Deciphera to Present Data on Oncology Pipeline at American Association for Cancer Research Annual Meeting 2015

March 18, 2015

Presentations Include Data on Deciphera's Lead Product Candidates and the Role of Immuno-oncology Macrophages in the Tumor Microenvironment

Deciphera Pharmaceuticals, a clinical-stage biotechnology company focused on developing advanced kinase inhibitor treatments targeting the tumor cell and the tumor microenvironment, today announced that seven abstracts highlighting the company's growing pipeline of novel kinase inhibitors have been selected for presentation at the American Association for Cancer Research Annual Meeting 2015, which is being held April 18-22 in Philadelphia.

The abstracts will present data from both company and investigator-sponsored studies of four of Deciphera's wholly-owned next generation kinase inhibitors, including altiratinib, a potent and balanced inhibitor of MET/TRK/TIE2 and VEGFR2 kinases, as well as DCC-2618, the company's novel pan-KIT inhibitor that is active against both wild-type and mutated KIT, including key emerging targets such as Exon 17 mutations. In addition, posters will highlight advancements in Deciphera's two macrophage-targeted product candidates, rebastinib, a TIE2/VEGFR1 inhibitor, and DCC-3014, a specific FMS inhibitor, both of which target microenvironment-mediated tumor cell invasion and immunotolerance. Data will also be presented on the company's partnered program, LY3009120 (DP-4978), a pan-RAF inhibitor developed by Deciphera in collaboration with Eli Lilly and Company.

“We are pleased that the AACR Annual Meeting 2015 will highlight the growing body of research on our pipeline of novel kinase inhibitors. In addition to important data on our key programs for altiratinib, and DCC-2618, we are excited about the emerging research focused on the potential role in immuno-oncology therapy for our macrophage-targeted product candidates, rebastinib and DCC-3014, which go beyond checkpoint inhibition to more selectively target innate immune checkpoint mechanisms within the tumor microenvironment,” said Michael D. Taylor, Ph.D., Deciphera’s President and Chief Executive Officer.

Details of the Poster Presentations on altiratinib and DCC-2618:

• Poster Title: Altiratinib is a potent inhibitor of TRK kinases and is efficacious in TRK-fusion driven cancer models (altiratinib)
Author: Smith, Deciphera
Abstract #: 790
Session: Experimental and Molecular Therapeutics: Tyrosine Kinase and Phosphatase Inhibitors
Date & Time: Sunday, April 19, 2015, 1:00 PM – 5:00 PM
Location: Section 32, Poster Board #22

• Poster Title: DCC-2618 is a potent inhibitor of wild type and mutant KIT, including refractory Exon 17 D816 KIT mutations, and exhibits efficacy in refractory GIST and AML xenograft models (DCC-2618)
Author: Heinrich, Oregon Health & Science Universityr
Abstract #: 2690
Session: PO.ET04.01. Resistance to Pathway-Targeted Therapeutics 1
Date & Time: Monday, April 20, 2015, 1:00 – 5:00 PM
Location: Section 33, Poster Board #12

Details on the poster presentations demonstrating blockade of pro-tumoral macrophages in the tumor microenvironment:

• Poster Title: Inhibiting endothelium directed tumor cell streaming by targeting the HGF/C-Met and EGF/CSF-1 signaling pathways (DCC-3014)
Author: Leung, Albert Einstein College of Medicine

Abstract #: 5091
Session: PO.TB10.03. Factors Regulating Motility and Invasion
Date & Time: Wednesday, Apr 22, 2015, 8:00 AM – 12:00 PM
Location: Section 15, Poster Board #2

• Poster Title: Mechanisms of Transendothelial Migration by Invasive Breast Cancer Carcinoma Cells from Patients (rebastinib)
Author: Pignatelli, Albert Einstein College of Medicine
Abstract #: 4112
Session: PO.TB04.06. Clonal Evolution and Antimetastatic Therapies
Date & Time: Tuesday, April 21, 2015, 1:00 – 5:00 PM
Location: Section 17, Poster Board #3

• Poster Title: Rebastanib potently inhibits function of perivascular TIE2 expressing macrophages in vitro and in vivo (rebastinib)
Author: Condeelis, Albert Einstein College of Medicine
Abstract #: 397
Session: PO.TB06.04. Crosstalk of the Microenvironment and Tumor Clone
Date & Time: Sunday, April 19, 2015, 1:00 – 5:00 PM
Location: Section 17, Poster Board #6

• Poster Title: Imaging the tumor microenvironment of metastasis reveals the mechanism of transient blood vessel permeability and tumor cell intravasation (rebastinib)
Author: Harney, Albert Einstein College of Medicine
Abstract #: 5125
Session: PO.TB07.01. Imaging Molecular and Cellular Events: Tumors and Cells
Date & Time: Wednesday, April 22, 2015, 8:00 AM – 12:00 PM
Location: Section 16, Poster Board #16

Details on the poster presentations on LY3009120 (DP-4978), a pan-RAF inhibitor licensed by Deciphera to Eli Lilly and Company:

• Poster Title: Novel Oncogenic BRaf Deletions Functioning as BRaf Homodimers and Sensitive to Inhibition by LY3009120, a Pan Raf and Raf Dimer Inhibitor (LY3009120

or DP-4978)

Author: Chen, Eli Lilly and Company

Abstract #: 2142

Session: PO.MCB04.01. Ras, Raf, ERK, and PI3K Pathway Signaling

Date/Time: Monday, April 20, 2015, 1:00 – 5:00 PM

Location: Section 10, Poster Board #5

About Deciphera Pharmaceuticals

Deciphera Pharmaceuticals seeks to improve treatment for patients with cancer by designing kinase inhibitor therapies that target the hallmarks of cancer biology. We specifically design our small molecule compounds to simultaneously block multiple cancer signaling mechanisms in the tumor cell and the tumor microenvironment to prevent growth and spread. Deciphera's unique approach represents an important advance over current therapies in the durability of kinase inhibition and resiliency to genetic mutations to provide greater benefit across a range of cancers. Deciphera's business strategy is to advance its drug candidates for genetically defined cancers and cancers that target the tumor microenvironment through both proprietary and partnered programs.

Deciphera's internal product pipeline includes altiratinib, a MET/TIE2/VEGFR2/TRK kinase inhibitor currently in Phase 1 clinical development, a pan-KIT inhibitor (DCC-2618) currently in preclinical development and rebastinib, a TIE2/VEGFR1 kinase inhibitor currently in Phase 1 clinical development. A specific FMS inhibitor, DCC-3014, which was designed to block the actions of pro-tumoral macrophages in the tumor microenvironment, is in preclinical development. In addition, we developed a pan-RAF inhibitor (LY-3009120) in collaboration with our partner Eli Lilly that is currently in Phase 1.

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