

Deciphera Pharmaceuticals Announces Late-Breaking Oral Presentation of Pivotal Phase 3 INVICTUS Data at the European Society for Medical Oncology (ESMO) 2019 Congress

September 6, 2019

WALTHAM, Mass.--(BUSINESS WIRE)--Sep. 5, 2019-- Deciphera Pharmaceuticals, Inc. (Nasdaq:DCPH), a clinical-stage biopharmaceutical company focused on addressing key mechanisms of tumor drug resistance, today announced that data from the Company's INVICTUS pivotal Phase 3 study of ripretinib in patients with fourth-line and fourth-line plus gastrointestinal stromal tumors (GIST) has been selected as an oral presentation at the European Society for Medical Oncology (ESMO) 2019 Congress to be held September 27 – October 1, in Barcelona, Spain.

"We look forward to the first presentation of the INVICTUS Phase 3 data in an oral session at ESMO later this month," said Steve Hoerter, President and Chief Executive Officer of Deciphera. "The INVICTUS data have given us confidence that ripretinib has the potential to fundamentally transform the treatment paradigm for patients with advanced GIST who have no approved treatment options. We expect that these data will serve as the basis for our first NDA, which we plan to submit in the first quarter of 2020."

Presentation information is as follows:

 Session Type: Late-Breaking Abstract, Proffered Paper Session

 Session Title: Proffered Paper - Sarcoma (ID 249)

 Title: INVICTUS: A Phase 3, INterVentional, Double-Blind, Placebo-Controlled Study to Assess the Safety and Efficacy of Ripretinib as ≥4th-Line

 Therapy In Patients With AdvanCed Gastrointestinal Stromal TUmorS (GIST) Who have Received Treatment With Prior Anticancer Therapies (NCT03353753) (ID 4794)

 Presentation Number: LBA87

 Date and Time: Monday, September 30, 2:45 – 2:57 PM CET

 Location:Malaga Auditorium (Hall 5)

 Speaker: Margaret von Mehren, MD, Department of Medical Oncology, Fox Chase Cancer Center, Philadelphia, Pennsylvania

About Ripretinib

Ripretinib is an investigational KIT and PDGFRα kinase switch control inhibitor in clinical development for the treatment of KIT and/or PDGFRα-driven cancers, including gastrointestinal stromal tumors, or GIST, systemic mastocytosis, or SM, and other cancers. Ripretinib was specifically designed to improve the treatment of patients with GIST by inhibiting a broad spectrum of mutations in KIT and PDGFRα. Ripretinib is a KIT and PDGFRα inhibitor that inhibits initiating and secondary KIT mutations in exons 9, 11, 13, 14, 17, and 18, involved in GIST, as well as the primary D816V exon 17 mutation involved in SM. Ripretinib also inhibits primary PDGFRα mutations in exons 12, 14 and 18, including the exon 18 D842V mutation, involved in a subset of GIST. In June 2019, the U.S. FDA granted Fast Track Designation to ripretinib for the treatment of patients with advanced GIST who have received prior treatment with imatinib, sunitinib and regorafenib.

Deciphera Pharmaceuticals has an exclusive license agreement with Zai Lab (Shanghai) Co., Ltd. for the development and commercialization of ripretinib in Greater China (MainlandChina, Hong Kong, Macau and Taiwan). Deciphera Pharmaceuticals retains development and commercial rights for ripretinib in the rest of the world.

About Deciphera Pharmaceuticals

Deciphera Pharmaceuticals is a clinical-stage biopharmaceutical company focused on improving the lives of cancer patients by tackling key mechanisms of drug resistance that limit the rate and/or durability of response to existing cancer therapies. Our small molecule drug candidates are directed against an important family of enzymes called kinases, known to be directly involved in the growth and spread of many cancers. We use our deep understanding of kinase biology together with a proprietary chemistry library to purposefully design compounds that maintain kinases in a "switched off" or inactivated conformation. These investigational therapies comprise tumor-targeted agents designed to address therapeutic resistance causing mutations and immuno-targeted agents designed to control the activation of immunokinases that suppress critical immune system regulators, such as macrophages. We have used our platform to develop a diverse pipeline of tumor-targeted and immuno-targeted drug candidates designed to improve outcomes for patients with cancer by improving the quality, rate and/or durability of their responses to treatment.

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, statements regarding our expectations regarding reporting additional data from our INVICTUS pivotal Phase 3 study of ripretinib in GIST patients at an upcoming medical meeting, the potential for the results of our INVICTUS pivotal Phase 3 clinical study to support a NDA submission, the timing of our planned NDA submission for fourth and fourth-line plus GIST, the potential for ripretinib and our other drug candidates based on our kinase switch control inhibitor platform to provide clinical benefit and treat cancers such as GIST and other possible indications, and preparations for seeking regulatory approval for and making ripretinib available to patients with fourth-line and fourth-line plus GIST, if approved,. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those

expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks and uncertainties related to the delay of any current or planned clinical studies or the development of our drug candidates, including ripretinib, our ability to successfully demonstrate the efficacy and safety of our drug candidates including in later-stage studies, the preclinical and clinical results for our drug candidates, which may not support further development of such drug candidates, actions of regulatory agencies, any or all of which may affect the initiation, timing and progress of clinical studies and regulatory development and other risks identified in our SEC filings, including our Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, and subsequent filings with the SEC. We caution you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. We disclaim any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Any forward-looking statements contained in this press release represent our views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. We explicitly disclaim any obligation to update any forward-looking statements.

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