



Exelixis Announces Results from Sub-Group Analyses of the Phase 3 Pivotal CELESTIAL Trial of Cabozantinib for Advanced Hepatocellular Carcinoma Presented at ASCO 2018

June 3, 2018

– Cabozantinib improved overall survival and progression-free survival irrespective of duration of prior sorafenib treatment or age category

SOUTH SAN FRANCISCO, Calif.--(BUSINESS WIRE)--Jun. 3, 2018-- [Exelixis, Inc.](#) (Nasdaq: EXEL) today announced results from sub-group analyses of the CELESTIAL phase 3 pivotal trial of cabozantinib in advanced hepatocellular carcinoma (HCC) comparing outcomes by duration of sorafenib treatment in patients whose only prior treatment was sorafenib and outcomes based on age. The findings, presented in two posters at the American Society of Clinical Oncology (ASCO) 2018 Annual Meeting during the Gastrointestinal (Noncolorectal) Cancer Poster Session from 8:00 – 11:00 a.m. CDT in Hall A, showed that cabozantinib improved overall survival (OS) and progression-free survival (PFS) compared with placebo irrespective of duration of prior sorafenib treatment or age category.

"We're pleased with the encouraging CELESTIAL subgroup data presented at ASCO, which showed that cabozantinib provided benefits to patients regardless of duration of prior sorafenib treatment or age," said Gisela Schwab, M.D., President, Product Development and Medical Affairs and Chief Medical Officer, Exelixis. "We continue to work closely with the U.S. FDA as they review the filing application for cabozantinib for previously treated advanced hepatocellular carcinoma and hope it may soon provide a new option for patients with this difficult-to-treat cancer who have few alternatives."

Outcomes in Patients who had Received Sorafenib [abstract 4088]

The sub-analysis of patients in CELESTIAL who received sorafenib as their only prior systemic therapy was presented by Robin Kate Kelley, M.D., University of California San Francisco. In this subgroup-analysis, patients were grouped by the length of time they had been treated with sorafenib (less than three months; three to six months; more than six months) to assess the effect of cabozantinib in patients with varying benefit from prior sorafenib. In all three groups, cabozantinib improved OS and PFS versus placebo:

	Duration of Prior Sorafenib*					
	<3 Months		3 to <6 Months		≥6 Months	
	Cabozantinib (n=89)	Placebo (n=47)	Cabozantinib (n=98)	Placebo (n=43)	Cabozantinib (n=143)	Placebo (n=74)
Median OS (months)	8.9	6.9	11.5	6.5	12.3	9.2
	HR 0.72, 95 percent CI 0.47–1.10		HR 0.65, 95 percent CI 0.43–1.00		HR 0.82, 95 percent CI 0.58–1.16	
Median PFS (months)	3.8	1.8	5.4	1.9	5.7	1.9
	HR 0.35, 95 percent CI 0.23–0.52		HR 0.37, 95 percent CI 0.25–0.56		HR 0.48, 95 percent CI 0.35–0.67	

*Patients who received prior sorafenib as the only prior systemic therapy for HCC

HR=Hazard Ratio; CI=Confidence Interval

Treatment-related grade 3 or 4 adverse events (AEs) that occurred in at least 5 percent of any patient group were palmar-plantar erythrodysesthesia, aspartate aminotransferase increased, hypertension, fatigue, decreased appetite, diarrhea, asthenia and anemia.

Outcomes in Patients Based on Age [abstract 4090]

The sub-analysis evaluating patients in the CELESTIAL trial based on age was presented by Lorenza Rimassa, M.D., Humanitas Clinical and Research Center. In this sub-analysis, patients were grouped as younger than 65 years of age and 65 years of age and older. The findings showed OS and PFS were consistently improved with cabozantinib versus placebo in each age category:

Patients <Age 65

Patients ≥65

	Cabozantinib (n=240)	Placebo (n=124)	Cabozantinib (n=230)	Placebo (n=113)
Median OS (months)	9.6 HR 0.81, 95 percent CI 0.62–1.05	7.7	11.1 HR 0.74, 95 percent CI 0.56–0.97	8.3
Median PFS (months)	5.0 HR 0.45, 95 percent CI 0.35–0.57	1.9	5.4 HR 0.46, 95 percent CI 0.35–0.59	2.0

Treatment-related grade 3 or 4 AEs occurred in at least 5 percent of either age group and were similar in nature and frequency to the AEs that occurred in patients who received sorafenib as their only prior systemic therapy.

An encore of the CELESTIAL trial data originally presented at the 2018 American Society of Clinical Oncology Gastrointestinal Cancers Symposium (ASCO-GI) will be presented by Dr. Ghassan K. Abou-Alfa, Memorial Sloan Kettering Cancer Center, during the Gastrointestinal (Noncolorectal) Cancer Poster Discussion Session today from 4:45 – 6:00 p.m. CDT in Hall D2 [abstract 4019].

The CELESTIAL trial was the basis for Exelixis' supplemental New Drug Application filed with the U.S. Food and Drug Administration (FDA) for CABOMETYX® (cabozantinib) tablets as a treatment for patients with previously treated advanced HCC. The Prescription Drug User Fee Act action date for this application is January 14, 2019. On March 28, 2018, our partner Ipsen announced that they received validation of the application for variation to the CABOMETYX marketing authorization from the European Medicines Agency, the European regulatory authority, for the addition of a new indication for patients with previously treated advanced HCC.

About the CELESTIAL Study

CELESTIAL is a phase 3 randomized, double-blind, placebo-controlled study of cabozantinib in patients with advanced HCC conducted at more than 100 sites globally in 19 countries. The trial was designed to enroll 760 patients with advanced HCC who received prior sorafenib and may have received up to two prior systemic cancer therapies for HCC and had adequate liver function. Enrollment of the trial was completed in September 2017. Patients were randomized 2:1 to receive 60 mg of cabozantinib once daily or placebo and were stratified based on etiology of the disease (hepatitis C, hepatitis B or other), geographic region (Asia versus other regions) and presence of extrahepatic spread and/or macrovascular invasion (yes or no). No cross-over was allowed between the study arms during the blinded treatment phase of the trial. The primary endpoint for the trial is overall survival, and secondary endpoints include objective response rate and progression-free survival. Exploratory endpoints include patient-reported outcomes, biomarkers and safety.

Results of the trial were first presented by Dr. Abou-Alfa at 2018 American Society of Clinical Oncology Gastrointestinal Cancers Symposium in January 2018.

About HCC

Liver cancer is the second-leading cause of cancer death worldwide, accounting for more than 700,000 deaths and nearly 800,000 new cases each year.¹ In the U.S., the incidence of liver cancer has more than tripled since 1980.² HCC is the most common form of liver cancer, making up about three-fourths of the estimated nearly 42,000 new cases in the U.S. in 2018. HCC is the fastest-rising cause of cancer-related death in U.S.³ Without treatment, patients with advanced HCC usually survive less than 6 months.⁴

About CABOMETYX® (cabozantinib)

CABOMETYX tablets are approved in the United States for the treatment of patients with advanced RCC. CABOMETYX tablets are also approved in the European Union, Norway, Iceland, Australia, Switzerland and South Korea for the treatment of advanced RCC in adults who have received prior VEGF-targeted therapy, and in the European Union for previously untreated intermediate- or poor-risk advanced RCC. In 2016, Exelixis granted Ipsen exclusive rights for the commercialization and further clinical development of cabozantinib outside of the United States and Japan. In 2017, Exelixis granted exclusive rights to Takeda Pharmaceutical Company Limited for the commercialization and further clinical development of cabozantinib for all future indications in Japan, including RCC and HCC.

Please see Important Safety Information below and full U.S. prescribing information at <https://cabometyx.com/downloads/CABOMETYXUSPI.pdf>.

U.S. Important Safety Information

- **Hemorrhage:** Severe and fatal hemorrhages have occurred with CABOMETYX. In two RCC studies, the incidence of Grade \geq 3 hemorrhagic events was 3% in CABOMETYX-treated patients. Do not administer CABOMETYX to patients that have or are at risk for severe hemorrhage.
- **Gastrointestinal (GI) Perforations and Fistulas:** In RCC studies, fistulas were reported in 1% of CABOMETYX-treated patients. Fatal perforations occurred in patients treated with CABOMETYX. In RCC studies, gastrointestinal (GI) perforations were reported in 1% of CABOMETYX-treated patients. Monitor patients for symptoms of fistulas and perforations, including abscess and sepsis. Discontinue CABOMETYX in patients who experience a fistula which cannot be appropriately managed or a GI perforation.
- **Thrombotic Events:** CABOMETYX treatment results in an increased incidence of thrombotic events. In RCC studies, venous thromboembolism occurred in 9% (including 5% pulmonary embolism) and arterial thromboembolism occurred in 1% of CABOMETYX-treated patients. Fatal thrombotic events occurred in the cabozantinib clinical program. Discontinue CABOMETYX in patients who develop an acute myocardial infarction or any other arterial thromboembolic complication.
- **Hypertension and Hypertensive Crisis:** CABOMETYX treatment results in an increased incidence of treatment-emergent

hypertension, including hypertensive crisis. In RCC studies, hypertension was reported in 44% (18% Grade \geq 3) of CABOMETYX-treated patients. Monitor blood pressure prior to initiation and regularly during CABOMETYX treatment. Withhold CABOMETYX for hypertension that is not adequately controlled with medical management; when controlled, resume CABOMETYX at a reduced dose. Discontinue CABOMETYX for severe hypertension that cannot be controlled with anti-hypertensive therapy. Discontinue CABOMETYX if there is evidence of hypertensive crisis or severe hypertension despite optimal medical management.

- **Diarrhea:** In RCC studies, diarrhea occurred in 74% of patients treated with CABOMETYX. Grade 3 diarrhea occurred in 11% of patients treated with CABOMETYX. Withhold CABOMETYX in patients who develop intolerable Grade 2 diarrhea or Grade 3-4 diarrhea that cannot be managed with standard antidiarrheal treatments until improvement to Grade 1; resume CABOMETYX at a reduced dose.
- **Palmar-Plantar Erythrodysesthesia (PPE):** In RCC studies, palmar-plantar erythrodysesthesia (PPE) occurred in 42% of patients treated with CABOMETYX. Grade 3 PPE occurred in 8% of patients treated with CABOMETYX. Withhold CABOMETYX in patients who develop intolerable Grade 2 PPE or Grade 3 PPE until improvement to Grade 1; resume CABOMETYX at a reduced dose.
- **Reversible Posterior Leukoencephalopathy Syndrome (RPLS),** a syndrome of subcortical vasogenic edema diagnosed by characteristic finding on MRI, occurred in the cabozantinib clinical program. Perform an evaluation for RPLS in any patient presenting with seizures, headache, visual disturbances, confusion or altered mental function. Discontinue CABOMETYX in patients who develop RPLS.
- **Embryo-fetal Toxicity** may be associated with CABOMETYX. Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during CABOMETYX treatment and for 4 months after the last dose.
- **Adverse Reactions:** The most commonly reported (\geq 25%) adverse reactions are: diarrhea, fatigue, nausea, decreased appetite, hypertension, PPE, weight decreased, vomiting, dysgeusia, and stomatitis.
- **Strong CYP3A4 Inhibitors:** If concomitant use with strong CYP3A4 inhibitors cannot be avoided, reduce the CABOMETYX dosage.
- **Strong CYP3A4 Inducers:** If concomitant use with strong CYP3A4 inducers cannot be avoided, increase the CABOMETYX dosage.
- **Lactation:** Advise women not to breastfeed while taking CABOMETYX and for 4 months after the final dose.
- **Hepatic Impairment:** In patients with mild to moderate hepatic impairment, reduce the CABOMETYX dosage. CABOMETYX is not recommended for use in patients with severe hepatic impairment.

Please see accompanying full Prescribing Information <https://cabometyx.com/downloads/CABOMETYXUSPI.pdf>.

About Exelixis

Founded in 1994, Exelixis, Inc. (Nasdaq: EXEL) is a commercially successful, oncology-focused biotechnology company that strives to accelerate the discovery, development and commercialization of new medicines for difficult-to-treat cancers. Following early work in model genetic systems, we established a broad drug discovery and development platform that has served as the foundation for our continued efforts to bring new cancer therapies to patients in need. We discovered our lead compounds cabozantinib and cobimetinib, and advanced them into clinical development before entering into partnerships with leading biopharmaceutical companies in our efforts to bring these medicines to patients globally. We are steadfast in our commitment to prudently reinvest in our business to maximize the potential of our pipeline. We intend to supplement our existing therapeutic assets with targeted business development activities and internal drug discovery – all to deliver the next generation of Exelixis medicines and help patients recover stronger and live longer. Exelixis recently earned a spot on Deloitte's Technology Fast 500 list, a yearly award program honoring the 500 fastest-growing companies over the past four years. For more information about Exelixis, please visit www.exelixis.com, follow [@ExelixisInc](https://twitter.com/ExelixisInc) on Twitter or like [Exelixis, Inc.](https://www.facebook.com/ExelixisInc) on Facebook.

Forward-Looking Statement Disclaimer

This press release contains forward-looking statements, including, without limitation, statements related to: the regulatory review process, including Exelixis' intent to continue to work closely with the FDA as they review the application for cabozantinib as a treatment for patients with previously treated advanced HCC; Exelixis' hope that cabozantinib will provide a new treatment option for patients with previously treated advanced HCC; plans for an encore presentation of the CELESTIAL trial data, originally presented at the 2018 ASCO-GI; Exelixis' plans to reinvest in its business to maximize the potential of the company's pipeline, including through targeted business development activities and internal drug discovery; and Exelixis' mission to deliver the next generation of Exelixis medicines and help patients recover stronger and live longer. Words such as "continue," "hope," "may," "will," "commitment," "potential," "intend," or other similar expressions identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. These forward-looking statements are based upon Exelixis' current plans, assumptions, beliefs, expectations, estimates and projections. Forward-looking statements involve risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in the forward-looking statements as a result of these risks and uncertainties, which include, without limitation: risks and uncertainties related to regulatory review and approval processes and Exelixis' compliance with applicable legal and regulatory requirements; market acceptance of CABOMETYX, COMETRIQ, and COTELLIC and the availability of coverage and reimbursement for these products; the risk that unanticipated developments could adversely affect the commercialization of CABOMETYX, COMETRIQ, and COTELLIC; risks related to the potential failure of cabozantinib and cobimetinib to demonstrate safety and efficacy in clinical testing; Exelixis' ability and the ability of its collaborators to conduct clinical trials of cabozantinib and cobimetinib, both alone and in combination with other therapies, sufficient to achieve a positive completion; Exelixis' dependence on its relationships with its collaboration partners, including, the level of their investment in the resources necessary to successfully commercialize partnered products in the territories where they are approved; the level of costs associated with Exelixis' commercialization, research and development, in-licensing or acquisition of product candidates, and other activities;

Exelixis' dependence on third-party vendors for the development, manufacture and supply of its products; Exelixis' ability to protect the company's intellectual property rights; market competition, including the potential for competitors to obtain approval for generic versions of Exelixis' marketed products; changes in economic and business conditions, and other factors discussed under the caption "Risk Factors" in Exelixis' annual report on Form 10-Q filed with the Securities and Exchange Commission (SEC) on May 2, 2018, and in Exelixis' future filings with the SEC. The forward-looking statements made in this press release speak only as of the date of this press release. Exelixis expressly disclaims any duty, obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Exelixis' expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based.

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¹ Cancer Incidence and Mortality Worldwide. Liver Cancer. International Agency for Research on Cancer, GLOBOCAN 2012. Available at: http://globocan.iarc.fr/Pages/fact_sheets_cancer.aspx. Accessed June 2018.

² American Cancer Society: Cancer Facts and Figures 2018. Available at: <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2018/cancer-facts-and-figures-2018.pdf>. Accessed June 2018.

³ Mittal S, El-Serag HB. Epidemiology of HCC: Consider the Population. *Journal of Clinical Gastroenterology*. 2013. 47:S2-S6.

⁴ Weledji E, Orock G, Ngowe M, NsaghaD. How grim is hepatocellular carcinoma? *Annals of Medicine and Surgery*. 2014. 3:71-76.

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