For Immediate Release

OncoMed Presents New Data in Six Anti-Cancer Stem Cell Programs at AACR

Redwood City, CA – April 9, 2013 - OncoMed Pharmaceuticals, Inc., a clinical-stage company developing novel therapeutics that target cancer stem cells (CSCs), or tumor-initiating cells, today summarized new data highlighting the progress of OncoMed’s pipeline of anti-cancer biologics presented this week in an oral presentation and five posters at the Annual Meeting of the American Association of Cancer Research in Washington DC.

As part of the “New Drugs on the Horizon” Special Session, Timothy Hoey, PhD, OncoMed’s Senior Vice President of Cancer Biology, gave an oral presentation titled, “Development of FZD8-Fc (OMP-54F28), a Wnt signaling antagonist that inhibits tumor growth and reduces tumor initiating cell frequency.” Dr. Hoey said that FZD8-Fc was shown to be a potent blocker of the Wnt pathway and have anti-tumor activity in multiple tumor types, particularly in pancreatic cancer. FZD8-Fc induced differentiation of tumor cells, reduced tumorigenicity, and promoted sensitivity to multiple chemotherapeutic agents. FZD8-Fc is currently in Phase 1 clinical testing in patients with advanced solid tumors and is part of OncoMed’s collaboration with Bayer HealthCare.

Austin Gurney, PhD, Senior Vice President of Molecular and Cellular Biology at OncoMed, presented poster #218, “R-Spondin (RSPO) signaling drives the growth of multiple human tumor types,” in the Tumor Biology 2 Poster Session. This work indicated that specific blockade of RSPO-LGR signaling with novel anti-RSPO antibodies inhibited tumor growth in various patient derived tumors, including ovarian, lung and pancreatic cancers. RSPO blockade promoted tumor cell differentiation and reduced the frequency of tumor initiating cells. These data highlight the potential for therapeutic intervention targeting this recently characterized stem cell signaling pathway. The RSPO program is one of OncoMed’s advanced research programs.

Poster #3725, “Anti-DLL4 (demcizumab) Inhibits Tumor Growth and Reduces Cancer Stem Cell Frequency in Patient-Derived Ovarian Cancer Xenografts,” was presented by Wan-ching Yen, PhD, Senior Scientist at OncoMed, in the Tumor Biology 35 Poster Session. Anti-DLL4 was found to have broad activity in ovarian cancer xenografts to profoundly reduce CSC frequency in ovarian tumors. Demcizumab is currently in Phase 1b clinical testing in non-small cell lung and pancreatic cancers. OncoMed is also initiating a Phase 1b/2 clinical trial of demcizumab in combination with paclitaxel in recurrent ovarian cancer patients in collaboration with investigators at the MD Anderson Cancer Center of Houston, TX.

Poster #213, “Novel NOTCH3 activating mutations identified in tumors sensitive to OMP-59R5, a monoclonal antibody targeting the Notch2 and Notch3 receptors,” was presented by Breanna Wallace, PhD, Post-doctoral Research Fellow at OncoMed, in the Cancer Stem Targeting Therapies Poster Session. This research described the discovery of oncogenic Notch3
mutations in breast and colon cancer. Tumors harboring these mutations were found to be highly sensitive to OMP-59R5 (anti-Notch2/3) treatment. OMP-59R5 is a fully human IgG2 monoclonal antibody originally identified by binding to Notch2. It inhibits the signaling of both Notch2 and Notch3 receptors. OncoMed has completed a Phase 1a single agent clinical trial of this agent in solid tumor patients and has now advanced this clinical program to later stage development by initiating a Phase 1b/2 clinical trial called ALPINE of anti-Notch2/3 in combination with gemcitabine and abraxane in first-line pancreatic cancer. Anti-Notch2/3 is part of OncoMed’s collaboration with GlaxoSmithKline (GSK).

Poster #3728, “Anti-Notch1 antibody (OMP-52M51) impedes tumor growth and cancer stem cell frequency (CSC) in a chemo-refractory breast cancer xenograft model with an activating Notch1 mutation and screening for activated Notch1 across multiple solid tumor types,” was presented by Belinda Cancilla, PhD, Associate Director of Translational Medicine at OncoMed, in the Tumor Biology 35 Poster Session. This work reported the discovery of an oncogenic Notch1 mutation in a chemorefractory breast cancer patient. Notch1 activation was detected in a range of epithelial tumor types and was particularly high in chemorefractory breast cancer patients. Anti-Notch1 is currently in two Phase 1a clinical trials in hematologic (lymphoid) malignancies and in solid tumors and is part of OncoMed’s collaboration with GlaxoSmithKline (GSK).

Poster #4330, “In vivo evaluation of anti-tumor activity by an anti-VEGF and anti-DLL4 bispecific antibody in a humanized skin graft model,” was presented by Ann Kapoun, PhD, OncoMed’s Vice President of Translational Medicine, in the Experimental and Molecular Therapeutics 28 Poster Session. This poster described the activity of OncoMed’s novel bispecific antibody targeting DLL4 and VEGF. This antibody was created using OncoMed’s proprietary bispecific antibody technology. This antibody has improved anti-angiogenic activity through simultaneous inhibition of VEGF and DLL4 and retains anti-CSC activity through Notch pathway inhibition mediated by the anti-DLL4 arm. The bispecific antibody is currently in late stage preclinical development and is wholly owned by OncoMed.

Paul Hastings, CEO of OncoMed commented: “This is an exciting AACR meeting for OncoMed. Cutting-edge research was presented from four of our five clinical programs, as well as from two of our exciting new later-stage research programs. The data presented illustrates the comprehensive directions that OncoMed is taking to target cancer stem cells for therapeutic purpose as we strive to be on the leading edge of this new therapeutic approach in the treatment of cancer.”

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, as well as, a novel bispecific antibody that targets both the DLL4 ligand in the Notch pathway and vascular endothelial growth factor (VEGF). OncoMed has formed strategic alliances with Bayer HealthCare 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.

# # #

Contacts:
OncoMed Pharmaceuticals
Paul Hastings
President and Chief Executive Officer
William D. Waddill
Senior Vice President, Chief Financial Officer
(650) 995-8200
phastings@oncomed.com
william.waddill@oncomed.com

Media Inquiries
BCC Partners
Karen L. Bergman or
Michelle Corral
(650) 575-1509 or (415) 794-8662
kbergman@bccpartners.com or
mcorral@bccpartners.com