**” means the Genentech Know-How and the Genentech Licensed Patents.

1.39 “**Genentech Licensed Patents**” means any and all Patents that are Controlled by Genentech, including Patents Controlled jointly with Exelixis, as of the Effective Date or at any time during the term of this Agreement, that: (a) Cover a Collaboration Compound or an Excluded Compound; [*] for Exelixis to exercise the rights licensed to it under the Agreement or to perform its obligations under the Agreement, but only, under each of (a) and (b), such Patents claiming inventions conceived and reduced to practice by or on behalf of Genentech pursuant to performing Genentech’s obligations or exercising Genentech’s rights under the Agreement (including performing Genentech Research).

1.40 “**Genentech Research IP**” means any and all: (a) Patents that are Controlled by Genentech, including Patents Controlled jointly with Exelixis, as of the Effective Date or at any time during the Collaborative Development Period that are [*] for Exelixis to perform its obligations under Article 3 or Section 4.1 or the Co-Promotion Agreement, and (b) Information and Materials provided by Genentech to Exelixis for the purpose of Exelixis performing its obligations under Article 3 or Section 4.1 or the Co-Promotion Agreement.

1.41 “**Genentech Research**” has the meaning set forth in Section 3.2(c).

1.42 “[*]” has the meaning set forth in Section [*].

1.43 “**IND**” means an Investigational New Drug Application filed with the FDA or the equivalent application in any country outside the U.S. where a regulatory filing is required or obtained to conduct a clinical trial.

1.44 “**Information**” means information (including results and data), in any tangible or intangible form, including without limitation, inventions, databases, methods, techniques, assays, processes, specifications,

formulations, formulae, skills, experience, manufacturing information, financial data, test data including pharmacological, biological, models, designs, chemical, biochemical, toxicological and clinical test data, analytical and quality control data, quality assurance data, stability data, studies and procedures, and legal information or descriptions.

1.45 “**Joint Patent**” has the meaning set forth in Section 9.1.

1.46 “**Joint Project Team**” or “**JPT**” means the subcommittee described in Section 2.2.

1.47 “**Joint Promotion Plan**” has the meaning set forth in Section 2.3(b).

1.48 “**Joint Steering Committee**” or “**JSC**” means the committee described in Section 2.1.

1.49 “**Licensed Product**” means any product that contains a Collaboration Compound.

1.50 “**Major Market Countries**” means Germany, France, United Kingdom, Spain, Italy and Japan.

1.51 “**Manufacture**” means the development of manufacturing process for, and the manufacture and supply (including formulation, packaging and finishing when applicable) of, active pharmaceutical ingredient, bulk drug substance, drug product and/or placebos to support pre-clinical or clinical development or commercialization, as the case may be.

1.52 “**Material**” means physical and biological material of any type, including excipients, active pharmaceutical ingredient, bulk drug substance, drug product and/or placebos, cell media, cell lines, chemical compounds and reagents.

1.53 “**MEK**” means the gene for the mitogen-activated protein kinase kinase 1 (also known as MAP2K1) for any mammalian species, and the protein (or fragment or epitope thereof) encoded by such gene, and naturally occurring variants and fragments thereof.

1.54 “**MEK Compound**” means any small molecule compound that inhibits the Program Target at or below the Target Potency Threshold.

1.55 “**NDA**” means a New Drug Application filed pursuant to the requirements of the FDA, or the equivalent application or filing in country other than the United States (as applicable).

1.56 “**Net Sales**” means, with respect to a particular time period, the gross amount invoiced by Genentech, its Affiliates and its sublicensees for sales of Licensed Products (such products being in final form intended for use by the end user) in arms length transactions with Third Parties during such time period, less the following charges or expenses, to the extent each is actually incurred and included in the invoiced gross sales price: (a) trade, cash and quantity discounts; (b) credits or allowances given or made for rejection or return of previously sold Licensed Products or for retroactive price reductions (including rebates similar to Medicare and/or Medicaid); (c) sales tax, VAT taxes, and other taxes, duties or other governmental charges levied on or measured by the billing amount, as adjusted for rebates or refunds, that are borne by the seller thereof and that are not refundable and to the extent noncreditable; (d) charges for freight and insurance directly related to the distribution of the Licensed Products (to the extent not paid by the Third Party customer); and (e) discounts pursuant to indigent patient programs and patient discount programs, including the impact of price caps and patient assistance programs. Sales between Genentech and its Affiliates or sublicensees shall be disregarded for purposes of calculating Net Sales, so long as each sale of a Licensed Product in final form intended for use by the end user is otherwise included in “Net Sales.” Notwithstanding anything herein to the contrary, in all cases Net Sales shall be determined in accordance with GAAP.

In the event a Licensed Product is sold in combination with one or more other active pharmaceutical ingredients (as used in this definition of Net Sales, a “**Combination**”), then Net Sales shall be calculated by multiplying the Net Sales of such Combination by the fraction A/B, where A is the gross selling price of the Licensed Product sold separately and B is the gross selling price of the Combination. In the event that no such separate sales are made, Net Sales for royalty determination shall be made by the Parties in good faith, based on the market price (or if the market price is not available, the relative value) for each component of the Combination.

Genentech and Exelixis agree that for purposes of this definition, [*] shall not be deemed to be “**active pharmaceutical ingredients**”, the presence of which in a Licensed Product would be deemed to create a Combination subject to the terms of the preceding paragraph.

If a Licensed Product is sold under a bundled or capitated arrangement with other products of a Party and its sublicensees, then, solely for the purpose of calculating Net Sales, any [*] shall be [*], than [*].

1.57 “Operating Profit (Loss)” has the meaning set forth in the Financial Appendix.

1.58 “Other Territory” means worldwide, excluding the Profit-Share Territory.

1.59 “Patents” means all: (a) U.S. issued patents, re-examinations, reissues, renewals, extensions and term restorations, inventors’ certificates and foreign counterparts thereof; (b) pending applications for U.S. patents, including provisional applications, continuations, continuations-in-part, continued prosecution, divisional and substitute applications; and (c) non-U.S. counterparts or equivalents of the foregoing in subsection (a) and (b).

1.60 “Phase I Clinical Trial” means a human clinical trial with a principal purpose of preliminarily determining the safety of a pharmaceutical product in healthy individuals or patients as required in 21 C.F.R. §312.21(a), or similar clinical study in a country other than the United States, and for which there are no primary endpoints related to efficacy.

1.61 “Phase II Clinical Trial” means a human clinical trial with a principal purpose of determining efficacy and dosing of a pharmaceutical products in patients with the disease being studied as described in 21 C.F.R. §312.21(b), or similar clinical study in a country other than the United States.

1.62 “Phase III Clinical Trial” means a human clinical trial with a principal purpose of establishing safety and efficacy of a pharmaceutical product in patients with the disease being studied as required in 21 C.F.R. §312.21(c) or similar clinical study in a country other than the United States. A Phase III Clinical Trial shall also include any other human clinical trial intended as a pivotal trial for Regulatory Approval purposes, or that results in data actually used to support the filing of a Marketing Approval Application, whether or not such trial is a traditional Phase III Clinical Trial.

1.63 “Profit-Share Territory” means the fifty (50) states of the United States, Puerto Rico, and the District of Columbia.

1.64 “Program Back-Up” means each small molecule compound that: (a) is identified, optimized and/or developed by Exelixis pursuant to Article 3 of this Agreement; and (b) is a MEK Compound, including all [*] of such MEK Compound.

1.65 “Program Target” means MEK.

1.66 “Regulatory Approval” means all necessary approvals (including supplements, amendments, pre- and post-approvals, pricing and reimbursement approvals), licenses, registrations or authorizations of any national, supra-national (e.g., the European Medicines Evaluation Agency), regional, state or local regulatory agency, department,

bureau, commission, council or other governmental entity, have been obtained for the manufacture, distribution, use or sale of that product in a regulatory jurisdiction.

1.67 “[*]” has the meaning set forth in Section [*].

1.68 “Subsequent Opt-In Expiration Date” has the meaning set forth in Section 3.4(c)(ii).

1.69 “Target Potency Threshold” means, if a compound is “at or below the Target Potency Threshold,” the compound in question [*] the [*] of the Program Target with [*] in [*] TPT Assays.

1.70 “Target Candidate Profile” or “TCP” means a set of characteristics agreed upon by the Parties prior to the Effective Date and attached to this Agreement as Exhibit C.

1.71 “Third Party” means any entity other than a Party or a Party’s Affiliate.

1.72 “TPT Assays” means: (a) the [*] Assay as described on [*] for EXEL-5518 dated [*] Assay as described on [*].

1.73 “Transfer Plan” has the meaning set forth in Section 3.5(c).

1.74 “Valid Claim” means any claim of an issued Patent that has not: (a) expired or been abandoned; (b) been held invalid or unenforceable by a court of competent jurisdiction from which no appeal can be taken or has been taken within the required time period; or (c) [*].

ARTICLE 2

GOVERNANCE

2.1 Joint Steering Committee.

(a) **Membership.** Within [*] after the Effective Date, the Parties shall establish a Joint Steering Committee, or JSC, to coordinate activities on which the Parties collaborate under this Agreement with respect to Licensed Product(s) in the Profit-Share Territory. The JSC shall consist of two (2) representatives from each Party. Each Party shall designate one (1) of its representatives as the co-chairperson of the JSC. Each Party may replace its appointed JSC representatives or co-chairperson at any time upon reasonable written notice to the other Party.

(b) **Responsibilities.** The responsibilities of the JSC shall be:

(i) to communicate regarding the overall strategy for the development and commercialization of Licensed Product(s) in the Profit-Share Territory and in the Field;

(ii) to facilitate the exchange of Information between the Parties with respect to the activities hereunder and to establish procedures for the efficient sharing of Information and Materials necessary for development and commercialization of the Licensed Product(s) hereunder;

(iii) to share and discuss the Parties’ performance against the Development End-Point, Exelixis’ performance on an Exelixis Work Plan, and Genentech’s progress on a Development Plan, in each case at least on a [*] basis;

(iv) to share and discuss the data generated by or on behalf of the Parties in the course of performance (1) towards the Development End-Point, (2) under the Development Plan or any Exelixis Work Plan, and (3) of Genentech Research;

(v) to create subcommittees as the JSC may find necessary or desirable from time to time for implementation of the research, development and commercialization hereunder, including without limitation the JPT and the JCC;

(vi) to oversee the activities of subcommittees created under this Agreement, and to seek to resolve any issues that such subcommittees cannot resolve, including without limitation issues referred to it from the JPT or the JCC; and

(vii) to perform such other functions as appropriate to further the purposes of this Agreement, as determined by the Parties.

(c) **Guiding Principles.** The JSC shall perform its responsibilities under this Agreement based on the principles of diligence, prudence and good scientific and business judgment. The JSC shall have only the powers assigned expressly to it under this Article 2 and elsewhere in this Agreement, and the JSC shall not have any power to amend, modify or waive compliance under this Agreement.

(d) **Decision Making.** The JSC shall make decisions unanimously, with each Party's representatives collectively having one (1) vote and at least one (1) representative from each Party present. In the event the JSC cannot reach an agreement regarding a decision within the JSC's authority for a period of [*], then, for the Collaboration: (i) Exelixis shall make the final determination in its sole discretion if such decision is regarding the [*] of Collaboration Compound(s) [*], provided that Genentech shall make the final determination in its sole discretion if such decision is regarding whether Exelixis [*] with respect to [*]; and (ii) Genentech shall make the final determination in its sole discretion if such decision is regarding the [*] of Licensed Product(s) [*] (although notwithstanding Genentech's sole discretion under this Section, Genentech continues to be subject to [*]). When either Party makes final determinations under this Section, that final determination shall be consistent with the terms of this Agreement. Disputes regarding matters not within the responsibilities of the JSC shall be resolved pursuant to Section 15.3.

(e) **JSC Meetings.** JSC meetings shall be held [*], or on another schedule agreed by the Parties, with ad hoc meetings as necessary, particularly to address issues described in Section 3.2(d). With the consent of the representatives of each Party serving on the JSC, other representatives of each Party may attend meetings as nonvoting observers (provided such nonvoting observers have confidentiality obligations to such Party that are at least as stringent as those set forth in this Agreement). A JSC meeting may be held by audio, video or internet teleconference with the consent of each Party, but at least half (1/2) of the minimum number of meetings shall be held in person, in South San Francisco, California. Meetings of the JSC shall be effective only if at least one (1) representative of each Party is present or participating. Each Party shall be responsible for all of its own expenses of participating in the JSC meetings. The Parties will alternate hosting the meeting, and the Party hosting is responsible for preparing and circulating the minutes of the JSC meetings.

(f) **No Decisions.** Notwithstanding anything to the contrary in this Agreement, no decision by either Party would be effective if such decision requires the other Party to breach any obligation or agreement with a Third Party, or to perform any activities that are materially different or greater in scope than those provided for specifically under this Agreement.

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[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

2.2 Joint Project Team.

(a) **Membership.** The JSC shall establish a JPT as a subcommittee to coordinate activities to be performed by Exelixis, or jointly by Exelixis and Genentech during the Collaborative Development Period. The JPT shall consist of two (2) representatives from each Party. Each Party may replace its appointed JPT representatives at any time upon reasonable written notice to the other Party. Each Party shall designate one (1) of its representatives as the co-chairpersons of the JPT.

(b) **Responsibilities.** The responsibilities of the JPT shall include:

- (i) to serve as the ongoing liaison between the Parties during the Collaborative Development Period;
- (ii) to collect the data generated by the Parties in the course of activities during the Collaborative Development Period;
- (iii) to coordinate efforts related to research and development during the Collaborative Development Period; and
- (iv) to perform such other functions as appropriate to further the purposes of this Agreement as directed by the JSC.

The JPT shall not have the right to amend this Agreement.

(c) **Decision Making.** The JPT shall make decisions unanimously, and each Party's representatives shall collectively have one (1) vote. In the event the JPT cannot reach an agreement regarding a decision within the JPT's authority for a period of [*], the JPT shall refer such matter to the JSC for resolution pursuant to Section 2.1(d).

(d) **JPT Meetings.** JPT meetings shall be held at least [*] during the Collaborative Development Period prior to an Opt-In by Genentech and, after Opt-In by Genentech but before the end of the Collaborative Development Period, at the request of the JSC. Other representatives of each Party may attend meetings as nonvoting observers (provided such nonvoting observers have confidentiality obligations to such Party that are at least as stringent as those set forth in this Agreement). A JPT meeting may be held by audio, video or internet teleconference with the consent of each Party, but at least half (1/2) of the minimum number of meetings in each year shall be held in person, in South San Francisco, California. Meetings of the JPT shall be effective only if at least one (1) representative of each Party is present or participating. Each Party shall be responsible for all of its own expenses of participating in the JPT meetings. The Parties will alternate hosting the meeting, and the Party hosting is responsible for preparing and circulating the minutes of the JPT meetings.

2.3 Joint Commercialization Committee.

(a) **Membership.** Within [*] after [*], the Parties shall establish a JCC to coordinate the co-promotion of Licensed Product(s) in the Profit-Share Territory. The JCC shall consist of two (2) representatives from each Party. Each Party may replace its appointed JCC representatives at any time upon reasonable written notice to the other Party. Each Party shall designate one (1) of its representatives as the co-chairpersons of the JCC. The JCC shall exist only during the period in which Exelixis is performing co-promotion activities with respect to a Licensed Product under this Agreement.

(b) **Responsibilities.** The responsibilities of the JCC shall include:

(i) within [*] after the establishment of the JCC, to prepare and approve a joint promotion plan governing the Parties' promotional activities with respect to the Licensed Products in the Profit-Share Territory (the "**Joint Promotion Plan**");

(ii) to coordinate activities designed to create, provide training for, deploy and manage a sales force for any Licensed Product;

(iii) to coordinate regarding sales force responsibilities, and to communicate adjustments in sizing of those sales forces for each Licensed Product as appropriate (subject to Section 5.2);

(iv) to communicate and coordinate regarding promotion of Licensed Products;

(v) to communicate and coordinate regarding integration of Licensed Products into the managed care system;

(vi) to perform such other functions as appropriate to further the purposes of this Agreement as directed by the JSC.

(c) **Decision Making.** The JCC shall make decisions unanimously, and each Party's representatives shall collectively have one (1) vote. In the event the JCC cannot reach an agreement regarding a decision within the JCC's authority for a period of [*], Genentech shall have the final authority to make the determination, so long as that determination is consistent with this Agreement and the Co-Promotion Agreement.

(d) **JCC Meetings.** JCC meetings shall be held at least [*]. With the consent of the representatives of each Party serving on the JCC, other representatives of each Party may attend meetings as nonvoting observers (provided such nonvoting observers have confidentiality obligations to such Party that are at least as stringent as those set forth in this Agreement). A JCC meeting may be held by audio, video or internet teleconference with the consent of each Party, but at least half (1/2) of the minimum number of meetings in each year shall be held in person, in South San Francisco, California. Meetings of the JCC shall be effective only if at least one (1) representative of each Party is present or participating. Each Party shall be responsible for all of its own expenses of participating in the JCC meetings. The Parties will alternate hosting the meeting, and the Party hosting is responsible for preparing and circulating the minutes of the JCC meetings.

ARTICLE 3

DEVELOPMENT

3.1 DC, TCP and Development End-Point. The Parties have agreed on the DC and TCP, which are attached as **Exhibit B** and **Exhibit C** to this Agreement, respectively. The Parties have also agreed on the Development End-Point, which is described in **Exhibit D** to this Agreement. The DC, TCP and Development End-Point criteria may be amended only by the Parties' mutual written agreement. The Parties agree that the Existing Compound meets the DC and TCP. For other Collaboration Compounds, the JSC shall determine whether such Collaboration Compound has met the DC or TCP based on meeting all of the objective criteria set forth in **Exhibit B** or **Exhibit C**, respectively.

3.2 Research and Development Activities for Existing Compound Prior to Opt-In.

(a) **Development by Exelixis for Existing Compound.** Exelixis shall, at its expense, use Diligent Efforts to reach the Development End-Point set forth on **Exhibit D** (Development End-Point) for the Existing Compound, by conducting and completing the clinical development activities set forth on **Exhibit D**.

(b) **Exelixis' Provision of Existing Compound.** If Genentech will be engaging in Genentech Research pursuant to Section 3.2(c), then Exelixis shall make available to Genentech, at [*], any amount that may be

required to perform the Genentech Research. Exelixis shall use all reasonable efforts to make such amounts available within [*] after Genentech's request. Prior to exercising its Opt-In right, Genentech shall only have the right to use the Existing Compound for the purpose of performing the Genentech Research as described in Section 3.2(c) below.

(c) Pre-Opt-In Studies.

(i) The Parties agree that, prior to Genentech's exercise of its Opt-In (A) the studies set forth in **Exhibit E ("Planned Pre-Opt-In Studies")** are planned to be performed for the Existing Compound, and (B) other studies mutually agreed by the Parties ("**Other Pre-Opt-In Studies**") may be performed for the Existing Compound (collectively, the "**Pre-Opt-In Studies**"). The Planned Pre-Opt-In Studies shall be performed by Exelixis [*], upon written request of Genentech (which request may be made on a study-by-study basis, and need not be for all such Planned Pre-Opt-In Studies, and further where such request is provided more than [*] after the Effective Date, the last sentence of Section 3.4(a) applies), with the exception that Genentech shall be the Party (either by itself or through a Third Party contractor selected by Genentech) performing the [*] as set forth on **Exhibit E [*]** (such [*], the "**Genentech Research**"). Unlike the Planned Pre-Opt-In Studies, which Exelixis shall undertake if so requested by Genentech, whether the Other Pre-Opt-In Studies will be performed, by whom, and the protocols for those studies are all subject to mutual agreement of the Parties, through the JSC without either Party having the trump vote over the matter. For the Planned Pre-Opt-In Studies requested by Genentech, Exelixis shall submit the proposed protocols for Genentech's review, and shall incorporate all reasonable comments made by Genentech to the extent reasonable and practical, and provided that such comments are provided to Exelixis in a timely manner. If the Parties cannot agree on any such protocol, then the matter shall be referred to [*] of Exelixis and Genentech's [*], and such executives shall resolve the [*]. If such matter cannot be resolved by such executives within such [*] period, [*].

(ii) If Genentech engages a Third Party to perform any Other Pre-Opt-In Studies, then the Parties shall mutually agree upon a Third Party for the performance of such Other Pre-Opt-In Studies. Genentech shall engage any Third Party to perform the Genentech Research or any Other Pre-Opt-In Studies only pursuant to an agreement which sets forth such Third Party's confidentiality and non-use obligations at least as stringent as those set forth in this Agreement for Exelixis proprietary Information and Exelixis proprietary Materials transferred to such Third Party by Genentech, and which requires that all inventions and intellectual property made by the Third Party in the course of those activities shall be Controlled by Genentech and included within the definition of "Genentech Licensed IP" as if developed by Genentech.

(iii) If Genentech undertakes Genentech Research, Other Pre-Opt-In Studies or otherwise obtains the Existing Compound prior to exercising its Opt-In right, then Genentech shall not, prior to exercise of its Opt-In right: (A) perform any research in connection with that Existing Compound other than the Genentech Research; (B) use the Existing Compound in [*] Collaboration Compound; (C) perform tests with such Existing Compound [*] Collaboration Compound; (D) transfer the Existing Compound to any Third Party except as specified above in this Section 3.2(c); or (E) attempt to elucidate the chemical structure of the Existing Compound; or (F) use, prior to Genentech's exercise of its Opt-In, any: (1) data or results arising from such Genentech Research or Other Pre-Opt-In Studies; or (2) [*], in each case in any manner outside the Collaboration, including without limitation in connection with the Competing Program. Genentech may use data and results from the Genentech Research for decision-making regarding development decisions of a Collaboration Compound or Licensed Product. For clarity, the provisions of Section 7.4 apply to the performance of the Genentech Research, any Other Pre-Opt-In Studies, or other delivery of Existing Compound prior to exercising Genentech's Opt-In right.

(d) Sharing of Data. During the Collaborative Development Period, at each meeting of the JPT and each meeting of the JSC: (i) Exelixis shall deliver to Genentech an update on any ongoing Phase I Clinical Trial, and other Information regarding research or pre-clinical studies, with respect to the Existing Compound or any other Collaboration Compound (including any Pre-Opt-In Study), provided, however, that Exelixis is not required to provide [*] except as set forth in Section [*]; and (ii) Genentech shall deliver to Exelixis an update on the data and results generated on any Genentech Research conducted by Genentech or a Third Party contractor pursuant to Section

3.2(c) above. Each Party shall have the right to use the data and results received from the other Party under this Section 3.2(d) solely to perform its obligations under this Agreement or to exercise its rights under this Agreement, and, prior to Genentech exercising its Opt-In right, neither Party shall have the right to publish such data and results without the other Party's prior written consent; provided however that the restrictions set forth in this sentence shall not apply to Exelixis with respect to its development and commercialization of any Excluded Compound, Reversion Compound or product containing any of the foregoing, and further, after Genentech exercises its Opt-In right, shall not apply to Genentech with respect to its development and commercialization of any Collaboration Compound or product containing any of the foregoing.

(e) Genentech Guidance. Genentech may provide to Exelixis assistance and guidance regarding analysis and interpretation of clinical data, trial design, or other preclinical and clinical development activities undertaken by Exelixis under this Agreement, including the Phase I Clinical Trial undertaken with respect to the Existing Compound. To maximize the likelihood of that a Collaboration Compound will successfully reach the TCP or Development End-Point, Exelixis shall consider such guidance, and implement such guidance if it is reasonable to do so.

(f) Regulatory. Exelixis shall file and own all INDs for Collaboration Compounds that are the subjects of clinical trials to be carried out by Exelixis under this Agreement, subject to Section 3.5(b), and shall be responsible for the filing of any additional necessary regulatory documents in the Profit-Share Territory for such Collaboration Compounds during the period [*] for those Collaboration Compounds. If Genentech exercises its Opt-In right pursuant to Section 3.4, Exelixis shall [*], and [*] for, any additional regulatory documents or filings, including any NDAs, with respect to any Licensed Product.

3.3 Back-Up Work.

(a) Back-Up Work. In addition to the activities in Section 3.2(a) with respect to the Existing Compound, Exelixis shall engage in research, preclinical and/or clinical development activities regarding any Back-Up Compound(s) pursuant to this Section 3.3.

(i) Request by Genentech. [*], Genentech may request, through the JSC, that Exelixis perform back-up work, with the goal of advancing one Back-Up Compound [*] for each Exelixis Work Plan (as described below), [*] (the "**Back-Up Work**"). Such Back-Up Work may involve the [*]. During [*], Genentech shall have the right to make a subsequent request for Back-Up Work to be performed by Exelixis on any additional Back-Up Compound [*] of the activities set forth in the Exelixis Work Plan (as described below) [*]. Genentech shall specify the number of Exelixis FTEs to be engaged in such Back-Up Work at the time of making each such request.

(ii) Work Plan. As soon as possible after receiving a request from Genentech, but within no more than [*], Exelixis shall, in consultation with Genentech, create a draft Exelixis Work Plan that includes the following:

(1) summary of planned activities to reach the goal identified by Genentech; provided that if Exelixis concludes that it is impractical to reach the goal identified by Genentech prior to the end of the Back-Up Period using the number of FTEs specified by Genentech, then Exelixis shall so inform Genentech and the Parties may revise the goal accordingly; provided further that if [*], then Exelixis shall have the right, after consultation with Genentech, to [*], [*];

(2) the estimated timeline to complete the Back-Up Work using the number of FTEs requested by Genentech;

(3) the estimated budget for costs and expenses in connection with the engagement of any Third Party contractor pursuant to Section 3.9; and

(4) at Exelixis' option, [*] the number of FTEs [*] the timeline and budget for Genentech's [*].

(iii) **Approval of Exelixis Work Plan.** Each draft Exelixis Work Plan provided by Exelixis pursuant to Section 3.3(a)(ii) is subject to approval by Genentech, through the JSC. In approving the Exelixis Work Plan, Genentech shall have the right to make the final decision as to [*] (subject to Section [*]) and the [*] for the project on such Exelixis Work Plan. Exelixis, however, shall have the right to make the final decision as to the [*] such Exelixis Work Plan that are directed to [*], and as to whether Exelixis will [*] for such Back-Up Compound. Exelixis shall begin Back-Up Work within [*] after approval of an Exelixis Work Plan.

(iv) **Performance by Exelixis; Limits on Genentech Request.** Exelixis shall use Diligent Efforts to reach the goal of that Back-Up Work as set forth in the Exelixis Work Plan. Subject to the other provisions under this Section 3.3(a) and Section 3.3(b), Exelixis shall undertake Back-Up Work requested by Genentech, so long as Genentech makes its request [*] and so long as the total number of Exelixis FTEs for all Back-Up Work is between [*], inclusive.

(v) **Payment for Back-Up Work.** Genentech shall (i) pay Exelixis for the FTEs that have engaged in Back-Up Work, provided that the number of such FTEs is within the number requested by Genentech; and (ii) reimburse Exelixis for actual Third Party expenses incurred under an Exelixis Work Plan, pursuant to Section 3.10, up to a maximum of the amount of expenses that are within the scope of the Exelixis Work Plan approved pursuant to Section 3.3(a)(iii).

(vi) [*] under an Exelixis Work Plan. Subject to Section 3.3(a)(iv), Genentech shall have the right to [*] under a particular Exelixis Work Plan by [*], or to [*] under a particular Exelixis Work Plan by [*], provided that such [*], and the [*] in Genentech's [*] under such Exelixis Work Plan, shall not [*]. Any [*] an Exelixis Work Plan will result in [*] such Exelixis Work Plan. The Parties will [*] the Exelixis Work Plan to [*].

(b) **Completion of Work under the Exelixis Work Plan.** Exelixis shall only have the obligation to perform Back-Up Work during the Back-Up Period. If at the end of the Back-Up Period, Exelixis has not completed the planned activities set forth in an Exelixis Work Plan, then Exelixis shall have the choice of [*].

(c) **Exelixis Provision of Back-Up Compounds.** After Genentech exercises its Opt-In right under Section 3.4 below, Exelixis shall continue to use Diligent Efforts to deliver to Genentech a Back-Up Compound meeting the goal for the Exelixis Work Plan for such Back-Up Compound: (i) after reaching the goal specified in that approved Exelixis Work Plan; or (ii) when Exelixis stops work pursuant to Section 3.3(b) above if the Back-Up Compound then under development has [*], as the case may be. If the goal of an Exelixis Work Plan has been met prior to Genentech exercising its Opt-In right, then Exelixis shall deliver that Back-Up Compound upon Genentech exercising its Opt-In right. In the event Exelixis stops work pursuant to Section 3.3(b) above and the Back-Up Compound then under development has [*], then, after Genentech exercises its Opt-In right under Section 3.4 below, Exelixis shall [*], that [*], [*] (such [*]). Exelixis shall [*] is made based on [*] of the same [*] whether a compound [*], and shall [*]. For clarity, Exelixis shall have no obligation to deliver any Back-Up Compound [*].

3.4 Opt-In Right.

(a) **Delivery of Data.** Exelixis shall use Diligent Efforts to reach the Development End-Point for the Existing Compound. After Exelixis reaches the Development End-Point for such Existing Compound, Exelixis shall deliver to Genentech, for Genentech's review, a data package including [*] generated from the studies on **Exhibit D** [*] performed by Exelixis that have not been previously disclosed to Genentech by Exelixis; provided that, for those [*] after the Effective Date, Exelixis shall only [*] deliver to Genentech [*] that have been [*] the Development End Point.

(b) Initial Opportunity for Opt-In.

(i) Within [*] days after receiving a complete data package from Exelixis pursuant to Section 3.4(a) above for such Existing Compound (the last day of such period, the “**Initial Opt-In Expiration Date**”), Genentech shall notify Exelixis in writing of its decision as to whether it would exercise its right to obtain a license for the development and commercialization of Licensed Product(s) containing any Collaboration Compound (“**Opt-In**”).

(ii) If, as of the Initial Opt-In Expiration Date, Genentech notifies Exelixis in writing of its decision to exercise its Opt-In right with respect to such Existing Compound, then: (A) Genentech shall obtain a license, pursuant to Section 7.1, to develop and commercialize such Existing Compound and any other Collaboration Compounds; and (B) all [*] Existing Compound will [*], but will [*]. The Parties shall conduct further development activities and commercialization activities with respect to such Collaboration Compounds and the associated Licensed Products pursuant to this Agreement, with Genentech being the Party responsible for the further clinical development (after the completion or termination of Exelixis Work Plans being conducted by Exelixis on or after the date Genentech exercises its Opt-In rights) of all Collaboration Compound(s) and the commercialization of any Licensed Product(s) containing such Collaboration Compound(s).

(iii) If, by the Initial Opt-In Expiration Date, Genentech notifies Exelixis of its decision not to exercise its Opt-In right, or fails to notify Exelixis of its decision whether it elects to exercise its Opt-In right, then:

(1) If, as of the Initial Opt-In Expiration Date, there is no outstanding request from Genentech for Exelixis to undertake Back-Up Work, and Exelixis does not have any ongoing obligations under any Exelixis Work Plan, then this Agreement shall terminate, the Existing Compound shall become an “Excluded Compound,” and Section 11.3(c) applies. Exelixis shall have the full right (and not obligation) to research, develop, partner and commercialize the Excluded Compound without any further obligation to Genentech.

(2) If, as of the Initial Opt-In Expiration Date, there is an outstanding request from Genentech for Exelixis to undertake Back-Up Work or Exelixis has on-going obligations under any Exelixis Work Plan, then: (I) the Existing Compound shall thereupon become an Excluded Compound; (II) Genentech shall have no rights to develop or commercialize such Excluded Compound; and (III) Genentech shall retain an on-going right to Opt-In as set forth in Section 3.4(c) below. In such event:

(a) Exelixis shall retain all right, title and interest to such Excluded Compound, and shall have the full right (and not obligation) to research, develop, commercialize or partner such Excluded Compound without any obligation to Genentech.

(b) Exelixis shall, subject to Section 3.2 above, continue to use Diligent Efforts to perform its obligations pursuant to the then ongoing and any future Exelixis Work Plan(s).

(c) Subsequent Opportunities for Genentech to Exercise Its Opt-In Right.

(i) Upon completion of each Exelixis Work Plan (or upon a decision to cease Back-Up Work under an Exelixis Work Plan as authorized under Section 3.3(b)), Exelixis shall deliver to Genentech, for Genentech’s review, all data and results generated under such Exelixis Work Plan not previously disclosed to Genentech ([*], which is subject to Section [*]).

(ii) If Genentech has not exercised its Opt-In right under Section 3.4(b) by the Initial Opt-In Expiration Date or if the development of the Existing Compound is suspended before Genentech’s Opt-In right under Section 3.4(b) is triggered (such date on which the right is triggered under Section 3.4(b), the “**Trigger Date**”), then Genentech may exercise its Opt-In right at any time prior to [*] days after the later of: (I) Exelixis having delivered

the data package for the first completed Exelixis Work Plan pursuant to Section 3.4(c)(i) above; and (II) the Trigger Date (“**Subsequent Opt-In Expiration Date**”). On or before the Subsequent Opt-In Expiration Date, Genentech shall notify Exelixis in writing of its decision as to whether it would exercise the Opt-In (which is for a license for the development and commercialization of Licensed Product(s) containing any Back-Up Compounds that have met all the criteria for DC, [*]) delivered by Exelixis to Genentech [*]). If, as of the Subsequent Opt-In Expiration Date, Genentech notifies Exelixis in writing of its decision to exercise the Opt-In, then Section 3.4(b)(ii) shall apply to such Back-Up Compounds as if such Back-Up Compounds were the Existing Compound. If Genentech does not notify Exelixis of its decision to exercise its Opt-In right prior to the Subsequent Opt-In Expiration Date, then this Agreement shall terminate and thereupon all Collaboration Compounds shall become Excluded Compounds, and Exelixis shall have the full right (and not obligation) to research, develop, partner and commercialize all such Excluded Compounds without any further obligation to Genentech.

(iii) Exelixis shall not disclose any [*] to Genentech pursuant to this Section 3.4(c) except upon [*].

(iv) [*], each Back-Up Compound that does not reach DC pursuant to an Exelixis Work Plan shall, at the end of such Exelixis Work Plan, cease to be a Back-Up Compound or a Collaboration Compound; and, the obligations in Section [*] shall continue to apply to such compounds if such compounds [*].

(v) For clarity, each compound shall cease to be a Collaboration Compound when it becomes an Excluded Compound.

3.5 Development of Collaboration Compounds after Genentech Opt-In.

(a) **Creation of Development Plan.** Promptly after Exelixis receives Genentech’s notice of its decision to Opt-In pursuant to Section 3.4, Genentech shall provide to Exelixis, through the JPT or JSC, a plan for the further development of that Collaboration Compound and the associated Licensed Product which shall be incorporated herein by reference (the “**Development Plan**”). Genentech has final decision-making authority regarding any Development Plan; the Development Plan shall reflect Genentech’s responsibility for the further clinical development (after the completion of the Phase I Clinical Trial being conducted by Exelixis on the date Genentech exercises its Opt-In rights) of Collaboration Compound(s) in the Profit-Share Territory. Genentech may amend or update the Development Plan [*], and shall provide such updated Development Plan to [*] at scheduled meetings of the JSC, but no more frequently than annually. The Development Plan is [*].

(b) **Regulatory.** As between Genentech and Exelixis, Genentech shall be responsible for the filing of all regulatory documents, including without limitation all associated submissions (e.g., safety alerts, protocol submissions, NDAs, etc.), for responding to inquiries and correspondences from the Regulatory Authorities, and for the establishment of the safety database for the Profit Share Territory for any Licensed Products, and the monitoring of all clinical experiences and submission of all required reports throughout clinical development and commercialization of any Licensed Product, in each case in compliance with all laws and regulations. With respect to any Collaboration Compound(s) or Licensed Product(s) in the Profit Share Territory, Genentech shall provide Information to Exelixis and reasonably consult with Exelixis regarding any filings, and regarding significant or material notices, actions or requests from or by Regulatory Authorities (whether such filings, notices, questions, actions and requests are related to testing, manufacture, distribution or facilities for that Licensed Product). Exelixis shall, at Genentech’s request, review and comment on filings, submissions, and responses to Regulatory Authorities related to any Licensed Product(s) in the Profit Share Territory.

(c) **Technical Assistance and Transfer Plan.** Promptly after Exelixis receives Genentech’s decision to Opt-In pursuant to Section 3.4, the Parties shall also agree on a transfer plan under which Exelixis shall use Diligent Efforts to transfer to Genentech, in a timely manner: (i) [*] for Collaboration Compound(s); (ii) [*] in connection with the [*] for such Collaboration Compounds; (iii) at [*], all [*] Exelixis [*] such Collaboration Compounds; (iv) technology transfer of the Information associated with Manufacturing for that Collaboration

Compound, either to Genentech or a Third Party manufacturer designated by Genentech; and (v) the scope of continuing technical assistance reasonably required for Genentech to continue to develop and Manufacture such Collaboration Compound(s), and the terms under which such technical assistance will be provided (the “**Transfer Plan**”). [*] is responsible for the [*] performance under items (i) through (iv) listed above.

(d) Development Costs. Genentech (or its sublicensees) shall bear one hundred percent (100%) of all Development Costs with respect to a Collaboration Compound and with respect to the associated Licensed Product after Genentech exercises its Opt-In rights under Section 3.4(b) or Section 3.4(c).

3.6 Development of Collaboration Compound(s) and Licensed Product(s) in the Other Territory. Genentech (or its Affiliates or sublicensees) shall have the sole responsibility and authority to, at its sole expense, develop Collaboration Compound(s) and/or Licensed Product(s) in the Other Territory and file for Regulatory Approvals for such Collaboration Compound(s) and/or Licensed Product(s) in the Other Territory; provided that Genentech shall use Diligent Efforts to obtain Regulatory Approvals for at least [*].

3.7 Competing Programs; Exclusivity.

(a) Genentech may, at its own expense and outside the scope of this Collaboration, conduct or have conducted programs for the [*] compounds that [*] (each such program, a “**Competing Program**”), provided that Genentech may not use in any such Competing Program any Exelixis Licensed Know-How, Confidential Information of Exelixis, or Materials transferred from Exelixis to Genentech under Section 3.2(b) and Section 3.3(c).

(b) Exelixis’ Exclusivity Obligations.

(i) For the term of this Agreement ([*], subject to Sections 3.7(b)(ii) and 3.7(b)(iii), Exelixis [*]. For the term of this Agreement ([*]), subject to Sections 3.7(b)(ii) and 3.7(b)(iii), Exelixis [*] with respect to, [*] related to, [*], and [*], any [*] except: (i) to the extent Exelixis has rights to an Excluded Compound under Sections 7.1 and 7.2, Exelixis may exercise such rights; (ii) Exelixis shall have the right to conduct research and development as set forth under an Exelixis Work Plan, pursuant to Section 3.2, or as otherwise expressly authorized by Genentech in writing; (iii) Exelixis shall have the right to conduct research within the scope of its retained rights under Section 7.1(e), [*] provide [*] to [*] with respect to [*]; and (iv) Exelixis shall have the right to screen its libraries against targets other than MEK (either for its internal programs or in collaboration with a Third Party), [*], and if [*], then Exelixis shall have the right to make and use such [*] for the purpose of [*], provided that [*], or any [*]. Exelixis [*] the right to [*] in (A) any research or development [*], or (B) engage in any other research or development activities, in either case with the purpose of [*], in either case by itself or in collaboration with a Third Party, [*].

(ii) Notwithstanding anything to the contrary, Section 3.7(b)(i) shall not apply to any [*] that, as of the Effective Date, [*] and has been [*] as a result of a [*]; and (B) is directed to [*].

(iii) Nothing in this Section 3.7(b) shall be interpreted as prohibiting Exelixis from performing activities intended to facilitate Exelixis’ compliance with the obligations of this Section 3.7(b).

3.8 Conduct of Development. The Parties shall use Diligent Efforts to conduct their respective tasks throughout the Collaboration in good scientific manner, and in compliance in all material respects with the requirements of all applicable laws, rules and regulations and all applicable good laboratory practices. After Genentech exercises its Opt-In right pursuant to Section 3.4, Genentech shall use Diligent Efforts to develop and commercialize one or more Licensed Products during the term of this Agreement. It is understood that activities by Genentech’s Affiliates or sublicensees will be considered as Genentech’s activities under this Agreement for purposes of determining whether Genentech has complied with its obligations under this Section 3.8, but Genentech shall be primarily liable and responsible for all such activities conducted by Genentech’s Affiliates or sublicensees. Exelixis may notify Genentech in writing if Exelixis in good faith believes that Genentech is not meeting its diligence obligations set forth in this

Section 3.8 and the Parties will meet and discuss the matter in good faith. Exelixis may further request review of Genentech's records generated and maintained as required under Article 6 below, to the extent those records relate to development and commercialization of a Licensed Product. If such matter is still not resolved to Exelixis' satisfaction, then the matter will be considered a dispute between the Parties and subject to the dispute resolution procedures, with the associated rights and responsibilities, under this Agreement.

3.9 [*] Exelixis to Engage Third Parties. Exelixis [*] use Third Party subcontractors or any other Third Parties to perform any of its obligations under this Agreement [*]. [*] Exelixis may engage a Third Party contractor [*]: (a) with respect to its [*], subject to the terms of Section [*]; (b) with respect to [*] activities such as [*]; (c) with respect to [*] activities; or (d) as specified in [*]; provided that all [*] by such Third Party subcontractor [*] and [*]. Notwithstanding any delegation of obligations under this Agreement, Exelixis shall remain primarily liable and responsible for the performance of all of its obligations.

3.10 Exelixis FTEs; Invoices. Exelixis shall assign FTEs for activities it is required to perform under an Exelixis Work Plan at the level set forth in the Exelixis Work Plan, subject to Section 3.3(a)(v). Genentech shall reimburse Exelixis for the number FTEs who actually performed activities under Section 3.3(a) at a rate of [*] per FTE per calendar quarter. Exelixis shall provide an invoice to Genentech within [*] days after the end of each calendar quarter setting forth: (a) the number of FTEs engaged during the preceding calendar quarter by Exelixis for such activities; and (b) the amount and underlying calculation for any other costs Genentech is required under this Agreement to reimburse directly to Exelixis. Genentech shall pay amounts due within [*] days after receipt of such invoice.

ARTICLE 4

MANUFACTURE AND SUPPLY

4.1 Overview.

(a) Prior to exercise of Genentech's Opt-In pursuant to Section 3.4, Exelixis shall be the Party responsible for the Manufacture of Collaboration Compound(s) in the Profit-Share Territory to supply the activities to be conducted prior to such Opt-In exercise or pursuant to an Exelixis Work Plan, either by itself or through one or more Third Parties (subject to Section [*]); such Manufacture is [*].

(b) Upon Genentech's exercise of its Opt-In, Exelixis shall be relieved from any Manufacturing obligations for any Collaboration Compound, except for those Collaboration Compounds for which Exelixis is performing Back-Up Work under an Exelixis Work Plan. Upon being relieved of its Manufacturing obligations, Exelixis shall transfer the Manufacturing-related activities for those Collaboration Compounds for which it no longer has Manufacturing obligations to Genentech, pursuant to Section 3.5(c), within [*] after those obligations cease. Where Genentech has taken over the responsibility for the Manufacture of any Collaboration Compound(s) and related Licensed Product(s), Genentech may carry out such responsibilities either by itself or through one or more Third Parties. Other than costs pursuant to carrying out the Manufacturing-related activities under the Transfer Plan (which costs are borne by [*] pursuant to Section 3.5(c)), Fully Burdened Manufacturing Costs (as defined in the Financial Appendix, and expressly including Third Party suppliers) incurred by Genentech (including in connection with engaging Third Party suppliers) for Collaboration Compound(s) and/or Licensed Product(s) with be borne as follows: (i) if the product is for use in [*] (including [*]), such Fully Burdened Manufacturing Costs shall be [*] and shall be borne [*]; (ii) if the product is for [*], such Fully Burdened Manufacturing Costs shall be borne [*]; and (iii) if the product is for [*], such Fully Burdened Manufacturing Costs shall be [*] and [*].

4.2 Engaging Third Party Manufacturers. It is understood that when a Party engages a non-licensed Affiliate or any Third Party to Manufacture any Licensed Product, that engagement may require a limited license or limited sublicense of rights obtained from the other Party under this Agreement. In addition to each Party's respective rights to sublicense under Article 7, the Party engaging such Third Party (or non-licensed Affiliate) may disclose Confidential Information of the other Party solely as necessary to fulfill the business purposes of the engagement, and

then only pursuant to terms and conditions that are substantially as protective of that Confidential Information as the terms and conditions of this Agreement. Notwithstanding any delegation of obligations under this Agreement by a Party to its Affiliates or to a Third Party, the Party shall remain primarily liable and responsible for the performance of all of its obligations under this Agreement and for causing such Affiliates or Third Parties to act in a manner consistent herewith. In addition, such Party shall assure that any intellectual property developed by its Affiliates or such Third Parties shall be Controlled by that Party and included in and subject to the licenses set forth in Article 7. The Party contracting with such Third Party shall not agree to any term that would make it unable to comply with its obligations under this Agreement.

ARTICLE 5

COMMERCIALIZATION

5.1 Commercialization in the Profit-Share Territory. As between Genentech and Exelixis, Genentech (alone or through its Affiliates or sublicensees) shall be the Party responsible for commercialization of any Licensed Product in the Profit-Share Territory, and shall use Diligent Efforts to commercialize any and all Licensed Product(s) in the Profit-Share Territory after such Licensed Product has received Regulatory Approval in the Profit-Share Territory. If Exelixis exercises its co-promotion option pursuant to Section 5.6 below, then Exelixis shall participate in promotional activities related to such commercialization as set forth under the Co-Promotion Agreement entered into pursuant to Section 5.6, and shall use Diligent Efforts to carry out its responsibilities under that Co-Promotion Agreement and under any Joint Promotion Plan created under Section 2.3(b). As between Exelixis and Genentech, Genentech [*] of the Licensed Products in the Profit Share Territory, and shall have the [*] of the Licensed Product in the Profit-Share Territory.

5.2 Commercialization in the Other Territory. As between Genentech and Exelixis, Genentech (alone or through its Affiliate or sublicensees) shall be the Party responsible for commercialization of any Licensed Product(s) in the Other Territory, and shall do so at its own expense, using Diligent Efforts to commercialize a Licensed Product in each of the Major Market Countries after such Licensed Product has received Regulatory Approval in such country. Subject to the foregoing obligation to use Diligent Efforts, all decisions regarding such commercialization shall be made at Genentech's sole discretion, including decisions regarding [*] of the Licensed Product in the Other Territory. As between Exelixis and Genentech, Genentech (alone or through Affiliates or sublicensees) [*] the Licensed Products in the Other Territory, and shall [*] in connection with such commercialization in the Other Territory.

5.3 Cost Sharing. All costs incurred and all revenues received by the Parties in connection with the commercialization of Licensed Products in the Profit-Share Territory shall be calculated as part of the Operating Profit (Losses) pursuant to the Financial Appendix, excluding any Development Costs, which shall be borne solely by Genentech.

5.4 Product Labeling; Promotional Materials. Genentech shall be responsible for designing and supplying the product labeling and promotional materials for the Licensed Product for the Profit-Share Territory. Genentech shall be responsible as to how and the manner in which Genentech shall be presented and described to the medical community in any promotional materials and the placement of the names and logos of the Parties therein, in each case as permitted by applicable law and with the labeling for the Licensed Product approved by the applicable Regulatory Authority.

5.5 Sales and Distribution. Genentech shall be [*] responsible for handling all returns, order processing, invoicing and collection, distribution, and inventory and receivables for the Licensed Product throughout the Profit-Share Territory. Genentech shall [*] for establishing and modifying the terms and conditions with respect to the sale of the Licensed Product, including any terms and conditions relating to or affecting the price at which the Licensed Product shall be sold, discounts available to any Third Party payers (including, without limitation, managed care providers, indemnity plans, unions, self insured entities, and government payer, insurance or contracting programs such as Medicare, Medicaid, or the U.S. Dept. of Veterans Affairs), any discount attributable to payments on receivables,

distribution of the Licensed Product, and credits, price adjustments, or other discounts and allowances to be granted or refused; provided, however, that Genentech shall [*] when doing the foregoing.

5.6 Exelixis' Co-Promotion Option. Exelixis has an option to co-promote Licensed Products in the Profit-Share Territory. Such co-promotion would mean that Exelixis could provide up to twenty-five percent (25%) of the total sales force for the Licensed Product in the Profit-Share Territory ([*]), and would call on customers and otherwise engage in promotional activities using that sales force, consistent with the terms of this Agreement and a co-promotion agreement containing commercially reasonable terms consistent with the terms and conditions outlined in **Exhibit F** attached hereto (such agreement, the "**Co-Promotion Agreement**"). Genentech shall keep Exelixis informed of its progress [*] for any Licensed Product in the Profit-Share Territory. Once Genentech notifies Exelixis that [*], Exelixis shall have the right but not the obligation to exercise its co-promotion option by providing notice to Genentech of its decision to so do. Exelixis' option expires if not exercised within twelve (12) months after notice from Genentech. [*] the foregoing option, Exelixis [*] the Licensed Product, including: (a) [*]; and (b) an [*] of Exelixis, which [*].

5.7 Compliance. Each Party shall comply with all applicable laws and regulations relating to activities performed or to be performed by such Party (or its Affiliates, contractor(s) or sublicensee(s)) under or in relation to the commercialization of the Licensed Product pursuant to this Agreement. Each Party represents, warrants and covenants to the other Party that, as of the Effective Date and during the term of this Agreement, such Party and its Affiliates have adequate procedures in place: (a) to ensure their compliance with such laws and regulations; (b) to bring any noncompliance therewith by any of the foregoing entities to its attention; and (c) to promptly remedy any such noncompliance.

ARTICLE 6

RECORDS

6.1 Records. Each Party shall maintain complete and accurate records of: (a) all significant development, Manufacturing and commercialization events and activities conducted by it or on its behalf related to a Collaboration Compound or Licensed Product; and (b) all significant Information generated by it or on its behalf in connection with research and development of Collaboration Compounds or Licensed Products under this Agreement. Such records shall be in sufficient detail to properly reflect, in good scientific manner, all significant work done and results of studies and trial undertaken, and further shall be at a level of detail appropriate for patent and regulatory purposes.

6.2 Progress Information. Each Party shall use Diligent Efforts to keep the other Party informed of its research, development and commercialization (including promotional) activities hereunder, and shall provide to the other Party's representatives on the JPT or JSC, as appropriate, regular summary updates at each meeting. If reasonably necessary for a Party to perform its work under this Agreement or to exercise its rights under this Agreement, that Party may request that the other Party provide more detailed information and data regarding the updates it earlier provided, and the other Party shall promptly provide the requesting Party with information and data as is reasonably available and reasonably related to the work under this Agreement. Neither Party is required to generate additional data or prepare additional reports to comply with the foregoing obligation. All such reports, information and data provided by a Party shall be considered the providing Party's Confidential Information.

ARTICLE 7

LICENSES

7.1 Licenses to Genentech.

(a) Research License. Subject to the terms of this Article 7 and Sections 3.2(c), 3.2(d) and 3.7(a), Exelixis hereby agrees to grant and hereby grants (on behalf of itself and its Affiliates) Genentech a worldwide, non-exclusive, royalty-free license (with the right to grant and authorize sublicenses solely to mutually agreed Affiliates

and Third Party contractors in accordance with Section 3.2(c)(ii)), under the Exelixis Licensed IP, to use the Existing Compound for purposes of engaging in the Genentech Research (as defined in Section 3.2(c)) or Other Pre-Opt-In Studies. The foregoing license shall expire on the Initial Opt-In Expiration Date if Genentech has not exercised its Opt-In right by such date.

(b) Development and Commercialization License. Subject to the terms of this Article 7 and Section 3.7(a), Exelixis agrees to grant and hereby grants (on behalf of itself and its Affiliates) Genentech and its Affiliates, effective upon Genentech's exercise of its Opt-In right pursuant to Section 3.4(b) or Section 3.4(c), an exclusive, worldwide, revenue-bearing license (with the right to grant and authorize sublicenses pursuant to Section 7.1(d)) under the Exelixis Licensed IP, to make, have made, use, and import Collaboration Compound(s) in the Field and to make, have made, use, sell, offer for sale, and import Licensed Products in the Field; provided, however, that with respect to the [*], such license [*] (other than a Collaboration Compound). Notwithstanding the limitation to the Field, the foregoing license expressly includes the right to test Collaboration Compounds in animals for the sole purpose of developing and commercializing Licensed Products in the Field.

(c) License for Diagnostic Products. Subject to the terms of this Article 7 and Section 3.7(a), Exelixis agrees to grant and hereby grants (on behalf of itself and its Affiliates) Genentech and its Affiliates, effective upon Genentech's exercise of its Opt-In right pursuant to Section 3.4(b) or 3.4(c), a worldwide, royalty-free license (with the right to grant and authorize sublicenses pursuant to Section 7.1(d) below), under the Exelixis Diagnostic IP, to make, have made, use, sell, offer for sale and import Diagnostic Products solely for the purposes of supporting the development and commercialization of Licensed Products. The foregoing license is [*] Collaboration Compound, and [*]. For clarity, the right to sell Diagnostic Products under the foregoing license shall be limited to those times and countries in which Licensed Products are sold by Genentech or its Affiliates or sublicensees.

(d) Sublicensing. For those licenses granted under this Section 7.1 that grant Genentech the right to grant and authorize sublicenses, Genentech shall grant such sublicenses in a manner consistent with the terms and conditions of this Agreement. Genentech shall also provide to Exelixis [*]. Genentech shall remain responsible for each of its permitted sublicensees' compliance with the material and applicable terms and conditions of this Agreement. Notwithstanding the foregoing, Genentech shall not grant to any Third Party any sublicense of its license under Section 7.1(b) that includes the right to [*], except: (i) when the Third Party is [*]; (ii) when notwithstanding the sublicense, Genentech [*] marketing and commercialization of such Licensed Product; or (iii) [*].

(e) Exelixis Retained Rights. Notwithstanding the licenses granted in this Section 7.1, Exelixis shall retain all rights under the Exelixis Licensed IP: (i) to make, have made, use and modify Collaboration Compounds solely: (1) for purpose of [*] (including [*] performed by Exelixis pursuant to [*]); (2) to perform Exelixis' obligations under this Agreement; and (3) to the extent subcontracting is authorized under this Agreement, to grant subcontractors the right to perform Exelixis' obligations under this Agreement; and (ii) to make, have made, use, sell, offer for sale and import any Excluded Compounds and products containing Excluded Compounds (provided that such products do not also contain Collaboration Compounds). The foregoing rights retained by Exelixis with respect to Excluded Compounds do not extend to [*], and [*]. The foregoing rights do extend to [*] and other [*]. Nothing in this Section 7.1(e) shall be interpreted as implying that any Excluded Compound is a Collaboration Compound. Once a compound becomes an Excluded Compound, it automatically ceases being a Collaboration Compound.

7.2 Licenses to Exelixis.

(a) Research and Development License. Subject to the terms of Article 7 and Section 3.7(b), Genentech agrees to grant and hereby grants (on behalf of itself and its Affiliates) Exelixis, a non-exclusive, royalty-free license (without the right to grant sublicenses except in connection with engaging a subcontractor pursuant to Section 3.8), under the Genentech Research IP, solely to perform Exelixis' obligations under this Agreement.

(b) License for Co-Promotion Activities. Subject to the terms of Article 7 and Section 3.7(b), during any period in which Exelixis is engaging in co-promotion under this Agreement after having exercised its co-

promotion option pursuant to Section 5.6, Genentech agrees to grant and hereby grants (on behalf of itself and its Affiliates) Exelixis a co-exclusive (with Genentech, its permitted Affiliates and sublicensees) license under the Genentech Research IP to offer for sale (but not to sell) Licensed Products in the Field in the Profit-Share Territory.

(c) License to Inventions from Genentech Research. Subject to the terms of Article 7 and Section 3.7(b), Genentech agrees to grant and hereby grants (on behalf of itself and its Affiliates) Exelixis, a non-exclusive, royalty-free license (with the right to grant sublicenses), under any Patents on inventions created and reduced to practice, and any data and results generated, in the course of performing Genentech Research, to make (and have made), use, import, offer for sale and sell any product or practice any method or process, and Exelixis shall have the right to use any data or results required to be delivered under Section 3.2(d) to do so.

(d) Excluded Compounds. Subject to the terms of Article 7 (including Section 7.1(e)), Genentech agrees to grant and hereby grants (on behalf of itself and its Affiliates) Exelixis, effective upon the Existing Compound becoming an Excluded Compound under Section 3.4(b) or Section 3.4(c) a worldwide, exclusive, royalty-free, perpetual, irrevocable license (with the right to grant sublicenses), under the Genentech Licensed IP, to make, have made, use, sell, offer for sale and import Excluded Compounds and products containing Excluded Compounds.

7.3 Information and Materials. The Parties understand and agree that neither Party is required to provide the other with: (a) any Information other than Information either expressly required to be provided or to which access is expressly described or required under this Agreement; or (b) any Materials other than, where Exelixis is the providing Party, the Collaboration Compounds to be provided by Exelixis pursuant to Section 3.2(b) and Section 3.3(c).

7.4 Genentech Use of Collaboration Compounds. Genentech shall not perform any [*] of, any Collaboration Compound (other than [*]) at any time after Genentech exercises its Opt-In right. Any [*] at any time after Genentech exercises its Opt-In right shall be for the sole purpose of researching, developing and commercializing Licensed Products in the Field.

7.5 No Additional Licenses. Except as expressly provided in Sections 7.1, 7.2 and 11.3, nothing shall grant either Party any right, title or interest in and to the intellectual property rights of the other Party (either expressly or by implication or estoppel). Neither Party has a license under the other Party's Licensed Patents for activities outside the scope of the licenses granted, or for Patents, Information or Materials not within the scope of the licenses granted.

ARTICLE 8

COMPENSATION

8.1 Upfront Fee. Genentech shall pay Exelixis a one-time fee of twenty-five million dollars (\$25,000,000) within [*] days after the Effective Date. Such fee shall be non-creditable and nonrefundable.

8.2 Opt-In Fees. Genentech shall pay Exelixis a non-refundable and non-creditable fee in consideration for its exercising the Opt-In right pursuant to Section 3.4, as follows: (a) if Genentech exercises its Opt-In right pursuant to Section 3.4(b) (*i.e.*, with respect to an Existing Compound and all other Collaboration Compounds), Genentech shall pay Exelixis \$[*] within [*] days of exercising such right pursuant to Section 3.4(b); or (b) if Genentech exercises its Opt-In right pursuant to Section 3.4(c) (*i.e.*, not with respect to an Existing Compound but with respect to a Back-Up Compound), then Genentech shall pay Exelixis the fee(s) as set forth in the table below:

21.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Opt-In Payment within [*]			[*] within [*] after [*] (as defined below)
[*]	[*]	[*]	
[*]			
[\$ [*]	N/A	N/A	[\$ [*]
N/A	[\$ [*]	N/A	[\$ [*]
N/A	N/A	[\$ [*]	[\$ [*]

* If Genentech exercises its Opt-In right when the [*], and subsequent to such Opt-In, Genentech [*], in each case pursuant to [*], then instead of making [*], Genentech shall pay Exelixis \$[*] within [*] days after [*], and another \$[*] within [*] days after a [*].

8.3 Milestone Payments.

(a) **Licensed Products Containing the Existing Compound.** In recognition of Exelixis' submission on December 20, 2006 of an IND for a Licensed Product containing an Existing Compound, Genentech shall pay Exelixis the one-time, non-refundable and non-creditable milestone payment in the amount of \$15,000,000 no later than January 19, 2007.

(b) **Licensed Products containing Back-Up Compounds.** Genentech shall pay Exelixis the one-time non-refundable and non-creditable fees set forth in the tables below within [*] days of a Licensed Product containing a Back-Up Compound meeting the milestone events described in the table below.

	[*]	[*]
First Licensed Product containing a [*] Back-Up Compound	[\$ [*]	[\$ [*]
Second Licensed Product containing a [*] Back-Up Compound	[\$ [*]	[\$ [*]

For clarity, in no event shall Genentech's payment obligation under this Section 8.3(b) exceed \$[*].

(c) Definitions and Interpretations for Above Tables.

(i) "[*]" means a [*] (or successor thereof), [*] (or a substantially similar [*], to [*] of a Licensed Product.

(ii) "[*] **Back-Up Compound**" means, at the time such Back-Up Compound meets the applicable milestone, there is [*] Compound by [*], such [*] Compound being either the [*] Compound [*] in its state of development.

(iii) **Same Active Ingredient.** Products that contain the same active pharmaceutical ingredient, but different [*] of a particular Collaboration Compound shall [*] Licensed Products for this Section 8.3 unless such products contain [*] Compound.

8.4 Payments.

(a) Profit Share in the Profit-Share Territory.

(i) **Profit-Share Ratio.** The Parties shall share Operating Profit (Loss) for Licensed Product(s) sold for the Profit-Share Territory as follows:

[*] Licensed Product in the Profit-Share Territory for a Particular Calendar Year	Genentech's Share of Operating Profit (Loss)	Exelixis' Share of Operating Profit (Loss)
First \$200 million	50%	50%
[*]	[*]%	[*]%
Above \$400 million	70%	30%

(ii) **Quarterly Calculations.** Each Party's share of Operating Profit (Loss) will be determined on a calendar quarterly basis, using a weighted average based on forecasted Actual Sales for the Licensed Product in the Profit Share Territory for the then current calendar year and actual Operating Profit (Loss) for the completed calendar quarter.

(iii) **Quarterly Reconciliation.** On a calendar quarterly basis after the end of each calendar quarter, each Party's actual share of Operating Profit (Loss) will be calculated and reconciled as follows: the forecasted Actual Sales for the Licensed Product in the Profit Share Territory for the then current calendar year will be adjusted based on the actual sales booked for the recently-completed calendar quarter and the forecasted Actual Sales for all remaining calendar quarters. Then, each Party's share of cumulative Operating Profit (Loss) for all of the completed calendar quarter(s) for such calendar year will be determined using a weighted average based on such newly-calculated forecasted Actual Sales and the actual Operating Profit (Loss) for all such completed calendar quarter(s) for such calendar year. The payment to be made by one Party to the other Party for such recently-completed calendar quarter shall reflect such reconciliation, so that each Party will receive its share of then-current cumulative Operating Profit (Loss). This calculation is illustrated by the example in **Exhibit A**.

(iv) **Reconciliation Payments.** Within [*] days after the end of each calendar quarter for as long as any Licensed Product is being commercialized in the Profit Share Territory, Exelixis shall submit to Genentech a statement setting forth any Operating Profit (Loss) obtained by Exelixis in the Profit-Share Territory during such calendar quarter, together with the information detailing the basis for the calculation of such Operating Profit (Loss), including the individual components of such Operating Profit (Loss). Genentech shall consolidate any Operating Profit (Loss) reported by Exelixis with those obtained directly by Genentech. Genentech shall, within [*] days after receiving such statement from Exelixis, notify Exelixis whether a reconciliation payment is due from one Party to the other based on its calculation pursuant to Section 8.4(a)(iii) above, and if so, the amount of such reconciliation payment, so that the Parties will share the Operating Profit (Loss) for such calendar quarter in the ratio set forth in Section 8.4(a)(i) using the mechanism set forth in Section 8.4(a)(iii). The Party required to pay such reconciliation payment shall submit such payment to the other Party within [*] days of receiving such notice from Genentech.

(v) **Budget Overrun.** If, for any calendar quarter: (A) Exelixis' share of the budgeted cost for the Operating Profit (Loss) [*] for such calendar quarter [*] is in the aggregate [*] (the "**Budget Overrun**")

by at least [*] dollars (\$[*]); and (B) a [*] for such calendar quarter, then Exelixis shall [*] such Budget Overrun [*] [*] Exelixis to Genentech [*]. If Exelixis' share of the budgeted cost for the Operating Profit (Loss) [*] for such [*] is in the aggregate [*] what Genentech [*] such calendar year, then the [*] the budget used in the calculation of the Budget Overrun above.

(b) Royalty Payments for the Other Territory.

(i) Subject to Section 8.4(b)(ii) below, Genentech shall pay Exelixis non-refundable (subject to the audit provisions in this Agreement) royalties for each Licensed Product sold in the Other Territory, as follows:

(1) [*] percent ([*]%) of the aggregate Net Sales of such Licensed Product in the Other Territory for the portion of Net Sales in a calendar year in the Other Territory that is below [*] dollars (\$[*]);

(2) [*] percent ([*]%) of the aggregate Net Sales of such Licensed Product in the Other Territory for the portion of Net Sales in a calendar year in the Other Territory that equals to or exceeds [*] dollars (\$[*]) and is below [*] dollars (\$[*]); and

(3) [*] percent ([*]%) of the aggregate Net Sales of such Licensed Product in the Other Territory for the portion of Net Sales in a calendar year in the Other Territory that equals to or exceeds [*] dollars (\$[*]).

(ii) Genentech's royalty obligations shall expire, on a product-by-product and country-by-country basis, upon the later to occur of: (1) the expiration of the last-to-expire Valid Claim of the [*] that Covers such Licensed Product in such country; and (2) the [*] of the First Commercial Sale of such Licensed Product in such country. In the event that [*], Genentech's royalty obligations under this Section 8.4(b) [*] for such Licensed Product [*] (as defined below in this Section 8.4(b)(ii)) of the [*] such Licensed Product in such country. For purposes of this Agreement, "[*]" means any [*] that has not: (I) [*]; (II) been [*] from which [*]; or (III) been [*] or otherwise. For purposes of this Agreement, a "[*]," with respect to any Licensed Product [*], is [*] that: (A) [*] (or [*]) [*] such Licensed Product; and (B) [*] or otherwise, [*] of the foregoing), including [*] to the foregoing, whether for [*].

8.5 [*] and Royalties for [*].

(a) Genentech shall pay Exelixis a royalty on [*] ([*] Net Sales for a Licensed Product under this Agreement) of [*] percent ([*]%), as follows:

(i) [*] percent ([*]%) if all of the following are true: (A) Genentech [*]; (B) Genentech has [*]; (C) a Licensed Product for which [*] the country of sale; and (D) there is a [*] the Licensed Product in the country of sale; or

(ii) [*] percent ([*]%) if Genentech is not paying the amounts under Section 8.4(a)(i), but a [*] is being sold and either: (A) the manufacture, use, sale, offer for sale or import of that [*] would infringe any of the [*] in the country of sale; or (B) Genentech [*] development or commercialization of that [*], but only for the later of: (x) the expiration of a Valid Claim of a [*] that would be infringed by the manufacture, use, sale, offer for sale or import of a [*]; or (y) [*] after the First Commercial Sale of such [*] in such country (where, for purposes of this Section 8.5(a)(ii), "First Commercial Sale" is defined as set forth in Section 1.32, with each instance [*]).

(b) For purposes of Section 8.5(a), the "[*]" are Patents that claim a [*], where a "[*]" is any [*] that is any or all of the following: (i) [*]; (ii) [*], prior to [*], using: (A) [*]; or (B) any [*] including [*], so long as [*]. For purposes of this Section 8.5(b)(ii)(A), "[*]" means, with respect to the use of a [*], the

[*] from the [*], and ending [*], but [*] in any country. For purposes of this Section 8.5(b)(ii)(A), the [*] that is disclosed in Exelixis Licensed Patents [*] considered [*].

(c) The obligation in Section 8.5(a) above [*], except as follows: (i) the royalty under Section 8.5(a)(i) [*] (but the royalty under Section 8.5(a)(ii) [*]) if the Agreement [*] a Licensed Product; and (ii) [*].

8.6 Third Party Patent Payments. During the term of this Agreement, if [*] that the development and commercialization of a Licensed Product requires a license to a Third Party's Patents for the Profit-Share Territory, or if [*] for the Other Territory, then the costs of obtaining such Third Party license (including any and all upfront payments, milestone payments and royalties) shall be deemed "**Third Party Patent Payments.**"

(a) **For the Profit-Share Territory.** All Third Party Patent Payments incurred by a Party after the First Commercial Sale of a Licensed Product in the Profit-Share Territory shall be [*]. Where Genentech (or its Affiliate or sublicensee) is making a Third Party Patent Payment with respect to worldwide rights, the amounts of the Third Party Patent Payment will be [*].

(b) **For the Other Territory.** All Third Party Patent Payments incurred by Genentech or its sublicensee in the Other Territory shall be [*].

8.7 Royalty Reports and Payments. Within [*] days after the end of the calendar quarter in which the First Commercial Sale occurs, and within [*] days after the end of each calendar quarter thereafter, Genentech shall provide Exelixis: (a) a payment of all royalties owed for such quarter; and (b) a report of Net Sales of Licensed Products in the Other Territory in sufficient detail to permit confirmation of the accuracy of the royalty payment made, including Net Sales, the royalties payable (in dollars), and the exchange rates used. In addition, within [*] days after the end of each such calendar quarter, Genentech shall provide Exelixis with a good faith estimate of the Net Sales for such calendar quarter, for those territories for which Genentech would owe a royalty. Genentech shall keep, for [*] years from the date of each payment of royalties, complete and accurate records of sales of each Licensed Product, in sufficient detail to allow the royalties accruing to be determined accurately. Genentech shall maintain all records as reasonably required for GAAP.

8.8 Currency. All references to "**dollars**" or "**\$**" means the legal currency of the United States. All payments to be made under this Agreement shall be made in United States dollars, unless expressly specified to the contrary herein. Net Sales outside of the United States shall be first determined in the currency in which they are earned and shall then be converted into an amount in United States dollars using the conversion rate reported by Reuters Ltd. on for the last day of the calendar quarter for which such payment is being determined.

8.9 Payment Type. Payment due under this Agreement must be paid in immediately available funds by wire transfer to an account to be identified by the payee or set forth in the Financial Appendix.

8.10 Withholding of Taxes. Each Party may withhold from payments due to the other Party amounts for payment of any withholding tax that is required by law to be paid to any taxing authority with respect to such payments. The Party that has withheld that tax shall provide to the other Party all relevant documents and correspondence and written evidence of the payment of such tax, and shall also provide to the Party from whose payment that tax was withheld any other cooperation or assistance on a reasonable basis as may be necessary to enable that Party subject to withholding to claim exemption from such withholding taxes and to receive a full refund of such withholding tax or claim a foreign tax credit. The Parties agree to cooperate with each other, in the event a Party seeks deductions under any double taxation or other similar treaty or agreement from time to time in force.

8.11 Late Payments. Any amounts not paid when due under this Agreement shall be subject to interest from the date payment is due through and including the date upon which payment is received at a rate equal to [*] rate, as such rate is published in the Federal Reserve Bulletin H.15 or successor thereto on the last business day of the

applicable quarter prior to the date on which such payment is due, calculated daily on the basis of a 365-day year, or, if lower, the highest rate permitted under applicable law.

8.12 Blocked Currency. If, at any time, legal restrictions prevent the prompt remittance of part or all royalties with respect to any country where any Licensed Product is sold, payment shall be made through such lawful means or methods as the Party paying may determine.

8.13 Records and Audit. Each Party shall keep full, true and accurate books of account containing all particulars that may be necessary for the purpose of showing Net Sales, royalties, Operating Profit (Loss), or, with respect to Exelixis, any project-based accounting or other method for determining the number of FTEs assigned to activities subject to reimbursement under this Agreement. Each Party shall have the right for a period of [*] after receiving any report or statement with respect to royalties due and payable to appoint an independent accounting firm reasonably acceptable to the other Party to inspect the relevant records of such other Party (as to its own accounts or to those of its Affiliates) to verify such reports, statements, records or books of accounts, as applicable. Upon request of the Party requesting inspection, and reasonable and customary notice (at least [*] in advance) to the Party whose records are being inspected, the Party whose records are being inspected shall make those records available for inspection by the auditor during regular business hours, solely to verify the accuracy of the other Party's reports provided under this Agreement. Records covering any particular period may be inspected or audited [*], [*], and [*], as [*] of the [*], that the [*] and would [*]. The report prepared by such independent accountant, a copy of which shall be sent or otherwise provided to the audited Party at the same time it is sent or otherwise provided to the auditing Party requesting the audit, shall contain the conclusions of such independent accountant regarding the audit and will specify that the amounts paid were correct, or, if incorrect, the amount of any underpayment or overpayment. If such report shows any underpayment, then, within [*] after the audited Party's receipt of such report, the audited Party shall remit to the other Party the amount of the undisputed underpayment plus any applicable interest pursuant to Section 8.11. If the total amount of any underpayment (as agreed to by the audited Party or as determined pursuant to the dispute resolution procedure in this Agreement) exceeds [*] of the amount previously paid by the audited Party to the other Party for such calendar year, then the audited Party shall pay the reasonable costs for such inspections. Any overpayment will be a credit against future royalties or other amounts due by the Party having overpaid or a credit for the Party having overpaid in the calculation of the Operating Profit (Loss), in each case to be applied as soon as practicable; provided that, if there will be no further payment obligation under this Agreement from the Party having overpaid to the other Party, then the other Party shall, at the request of the Party having overpaid, refund such overpaid amount within [*] of receiving such request.

ARTICLE 9

INTELLECTUAL PROPERTY

9.1 Ownership. Inventorship of any inventions arising under this Agreement will be determined in accordance with rules of inventorship under U.S. patent laws. Except as otherwise described herein, and subject to the licenses granted under this Agreement, each Party shall own the entire right, title and interest in and to any and all inventions (and the associated intellectual property rights) for which the inventors are solely its employees or agents. Subject to the licenses granted under this Agreement, Genentech and Exelixis shall each own an undivided one-half (1/2) interest, without duty of accounting, in and to any and all such inventions and associated intellectual property for which employees or agents of both Parties are inventors, and all Patents Covering such joint inventions shall be deemed "**Joint Patents**" and subject to Section 9.3(e). The Parties shall co-operate with each other to prepare and execute all affidavits, assignments or documents required to effect the ownership rights described in this Section 9.1.

9.2 Disclosure. During the Collaborative Development Period, each Party shall notify the other Party (through the JSC if existing, otherwise in accordance with the notice provisions of the Agreement) of any invention related to the Collaboration Compounds or Licensed Products that arose under the Agreement during the preceding quarter.

26.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

9.3 Patent Prosecution and Maintenance.

(a) Consultation. Each Party shall advise and consult with the other Party promptly after receiving any substantial action or development in the prosecution or maintenance of any Patent application being prosecuted and maintained pursuant to Sections 9.3(b), (c) and (e) (including issues regarding (A) countries in which to initiate or continue prosecution (including validation) or (B) the scope of, the issuance of, the rejection of, an interference involving, or an opposition to any such Patent application or resulting Patent). The provisions of this Section 9.3(a) as well as Sections 9.3(b), 9.3(c) and 9.3(e) shall not apply to [*]. Exelixis shall promptly notify Genentech in writing within thirty (30) calendar days after Exelixis receives the notice of issuance of each [*].

(b) Exelixis Licensed Patents Prior to Opt-In. Prior to Genentech's Opt-In, Exelixis shall [*] Exelixis Licensed Patents [*] or [*] (collectively, "[*]") [*], file, prosecute and maintain (including conducting any interferences, reexaminations, reissues, oppositions, or requests for patent term extension relating thereto), all Exelixis Licensed Patents (other than Joint Patents) in [*] (the "**Primary Prosecution Countries**") [*]. For clarity, [*]. If Genentech requests that Exelixis prepare, file, prosecute or maintain an Exelixis Licensed Patent in a country other than a Primary Prosecution Country, Genentech shall [*] Exelixis prior to Genentech's Opt-In in connection with preparing, filing, prosecuting or maintaining such Exelixis Licensed Patent in such non-Primary Prosecution Country. [*] shall: (i) keep [*] informed as to the status of filing, prosecution, maintenance and extension of such Exelixis Licensed Patents in a report at no less frequently than [*] (or as otherwise agreed by the Parties) that [*]; (ii) keep [*] informed as to the status of filing, prosecution, maintenance and extension of such Exelixis Licensed Patents, such that there is reasonable time to review, comment upon and approve (as set forth in this Section) any documents intended for submission to any patent office; (iii) furnish to [*] copies of documents relevant to any such filing, prosecution, maintenance and extension including copies of any Patent Office, foreign associate, and outside counsel correspondence; and (iv) [*] of [*] on documents prepared for filing with any patent office with respect to Exelixis Licensed Patent claims that Cover Collaboration Compounds or Licensed Products and statements in such documents that might [*]. For the purpose of this Section 9.3, [*] shall only have the right to review any such documents provided by Exelixis if [*] agrees in writing [*] ([*]) disclosed in such documents [*] and if [*] has not been, is not and is reasonably not expected to be in the future, [*] Genentech relating to [*].

(c) Exelixis Licensed Patents After Opt-In. After Genentech's Opt-In, [*] shall continue to prepare, file, prosecute and maintain (including conducting any interferences, reexaminations, reissues, oppositions, or requests for patent term extension relating thereto), all of its Exelixis Licensed Patents throughout the world. Costs for such preparation, filing, prosecution and maintenance of Exelixis Licensed Patents for the Other Territory shall be borne [*], and for the Profit-Share Territory shall be included in Operating Profit (Loss). For clarity, [*]. [*] shall: (i) keep [*] informed as to the filing, prosecution, maintenance and extension of all Exelixis Licensed Patents, such that [*] has reasonable time to review, comment upon and approve any documents intended for submission to any patent office; (ii) furnish to [*] copies of documents relevant to any such filing, prosecution, maintenance and extension including copies of any Patent Office, foreign associate, and [*]; and (iii) [*] of [*] on documents prepared for filing with any patent office with respect to Exelixis Licensed Patent claims that Cover Collaboration Compounds or Licensed Products and statements in such documents that might [*]. In addition, [*] shall provide [*] with a report, no less frequently than [*] (or as otherwise agreed by the Parties), that lists all Exelixis Licensed Patents, identifying them by country and patent or application number, and briefly describing the status thereof. In the event that [*] elects not to: (A) prosecute and maintain (including conducting any interferences, reexaminations, reissues, oppositions, or requests for patent term extension relating thereto) an Exelixis Licensed Patent; or (B) file continuations or divisionals of an Exelixis Licensed Patent to the extent that such continuations or divisionals Cover Collaboration Compounds or Licensed Products, then [*] shall promptly notify [*] in writing (such notice shall be at least [*] prior to any required action relating to such prosecution or maintenance). Thereafter, [*] may, but is not required to, undertake such prosecution or maintenance of an Exelixis Licensed Patent at its sole expense.

(d) Genentech Licensed Patents. Genentech shall prepare, file, prosecute and maintain (including conducting any interferences, reexaminations, reissues, oppositions, or requests for patent term extension relating thereto), all of the Genentech Licensed Patents throughout the world. Costs for filing, preparation, prosecution

and maintenance of such Genentech Licensed Patents for countries within the Other Territory shall be borne solely by Genentech or its sublicensees, and for the Profit-Share Territory shall be included in Operating Profit (Loss) and shared pursuant to this Agreement.

(e) Joint Patents. [*], Exelixis and Genentech shall jointly control the preparation, filing, prosecution, extension and maintenance of any Joint Patents (provided that in the event of a dispute, [*] shall be the final decision-maker to the extent such Joint Patents [*] Collaboration Compounds and/or Licensed Products). The costs associated with such preparation, filing, prosecution, extension and maintenance for countries within the Other Territory shall be borne [*], and for the Profit-Share Territory shall be included in Operating Profit (Loss). [*] shall: (i) keep [*] reasonably informed as to the filing, prosecution, maintenance and extension of such Joint Patents, such that both Parties have reasonable time to review, comment upon and approve any documents intended for submission to any patent office; (ii) furnish to [*] copies of documents relevant to any such filing, prosecution, maintenance and extension including copies of any Patent Office, foreign associate, and [*] shall perform the foregoing tasks with respect to Genentech's [*] and such [*] shall be subject to the [*].

9.4 Enforcement.

(a) Notices and Consultation. The Parties shall consult in good faith as to potential strategy or strategies to manage infringement by Third Parties of the Exelixis Licensed Patents and/or Joint Patents. The provisions of this Section 9.4 shall not apply to [*].

(b) Enforcement by [*] of Joint Patents. [*] shall have the first right, but not the obligation to institute, prosecute, and control any action or proceeding with respect to such infringement of Joint Patents, by counsel of its own choice, and [*] shall have the right, at its own expense, to be represented by counsel of its own choice in that action. [*] shall inform [*] regarding an initiation of an infringement action by [*] regarding Joint Patents. Any amounts obtained by [*] as damages or settlement of such action or proceeding shall first be used to reimburse the Parties' legal expenses (including, if any costs of [*] separate counsel). Any remainder shall be considered Operating Profit (Loss) in the year received. If [*] fails to take action to terminate infringement of a Joint Patent within a reasonable period after the Parties' consultation in Section 9.4(a), then [*] shall have the right, but not the obligation to institute, prosecute, and control any action or proceeding with respect to such infringement of Joint Patents, by counsel of its own choice, and [*] shall have the right, at its own expense, to be represented by counsel of its own choice in that action. [*] shall inform [*] regarding an initiation of an infringement action by [*] regarding Joint Patents. Any amounts obtained by [*] as damages or settlement of such action or proceeding shall first be used to reimburse the Parties' legal expenses (including, if any costs of [*] separate counsel). Any remainder shall be considered Operating Profit (Loss) in the year received.

(c) Enforcement by [*] of Exelixis Licensed Patents. If there is any infringement, suspected infringement or alleged infringement by a Third Party of the Exelixis Licensed Patents, to the extent that such infringement, suspected infringement or alleged infringement relates to a Collaboration Compound or a Licensed Product ("**Product Infringement**"), then each Party may provide notification to the other and engage in consultation pursuant to Section 9.4(a). Subject to the terms of this Section 9.4(c), [*] has the first right to take action to terminate infringement without litigation, to institute an action or proceeding for enforcement, or to settle or continue prosecution of an action or proceeding with respect to each Product Infringement. If [*] takes action to terminate such Product Infringement without litigation, commences a legal action or proceeding against such Product Infringement, [*] shall timely inform [*] and the Parties shall consult as provided in Section 9.4(a). [*] will bear the costs and expenses of that action or proceeding, and shall control the conduct and strategy of such action or proceeding. [*] may act to terminate infringement without litigation, enter into settlements, stipulated judgments or other arrangements respecting such Product Infringement, at its own expense; however, [*] shall not (without obtaining [*]' prior written consent) be able to take any action or agree to any settlement that would impose undue financial burden on [*] or admit invalidity or unenforceability of Exelixis Licensed Patents. If [*] commences such a Product Infringement enforcement action, [*] agrees to execute all papers and to perform such other acts as may be reasonably required (including consent to be joined as nominal Party plaintiffs in such action). [*] shall reimburse [*] for its out-of-pocket expenses for

performing actions requested by [*] in relation to such Product Infringement enforcement action. [*] may, at its option and at its own expense, be represented in such action by counsel of its choice. Any damages or other recovery from a Product Infringement enforcement action undertaken by [*] pursuant to this Section 9.4(c) shall first be used to [*]. Any remainder attributable to the Profit-Share Territory shall be [*]. If [*] fails to take action to terminate a Product Infringement within a reasonable period after the Parties' consultation in Section 9.4(a), then [*] shall have the right, in accordance with Section 9.4(d) to terminate such Product Infringement without litigation or to commence a legal action or proceeding against such Product Infringement as if it were an Other Infringement.

(d) Enforcement by [*] of Exelixis Licensed Patents. To the extent there is an infringement, suspected infringement or alleged infringement by a Third Party of Exelixis Licensed Patents to the extent that such infringement, suspected infringement or alleged infringement is not related to a Collaboration Compound or a Licensed Product (an "**Other Infringement**"), [*]. If [*] wishes to commence a legal action or proceeding against such Other Infringement, [*] shall [*], and [*] may commence such legal action or proceeding [*]. If [*] does undertake such legal action or proceeding, then [*] will bear the costs and expenses of that action or proceeding, and shall control the conduct and strategy of such action or proceeding. [*] may act to terminate infringement without litigation, enter into settlements, stipulated judgments or other arrangements respecting such Other Infringement, at its own expense, to the extent such arrangements or actions do not adversely affect the Licensed Product or any claim of an Exelixis Licensed Patent Covering such Collaboration Compound or Licensed Product. [*] shall not (without obtaining [*] prior written consent) take any action or agree to any settlement that would impose undue financial burden on [*] or admit invalidity or unenforceability of Exelixis Licensed Patents. If [*] commences such infringement action, [*] agrees to execute all papers and to perform such other acts as may be reasonably required. [*] shall reimburse [*] for its out-of-pocket expenses for performing actions requested by [*] in relation to such Other Infringement enforcement action. Any amounts obtained by [*] as damages or settlement of such Other Infringement enforcement action or proceeding undertaken by [*] pursuant to this Section 9.4(d) belong [*].

9.5 Trademarks. Genentech (or its Affiliates or other sublicensees) will be responsible for, and shall have sole discretion in, selecting trademarks for the use on or in connection with the Licensed Products. Genentech (or its Affiliates or other sublicensees) will be responsible for registration of such trademarks and will be the sole owner of such trademarks. For the avoidance of doubt, trademarks, including those created hereunder, are not included in the definition of Information.

9.6 Marking. Genentech shall, and shall require that its sublicensees, apply the patent marking notices required by the law of any country where Licensed Products are made, sold or used, to the extent feasible and practical, and in accordance with the applicable patent laws of that country.

ARTICLE 10

CONFIDENTIALITY

10.1 Nondisclosure of Confidential Information.

(a) "Confidential Information" means Information, of whatever kind and in whatever form or medium, including Information about Materials provided or created, and confidential Know-How, which Information is not within the exclusions in Section 10.2(a) and further: (i) disclosed by or on behalf of a Party in connection with this Agreement, whether prior to or during the term of this Agreement and whether disclosed orally, electronically, by observation or in writing, (ii) created by, or on behalf of, either Party, or created jointly by the Parties, in the course of this Agreement, or (iii) expressly deemed to be Confidential Information pursuant to another provision of this Agreement.

(b) All Confidential Information about any Collaboration Compound that exists as of the Effective Date, is created as a result of the Pre-Opt-In Studies (including the Genentech Research), as a result of Exelixis' Back-Up Work under Section 3.3 or Exelixis' development activities under Section 3.2 ("**Pre-Opt-In Confidential**")

Information”), whether or not disclosed under this Agreement, will be deemed to be the Confidential Information of [*]. If [*] Confidential Information will [*] to be the Confidential Information of [*]. If [*] to be the Confidential Information of [*]. If [*] Compound will be deemed to be the Confidential Information of [*] and the rest of such [*] the Confidential Information of [*]. If [*] Compound will be deemed to be the Confidential Information of [*], such [*] will be deemed to be the Confidential Information of [*] and the rest of such Information will be deemed to be the Confidential Information of [*]. If [*] Confidential Information will thereafter be deemed the Confidential Information of [*]. Any Development Plans are the Confidential Information of [*]. Although, pursuant to Section [*], [*] regarding a Collaboration Compound may not be disclosed to Genentech prior to [*], it nonetheless will be treated in the same manner as Pre-Opt-In Confidential Information for purposes of non-disclosure and non-use obligations.

(c) All Confidential Information about any Collaboration Compound created by Genentech after exercising the Opt-In is [*] Confidential Information and Confidential Information about an Excluded Compound is [*] Confidential Information; however, if this Agreement is terminated by [*] or by Exelixis pursuant to Section 11.2(c), then Confidential Information that is created by Genentech after exercising the Opt-In and that relates solely to a Reversion Compound or Reversion Product (as defined in Section 11.3(e)) will be treated as the Confidential Information of [*] and all other Confidential Information created by Genentech after exercising the Opt-In that relates to a Reversion Compound or Reversion Product will be treated as the Confidential Information of [*].

(d) The Parties agree that during the term of this Agreement and for a period of [*] after the expiration or earlier termination of this Agreement, a Party receiving Confidential Information of the other Party will: (i) hold such Confidential Information in strict trust and confidence and not disclose such Confidential Information to any Third Party without prior written consent of the other Party, except for disclosures made in confidence to any Third Party under terms consistent with this Agreement and made in furtherance of this Agreement or of rights granted to a Party hereunder; and (ii) not use such other Party’s Confidential Information for any purpose except those permitted by this Agreement.

10.2 Exceptions. The term “Confidential Information” under this Agreement does not include any portion of the Information that the first Party (*i.e.*, the Party wishing to disclose Confidential Information of the other Party) can show by competent written proof:

- (a) Is publicly disclosed by the other Party, either before or after it is disclosed to the first Party hereunder;
- (b) Was known to the first Party, without obligation to keep it confidential, prior to disclosure by the other Party;
- (c) Is subsequently made available to the first Party, without any restrictions on non-disclosure or non-use, by a Third Party having authority to do so;
- (d) Is published by a Third Party or otherwise becomes publicly available or enters the public domain, without breach of this Agreement or any agreement between a Party and such Third Party, either before or after it is disclosed to the first Party; or
- (e) Has been independently developed by employees or contractors of the first Party without reference of any Confidential Information of the other Party.

10.3 Authorized Disclosure. Each Party may disclose the Confidential Information belonging to the other Party to the extent such disclosure is reasonably necessary in the following instances:

- (a) Filing or prosecuting Patents pursuant to Article 9 of this Agreement and, with respect to Genentech, future Patents related to Licensed Products and the uses thereof;

(b) Regulatory filings by either Party, as related to Licensed Products by such Party;

(c) To the extent such disclosure is reasonably necessary to prosecute or defend litigation, or to comply with the order of a court, applicable laws or governmental regulations; provided that receiving Party provides prompt notice to the disclosing Party of the disclosure requirement and the Confidential Information to be disclosed, and further provides reasonable assistance to enable the disclosing Party to seek a protective order or otherwise prevent or limit such disclosure by the receiving Party;

(d) To the extent such disclosure is required to comply with applicable governmental regulations (including those of the U.S. Internal Revenue Service and U.S. Securities and Exchange Commission (the "SEC")); provided that the procedure in Section 10.6 is followed (whether with respect to the terms of this Agreement or other Confidential Information):

(e) Disclosure to such Party's Affiliates and sublicensees, Third Party contractors and potential sublicensees or collaborators, to the extent disclosure to such entities is required or necessary for Exelixis and/or Genentech to exercise the licenses granted under this Agreement, or for the performance of the obligations under this Agreement; provided that any of the foregoing entities, prior to disclosure, must be bound by similar obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 10.

In addition, Exelixis may disclose Genentech's Confidential Information to the extent such disclosure is reasonably necessary for the filing or prosecution of Patents relating to Excluded Compounds, Reversion Compounds or Reversion Products, or for regulatory filings relating to the Excluded Compound, Reversion Compounds or Reversion Products.

10.4 Terms of this Agreement. The Parties acknowledge that the terms of this Agreement shall be treated as Confidential Information of both Parties. Such terms may be disclosed, in confidence, by a Party: (a) to its Affiliates; (b) to collaborators, potential collaborators, sublicensees or potential sublicensees but only after redacting terms not relevant to the rights and obligations being undertaken or contemplated to be undertaken by such collaborators or sublicensees, and only for limited purposes as necessary for that collaborator or sublicensee or perform its obligations or exercise its rights; (c) to potential acquirers, investment bankers and lenders, but only after redacting terms not relevant to the potential transaction, and only for limited purposes as required in connection with a transaction; and (d) connection with a required filing to the SEC, subject to Section 10.6 below.

10.5 Termination of Prior Confidentiality Agreements. This Agreement supersedes the Amended and Restated Mutual Confidentiality Agreement between Exelixis and Genentech effective March 29, 2006. All Information (as such term is defined in such Confidentiality Agreement) exchanged between the Parties under such earlier agreement shall be deemed Confidential Information of the Party that disclosed such Information and shall be subject to the terms of this Article 10.

10.6 Publicity. The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of the press release attached as **Exhibit G**. Any other publication, news release or other public announcement relating to this Agreement or to the performance hereunder, shall first be reviewed and approved by both Parties; *provided, however*, that such approval will not unreasonably be withheld or delayed with respect to any disclosure which is required by law, including disclosures required by the U.S. Securities and Exchange Commission or made pursuant to the requirements of the national securities exchange or other stock market on which such Party's securities are traded ("**Exchange**"), so long as the Party from which approval is being required will have no less than [*] to review and provide comment regarding any such proposed announcement, unless a shorter review time is necessary or agreed. If the compliance with the disclosure requirements of an Exchange requires filing of this Agreement, the filing Party shall seek confidential treatment of portions of this Agreement from the Exchange and shall provide the other Party with a copy of the proposed filings at least [*] prior to filing it with the Exchange for the other Party to review any such proposed filing. Each Party agrees that it will obtain its own legal advice with regard to its compliance

with securities laws and regulations, and will not rely on any statements made by the other Party relating to such securities laws and regulations.

10.7 Scientific Publications. [*] shall publish or present the results of research carried out during the Collaborative Development Period [*] pursuant to this Section 10.7. [*] agrees to provide [*] the opportunity to review any such proposed publication or presentation (including abstracts, manuscripts or verbal presentations) at least [*] prior to its intended submission for publication or presentation and agrees, upon request, not to submit any such publication or presentation until [*] is given a reasonable period of time to secure patent protection for any material in such publication or presentation which it believes to be patentable. Both Parties understand that a reasonable commercial strategy may require delay of publication or presentation of information or of filing of patent applications. The Parties agree to review and consider delay of publication or presentation and filing of patent applications under certain circumstances. Neither Party shall have the right to publish or present Confidential Information of the other Party, unless it receives the prior written consent of the other Party; upon request, a Party seeking to make a publication shall remove Confidential Information of the other Party. Further, each Party shall provide appropriate scientific attribution to the other in any publication concerning Collaboration Compounds or Licensed Products.

10.8 [*] for Collaboration Compounds. Exelixis shall provide the [*] for all [*] to Genentech [*]. [*], Exelixis shall provide the [*] (collectively, the “[*]”) [*] and [*], but not [*] unless [*]. Any such provision of [*] shall take place pursuant to a confidentiality agreement between the Parties and such [*] that has [*] of [*] as [*] Confidential Disclosure Agreement between [*]. In the event that [*] that Exelixis [*] Genentech, Exelixis [*] but such [*] or a similarly or more [*] and may [*]. Such information can be used solely to [*], and such information [*] any other purpose including in connection with the [*].

ARTICLE 11

TERM AND TERMINATION

11.1 Term. This Agreement shall become effective on the Effective Date and shall remain in effect until terminated in accordance with Section 11.2, Section 11.3 or by mutual written agreement, or until the expiration of the last payment obligation with respect to all Licensed Products hereunder.

11.2 Termination.

(a) **Termination for Genentech’s Decision not to Opt-In.** This Agreement may be terminated pursuant to Section 3.4(b)(iii).

(b) **Termination by Genentech for Convenience.** At any time, Genentech may terminate this Agreement, at its sole discretion and for any reason or no reason, by providing written notice of termination to Exelixis, which notice includes an effective date of termination at least [*]; provided, however, if Genentech terminates this Agreement for convenience [*], then at Exelixis’ request, such termination shall become effective [*].

(c) **Termination for Cause.** If either Party believes that the other is in material breach of this Agreement, then the non-breaching Party may deliver notice of such breach to the other Party. For all breaches other than a failure to make a payment set forth in this Agreement, the allegedly breaching Party shall have [*] to cure such breach from the receipt of the notice [*]. For any breach arising from a failure to make a payment set forth in this Agreement, the allegedly breaching Party shall have [*] from the receipt of the notice [*] cure such breach. If the Party receiving notice of breach fails to cure, [*], that breach within applicable period set forth above, then the Party originally delivering the notice of breach may terminate this Agreement on written notice of termination. If the allegedly breaching Party in good faith [*] the failure to cure or remedy such material breach and provides written notice of [*] to the other Party within the above time periods, then the matter will be addressed under the [*] provisions in Section [*], and the notifying Party may [*] until it has been [*] that the [*] is in material breach of this Agreement, and such breaching Party further [*] after the [*].

11.3 Effect of Termination.

(a) **Accrued Obligations Survive.** In any event, termination of this Agreement shall not relieve the Parties of any liability which accrued hereunder prior to the effective date of such termination nor preclude either Party from pursuing all rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement nor prejudice either Party's right to obtain performance of any obligation.

(b) **Effect of Termination on Co-Promotion.** Even if [*] as set forth in this Section [*], upon termination or expiration of this Agreement [*].

(c) **Effect on Licenses of Termination under Section 11.2(a) (Genentech's Decision not to Opt-In).** In the event of termination of this Agreement pursuant to Section 3.4(b)(iii) or Section 3.4(c)(ii): (i) the licenses granted to Genentech under Article 7 shall expire (or never become effective, as the case may be); (ii) any licenses granted by Genentech to Exelixis shall expire (or never become effective, as the case may be), except that [*].

(d) **Effect on Licenses of Termination by Genentech under Section 11.2(c) (Genentech Termination for Exelixis Breach).** In the event of termination of this Agreement by Genentech pursuant to Section 11.2(c): (i) the licenses granted to Exelixis shall terminate ([*] and [*] with respect to [*]); (ii) the licenses granted [*] under Section [*] shall survive, so long as [*] as set forth in this Section [*]; and Sections [*] and Article [*] (in each case only pertaining to [*]), Sections [*] and [*] shall survive; and, if the Exelixis breach is of obligations other than those in Section [*], then the obligations in Sections [*] also survive. The license to [*] described in this Section [*] shall [*] of Licensed Products [*] at the rate set forth in the table below, [*]. Such royalty obligation shall expire, on a product-by-product and country-by-country basis, upon the later to occur of: (1) the expiration of the last Valid Claim of the [*] that Covers such Licensed Product in such country; and (2) the [*] of the First Commercial Sale of such Licensed Product in such country. In the event that there is [*], [*] obligations under this Section 11.3(d) [*] for such Licensed Product [*] that Covers such Licensed Product in such country.

Time when [*] occurred	Royalty on Licensed Products	Section 8.5 ([*] and Royalties for [*])
Prior to the [*]	[*]	[*]
After [*]	[*]	[*]

(e) **Effect on Licenses of Termination by Genentech under Section 11.2(b) or by Exelixis under Section 11.2(c) (Genentech's termination for convenience or Exelixis' Termination for Genentech Breach).** In the case of termination of this Agreement by Genentech under Section 11.2(b) or by Exelixis pursuant to Section 11.2(c), all licenses granted to Genentech under Section 7.1 cease. In addition, all [*] shall thereupon be deemed "**Reversion Compounds**" and all products containing such Reversion Compounds shall be deemed "**Reversion Products**," and the license grants below shall become effective (or, if not effective, be granted by Genentech).

(i) License for Reversion Compound and Reversion Product.

(1) For purposes of this Section 11.3(e), "**Genentech Reversion IP**" means the following, to the extent it exists and is Controlled by Genentech as of the date of termination: (A) all Genentech Licensed Patents [*] make, have made, use, sell, have sold, offer for sale or import Reversion Compounds or Reversion Products, and (B) all Patents Controlled by Genentech that [*], which Patents disclose or claim the composition of matter, manufacture or use of a Reversion Compound or Reversion Product, provided that [*]. For purposes of this Section, "**Reversion Information and Materials**" means the following, to the extent it exists and is Controlled by Genentech as of the date of termination (such Information in (A), (B), (D) and (E) is "**Reversion Information**"): (A) [*] (including [*]) with respect to the Reversion Products in Genentech's or its Affiliate's name; (B) [*] then [*]

and related only to such Reversion Products, subject to [*]; (C) all supplies of Reversion Products (including [*]) that in each case are in Genentech's Control; (D) Information necessary for manufacture of the Reversion Product in its then-current form; and (E) [*] for a Reversion Product.

(2) Genentech shall, and hereby does, grant to Exelixis, effective as of the effective date of termination of this Agreement by Genentech under Section 11.2(b) or by Exelixis under Section 11.2(c) and subject to [*] [*] set forth below and continued compliance with Section [*], a worldwide, [*] [*] license, with the right to sublicense: (A) under the Genentech Reversion IP, effective as of the effective date of termination of this Agreement, to make, have made, use, sell, have sold, offer for sale and import Reversion Compounds and Reversion Products; and (B) to use the Reversion Information to do so. The license described in this Section 11.3(e)(i)(2) shall bear a royalty on Exelixis' Net Sales of such Reversion Product anywhere in the world at the royalty rates set forth in the table below, [*], for the period set forth in Section 11.3(e)(i)(3) below. Further, to the extent Genentech Reversion IP would include any rights under Patents and other intellectual property for which Genentech has an obligation to pay royalties or any other payments to that Third Party, then Genentech shall disclose such obligations to Exelixis and Exelixis either may: (i) have such Patents and intellectual property included in the license and pay to the Third Party licensor amounts attributable to the rights obtained (which amounts shall be reasonably allocated between Exelixis and Genentech if they also pertain to rights not sublicensed to Exelixis) or reimburse Genentech for such amounts it has paid to that Third Party; or (ii) decline to have such Patents and intellectual property included in the license.

Time when [*]	Royalty on Reversion Products
Prior to the start of the [*]	[*]%
Prior to the start of the [*]	[*]%
After [*]	[*]%
After the [*]	[*]%

(3) Such royalty obligation shall expire, on a product-by-product and country-by-country basis, upon the later to occur of: (A) the expiration of the last Valid Claim of a Patent within the [*] that Covers such Reversion Product in such country; and (B) the [*] of the First Commercial Sale of such Reversion Product in such country. In the event that there is [*], Exelixis' royalty obligations under this Section 11.3(e) shall cease in such country for such Reversion Product after the expiration of the last-to-expire [*] that Covers such Licensed Product in such country.

(4) Genentech shall transfer to Exelixis a copy of the Reversion Information, and shall transfer to Exelixis all Materials included in the scope of Reversion Information and Materials. Genentech shall use reasonable efforts to provide other research or preclinical data that is in its possession and control and is specific to the Reversion Compounds. Genentech hereby grants Exelixis an exclusive license to use such Reversion Information and Materials so transferred to make, have made, use, sell, offer for sale and import Reversion Compounds and Reversion Products. However, Genentech shall not, under such circumstances, have any obligation or right to Manufacture any Reversion Products, or to have any Reversion Products made by a Third Party. Enforcement of licensed Genentech Reversion IP shall be similar to Section 9.4(c) except to replace "Genentech" with "Exelixis", "Exelixis" with "Genentech", "Exelixis Licensed Patents" with "Genentech Reversion IP", "a Collaboration Compound or a Licensed Product" with "a Reversion Compound or a Reversion Product", [*].

(ii) License for [*] Diagnostic Product.

(1) For the purpose of this paragraph, a Diagnostic Product is [*] (and thus a “[*]”) if: (A) either Party is [*] in clinical trials of, [*], or [*], the Reversion Product, or (B) (I) either Party is [*] in clinical trials of, [*], or [*] the Reversion Product; (II) the Patents Controlled by Genentech [*]; and (III) [*] exists.

(2) For purposes of this Section 11.3(e), “**Collaboration Diagnostic Reversion IP**” means the following, to the extent it exists and is Controlled by Genentech as of the date of termination: [*]. “**Other Diagnostic Reversion IP**” means all Patents Controlled by Genentech, other than Genentech Licensed Patents, that disclose or claim an invention then existing, which Patents disclose or claim the composition of matter, manufacture or use of a [*], except that to the extent Other Diagnostic Reversion IP would include any rights under Patents and other intellectual property for which [*], then Genentech shall disclose such obligations to Exelixis and Exelixis either may: (I) have such Patents and intellectual property included in the license and [*] (which [*] Exelixis and Genentech if they [*] Exelixis) or [*]; or (II) [*]. For purposes of this Section 11.3(e), “**Diagnostic Reversion Information and Materials**” means the following, to the extent it exists and is Controlled by Genentech as of the date of termination (such Information is “**Diagnostic Reversion Information**”) [*] regulatory and technical information for creating such [*], which may include manufacturing Information or agreements with Third Parties, but in any event includes only that Information that would not [*].

(3) Genentech shall, and hereby does, grant to Exelixis, subject to Exelixis’ continued compliance with its payment obligations set forth below and the terms of the licenses granted, a worldwide, non-exclusive license, under the Collaboration Diagnostic Reversion IP, with the right to sublicense, effective as of the effective date of termination of this Agreement, to make, have made, use, sell, have sold, offer for sale and import [*] Diagnostic Products, but only in connection with a Reversion Product and only in the countries and during the period for which Exelixis or its Affiliate or sublicensee is selling such Reversion Compound (and associated Reversion Products).

(4) If, as of the date of such termination, [*], then Genentech shall, and hereby does, grant to Exelixis, subject to Exelixis’ continued compliance with its payment obligations set forth below and the terms of the licenses granted, a worldwide, non-exclusive license, under such Other Diagnostic Reversion IP, with the right to sublicense, effective as of the effective date of termination of this Agreement, to make, have made, use, sell, have sold, offer for sale and import [*] Diagnostic Products, but only in connection with a Reversion Product and only in the countries and during the period for which Exelixis or its Affiliate or sublicensee is selling such Reversion Compound (and associated Reversion Products).

(5) If, as of the date of such termination, [*] that there is a reasonable likelihood that the [*], then the Parties shall [*], but would [*] with a means of one of the following, [*]: (1) obtaining the right or ability to use of such [*] Diagnostic Product, (2) obtaining an [*], or [*] could be obtained, or (3) providing access [*], in the form of [*], provided that, if such [*] is granted in the [*], then [*] shall be in the form of a [*] of such [*] Diagnostic Product [*].

(6) If the Parties select option (3) above, then Genentech shall use reasonable efforts to transfer to Exelixis a copy of the Diagnostic Reversion Information, and to transfer to Exelixis all Materials included in the scope of Diagnostic Reversion Information and Materials. Genentech shall use reasonable efforts to provide other research or preclinical data that is in its possession and control and is specific to the [*] Diagnostic Product. Genentech hereby grants Exelixis an exclusive license to use such Diagnostic Reversion Information and Materials so transferred to practice its license under Sections 11.3(e)(iii)(3)-(5) above.

(f) In addition to the licenses for Reversion Products and Diagnostic Products, if at the time of termination a Licensed Product is being marketed (or being provided in a clinical trial) under a trademark or tradename specific to that Reversion Product and Controlled by Genentech, then, at Exelixis’ request, Genentech shall grant Exelixis an exclusive, fully paid, fully paid, royalty-free license (with the right to grant sublicenses) to use such trademark or tradename upon, or in relation to, such Reversion Product. Such trademark license shall be only for the then-current

form of the Reversion Product (*i.e.*, if another form of the Reversion Product would require an additional NDA or similar regulatory filing, then such form is not included in the trademark license) and mutually agreed enhancements to that Reversion Product (if any). Genentech shall promptly and diligently negotiate in good faith with Exelixis to agree upon the non-financial terms of the agreement pursuant to which Genentech shall grant such trademark license. Such terms shall be commercially reasonable and consistent with Genentech's practices with respect to trademark licenses. The Parties shall enter into such trademark license agreement promptly upon agreeing upon such terms. The terms of the trademark license agreement shall not include any payment obligations from Exelixis, except for reimbursements to Genentech of fees (such as maintenance and filing fees) required for ongoing maintenance of that trademark.

(g) Payment Breach. If the Agreement is terminated by either Party pursuant to Section 11.2(c) for the other Party's uncured breach of a payment obligation under this Agreement, then the terminating Party shall have the right to deduct from the future payments due to such breaching Party under this Section 11.3, the amount of such payment obligation together with all interest accrued from the date such payment was due at the rate set forth in Section 8.11, to the extent such amount and any interest so accrued is not paid by the breaching Party prior to such deduction.

(h) Return of Confidential Information. Upon any termination of this entire Agreement, each Party shall use reasonable efforts promptly to return (or destroy and provide written certification thereof) to the other Party all Confidential Information received from the other Party, including any copies thereof (except copies retained solely for legal archival purposes).

11.4 Survival. In addition to specific Sections listed in Section 11.3 as surviving particular types of termination of this Agreement, [*] of this Agreement shall survive expiration or termination of this Agreement for any reason.

ARTICLE 12

REPRESENTATIONS AND WARRANTIES

12.1 Mutual Authority. Exelixis and Genentech each represents and warrants to the other as of the Effective Date that: (a) it has the authority and right to enter into and perform this Agreement; (b) this Agreement is a legal and valid obligation binding upon it and is enforceable in accordance with its terms, subject to applicable limitations on such enforcement based on bankruptcy laws and other debtors' rights; and (c) its execution, delivery and performance of this Agreement will not conflict in any material fashion with the terms of any other agreement or instrument to which it is or becomes a party or by which it is or becomes bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having authority over it.

12.2 Exelixis Warranties. Exelixis represents and warrants that:

(a) as of the Effective Date, to the knowledge of Exelixis' [*], [*], and [*], without any duty of inquiry or investigation, Exelixis does not [*] directed to or claiming [*], [*];

(b) as of the Effective Date, to the knowledge of Exelixis' [*], [*], and [*], without any duty of inquiry or investigation, [*] a Third Party has a license or an option for a license pursuant to a collaboration between Exelixis and any Third Party [*];

(c) as of the Effective Date, it does not have knowledge of any rights that it currently owns or to which it currently has a license, that are within the Exelixis Licensed Patents or Exelixis Licensed Know-How (or that would be but for the terms of any agreement pursuant to which it has given up Control thereof, or pursuant to which it has rights to such Patents or Information but lacks Control thereof), to which [*] in this Agreement;

(d) it has [*] to grant licenses of the scope in this Agreement under those Patents included in that are either owned by Exelixis or its Affiliates or are the subject of a license from a Third Party to Exelixis that includes the right to sublicense, to the extent such Patents claim any Collaboration Compound;

(e) the scientific Information relating the Existing Compound that Exelixis delivered or made available to Genentech (whether directly or through its Third Party advisors) prior to the Effective Date, including the Information regarding the [*] of the Existing Compound, is [*] in [*] as of the Effective Date that [*]; Exelixis has not [*] pre-clinical or clinical studies of the Existing Compound Controlled by Exelixis as of the Effective Date, including [*] to the Existing Compound;

(f) EXEL-5518/the Existing Compound [*];

(g) the scientific Information provided to Genentech [*] the Existing Compound or EXEL-5518 [*], and the physical compound provided to Genentech under this Agreement as the Existing Compound is MEK Compound referred to internally at Exelixis as “EXEL-5518” or “XL-518”; and

(h) Exelixis Controls, with respect to the license set forth in Section 7.1(b) for the Existing Compound and Licensed Products containing such Existing Compound, [*] in the course of [*] of the Existing Compound [*] the Effective Date.

12.3 Genentech Warranty. Genentech represents and warrants that, as of the Effective Date, it owns or possesses adequate licenses to grant the licenses and perform the obligations herein.

12.4 Third Party Rights. Each Party represents and warrants to the other Party that, to its knowledge as of the Effective Date, performing its obligations under this Agreement will not in itself constitute a violation of a contractual or fiduciary obligation owed to any Third Party (including without limitation misappropriation of trade secrets).

12.5 Notice of Infringement or Misappropriation. Each Party represents and warrants to the other Party that, as of the Effective Date, it has received no notice of infringement or misappropriation of any alleged rights asserted by any Third Party in relation to any technology to be used in connection with the Collaboration.

ARTICLE 13

THIRD PARTY CLAIMS AND INDEMNIFICATION

13.1 Third Party Claims. If Exelixis receives notice or otherwise has knowledge, of a Claim (as defined in Section 13.2) related to any Licensed Product or Collaboration Compound, Exelixis promptly shall inform Genentech. If Genentech receives notice or otherwise has knowledge of a Claim for which Genentech reasonably expects to request indemnification from Exelixis under this Article 13, Genentech promptly shall inform Exelixis. The Parties then shall discuss a strategy on how to defend against such Claim. If the Claim is one likely to be subject to indemnification by one Party under Section 13.2, then the procedures in Section 13.4 apply. If the Claim is not a Claim subject to indemnification by one Party under Section 13.2, then the Parties shall meet and consult regarding the best way to proceed. If the Claim is of the type addressed in Article 9, the provisions of Article 9 apply. Final decisions regarding defense and settlement of Claims related to a Licensed Product or Collaboration Compound shall be made by [*] except if [*] is the indemnifying Party. Unless and to the extent [*] is the indemnifying Party, in no event may [*] settle or compromise any Claim related to a Licensed Product or Collaboration Compound without the prior written consent of [*]. [*].

13.2 Mutual Indemnification. Subject to this Section 13.2, to the last two sentences of Section 13.1, and to Section 13.4, each Party hereby agrees to indemnify, defend and hold the other Party, its Affiliates, and its and their officers, directors, and employees (collectively, the “**Indemnitees**”) harmless from and against any and all damages or other amounts payable to a Third Party claimant, as well as any reasonable attorneys’ fees and costs of litigation incurred by such Indemnitees (collectively, “**Damages**”), all to the extent resulting from claims, suits, proceedings or causes of action brought by such Third Party (“**Claims**”) against such Indemnitee based on or alleging: (a) a breach of warranty by the indemnifying Party contained in this Agreement; (b) violation of applicable law by such indemnifying Party related to or in the course of the performance of this Agreement; or (c) [*] or willful misconduct of a Party, its Affiliates or sublicensees, or their respective employees, officers, and directors related to or in the course of the performance of this Agreement. Subject to Section 13.4, Genentech hereby agrees to indemnify, defend and hold the Exelixis Indemnitees harmless from and against any and all Damages to the extent resulting Claims against such Indemnitees that are based on or alleging any action or failure to act occurring in the Other Territory except to the extent such Claim is based on or alleges: (i) a breach of warranty by Exelixis contained in this Agreement; (b) violation of applicable law by Exelixis related to or in the course of the performance of this Agreement; or (c) [*] or willful misconduct of Exelixis, its Affiliates or sublicensees, or their respective employees, officers, and directors related to or in the course of the performance of this Agreement.

13.3 Damages for Third Party Claims Related to Licensed Products. Damages from Third Party claims relating to the manufacture, use, handling, storage, sale or other disposition of any Licensed Product in the Profit-Share Territory, including without limitation Damages from claims of infringement of Third Party Patent rights, [*], except that Damages [*] to the extent such Damages result from: (i) breach of warranty, (ii) material breach of this Agreement, (iii) violation of applicable law in the course of the performance of its obligations under this Agreement; or (iv) [*] or willful misconduct by a Party, its sublicensees, or their respective employees.

13.4 Conditions to Indemnification. As used herein, “**Indemnitee**” means a party entitled to indemnification under the terms of Section 13.2. It shall be a condition precedent to an Indemnitee’s right to seek indemnification under such Section 13.2 that the Indemnitee: (a) informs the indemnifying Party of a Claim as soon as reasonably practicable after it receives notice of the Claim; (b) if the indemnifying Party acknowledges that such Claim falls within the scope of its indemnification obligations hereunder, permits the indemnifying Party to assume direction and control of the defense, litigation, settlement, appeal or other disposition of the Claim (including the right to settle the Claim solely for monetary consideration); provided, however, that the indemnifying Party shall seek the prior written consent (not to be unreasonably withheld or delayed) of any such Indemnitee as to any settlement which would require any payment by such Indemnitee, would require an admission of legal wrongdoing in any way on the part of an Indemnitee, or would effect an amendment of this Agreement; and provided further that if Exelixis is the indemnifying Party and the Claim involves a Licensed Product, then Genentech has the right to approve a settlement or compromise that would damage or have the effect of damaging Genentech’s strategy for defending or settling similar claims and would not require any particular activities or oversight regarding marketing or selling a Licensed Product; and (c) fully cooperates (including providing access to and copies of pertinent records and making available for testimony relevant individuals subject to its control) as reasonably requested by, and at the expense of, the indemnifying Party in the defense of the Claim. Provided that an Indemnitee has complied with the foregoing, the indemnifying Party shall provide attorneys reasonably acceptable to the Indemnitee to defend against any such Claim. Subject to the foregoing, an Indemnitee may participate in any proceedings involving such Claim using attorneys of its/his/her choice and at its/his/her expense. In no event may an Indemnitee settle or compromise any Claim for which it/he/she intends to seek indemnification from the indemnifying Party hereunder without the prior written consent of the indemnifying Party, or the indemnification provided under such Section 13.2 as to such Claim shall be null and void.

13.5 Limitation of Liability. EXCEPT FOR AMOUNTS PAYABLE TO THIRD PARTIES BY A PARTY FOR WHICH IT SEEKS REIMBURSEMENT OR INDEMNIFICATION FROM THE OTHER PARTY PURSUANT TO SECTION 13.2, AND EXCEPT FOR BREACH OF ARTICLE 10 HEREOF (CONFIDENTIALITY) OR SECTION 3.7 (EXCLUSIVITY), IN NO EVENT SHALL EITHER PARTY, ITS DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES OR SUBLICENSEES BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER BASED

UPON A CLAIM OR ACTION OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING OUT OF THIS AGREEMENT, UNLESS SUCH DAMAGES ARE DUE TO THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LIABLE PARTY.

13.6 Disclaimer. EXCEPT AS EXPRESSLY PROVIDED IN ARTICLE 12 ABOVE, EACH PARTY DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES WITH RESPECT TO ANY RESEARCH RESULTS, TARGETS, ASSAYS, MOLECULES, DATA, OR INVENTIONS (AND ANY PATENT RIGHTS OBTAINED THEREON) IDENTIFIED, MADE OR GENERATED BY SUCH PARTY AS PART OF THE COLLABORATION OR OTHERWISE MADE AVAILABLE TO THE OTHER PARTY PURSUANT TO THE TERMS OF THIS AGREEMENT.

ARTICLE 14

INSURANCE

14.1 Insurance Coverages. Each Party shall maintain, at its own cost, the insurance coverages set forth in this Section 14.1; *provided, however,* [*].

(a) Commencing as of the Effective Date, each Party shall obtain and maintain on an ongoing basis, Commercial General Liability insurance, including contractual liability, in a minimum amount of [*] per occurrence (combined single limit for bodily injury and property damage liability) during any period in which either Party is [*] (as such period may be extended under Section 14.2(c)), and [*] during any other period.

(b) During any period in which a Party is [*] (as such period may be extended under Section 14.2(c)), such Party shall obtain and maintain on an ongoing basis, Products Liability insurance, including contractual liability, in the minimum amount of [*] per occurrence, combined single limit for bodily injury and property damage liability.

14.2 Additional Requirements. Except [*], the following provisions apply:

(a) All insurance coverages shall be primary insurance with respect to each Party's own participation under this Agreement, and shall be maintained with an insurance company or companies having an A.M. Best's rating (or its equivalent) of [*] or better.

(b) [*] shall name [*] as an [*] under its Commercial General Liability and Products Liability insurance policies.

(c) The insurance policies shall be under an occurrence form, but if only a claims-made form is available to a Party, then in such a case, such Party shall maintain the insurance coverage for at least [*] following the period during which such coverage is required under Section 14.1.

(d) Each Party's aggregate deductibles under its Commercial General Liability and Products Liability and other insurance policies shall be [*], taking into account the deductibles that are prudent and customary with respect to the activities in which it is engaged under this Agreement.

(e) Upon request, each Party shall provide to the other Party its respective certificates of insurance evidencing the insurance coverages set forth in Section 14.2. Each Party shall provide to the other Party at least [*] prior written notice of any cancellation, nonrenewal or material change in any of the insurance coverages.

Each Party shall, upon receipt of written request from the other Party, provide renewal certificates to the other Party for as long as such Party is required to maintain insurance coverages hereunder.

ARTICLE 15

MISCELLANEOUS

15.1 Complete Agreement; Modification. This Agreement constitutes the entire agreement, both written and oral, between the Parties with respect to the subject matter hereof, and all prior agreements respecting the subject matter hereof, either written or oral, expressed or implied, are superseded hereby, merged and canceled, and are null and void and of no effect. No amendment or change hereof or addition hereto shall be effective or binding on either of the Parties hereto unless reduced to writing and duly executed on behalf of both Parties.

15.2 Governing Law. Resolution of all disputes arising out of or related to this Agreement or the performance, enforcement, breach or termination of this Agreement and any remedies relating thereto, shall be governed by and construed under the substantive laws of the State of California, without regard to conflicts of law rules requiring the application of different law.

15.3 Dispute Resolution.

(a) Internal Resolution. Except as otherwise expressly provided herein (including, without limitation, under Section 2.2(c)), in the event of any controversy, claim or other dispute arising out of or relating to any provision of this Agreement or the interpretation, enforceability, performance, breach, termination or validity hereof (a "Dispute"), such Dispute shall be first referred to [*] Genentech [*] and [*] of Exelixis for resolution, prior to proceeding under the following provisions of this Section 15.3. A Dispute shall be referred to such executives upon any Party providing the other Party with written notice that such Dispute exists, and such executives, or their designees, shall attempt to resolve such Dispute through good faith discussions. In the event that such Dispute is not resolved within [*] of such other Party's receipt of such written notice, either Party may initiate the dispute resolution procedures set forth in Section 15.3(b).

(b) Arbitration. Except as otherwise expressly provided in this Agreement, the Parties agree that any Dispute not resolved internally by the Parties pursuant to Section 15.3(a) must be finally resolved through binding arbitration by JAMS in accordance with its Comprehensive Arbitration Rules and Procedures in effect at the time the Dispute arises, except as modified in this Agreement, applying the substantive law specified in Section 15.2. A Party may initiate an arbitration by written notice to the other Party of its intention to arbitrate, and such demand notice shall specify in reasonable detail the nature of the Dispute. Each Party shall select one (1) arbitrator, and the two (2) arbitrators so selected shall choose a third arbitrator ([*]) to resolve the Dispute, and all three (3) shall serve as neutrals. If a Party fails to nominate its arbitrator, or if the Parties' arbitrators cannot agree on the third arbitrator, the necessary appointments shall be made in accordance with the then prevailing Comprehensive Arbitration Rules and Procedures. Within [*] of the conclusion of an arbitration proceeding, the arbitration decision shall be rendered in writing and shall specify the basis on which the decision was made. The award of the arbitration tribunal shall be final and judgment upon such an award may be entered in any competent court or application may be made to any competent court for judicial acceptance of such an award and order of enforcement. The arbitration proceedings shall be conducted in San Francisco, California. The Parties agree that they shall share equally the cost of the arbitration filing and hearing fees, and the cost of the arbitrator, except as otherwise set forth in the Agreement. Each Party shall bear its own attorneys' fees and associated costs and expenses.

(c) Patent Validity; Equitable Relief. Notwithstanding the other provisions of this Section 15.3, any Dispute that involves the validity, infringement or claim interpretation of a Patent: (i) that is issued in the United States, shall be subject to actions before the United States Patent and Trademark Office and/or submitted exclusively to the federal court located in the jurisdiction of the district where any of the defendants resides; and (ii)

that is issued in any other country, shall be brought before an appropriate regulatory or administrative body or court in that country, and the Parties hereby consent to the jurisdiction and venue of such courts and bodies. For the sake of clarity, such patent disputes shall not be subject to the provisions of Section 15.3(b). Notwithstanding the other provisions of this Section 15.3, any Dispute that involves the need to seek preliminary or injunctive measures or other equitable relief (e.g., in the event of a potential (or actual) breach of the confidentiality and non-use provisions in Article 10) need not be resolved through the procedure described in Sections 15.3(a) or (b) but may be immediately brought in a court of competent jurisdiction.

15.4 Consents Not Unreasonably Withheld or Delayed. Whenever provision is made in this Agreement for either Party to secure the consent or approval of the other, that consent or approval shall not unreasonably be withheld or delayed, and whenever in this Agreement provisions are made for one Party to object to or disapprove a matter, such objection or disapproval shall not unreasonably be exercised.

15.5 Assignment and Change of Control. Neither Party may assign or otherwise transfer this Agreement or any of its rights or obligations under this Agreement without the prior written consent of the other Party, except, that either Party may assign this Agreement, without the consent of the other Party in connection with a Change of Control, conditioned on providing notice of that Change of Control to the other Party, and, with respect to Exelixis, also subject to the following. If Exelixis is subject to a Change of Control, then: (a) [*]. Any purported assignment in contravention of this Section 15.5 shall be null and void and of no effect. No assignment shall release either Party from responsibility for the performance of any accrued obligation of such Party hereunder. This Agreement shall be binding upon and enforceable against the successor to or any permitted assignees from either of the Parties. For purposes of this Section 15.5, "**Change of Control**" means: (i) any stock acquisition, reorganization, merger, consolidation or similar transaction or series of transactions of Exelixis, other than a transaction or series of transactions in which the holders of the voting securities of Exelixis outstanding immediately prior to such transaction or series of transactions continue to retain at least fifty percent (50%) of the total voting power represented by the voting securities of Exelixis or the surviving entity outstanding immediately after consummation of such transaction or series of transactions; or (ii) a sale or other conveyance of all or substantially all of the assets of Exelixis by means of a transaction or series of transactions to another entity.

15.6 Notices. Any notices given under this Agreement shall be in writing, addressed to the Parties at the following addresses, and delivered by person, by facsimile (with receipt confirmation), or by FedEx or other reputable courier service. Any such notice shall be deemed to have been given as of the day of personal delivery, one (1) day after the date sent by facsimile service, or on the day of successful delivery to the other Party confirmed by the courier service.

For Exelixis: Exelixis, Inc.
 170 Harbor Way
 P.O. Box 511
 South San Francisco, CA 94083
 Attention: SVP, Patents and Licensing
 Phone: +1 650-837-7000
 Fax: +1 650-837-8300

With a copy to: Cooley Godward Kronish LLP
 Five Palo Alto Square
 3000 El Camino Real
 Palo Alto, CA 94306
 Attention: Robert L. Jones, Esq.
 Phone: +1 650-843-5000
 Fax: +1 650-849-7400

For Genentech: Corporate Secretary
Genentech, Inc.
1 DNA Way
South San Francisco, CA 94080
Phone: +1 650-225-1672
Fax: +1 650-952-9881

With a copy to: Vice President of Alliance Management
Genentech, Inc.
1 DNA Way
South San Francisco, CA 94080
Phone: +1 650-225-1000
Fax: +1 650-467-3294

15.7 Force Majeure. Each Party shall be excused from the performance of its obligations (other than payment obligations) under this Agreement to the extent that such performance is prevented by force majeure and the nonperforming Party promptly provides notice of the prevention to the other Party. Such excuse shall be continued so long as the condition constituting force majeure continues and the nonperforming Party takes reasonable efforts to remove the condition. For purposes of this Agreement, “**force majeure**” shall include conditions beyond the control of the Parties, including an act of God, voluntary or involuntary compliance with any regulation, law or order of any government, war, act of terrorism, civil commotion, labor strike or lock-out, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe.

15.8 Severability; Waiver. In the event that any provision of this Agreement is determined to be invalid or unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall remain in full force and effect without said provision. In such event, the Parties shall in good faith negotiate a substitute clause for any provision declared invalid or unenforceable, which shall most nearly approximate the intent of the Parties in entering this Agreement. The failure of a Party to insist upon strict performance of any provision of this Agreement or to exercise any right arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a Party of a particular provision or right shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time and shall be signed by such Party.

15.9 Section 365(n) of Bankruptcy Code. All rights and licenses now or hereafter granted under or pursuant to Article 7 of this Agreement are rights to “intellectual property” (as defined in Section 101(35A) of Title 11 of the United States Code, as amended (such Title 11, the “**Bankruptcy Code**”)). The Party granting such a license agrees not to interfere with the receiving Party’s exercise of rights and licenses to intellectual property licensed hereunder and embodiments thereof in accordance with this Agreement and agrees to use Diligent Efforts to assist such receiving Party to obtain such intellectual property and embodiments thereof in the possession or control of Third Parties as reasonably necessary or desirable for the receiving Party to exercise such rights and licenses in accordance with this Agreement. The Parties acknowledge and agree that all payments by one Party to the other Party under this Agreement constitute royalties within the meaning of Bankruptcy Code §365(n) or relate to licenses of intellectual property hereunder.

15.10 Cumulative Rights; Further Assurances. The rights, powers and remedies hereunder shall be in addition to, and not in limitation of, all rights, powers and remedies provided at law or in equity, or under any other agreement between the Parties. All of such rights, powers and remedies shall be cumulative, and may be exercised successively or cumulatively. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

15.11 Construction of this Agreement. Except where the context otherwise requires, wherever used, the singular will include the plural, the plural the singular, the use of any gender will be applicable to all genders, and the word “or” are used in the inclusive sense. When used in this Agreement, “including” means “including without limitation”. References to either Party include the successors and permitted assigns of that Party. The headings of this Agreement are for convenience of reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The Parties have each consulted counsel of their choice regarding this Agreement, and, accordingly, no provisions of this Agreement will be construed against either Party on the basis that the Party drafted this Agreement or any provision thereof. If the terms of this Agreement conflict with the terms of any Exhibit or the Exelixis Work Plan, then the terms of this Agreement shall govern. The official text of this Agreement and any Exhibits hereto, any notice given or accounts or statements required by this Agreement, and any dispute proceeding related to or arising hereunder, shall be in English. In the event of any dispute concerning the construction or meaning of this Agreement, reference shall be made only to this Agreement as written in English and not to any other translation into any other language.

15.12 Export Control. This Agreement is made subject to any restrictions concerning the export of products or technical information from the United States of America or other countries which may be imposed upon or related to Exelixis or Genentech from time to time. Each Party agrees that it will not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products using such technical information to a location or in a manner that at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the appropriate agency or other governmental entity.

15.13 Independent Contractors; Use of Name. Subject to the terms of this Agreement, the activities and resources of each Party shall be managed by such Party, acting independently and in its individual capacity. The relationship between Exelixis and Genentech is that of independent contractors. The relationship between the Parties under this Agreement is not, and is not intended to be, a joint venture, an agency relationship, or a fiduciary or trust relationship. Neither Party shall have the power to bind or obligate the other Party in any manner. Except as required by law, neither Party shall use the name or trademarks of the other Party for any advertising or promotional purposes without the prior written consent of such other Party.

15.14 Affiliates.

(a) Affiliates Bound. Each Party agrees that it will prohibit each of its Affiliates from taking any action that the Party itself is prohibited from taking under this Agreement. All Affiliates of a Party that perform one or more obligations of that Party under this Agreement, or that Control any intellectual property licensed under this Agreement, are bound by all relevant provisions of this Agreement that employ the terms “Exelixis”, “Genentech”, “Party” or “Parties”. In addition, the Affiliates of a Party that receive any Confidential Information of the other Party pursuant to his Agreement are bound by all obligations set forth in Article 10.

(b) Breach by Affiliates. Each Party acknowledges and agrees that a breach by any of its Affiliates under this Agreement will be treated as a breach by that Party. In that circumstance, each Party expressly waives any requirement that the other Party exhaust any right, power or remedy, or proceed directly against its Affiliate, for any obligation or performance under this Agreement.

15.15 Electronic Data Interchange. If both Parties elect to facilitate business activities hereunder by electronically sending and receiving data in agreed formats (also referred to as Electronic Data Interchange or “EDI”) in substitution for conventional paper-based documents, the terms and conditions of this Agreement shall apply to such EDI activities.

15.16 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which shall constitute together the same document. Counterparts may be signed and delivered by facsimile, each of which shall be binding when sent.

Signature Page Follows

44.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

IN WITNESS WHEREOF, Exelixis and Genentech have executed this Collaboration Agreement by their respective duly authorized representatives as of the Effective Date.

EXELIXIS, INC.

GENENTECH, INC.

By: /s/ GEORGE SCANGOS
Name: George Scangos
Title: President and Chief Executive Officer
Date: December 22, 2006

By: /s/ ARTHUR D. LEVINSON
Name: Arthur D. Levinson
Title: Chief Executive Officer
Date: December 22, 2006

45.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Exhibit A

Financial Appendix

Principles of Reporting.

Determination of Operating Profit (Loss) for a Licensed Product in the Profit-Share Territory will be based on each Party's respective financial information. The interpretation of the defined terms in such report shall be in accordance with GAAP and this Agreement.

Gross Sales
less [*]
= Operating Profit (Loss)

If necessary, a Party will make the appropriate adjustments to the financial information it supplies under the Agreement to conform to the above format of reporting results of operations.

Accounting and Cost Categories. Definitions of the various categories of revenues, costs and expenses included in Operating Profit (Loss) shall be interpreted in accordance with GAAP. Any costs included in the calculation under one cost category may not be included in the calculation of another cost category. Where the terms of this Financial Appendix would permit inclusion of a cost within more than one cost category, that cost will be allocated to a single cost category consistent with GAAP and the other provisions of this Agreement. [*].

References to "Collaboration"

References in this Financial Appendix to the "**Collaboration**" are references to those activities related to the Licensed Product that would form the basis for Operating Profit (Loss) under this Agreement. The Parties may consolidate accounting of operations related to Licensed Products, and the activities subject to that consolidated accounting also will be referred to the "Collaboration." However, the Collaboration is not a legal entity for financial accounting, income tax reporting or any other purposes

Reporting.

The fiscal year for the Collaboration will be a calendar year.

Each Party is responsible for providing the other Party reports as set forth in the table below, for activities for which it is responsible and costs it incurred and revenue obtained that forms a component of Operating Profit (Loss) for Licensed Products in the Profit-Share Territory.

Reporting will be at the times set forth in the following Report Table, with submissions due on the date indicated or the next business day if such date is a weekend or U.S. holiday:

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The Parties may agree to modify the foregoing reporting cycles and deadlines. In the event that a Party substantially or materially changes its internal reporting cycles and deadlines generally, then the Parties shall discuss, in good faith, appropriate revisions to the foregoing reporting cycles and deadlines to reasonably accommodate such change.

Unless otherwise agreed by the Parties consistent with their responsibilities for sales and marketing, Genentech shall record sales. Without limiting the Parties' reporting obligations as set forth in the Report Table above, on a calendar quarterly basis, [*] will supply [*] with a statement setting forth that quarter's Operating Profit (Loss) obtained by [*] for Licensed Products in the Profit-Share Territory, including the basis for calculation of such amounts. Genentech shall consolidate any Operating Profit (Loss) reported by Exelixis with those obtained directly by Genentech. Each such report shall be provided as early as possible, on the schedule in the chart above.

Each Party will make available a financial representative to coordinate regarding financial aspects of planning, reporting and information sharing, at the request of the other Party: Upon the reasonable request of either Party, the other Party shall answer any question and address any comment from the other Party pertaining to such financial planning and reporting.

Budgets.

Genentech will prepare a consolidated budget for Operating Profit (Loss) for the Collaboration on an [*] basis; Exelixis shall provide input for that budget regarding its sales force activities.

Budgets are provided for information and planning purposes, including establishing the initial profit share ratio for the forthcoming calendar year; final sharing of Operating Profit (Loss) on a calendar year basis are based on actual amounts, subject to Section 8.3(a)(v) of the Agreement.

ILLUSTRATIVE EXAMPLE OF PROFIT SHARE CALCULATION

The following two calendar year example is intended to illustrate the determination of Operating Profits (Losses) in the Profit Share Territory and the method of calculating the annual profit share percentages for each Party based on that year's Actual Sales.

[*]

Definitions for Financial Appendix.

“Actual Sales” means, with respect to a particular Licensed Product, the Gross Sales less [*].

“Allocable Overhead” means costs incurred by each Party that are attributable to that Party's [*]. The Allocable Overhead shall not include [*] and shall not duplicate General & Administrative Expenses hereunder.

“Cost of Sales” means the sum of: (a) Fully Burdened Manufacturing Cost (or **“FBMC”**, as defined below) of a Licensed Product in the Profit-Share Territory (in whatever form), to the extent included pursuant to Section 4.1 of the Agreement; (b) freight, insurance, customs charges, duty, and other costs of shipping Licensed Products in the Profit-Share Territory to customers (to the extent actually incurred by the shipping Party and not reimbursed by the customer); (c) temporary storage; and (d) the actual costs associated with the technology transfer to a Third Party manufacturer to enable Manufacturing of that Licensed Product, including without limitation any upfront and milestone based payments and startup costs associated therewith.

“Distribution Costs” means the costs, including applicable Allocable Overhead, specifically identifiable to the distribution of a Licensed Product in the Profit-Share Territory, including customer services, collection of data about sales to hospitals and other end users, order entry, billing, shipping, logistics, credit and collection and other such activities.

“Fully Burdened Manufacturing Cost” or **“FBMC”** means one hundred percent (100%) of each Party's actual manufacturing cost (as defined in each Party's accounting policies consistently applied) of goods produced, as determined by each Party manufacturing or contracting with a Third Party for each stage of the manufacturing process, in accordance with GAAP (as used in this definition of FBMC, the “Cost of Goods”), including product quality assurance/control costs, plus applicable Allocable Overhead.

“General and Administrative Costs” or **“G&A Costs”** means costs equal to [*] (**“G&A Rate”**) of the sum of [*] both Parties shall use such revised G&A Rate going forward in calculating General and Administrative Costs.

“Gross Sales” means the gross amount invoiced by Genentech, its Affiliates or sublicensees (for the purpose of this definition only, the term sublicensee shall include entities to which Genentech sells a Licensed Product in a form other

than final form, including without limitation OEM manufacturer and distributors, whether or not a sublicense is expressly granted) for sales of Licensed Products (such products being in final form intended for use by the end user) in the Profit-Share Territory to any Third Party in arms-length transactions. Consideration for sales of Licensed Products in the Profit-Share Territory for other than cash shall be valued at fair market value at the time of final sale. Sales between Genentech and its Affiliates or sublicensees shall be disregarded for purposes of calculating Gross Sales, except if the purchasing entity is the end-user.

“Marketing Costs” means the specific direct costs incurred by Genentech for marketing a Licensed Product in the Profit-Share Territory, including costs incurred for marketing, promotion, advertising, promotional materials, professional education, product related public relations, relationships with opinion leaders and professional societies, market research (before and after product approval), healthcare economics studies, and other similar activities for the Licensed Product in the Profit-Share Territory. Such costs will include internal costs (e.g., salaries, benefits, travel, supplies and materials), applicable Allocable Overhead, and outside services and expenses (e.g., consultants, agency fees, meeting costs), in all cases as directly applicable to a specific Licensed Product in the Profit-Share Territory. The Marketing Costs shall also include activities related to obtaining reimbursement from payers and costs of sales and marketing data, in all cases only as directly applicable to a specific Licensed Product in the Profit-Share Territory. The Marketing Costs will specifically exclude the costs of activities that promote either Party’s business as a whole without being product specific (e.g., corporate image advertising).

“Operating Profit (Loss)” means Gross Sales of all Licensed Products in the Profit-Share Territory less the following items with respect to each Licensed Product in the Profit-Share Territory, all for a given period: [*], all of which as properly chargeable and allocable on a Licensed Product-by-Licensed Product basis. All calculations will be made using, and all defined and undefined terms will be construed in accordance with GAAP and consistent with generally accepted costing methods (including appropriate Allocable Overhead) for similar products in the pharmaceutical industry.

“Other Operating Income/Expense” means any of the following: (a) [*] of any Licensed Product in the Profit-Share Territory, to the extent not previously captured; (b) amounts with respect to [*] that will be shared pursuant to Article [*] of this Agreement; (c) costs of [*] with respect to the Licensed Product (provided that if such costs are allocated between products the Parties will discuss the method of such allocation, which method must be reasonable); (d) costs of [*] that, pursuant to Article [*], will be included in Operating Profit (Loss); (e) costs to [*]; and (f) any [*] of Licensed Products in the Profit-Share Territory, excluding any [*] already accounted for in Fully Burdened Manufacturing Cost.

“Report Table” means the table set forth in this Appendix that specifies the frequency and timing of submissions for specific reporting events.

“Sales Costs” means costs, including Allocable Overhead, incurred by a Party pursuant to sales activities pursuant to a Promotion Plan or otherwise authorized under this Agreement for a Licensed Product in the Profit-Share Territory, which costs are specifically identifiable with such authorized sales efforts for Licensed Products in the Profit-Share Territory, with respect to all markets, including the managed care market.

“Sales Returns and Allowances” means the sum of (a) and (b), where:

(a) is a provision, determined by a Party under GAAP for sales of Licensed Products in the Profit-Share Territory for (i) trade, cash and quantity discounts on Licensed Products in the Profit-Share Territory granted and which are included in the determination of Gross Sales; (ii) credits or allowances given or made for rejection or return of previously sold Licensed Products in the Profit-Share Territory or for retroactive price reductions (including rebates similar to Medicare and/or Medicaid); (iii) sales tax, VAT taxes, and other taxes, duties or other governmental charges levied on or measured by the billing amount for Licensed Products in the Profit-Share Territory, as adjusted for rebates or refunds, that are borne by the seller thereof and that are not refundable and to the extent noncreditable; and (iv) discounts pursuant to indigent patient programs and patient discount programs, including the impact of price caps and patient assistance programs; and

(b) is a periodic adjustment of the provision determined in clause (a) to reflect amounts actually incurred by each Party in the Territory for items (i), (ii), (iii), and (iv) in clause (a). The provision allowed in clause (a) and adjustments made in clause (b) (if any) will be reviewed by the financial representatives from the Parties.

iv

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Exhibit B

Development Criteria

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Exhibit D

Development Plan and Development End-Point

o [*]

The patient population for this study will be cancer patients with advanced solid tumors. Entry criteria are summarized below.

INCLUSION CRITERIA

- The subject has a histologically confirmed solid tumor that is metastatic or unresectable, and for which standard curative or palliative measures do not exist or are no longer effective, and there are no therapies known to prolong survival.
- The subject has disease that is assessable by tumor marker, physical, or radiologic means.
- The subject is ≥ 18 years old.
- The subject's weight is ≥ 55 kg and ≤ 120 kg.
- The subject has an Eastern Cooperative Oncology Group ("ECOG") performance status ≤ 2 .
- The subject has organ and marrow function as follows: absolute neutrophil count ("ANC") $\geq 1500/\text{mm}^3$, platelets $\geq 100,000/\text{dL}$, hemoglobin ≥ 9 g/dL, bilirubin ≤ 1.5 mg/dL, serum creatinine ≤ 1.5 mg/dL or creatinine clearance ≥ 60 mL/min, and alanine aminotransferase ("ALT") and aspartate aminotransferase ("AST") ≤ 2.5 times the upper limit of normal if no liver involvement, or ≤ 5 times the upper limit of normal with liver involvement.
- The subject is capable of understanding and complying with the protocol and has signed the informed consent document.
- Sexually active subjects (male and female) must use medically acceptable methods of contraception during the course of the study.
- Female subjects of childbearing potential must have a negative pregnancy test at screening.
- If a subject has received more than three prior regimens of cytotoxic chemotherapy, more than two biologic regimens, or more than 3000 cGy to $>25\%$ of his or her bone marrow, the sponsor must determine subject suitability before enrollment.
- The subject has had no other diagnosis of malignancy (unless non-melanoma skin cancer or a malignancy diagnosed ≥ 5 years ago, and has had no evidence of disease for 5 years prior to screening for this study).

EXCLUSION CRITERIA

- The subject has received anticancer treatment (e.g., chemotherapy, radiotherapy, cytokines, or hormones) within 30 days (6 weeks for nitrosoureas or mitomycin C) before the first dose of study drug.
- The subject has received radiation to $>25\%$ of his or her bone marrow within 30 days of study entry.
- The subject has not recovered to grade ≤ 1 from adverse events ("AEs") or to within 10% of baseline values due to investigational or other agents administered more than 30 days prior to study enrollment.
- The subject has received another investigational agent within 30 days of the first dose of study drug.
- The subject has known brain metastases.
- The subject has an uncontrolled intercurrent illness including, but not limited to, ongoing or active infection, symptomatic congestive heart failure, unstable angina pectoris, cardiac arrhythmia, or psychiatric illness/social situations that would limit compliance with study requirements.
- The subject is pregnant or breastfeeding.
- The subject is known to be positive for the human immunodeficiency virus ("HIV").
- The subject has an allergy or hypersensitivity to components of the formulation.
- The subject is unable or unwilling to abide by the study protocol or cooperate fully with the investigator or designee.

The dose for the first cohort will be selected based on published FDA guidelines, referenced as follows: “General Guide for Starting Dose Selection for a Cytotoxic Agent in Cancer Patients” (www.fda.gov/cder/cancer/docs/doseflow.pdf).

For the initial cohorts in study, XL518 drug substance will be provided in powder form accompanied by a pharmaceutically appropriate aqueous vehicle for oral administration as a solution and/or suspension (“PIB”). A solid oral dosage form will be developed and introduced in the Phase 1 clinical trial with appropriate PK and safety monitoring.

Following the initial cohort, additional subjects will be enrolled and receive higher doses of XL518 as outlined below.

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vii

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Exhibit E

Certain Research to be Performed by the Parties for the Existing Compound

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viii

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Exhibit F

TERMS OF CO-PROMOTION AGREEMENT

Without limiting the generality of either Party's rights and obligations contained in the Agreement, the Co-Promotion Agreement shall, in addition to such other terms as the Parties may agree and as are customary in an agreement of that type, include the following terms and conditions, unless otherwise agreed upon by the Parties:

Allocation of Promotional Responsibilities	Each year, the JCC shall decide the activities to be performed by each Party during the upcoming calendar year for the promotion of a Licensed Product in the Profit-Share Territory based on indication(s) then available and expected to be available during the calendar year for co-promotion of the Licensed Product in the Profit-Share Territory. The promotional activities shall be reviewed and may be modified or adjusted during a calendar year if both Parties so agree. As a fundamental principle of co-promotion in the Profit-Share Territory, Exelixis shall have the right to field up to 25% of the total [*] within the sales force for the Licensed Product, over a calendar year. Genentech shall have the right to [*], and the [*].
Details	The JCC shall establish sales promotion thresholds, measures of sales performance and shortfall provisions (<i>e.g.</i> , the target number of and allocation thereof between the Parties, and the remedies in case of shortfall of the allocated activities by one Party, etc.) in the definitive Co-Promotion Agreement.
Breach	The Parties shall jointly establish standards and consequences for material breach of the co-promotion obligations (<i>e.g.</i> , the threshold of material breach and remedies therefor, including without limitation the possibility of termination of the breaching Party's co-promotion right, etc.) set forth in the definitive Co-Promotion Agreement.
[*]	Exelixis shall not [*]

Exhibit G: Press Release

Contact:
Charles Butler
Director,
Corporate Communications
Exelixis, Inc.
(650) 837-7277
cbutler@exelixis.com

EXELIXIS SIGNS CO-DEVELOPMENT AGREEMENT WITH GENENTECH FOR SMALL MOLECULE ONCOLOGY COMPOUND

-New Collaboration Focuses on Novel Compound Targeting MEK-

South San Francisco, CA – January 2, 2006 – Exelixis, Inc. (Nasdaq: EXEL) today announced that it has entered into an agreement with Genentech, Inc. for the worldwide co-development of XL518, a small-molecule inhibitor of MEK. Exelixis submitted an Investigational New Drug application (IND) for XL518 to the U.S. Food and Drug Administration (FDA) on December 20, 2006. MEK, also known as mitogen activated protein kinase (MAPK) kinase, is a key component of the RAS/RAF/MEK/ERK pathway, which is frequently activated in human tumors. Inappropriate activation of the MEK/ERK pathway can promote cell growth in the absence of exogenous growth factors.

Under the terms of the agreement, Exelixis will receive upfront and milestone payments totaling \$40 million upon signing of the agreement and with the submission of the IND for XL518 to the FDA. Exelixis is responsible for developing XL518 through the end of Phase I. If Genentech exercises its option to further develop XL518, Exelixis will receive an additional payment and Genentech will be responsible for further development, including all further development costs. Exelixis has the option to co-promote in the United States along with Genentech. Exelixis has a substantial share in the marketing and commercialization costs, as well as an initial equal share in profits in the United States, which will decrease as sales increase. Exelixis will receive royalties on any sales of the product which may be commercialized outside the United States.

“Genentech is a leading innovator of important new cancer therapies, and we believe that this collaboration validates the significant potential of XL518 to be the first in a new class of drugs targeting critical intracellular signaling pathways,” said George A. Scangos, Ph.D., president and chief executive officer of Exelixis. “This collaboration also combines our world class drug discovery and development platform with Genentech’s proven track record in commercializing novel compounds that positively impact the lives of patients with cancer. This is our second strategic collaboration with Genentech, and we look forward to strengthening our relationship with Genentech on the development of this promising compound.”

About Exelixis

Exelixis, Inc. is a development-stage biotechnology company dedicated to the discovery and development of novel small molecule therapeutics for the treatment of cancer and other serious diseases. The company is leveraging its fully integrated drug discovery platform to fuel the growth of its development pipeline, which is primarily focused on cancer. Currently, Exelixis' broad product pipeline includes investigational compounds in Phase II and Phase I clinical development for cancer and renal disease. Exelixis has established strategic corporate alliances with major pharmaceutical and biotechnology companies, including GlaxoSmithKline, Bristol-Myers Squibb Company, Genentech, Wyeth Pharmaceuticals and Sankyo. For more information, please visit the company's web site at www.exelixis.com.

x

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Forward Looking Statement

This press release contains forward-looking statements, including, without limitation, all statements related to the clinical and commercial potential of XL518 as well as anticipated payments, costs and profits under the agreement. Words such as "believes," "anticipates," "plans," "expects," "intends," "will," and similar expressions are intended to identify forward-looking statements. These forward-looking statements are based upon Exelixis' current expectations. Forward-looking statements involve risks and uncertainties and past performance is not indicative of future results. Exelixis' actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, the risk that products candidates that appeared promising in early research do not demonstrate safety or efficacy in clinical trials; the ability of the company to advance preclinical compounds into clinical development; the uncertainty of the FDA approval process; and the therapeutic and commercial value of the company's compounds. These and other risk factors are discussed under "Risk Factors" and elsewhere in Exelixis' quarterly report on Form 10-Q for the quarter ended September 30, 2006 and other filings with the Securities and Exchange Commission. Exelixis expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the company's expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based.

xi

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Exhibit 10.52

First Amendment to the Collaboration Agreement

This first amendment (the “**Amendment**”) to the Collaboration Agreement dated December 22, 2006 (the “**Agreement**”) between Exelixis, Inc. (“**Exelixis**”) and Genentech, Inc. (“**Genentech**”) is made and entered into by Exelixis and Genentech effective March 13, 2008 (the “**Amendment Effective Date**”). All capitalized terms not expressly defined in this Amendment shall have the meaning assigned to them in the Agreement.

Whereas, Exelixis and Genentech are parties to the Agreement; and

Whereas, Exelixis and Genentech wish to make certain amendments to the Agreement;

Now, therefore, in consideration of the foregoing premises the Parties do hereby agree to amend the Agreement, effective as of the Amendment Effective Date, as follows:

1. The following new Sections 1.75 through 1.77 are hereby added to the end of Article 1 of the Agreement:

1.75 “Development Plan Activities” means the activities directed toward achieving the primary, secondary, and exploratory objectives listed under the heading “Development Plan Activities” in **Exhibit D**.

1.76 “Opt-In Date” means the date on which Exelixis receives Genentech’s written notification of its decision to exercise its Opt-In right pursuant to Section 3.4(b).

1.77 “Transfer Date” means the date on which Exelixis notifies Genentech of the first occurrence of [*] MTD has been established consistent with the Development Plan Activities[*].

2. Section 2.1(d) of the Agreement is hereby amended and restated as follows:

“(d) Decision Making. The JSC shall make decisions unanimously, with each Party’s representatives collectively having one (1) vote and at least one (1) representative from each Party present. In the event the JSC cannot reach an agreement regarding a decision within the JSC’s authority for a period of [*], then, except as otherwise set forth in this Section 2.1(d) below, for the Collaboration: (i) Exelixis shall make the final determination in its sole discretion if such decision is regarding the [*] of Collaboration Compound(s) prior to [*], provided that Genentech shall make the final determination in its sole discretion if such decision is regarding whether Exelixis [*] with respect to [*]; and (ii) Genentech shall make the final determination in its sole discretion if such decision is regarding the [*] of Licensed Product(s) [*] (although notwithstanding Genentech’s sole discretion under this Section, Genentech continues to be subject to [*]). Notwithstanding the foregoing, [*], Exelixis shall have final decision making authority for all matters relating to: (x) [*]; and (y) [*]. [*], Genentech will have final decision making authority for all matters related to the [*]. When either Party makes final determinations under this Section, that final determination shall be consistent with the terms of this Agreement. Disputes regarding matters not within the responsibilities of the JSC shall be resolved pursuant to Section 15.3.”

3. Section 2.2(d) of the Agreement is hereby amended by replacing the phrase [*] with [*], and by replacing the phrase [*] with [*].

4. Section 3.1 of the Agreement is hereby amended and restated as follows:

1.

“3.1 DC, TCP and Development Plan Activities. The Parties have agreed on the DC and TCP, which are attached as **Exhibit B** and **Exhibit C** to this Agreement, respectively. The Parties have also agreed on the Development Plan Activities described in **Exhibit D** to this Agreement. The DC, TCP and Development Plan Activities may be amended only by the Parties’ mutual written agreement. The Parties agree that the Existing Compound meets the DC and TCP. For other Collaboration Compounds, the JSC shall determine whether such Collaboration Compound has met the DC or TCP based on meeting all of the objective criteria set forth in **Exhibit B** or **Exhibit C**, respectively.”

5. Section 3.2(a) of the Agreement is hereby amended and restated as follows:

“(a) Development by Exelixis for Existing Compound. Exelixis shall, at its expense, use Diligent Efforts to conduct the Development Plan Activities, including the Initial Phase I Trial, as set forth on **Exhibit D**, as amended, until the Transfer Date. Except as expressly set forth in the Agreement, as amended, including, without limitation, in Section 3.5(c), 4.1(a), and 4.1(b), after the Transfer Date, Exelixis shall have no obligation to conduct any further development activities with respect to the Existing Compound, [*] pursuant to the terms of the Agreement.”

6. The second sentence of Section 3.2(d) of the Agreement is hereby amended by: (1) replacing the phrase [*] with the phrase [*] and (2) replacing the phrase [*] with the phrase [*].

7. Section 3.2(d) of the Agreement is amended by adding the following to the end of such section:

“[*], Exelixis will provide Genentech with [*] updates, including, without limitation, copies of the data generated by Exelixis pursuant to Section 3.2(a) (as amended), on the Initial Phase I Trial and other information and data generated in connection with the Development Plan Activities. In addition, [*], Genentech’s representatives on the JPT, or, in place of such representatives, an equivalent number of Genentech’s designees, [*]: (i) [*]; and (ii) [*]. [*], if Genentech has [*] with: (1) [*]; or (2) [*], then Exelixis’ representatives on the JPT, or, in place of such representatives, an equivalent number of Exelixis’ designees, may [*].”

8. Section 3.2(f) of the Agreement is hereby amended and restated as follows:

“(f) Regulatory. Exelixis shall file and own all INDs for Collaboration Compounds that are the subjects of clinical trials to be carried out by Exelixis under this Agreement, subject to Section 3.5(b), and shall be responsible for the filing of any additional necessary regulatory documents in the Profit-Share Territory for such Collaboration Compounds during the period [*] for those Collaboration Compounds. If Genentech exercises its Opt-In right pursuant to Section 3.4 then Exelixis shall [*], and [*] for, any additional regulatory documents or filings, including any NDAs, with respect to any Licensed Product.”

9. Section 3.4(a) of the Agreement is hereby amended and restated as follows:

“(a) Performance of Development Plan Activities.” Exelixis shall use Diligent Efforts in performance of the Development Plan Activities set forth on **Exhibit D**, including [*]. Exelixis will notify Genentech promptly after [*] MTD for the Existing Compound is established consistent with the Development Plan Activities[*].”

10. Section 3.4(b)(i) of the Agreement is hereby amended and restated as follows:

“(i) Genentech shall notify Exelixis in writing of its decision as to whether it will exercise its right to obtain a license for the development and commercialization of Licensed Product(s) containing any Collaboration Compound (“**Opt-In**”) by [*] (the “**Initial Opt-In Expiration Date**”).”

11. Section 3.4(b)(ii) of the Agreement is hereby amended and restated in its entirety as follows: “If, as of the Initial Opt-In Expiration Date, Genentech notifies Exelixis in writing of its decision to exercise its Opt-In right with respect to such Existing Compound, then: (A) Genentech shall obtain a license, pursuant to Section 7.1, to develop and commercialize such Existing Compound and any other Collaboration Compounds; and (B) all [*] Existing Compound will [*], but will [*]; provided, however, that Exelixis shall [*], under this Agreement. The Parties shall conduct further development activities and commercialization activities with respect to such Collaboration Compounds and the associated Licensed Products pursuant to this Agreement, with Genentech being the Party responsible for the further clinical development (after the Transfer Date) of all Collaboration Compound(s) and the commercialization of any Licensed Product(s) containing such Collaboration Compound(s).

12. Section 3.4(b)(iv) is hereby added to the Agreement to read as follows:

“(iv) If Genentech exercises its Opt-In right pursuant to Section, 3.4(b)(ii) and subsequently [*], to either (1) [*], or (2) [*], then [*], the [*] under this Agreement regarding [*], but will [*], and the [*]. Thereafter Genentech shall use reasonable efforts [*], and the Parties shall [*]. If Genentech [*].”

13. Section 3.5(a) of the Agreement is hereby amended and restated in its entirety as follows:

“(a) **Effect of Opt-In; Protocol Amendment; Creation of Development Plan.** Promptly after Exelixis receives Genentech’s notice of its decision to Opt-In pursuant to Section 3.4, Exelixis shall provide Genentech with a copy of the protocol for the Initial Phase I Trial. Should Genentech want to amend this protocol, Genentech will provide Exelixis with the terms of such amendment for review (the “**Protocol Amendment**”). The Parties understand and agree that any Protocol Amendment shall not [*]. Exelixis will provide, and Genentech will reasonably consider, any comments to the Protocol Amendment within [*] of receipt thereof. Provided the Parties mutually agree on such Protocol Amendment, such agreement not to be unreasonably withheld by either Party, Exelixis will file such amendment for Regulatory Approval. [*], each Party will use Diligent Efforts to transfer the conduct of the Initial Phase I Clinical Trial to Genentech so as to minimize any disruptions thereto. Thereafter, Genentech shall provide to Exelixis, through the JPT or JSC, a plan for the further development of that Collaboration Compound and the associated Licensed Product which shall be incorporated herein by reference (the “**Development Plan**”). Genentech has final decision-making authority regarding any Development Plan; the Development Plan shall reflect Genentech’s responsibility for the further clinical development (after the Transfer Date) of Collaboration Compound(s) in the Profit-Share Territory. Genentech may amend or update the Development Plan [*], and shall provide such updated Development Plan to [*] at scheduled meetings of the JSC, but no more frequently than annually. The Development Plan is [*].”

14. Section 3.5(c) of the Agreement is amended and restated to read in its entirety as follows:

“(c) **Technical Assistance and Transfer.** Exelixis shall transfer to Genentech the Information and documents described in subsections (i)-(iii) below; provided, however, that except for those documents expressly set forth on **Exhibit D-1**, Exelixis shall not have any obligation to transfer or provide copies of any Information or documents pursuant to subsections (i) and (ii) below that are [*] (e.g., [*]).

(i) Within [*], Exelixis shall, [*], transfer (or provide copies of, as applicable) to Genentech (or a Third Party designated by Genentech) the Information associated with [*], the Parties will meet and discuss in good faith the technical assistance from Exelixis reasonably required for Genentech to [*], and the commercially reasonable terms under which such technical assistance would be provided.

(ii) Within [*], Exelixis shall, [*], disclose (and provide copies, as applicable) to Genentech the “Priority” documents identified on Exhibit D-1. Within [*], Exelixis shall, [*], disclose (and provide copies, as applicable) to Genentech the “Other” documents identified on Exhibit D-1. In addition, within [*], Exelixis shall, [*] disclose (and provide copies, as applicable) to Genentech any other Information, including [*].

(iii) [*], Exelixis shall transfer to Genentech: (1) [*], with respect to Collaboration Compounds, [*]; (2) [*] with respect to any Collaboration Compound; (3) [*]; and (4) [*], all [*] such Collaboration Compounds.”

15. Section 3.5(d) is amended and restated to read in its entirety as follows:

“(d) **Development Costs.** If Genentech exercises its Opt-In rights under Section 3.4(b) or Section 3.4(c); then [*] Genentech shall bear one hundred percent (100%) of the Development Costs with respect to a Collaboration Compound and with respect to the associated Licensed Product incurred after the Transfer Date.”

16. Section 4.1(a) of the Agreement is hereby amended and restated as follows:

“(a) Exelixis shall be the Party responsible, [*], for the Manufacture of Collaboration Compound(s) to supply the Development Activities [*] or pursuant to an Exelixis Work Plan, either by itself or through one or more Third Parties (subject to Section [*]). Notwithstanding anything to the contrary in the Agreement, if [*], then Exelixis will be responsible, at [*]. In addition, within [*], at [*], Exelixis shall provide Genentech with [*] in accordance with the terms of this Agreement.”

17. Section 4.1(b) of the Agreement is hereby amended and restated as follows:

“(b) Except as otherwise agreed by the Parties, including as may be agreed pursuant to Section 3.5(c)(i), following the Opt-In Date Exelixis shall be relieved from any Manufacturing obligations for any Collaboration Compound, except for: (1) the requirement to provide Collaboration Compound for the Initial Phase I Clinical Trial as set forth in Section 4.1(a) above; (2) the requirement to [*]; and (3) the obligation to provide those quantities of Collaboration Compounds needed for Exelixis to perform Back-Up Work under an Exelixis Work Plan. Upon being relieved of its Manufacturing obligations, Exelixis shall, [*], use Diligent Efforts to transfer the Manufacturing-related activities for those Collaboration Compounds for which it no longer has Manufacturing obligations to Genentech, pursuant to a mutually agreeable transfer plan. In addition to the transfer of documents and Information as set forth under Section 3.5(c), such transfer shall include [*]. Where Genentech has taken over the responsibility for the Manufacture of any Collaboration Compound(s) and related Licensed Product(s), Genentech may carry out such responsibilities either by itself or through one or more Third Parties. Other than costs pursuant to carrying out the Manufacturing-related activities under the technological transfer consistent with Section 3.5(c) (which costs are borne by [*] pursuant to Section 3.5(c)), Fully Burdened Manufacturing Costs (as defined in the Financial Appendix, and expressly including Third Party suppliers) incurred by Genentech (including in connection with engaging Third Party suppliers) for Collaboration Compound(s) and/or Licensed Product(s) will be borne as follows: (i) if the product is for use in [*] (including [*]), such Fully Burdened Manufacturing Costs shall be deemed [*] and shall be borne [*]; (ii) if the product is for [*], such Fully Burdened

Manufacturing Costs shall be borne [*]; and (iii) if the product is for [*], such Fully Burdened Manufacturing Costs shall be [*] and [*]”

18. Section 7.1(e) of the Agreement is hereby amended by inserting the following phrase at the end of subsection (i)(2): “, including without limitation the Initial Phase I Trial (as set forth on **Exhibit D**)”
19. Section 8.2(a) of the Agreement is hereby amended and restated in its entirety as follows:

“(a) if Genentech exercises its Opt-In right pursuant to Section 3.4(b), as amended, (i.e. with respect to an Existing Compound and all other Collaboration Compounds), Genentech shall make the following payments to Exelixis: (i) \$3,000,000 within [*] of the Opt-In Date, and (ii) \$7,000,000 within [*] following the enrollment of the first human subject in the first Phase II Clinical Trial for a Licensed Product containing the Existing Compound. For clarity, if Genentech [*]; provided, however, that Genentech shall [*] under this Agreement. Further, if Genentech [*], [*] Existing Compound.”
20. The second sentence of Section 10.1(b) is hereby amended by inserting the phrase “; provided, however, that [*] shall have the right to use such Confidential Information of [*] to [*], under this Agreement.” at the end of such sentence.
21. **Exhibit D** is hereby amended and restated in its entirety, as described in the attached Appendix.
22. Except as expressly and unambiguously stated herein, no other changes are made to the Agreement or Genentech’s rights following an Opt-In, and all other terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict between the provisions hereof and the Agreement, the provisions of this Amendment shall control. The Agreement and this Amendment contains the entire understanding between the Parties hereto with respect to the subject matter hereof and supersedes and terminates all prior agreements, understandings and arrangements between the Parties, whether written or oral with respect to such subject matter.

Signature page follows.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Accepted and Agreed:

GENENTECH, INC. By:

By: Ashraf Hanna

Title: VP Alliance Management

Date: March 13, 2008

EXELIXIS, INC.

By: /s/ George A. Scangos, PhD

Title: President & CEO

Date: March 13, 2008

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Appendix Exhibit D

o [*]

The patient population for this study will be cancer patients with advanced solid tumors. Entry criteria are summarized below:

Inclusion Criteria for subjects in the Phase I Clinical Trial:

- The subject has a histologically confirmed solid tumor that is metastatic or unresectable, and for which standard curative or palliative measures do not exist or are no longer effective, and there are no therapies known to prolong survival.
- The subject has disease that is assessable by tumor marker, physical, or radiologic means.
- The subject is ³18 years old.
- The subject's weight is ³55 kg and [£]120 kg.
- The subject has an Eastern Cooperative Oncology Group ("ECOG") performance status [£]2.
- The subject has organ and marrow function as follows: absolute neutrophil count ("ANC") ³1500/mm³, platelets ³100,000/mm³, hemoglobin ³9 g/dL, bilirubin [£]1.5 mg/dL, serum creatinine [£]1.5 mg/dL or creatinine clearance ³60 mL/min, and alanine aminotransferase ("ALT") and aspartate aminotransferase ("AST") [£]2.5 times the upper limit of normal if no liver involvement, or [£]5 times the upper limit of normal with liver involvement.
- The subject is capable of understanding and complying with the protocol and has signed the informed consent document.
- Sexually active subjects (male and female) must use medically acceptable methods of contraception during the course of the study.
- Female subjects of childbearing potential must have a negative pregnancy test at screening.
- If a subject has received more than three prior regimens of cytotoxic chemotherapy, more than two biologic regimens, or more than 3000 cGy to ³25% of his or her bone marrow, the sponsor must determine subject suitability before enrollment.
- The subject has had no other diagnosis of malignancy (unless non-melanoma skin cancer or a malignancy diagnosed ³5 years ago, and has had no evidence of disease for 5 years prior to screening for this study).

Exclusion Criteria or subjects in the Phase I Clinical Trial:

- The subject has received anticancer treatment (e.g., chemotherapy, radiotherapy, cytokines, or hormones) within 30 days (6 weeks for nitrosoureas or mitomycin C) before the first dose of study drug.
- The subject has received radiation to ³25% of his or her bone marrow within 30 days of study entry.
- The subject has not recovered to grade [£]1 from adverse events ("AEs") or to within 10% of baseline values due to investigational or other agents administered more than 30 days prior to study enrollment.
- The subject has received another investigational agent within 30 days of the first dose of study drug.
- The subject has known brain metastases.
- The subject has an uncontrolled intercurrent illness including, but not limited to, ongoing or active infection, symptomatic congestive heart failure, unstable angina pectoris, cardiac arrhythmia, or psychiatric illness/social situations that would limit compliance with study requirements.
- The subject is pregnant or breastfeeding.
- The subject is known to be positive for the human immunodeficiency virus ("HIV").
- The subject has an allergy or hypersensitivity to components of the formulation.
- The subject is unable or unwilling to abide by the study protocol or cooperate fully with the investigator or designee.

The dose for the first cohort will be selected based on published FDA guidelines, referenced as follows: “General Guide for Starting Dose Selection for a Cytotoxic Agent in Cancer Patients” (www.fda.gov/cder/cancer/docs/doseflow.pdf).

For the initial cohorts in study, XL518 drug substance will be provided in powder form accompanied by a pharmaceutically appropriate aqueous vehicle for oral administration as a solution and/or suspension (“PIB”). A solid oral dosage form will be developed and introduced in the Phase 1 clinical trial with appropriate PK and safety monitoring.

Following the initial cohort, additional subjects will be enrolled and receive higher doses of XL518 in order to establish MTD as outlined below.

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

**Appendix
Exhibit D-1**

Documents to be provided to Genentech by Exelixis [*] following a Genentech Opt-In:

- o [*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

EXELIXIS, INC.
STATEMENT RE COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES
(in thousands)

Our earnings were insufficient to cover fixed charges for the periods presented. The following table sets forth our deficiency of earnings to cover fixed charges.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
Fixed charges:					
Interest expense	\$ 33,060	\$ 40,680	\$ 41,362	\$ 38,779	\$ 24,778
Interest portion of rental expense	721	755	886	935	2,948
Total fixed charges	<u>\$ 33,781</u>	<u>\$ 41,435</u>	<u>\$ 42,248</u>	<u>\$ 39,714</u>	<u>\$ 27,726</u>
Earnings available for fixed charges:					
Net loss before income taxes	\$ (70,222)	\$ (161,744)	\$ (261,297)	\$ (238,192)	\$ (145,335)
Fixed charges per above	33,781	41,435	42,248	39,714	27,726
Total earnings available for fixed charges	<u>\$ (36,441)</u>	<u>\$ (120,309)</u>	<u>\$ (219,049)</u>	<u>\$ (198,478)</u>	<u>\$ (117,609)</u>
Ratio of earnings to fixed charges	N/A	N/A	N/A	N/A	N/A
Deficiency of earnings available to cover fixed charges	\$ (70,222)	\$ (161,744)	\$ (261,297)	\$ (238,192)	\$ (145,335)

Interest expense and Net loss before income taxes have been revised to reflect the correction of the accounting for non-cash interest expense associated with the 2019 Notes. See "Note 1 - Organization and Summary of Significant Accounting Policies - Correction of an Immaterial Error" in the Notes to the Condensed Consolidated Financial Statements for additional information on the correction.

SUBSIDIARIES OF EXELIXIS, INC.

Name of Subsidiary	State or Other Jurisdiction of Incorporation or Organization
Exelixis Global Services, Inc.	Delaware
Exelixis International (Bermuda) Ltd.	Bermuda
Exelixis International (UK) Ltd.	United Kingdom
Exelixis Patent Company, LLC	Delaware
Exelixis Plant Sciences, Inc.	Delaware

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-214766, 333-212866, 333-209824, 333-203758, 333-196761, 333-176674, 333-165389, 333-159280, 333-157825, 333-149834, 333-147063, 333-133237, 333-124536, 333-113472, 333-102770, 333-82724, 333-82722, 333-57026, 333-54868 and 333-35862) of Exelixis, Inc. and the Registration Statements (Form S-3 Nos. 333-205397 and 333-194074) and related Prospectuses of Exelixis, Inc. of our reports dated February 27, 2017, with respect to the consolidated financial statements of Exelixis, Inc. and the effectiveness of internal control over financial reporting of Exelixis, Inc., included in this Annual Report (Form 10-K) for the year ended December 30, 2016.

/s/ Ernst & Young LLP

Redwood City, California
February 27, 2017

CERTIFICATION

I, Michael M. Morrissey, Ph.D., certify that:

1. I have reviewed this Form 10-K of Exelixis, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ MICHAEL M. MORRISSEY

Michael M. Morrissey, Ph.D.

President and Chief Executive Officer
(Principal Executive Officer)

Date: February 27, 2017

CERTIFICATION

I, Christopher J. Senner, certify that:

1. I have reviewed this Form 10-K of Exelixis, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ CHRISTOPHER J. SENNER

Christopher J. Senner

Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

Date: February 27, 2017

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code, Michael M. Morrissey, Ph.D., the President and Chief Executive Officer of Exelixis, Inc. (the "Company"), and Christopher J. Senner, the Executive Vice President and Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company's Annual Report on Form 10-K for the period ended December 30, 2016, to which this Certification is attached as Exhibit 32.1 (the "Annual Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 27th day of February 2017.

/s/ MICHAEL M. MORRISSEY

Michael M. Morrissey, Ph.D.

President and Chief Executive Officer
(Principal Executive Officer)

/s/ CHRISTOPHER J. SENNER

Christopher J. Senner

Executive Vice President and Chief Financial Officer
(Principal Financial Officer)