For Immediate Release

FDA Clears OncoMed's Demcizumab (Anti-DLL4) to Resume Clinical Testing in the US

Partial Clinical Hold Removed By FDA

Redwood City, CA – January 2, 2013 – OncoMed Pharmaceuticals, a clinical-stage company developing novel therapeutics that target cancer stem cells (CSCs), or tumor-initiating cells, today announced that the U.S. Food and Drug Administration (FDA) has removed a partial clinical hold on its demcizumab (OMP-21M18) clinical program. Demcizumab is a humanized monoclonal antibody that targets Delta Like Ligand 4, or DLL4, in the Notch signaling pathway.

Jakob Dupont, MD, OncoMed's Chief Medical Officer, stated, "We are pleased that the FDA has responded favorably to the demcizumab clinical data and development strategy and removed the partial clinical hold to allow further development of demcizumab in the United States."

OncoMed had submitted an extensive data package to the FDA with safety and efficacy results from four demcizumab clinical trials: a Phase 1a solid tumors study and three Phase 1b studies in non-small cell lung cancer (NSCLC), pancreatic cancer and colorectal cancer. The company plans to initiate new demcizumab clinical trials in 2013 in the United States. Specifically, the company will initiate a Phase 1b/2 study of demcizumab and paclitaxel in patients with epithelial ovarian cancer in collaboration with Drs. Robert Coleman and Anil Sood at the MD Anderson Cancer Center (MDACC) as part of the MDACC Ovarian SPORE grant. Additionally, the Company is planning Phase 2 clinical trials of demcizumab for NSCLC and pancreatic cancer in 2013, to be performed in multiple regions, including the United States.

Paul Hastings, OncoMed's President and Chief Executive Officer, commented, "Because OncoMed holds unencumbered worldwide development and commercialization rights to demcizumab, the FDA's decision is a very positive milestone for the company. We look forward to rapidly developing demcizumab, as it is the most advanced of our five clinical cancer programs."

About Demcizumab (Anti-DLL4, OMP-21M18)
Demcizumab (OMP-21M18) is a humanized monoclonal antibody that inhibits DLL4 in the Notch signaling pathway. Two Phase 1b combination trials of demcizumab are ongoing. The first trial is in combination with standard-of-care gemcitabine in first-line advanced pancreatic cancer patients, and the second trial is in combination with standard-of-care carboplatin and pemetrexed (Alimta®) in first-line advanced NSCLC patients. Data from the demcizumab NSCLC Phase 1b study was presented at the EORTC-AACR-NCI Molecular Targets and Cancer Therapeutics Meeting in Dublin, Ireland in November 2012. OncoMed has worldwide rights to this program.

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), vantictumab (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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