Deciphera Pharmaceuticals Announces Study Results for Altiratinib Demonstrating Inhibition of Three Major Cancer-Promoting Pathways to Durably Block Tumor Growth and Invasion

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reclinical data profiling unique anti-cancer attributes of altiratinib, a balanced, spectrum-selective inhibitor of MET, TIE2, and VEGFR2 kinases, published in Molecular Cancer Therapeutics

Deciphera Pharmaceuticals, a clinical-stage biotechnology company focused on developing advanced kinase inhibitor treatments targeting the tumor cell and the tumor microenvironment, announced today the publication of study results describing the preclinical profile of its Phase 1 anti-cancer product candidate, altiratinib, a balanced, spectrum-selective inhibitor of MET, TIE2, and VEGFR2 kinases. The article, which will appear in the September 2015 issue of Molecular Cancer Therapeutics, was pre-published on-line on August 18, 2015. Altiratinib is currently in Phase 1 clinical evaluation in cancer patients (NCT02228811).

In the article the authors describe how altiratinib's balanced inhibition of the three key kinases, MET, TIE2, and VEGFR2 was achieved using Deciphera's proprietary switch control kinase inhibitor platform. Moreover, altiratinib was shown to inhibit not only wild type MET, but also oncogenic mutant forms of MET not readily inhibited by other MET inhibitors in development. The ability to inhibit MET mutants during the course of treatment is a key component to altiratinib's product profile, which Deciphera believes

will provide more durable therapy for cancer patients compared to existing agents. MET mutations are driver mutations in certain cancers and can also arise as a resistance mechanism in patients with pre-existing MET amplifications, highlighting the need for durable inhibition of various forms of genomically altered MET.

The report further discloses altiratinib's ability to block drug resistance mechanisms mediated by the tumor microenvironment. Through its balanced inhibitory potency, altiratinib was shown to inhibit three major evasive cancer (re)vascularization and resistance pathways with comparable single-digit nanomolar inhibitory potency, including HGF, ANG, and VEGF and to block tumor invasion and metastasis. Notably, in a glioblastoma tumor model known to exhibit these tumor microenvironment disease progression mechanisms, altiratinib was shown to double the overall survival of mice compared to vehicle control treated mice and, in combination with bevacizumab, to double survival compared to single-agent bevacizumab-treated mice.

"Altiratinib has a unique profile with the potential to provide cancer patients with a more durable therapy than currently approved and investigational kinase inhibitors in this space," said Daniel L. Flynn, Ph.D., Chief Scientific Officer and Founder of Deciphera Pharmaceuticals. "Already clinical oncologists are seeing the rise in secondary MET mutations, which confer resistance to current MET inhibitors. Altiratinib's mechanism of action targets not only the wild type form of MET kinase, but also these various secondary mutations."

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