



## Exelixis Announces Positive Findings at ASCO GU for CABOMETYX® (cabozantinib) in Patients with Brain Metastases from Renal Cell Carcinoma

February 8, 2021

**– Results of retrospective analysis demonstrate a 61% intracranial response rate in patients with progressing brain metastases –**

**– Data to be presented during the 2021 American Society of Clinical Oncology’s Genitourinary Cancers Symposium –**

ALAMEDA, Calif.--(BUSINESS WIRE)--Feb. 8, 2021-- [Exelixis, Inc.](https://www.exelixis.com) (NASDAQ: EXEL) today announced results from a retrospective analysis evaluating CABOMETYX® (cabozantinib) activity in brain metastases in patients with renal cell carcinoma (RCC). The findings will be presented as part of the Poster Session: Renal Cell Cancer at the 2021 American Society of Clinical Oncology’s Genitourinary Cancers Symposium (ASCO GU), which is being held virtually, February 11-13, 2021. All posters will be available on demand beginning at 5:00 a.m. PT on Thursday, February 11.

In this retrospective analysis of medical records from patients with metastatic RCC with brain metastases, an intracranial response rate of 61% (95% CI: 39%-80%), including a complete response rate of 13%, was seen for patients with progressing intracranial metastases at baseline (Cohort 1; n=25) who were treated with CABOMETYX. Patients without progressing intracranial metastases (Cohort 2; n=44) had an intracranial response rate of 57% (95% CI: 41%-72%). The rate of brain disease progression at six months was 16% for patients with progressive brain disease at baseline and 9% for those without. Median overall survival was 14.7 months for Cohort 1 and 14.1. months for Cohort 2. The reported safety data are consistent with the known safety profile for CABOMETYX.

“With these exciting results, oral systemic cabozantinib is showing intriguing activity on brain metastases in renal cell carcinoma,” said Dr. Toni Choueiri, Director of the Lank Center for Genitourinary Oncology at Dana-Farber Cancer Institute and the Jerome and Nancy Kohlberg Professor of Medicine at Harvard Medical School. “The high intracranial response rates seen in this retrospective analysis suggest cabozantinib has the potential for helping patients with difficult-to-treat brain lesions from kidney cancer. We look forward to building on these encouraging findings through the ongoing phase 2 CABRAMET trial ([NCT03967522](https://clinicaltrials.gov/ct2/show/study/NCT03967522)) led by our French colleagues, which is prospectively evaluating cabozantinib in patients with brain metastases from renal cell carcinoma.”

“Brain metastases resulting from renal cell carcinoma are especially difficult to treat, as the blood-brain barrier poses a challenge for therapies to reach their targets,” said Gisela Schwab, M.D., President, Product Development and Medical Affairs and Chief Medical Officer, Exelixis. “These encouraging results including a high intracranial response rate, suggest CABOMETYX may reduce the size of brain metastases, without neurological toxicity, and thereby may be of interest to physicians treating kidney cancer patients with brain metastases.”

### About the Study

For this retrospective study, sponsored by the Dana-Farber Cancer Institute, consecutive medical records from patients with metastatic RCC with brain metastases who had been treated with cabozantinib monotherapy across 15 institutions in the United States (ten centers), Belgium (three centers), Spain (one center) and France (one center) were reviewed.

Patients were divided into two cohorts based on the presence (n=25) or absence (n=44) of progressing intracranial metastases at start of CABOMETYX therapy. Most patients (87%) were International Metastatic RCC Database Consortium (IMDC) intermediate/poor risk, and 75% had been previously treated. Prior brain-directed therapy was received by 65% of patients with progressing brain metastases and by 93% of those without. All patients were treated with CABOMETYX. Four patients were not included in the intracranial analysis due to brain lesion size under 5 mm.

### About RCC

The American Cancer Society’s 2021 statistics cite kidney cancer as among the top ten most commonly diagnosed forms of cancer among both men and women in the U.S.<sup>1</sup> Clear cell RCC is the most common form of kidney cancer in adults.<sup>2</sup> If detected in its early stages, the five-year survival rate for RCC is high; for patients with advanced or late-stage metastatic RCC, however, the five-year survival rate is only 13%.<sup>1</sup> Approximately 32,000 patients in the U.S. and 71,000 worldwide will require systemic treatment for advanced kidney cancer in 2021.<sup>3</sup>

About 70% of RCC cases are known as “clear cell” carcinomas, based on histology.<sup>4</sup> The majority of clear cell RCC tumors have below-normal levels of a protein called von Hippel-Lindau, which leads to higher levels of MET, AXL and VEGF.<sup>5,6</sup> These proteins promote tumor angiogenesis (blood vessel growth), growth, invasiveness and metastasis.<sup>7,8,9,10</sup> MET and AXL may provide escape pathways that drive resistance to VEGF receptor inhibitors.<sup>6,7</sup>

### About CABOMETYX® (cabozantinib)

In the U.S., CABOMETYX tablets are approved for the treatment of patients with advanced RCC; for the treatment of patients with HCC who have been previously treated with sorafenib; and for patients with advanced RCC as a first-line treatment in combination with nivolumab. CABOMETYX tablets have also received regulatory approvals in the European Union and additional countries and regions worldwide. 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. Exelixis holds the exclusive rights to develop and commercialize cabozantinib in the United States.

### Important Safety Information

## Warnings and Precautions

**Hemorrhage:** Severe and fatal hemorrhages occurred with CABOMETYX. The incidence of Grade 3 to 5 hemorrhagic events was 5% in CABOMETYX patients in RCC and HCC studies. Discontinue CABOMETYX for Grade 3 or 4 hemorrhage. Do not administer CABOMETYX to patients who have a recent history of hemorrhage, including hemoptysis, hematemesis, or melena.

**Perforations and Fistulas:** Fistulas, including fatal cases, occurred in 1% of CABOMETYX patients. Gastrointestinal (GI) perforations, including fatal cases, occurred in 1% of CABOMETYX patients. Monitor patients for signs and symptoms of fistulas and perforations, including abscess and sepsis. Discontinue CABOMETYX in patients who experience a Grade 4 fistula or a GI perforation.

**Thrombotic Events:** CABOMETYX increased the risk of thrombotic events. Venous thromboembolism occurred in 7% (including 4% pulmonary embolism) and arterial thromboembolism in 2% of CABOMETYX patients. Fatal thrombotic events occurred in CABOMETYX patients. Discontinue CABOMETYX in patients who develop an acute myocardial infarction or serious arterial or venous thromboembolic events that require medical intervention.

**Hypertension and Hypertensive Crisis:** CABOMETYX can cause hypertension, including hypertensive crisis. Hypertension was reported in 36% (17% Grade 3 and <1% Grade 4) of CABOMETYX patients. Do not initiate CABOMETYX in patients with uncontrolled hypertension. Monitor blood pressure regularly during CABOMETYX treatment. Withhold CABOMETYX for hypertension that is not adequately controlled with medical management; when controlled, resume at a reduced dose. Discontinue CABOMETYX for severe hypertension that cannot be controlled with anti-hypertensive therapy or for hypertensive crisis.

**Diarrhea:** Diarrhea occurred in 63% of CABOMETYX patients. Grade 3 diarrhea occurred in 11% of CABOMETYX patients. Withhold CABOMETYX until improvement to Grade 1 and resume at a reduced dose for intolerable Grade 2 diarrhea, Grade 3 diarrhea that cannot be managed with standard antidiarrheal treatments, or Grade 4 diarrhea.

**Palmar-Plantar Erythrodysesthesia (PPE):** PPE occurred in 44% of CABOMETYX patients. Grade 3 PPE occurred in 13% of CABOMETYX patients. Withhold CABOMETYX until improvement to Grade 1 and resume at a reduced dose for intolerable Grade 2 PPE or Grade 3 PPE.

**Hepatotoxicity:** CABOMETYX in combination with nivolumab can cause hepatic toxicity with higher frequencies of Grades 3 and 4 ALT and AST elevations compared to CABOMETYX alone.

Monitor liver enzymes before initiation of and periodically throughout treatment. Consider more frequent monitoring of liver enzymes than when the drugs are administered as single agents. For elevated liver enzymes, interrupt CABOMETYX and nivolumab and consider administering corticosteroids.

With the combination of CABOMETYX and nivolumab, Grades 3 and 4 increased ALT or AST were seen in 11% of patients. ALT or AST >3 times ULN (Grade  $\geq 2$ ) was reported in 83 patients, of whom 23 (28%) received systemic corticosteroids; ALT or AST resolved to Grades 0-1 in 74 (89%). Among the 44 patients with Grade  $\geq 2$  increased ALT or AST who were rechallenged with either CABOMETYX (n=9) or nivolumab (n=11) as a single agent or with both (n=24), recurrence of Grade  $\geq 2$  increased ALT or AST was observed in 2 patients receiving CABOMETYX, 2 patients receiving nivolumab, and 7 patients receiving both CABOMETYX and nivolumab.

**Adrenal Insufficiency:** CABOMETYX in combination with nivolumab can cause primary or secondary adrenal insufficiency. For Grade 2 or higher adrenal insufficiency, initiate symptomatic treatment, including hormone replacement as clinically indicated. Withhold CABOMETYX and/or nivolumab depending on severity.

Adrenal insufficiency occurred in 4.7% (15/320) of patients with RCC who received CABOMETYX with nivolumab, including Grade 3 (2.2%), and Grade 2 (1.9%) adverse reactions. Adrenal insufficiency led to permanent discontinuation of CABOMETYX and nivolumab in 0.9% and withholding of CABOMETYX and nivolumab in 2.8% of patients with RCC.

Approximately 80% (12/15) of patients with adrenal insufficiency received hormone replacement therapy, including systemic corticosteroids. Adrenal insufficiency resolved in 27% (n=4) of the 15 patients. Of the 9 patients in whom CABOMETYX with nivolumab was withheld for adrenal insufficiency, 6 reinstated treatment after symptom improvement; of these, all (n=6) received hormone replacement therapy and 2 had recurrence of adrenal insufficiency.

**Proteinuria:** Proteinuria was observed in 7% of CABOMETYX patients. Monitor urine protein regularly during CABOMETYX treatment. Discontinue CABOMETYX in patients who develop nephrotic syndrome.

**Osteonecrosis of the Jaw (ONJ):** ONJ occurred in <1% of CABOMETYX patients. ONJ can manifest as jaw pain, osteomyelitis, osteitis, bone erosion, tooth or periodontal infection, toothache, gingival ulceration or erosion, persistent jaw pain, or slow healing of the mouth or jaw after dental surgery. Perform an oral examination prior to CABOMETYX initiation and periodically during treatment. Advise patients regarding good oral hygiene practices. Withhold CABOMETYX for at least 3 weeks prior to scheduled dental surgery or invasive dental procedures, if possible. Withhold CABOMETYX for development of ONJ until complete resolution.

**Impaired Wound Healing:** Wound complications occurred with CABOMETYX. Withhold CABOMETYX for at least 3 weeks prior to elective surgery. Do not administer CABOMETYX for at least 2 weeks after major surgery and until adequate wound healing is observed. The safety of resumption of CABOMETYX after resolution of wound healing complications has not been established.

**Reversible Posterior Leukoencephalopathy Syndrome (RPLS):** RPLS, a syndrome of subcortical vasogenic edema diagnosed by characteristic findings on MRI, can occur with CABOMETYX. Evaluate for RPLS in patients presenting with seizures, headache, visual disturbances, confusion, or altered mental function. Discontinue CABOMETYX in patients who develop RPLS.

**Embryo-Fetal Toxicity:** CABOMETYX can cause fetal harm. Advise pregnant women and females of reproductive potential of the potential risk to a fetus. Verify the pregnancy status of females of reproductive potential prior to initiating CABOMETYX and advise them to use effective contraception during treatment and for 4 months after the last dose.

## ADVERSE REACTIONS

The most common (≥20%) adverse reactions are:

CABOMETYX as a single agent: diarrhea, fatigue, decreased appetite, PPE, nausea, hypertension, vomiting, weight decreased, constipation, and dysphonia.

CABOMETYX in combination with nivolumab: diarrhea, fatigue, hepatotoxicity, PPE, stomatitis, rash, hypertension, hypothyroidism, musculoskeletal pain, decreased appetite, nausea, dysgeusia, abdominal pain, cough, and upper respiratory tract infection.

## DRUG INTERACTIONS

**Strong CYP3A4 Inhibitors:** If coadministration with strong CYP3A4 inhibitors cannot be avoided, reduce the CABOMETYX dosage. Avoid grapefruit or grapefruit juice.

**Strong CYP3A4 Inducers:** If coadministration with strong CYP3A4 inducers cannot be avoided, increase the CABOMETYX dosage. Avoid St. John's wort.

## USE IN SPECIFIC POPULATIONS

**Lactation:** Advise women not to breastfeed during CABOMETYX treatment and for 4 months after the final dose.

**Hepatic Impairment:** In patients with moderate hepatic impairment, reduce the CABOMETYX dosage. Avoid CABOMETYX in patients with severe hepatic impairment.

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

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit [www.FDA.gov/medwatch](http://www.FDA.gov/medwatch) or call 1-800-FDA-1088.

## 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 system genetics, 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. Our discovery efforts have resulted in four commercially available products, CABOMETYX<sup>®</sup> (cabozantinib), COMETRIQ<sup>®</sup> (cabozantinib), COTELLIC<sup>®</sup> (cobimetinib) and MINNEBRO<sup>®</sup> (esaxerenone), and we have entered into partnerships with leading pharmaceutical companies to bring these important medicines to patients worldwide. Supported by revenues from our marketed products and collaborations, we are committed to prudently reinvesting in our business to maximize the potential of our pipeline. We are supplementing 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 is a member of the Standard & Poor's (S&P) MidCap 400 index, which measures the performance of profitable mid-sized companies. In November 2020, the company was named to *Fortune's* 100 Fastest-Growing Companies list for the first time, ranking 17<sup>th</sup> overall and the third-highest biopharmaceutical company. For more information about Exelixis, please visit [www.exelixis.com](http://www.exelixis.com), follow [@ExelixisInc](https://twitter.com/ExelixisInc) on Twitter or like [Exelixis, Inc.](https://www.facebook.com/Exelixis.Inc) on Facebook.

## Forward-Looking Statements

This press release contains forward-looking statements, including, without limitation, statements related to: the presentation of data from a retrospective analysis evaluating CABOMETYX activity in brain metastases in patients with RCC at ASCO GU; the therapeutic potential of CABOMETYX for patients with difficult-to-treat brain lesions from kidney cancer; and 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. Any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements and 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: the availability of data at the referenced times; the potential failure of cabozantinib to demonstrate safety and/or efficacy in future trials; unexpected concerns that may arise as a result of the occurrence of adverse safety events or additional data analyses of clinical trials evaluating CABOMETYX; Exelixis' continuing compliance with applicable legal and regulatory requirements; Exelixis' dependence on third-party vendors for the development, manufacture and supply of cabozantinib; Exelixis' ability to protect its intellectual property rights; market competition, including the potential for competitors to obtain approval for generic versions of CABOMETYX; changes in economic and business conditions, including as a result of the COVID-19 pandemic; and other factors affecting Exelixis and its development programs discussed under the caption "Risk Factors" in Exelixis' Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (SEC) on November 5, 2020, and in Exelixis' future filings with the SEC. All forward-looking statements in this press release are based on information available to Exelixis as of the date of this press release, and Exelixis undertakes no obligation to update or revise any forward-looking statements contained herein, except as required by law.

*Exelixis, the Exelixis logo, CABOMETYX, COMETRIQ and COTELLIC are registered U.S. trademarks. MINNEBRO is a Japanese trademark.*

<sup>1</sup> American Cancer Society: Cancer Facts & Figures 2021. Available at: <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf>. Accessed February 2021.

<sup>2</sup> Jonasch, E., Gao, J., Rathmell, W., Renal cell carcinoma. *BMJ*. 2014; 349:g4797.

<sup>3</sup> Decision Resources Report: Renal Cell Carcinoma. October 2014 (internal data on file).

<sup>4</sup> American Cancer Society: What is Kidney Cancer? Available at: <https://www.cancer.org/cancer/kidney-cancer/about/what-is-kidney-cancer.html>. Accessed February 2021.

<sup>5</sup> Harshman, L., and Choueiri, T. Targeting the hepatocyte growth factor/c-Met signaling pathway in renal cell carcinoma. *Cancer J*. 2013; 19:316-323.

<sup>6</sup> Rankin, et al. Direct regulation of GAS6/AXL signaling by HIF promotes renal metastasis through SRC and MET. *Proc Natl Acad Sci USA*. 2014; 111:13373-13378.

<sup>7</sup> Zhou, L., Liu, X-D., Sun, M., et al. Targeting MET and AXL overcomes resistance to sunitinib therapy in renal cell carcinoma. *Oncogene*. 2016;

35:2687-2697.

<sup>8</sup> Koochekpour, et al. The von Hippel-Lindau tumor suppressor gene inhibits hepatocyte growth factor/scatter factor-induced invasion and branching morphogenesis in renal carcinoma cells. *Mol Cell Biol.* 1999; 19:5902–5912.

<sup>9</sup> Takahashi, A., Sasaki, H., Kim, S., et al. Markedly increased amounts of messenger RNAs for vascular endothelial growth factor and placenta growth factor in renal cell carcinoma associated with angiogenesis. *Cancer Res.* 1994; 54:4233-4237.

<sup>10</sup> Nakagawa, M., Emoto, A., Hanada, T., Nasu, N., Nomura, Y. Tubulogenesis by microvascular endothelial cells is mediated by vascular endothelial growth factor (VEGF) in renal cell carcinoma. *Br J Urol.* 1997; 79:681-687.

View source version on [businesswire.com](https://www.businesswire.com/news/home/20210208005752/en/): <https://www.businesswire.com/news/home/20210208005752/en/>

**Investors Contact:**

*Susan Hubbard*

*EVP, Public Affairs and Investor Relations*

*Exelixis, Inc.*

*(650) 837-8194*

[shubbard@exelixis.com](mailto:shubbard@exelixis.com)

**Media Contact:**

*Lindsay Treadway*

*Senior Director, Public Affairs and Advocacy Relations*

*Exelixis, Inc.*

*(650) 837-7522*

[ltreadway@exelixis.com](mailto:ltreadway@exelixis.com)

Source: Exelixis, Inc.