



For Immediate Release

OncoMed Pharmaceuticals Initiates Phase 1 Clinical Trial of Anti-Cancer Stem Cell Therapeutic OMP-52M51 (Anti-Notch1) in Solid Tumors

Redwood City, CA – March 7, 2013 - OncoMed Pharmaceuticals, Inc., a clinical-stage company developing novel therapeutics that target cancer stem cells (CSCs), or tumor-initiating cells, today announced that patient dosing has begun in a Phase 1 clinical trial of OMP-52M51 in patients with advanced, refractory solid tumors. OMP-52M51, OncoMed's fifth product candidate, entered clinical testing in hematologic cancers in December 2012 and is now also being tested in patients with selected solid tumors. OMP-52M51 is a proprietary monoclonal antibody that targets the Notch1 receptor.

The Phase 1 clinical trial of OMP-52M51 in solid tumors is an open-label dose escalation and expansion study in patients with advanced, refractory solid tumors. These patients will be assessed for safety, pharmacokinetics, pharmacodynamics, and initial evidence of efficacy, and the clinical trial will also assess a predictive biomarker-based patient selection approach. The trial is being conducted at several sites in the United States including the South Texas Accelerated Research Therapeutics (START).

According to Dr. Amita Patnaik of START, who treated the first patient with OMP-52M51 on the solid tumor trial, "It is exciting to begin a clinical trial with this therapeutic, with a novel anti-cancer stem cell mechanism of action, to patients with advanced solid tumors. The companion predictive diagnostic test also makes this a cutting-edge program."

"We continue to make progress on our broad, first-in-class clinical pipeline of anti-cancer stem cell therapeutics," said Paul Hastings, President and Chief Executive Officer of OncoMed Pharmaceuticals. "OncoMed's novel Anti-Notch1 antibody is the fifth product candidate in the clinic, and several of OncoMed's other candidates are advancing towards Phase 2 testing. We look forward to generating important clinical data with Anti-Notch1 and our other novel agents that target cancer stems cells."

About OMP-52M51

OMP-52M51 is a humanized monoclonal antibody targeted to the Notch1 receptor that has shown substantial anti-tumor and anti-CSC activity in Notch-dependent hematologic malignancies and solid tumors in preclinical studies. Certain hematologic malignancies have mutations that increase Notch1 signaling activity and may be a primary driver of tumor growth, as well as resistance to chemotherapy. Predictive biomarker tests have been identified that enable analyses of potential predictive biomarkers in clinical trials for OMP-52M51 to identify those subsets of patients with certain hematologic malignancies or certain solid tumors that may benefit most from the product candidate. OMP-52M51 is part of OncoMed's strategic

collaboration with GlaxoSmithKline (GSK). In December 2007, OncoMed and GSK entered into a broad strategic alliance to discover and develop novel product candidates targeting CSCs via Notch pathway signaling modulation. GSK retains an option through the end of certain Phase 1 or certain Phase 2 clinical trials to obtain an exclusive license to OMP-52M51.

About Cancer Stem Cells

Cancer stem cells, or CSCs, are the subpopulation of cells in a tumor responsible for driving growth and metastasis of the tumor. CSCs, also known as tumor-initiating cells, exhibit certain properties which include the capacity to divide and give rise to new CSCs via a process called self-renewal and the capacity to differentiate or change into the other cells that form the bulk of the tumor. Common cancer drugs target bulk tumor cells but have limited impact on CSCs, thereby providing a path for recurrence of the tumor. OncoMed's product candidates target CSCs by blocking self-renewal and driving differentiation of CSCs toward a non-tumorigenic state, and also impact bulk tumor cells. OncoMed believes its product candidates are distinct from the current generations of chemotherapies and targeted therapies, and have the potential to significantly impact cancer treatment and the clinical outcome of patients with cancer.

About OncoMed Pharmaceuticals

OncoMed Pharmaceuticals is a clinical-stage company that discovers and develops novel therapeutics targeting cancer stem cells, the cells shown to be capable of driving tumor growth, recurrence and metastasis. OncoMed has advanced five anti-cancer therapeutics into the clinic, including demcizumab (OMP-21M18, Anti-DLL4), OMP-59R5 (Anti-Notch2/3), OMP-52M51 (Anti-Notch1), vanttictumab (OMP-18R5, Anti-Fzd7), and OMP-54F28 (Fzd8-Fc), which target key cancer stem cell signaling pathways including Notch and Wnt. In addition, OncoMed's pipeline includes several novel preclinical product candidates targeting multiple validated cancer stem cell pathways, including the RSPO-LGR pathway. OncoMed has formed strategic alliances with Bayer Pharma AG and GlaxoSmithKline. Privately held, OncoMed's investors include: US Venture Partners, Latterell Venture Partners, The Vertical Group, Morgenthaler Ventures, Phase4Ventures, Delphi Ventures, Adams Street Partners, De Novo Ventures, Bay Partners and GlaxoSmithKline. Additional information can be found at the company's website: www.oncomed.com.

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