



For Immediate Release

Data Published in *Cell Stem Cell* Demonstrates Potent Anti-Cancer Activity for OncoMed Pharmaceuticals' Lead Antibody

Targeting Cancer Stem Cells Dramatically Reduces Tumor Growth and Recurrence in Preclinical Models

Redwood City, CA, August 6, 2009 – OncoMed Pharmaceuticals, Inc., a clinical-stage company developing novel antibody therapeutics that target cancer stem cells, today announced the publication in *Cell Stem Cell* of data demonstrating potent anti-cancer activity in colon and breast cancer models for the company's first product candidate, OMP-21M18, underlining the therapeutic potential of targeting cancer stem cells to treat solid tumors. OMP-21M18 is currently in Phase 1 clinical testing.

"OMP-21M18 specifically targets cancer stem cells, a type of tumor cell responsible for driving tumor initiation, growth and recurrence. Research published in *Cell Stem Cell* suggests that reducing the ratio of these cells within tumors may dramatically improve anti-cancer treatment," said Timothy Hoey, Ph.D., Vice President, Cancer Biology of OncoMed Pharmaceuticals and a co-author of the paper. "In models of colon and breast cancer, we observed that treatment with OMP-21M18 significantly decreased the proportion of cancer stem cells found in tumors compared to chemotherapy alone. In addition, we demonstrated that blocking a key cancer stem cell pathway impacts tumor cell proliferation, growth and recurrence."

OMP-21M18 is a monoclonal antibody that blocks DLL4 signaling to reduce tumor growth two ways: by reducing cancer stem cell frequency and by disrupting angiogenesis. In a series of published experiments using primary human tumors in xenograft models, OncoMed scientists assessed the effect of OMP-21M18 alone and in combination with approved chemotherapeutic agents versus chemotherapy alone on the frequency of cancer stem cells in treated tumors. Results demonstrate that treatment with OMP-21M18 as a single agent or in combination with standard chemotherapeutic agents significantly decreases the ratio of cancer stem cells found in colon and breast tumors. Notably, treatment with chemotherapy alone was demonstrated to increase the ratio of tumorigenic stem cells found in colon and breast tumors. Further, OMP-21M18 was shown to significantly delay tumor recurrence by inhibiting cancer stem cells in colon and breast tumor models. Taken together, these data indicate that treatment with certain chemotherapeutic agents alone may actually serve to amplify the risk for recurrence or more aggressive tumor activity by increasing the ratio of cancer stem cells within tumors.

In addition to inhibiting cancer stem cell frequency, thereby delaying the re-growth or recurrence of tumors, anti-DLL4 therapy was shown to reduce tumor growth and tumor cell proliferation and disrupt tumor angiogenesis. Moreover, OMP-21M18 displayed additive activity in reducing tumor volume when combined with traditional chemotherapy.

"This research represents an entirely new way of looking at the treatment of solid tumor cancers, recognizing that tumors are made up of different types of cells and targeting cancer stem cells has a profound effect on tumor growth and recurrence," said Paul Hastings, President and Chief Executive Officer of OncoMed Pharmaceuticals. "OMP-21M18 is the first of several promising monoclonal antibodies in development at OncoMed. We have seen potent anti-cancer stem cell

activity, and we look forward to reporting results from our initial trials as this product advances through the clinic.”

These data are published in the August 7, 2009 edition of *Cell Stem Cell* in an article titled “DLL4 Blockade Inhibits Tumor Growth and Reduces Tumor Initiating Cell Frequency.” The authors of the article include Dr. Michael Clarke of Stanford University, Dr. Hoey and Dr. Austin Gurney of OncoMed Pharmaceuticals, where OMP-21M18 was discovered and is being developed. OMP-21M18 was evaluated using OncoMed’s proprietary tumor models, using xenografts established from primary human tumors. These models are designed to be more directly representative of human tumors than the cell lines used in standard cancer research.

About OMP-21M18

OMP-21M18 is a monoclonal antibody optimized to block a key signaling pathway in cancer stem cells. Specifically, OMP-21M18 selectively targets Delta-like ligand 4 (DLL4), an activator of Notch signaling, which is a pathway known to be important in stem cells and cancer. Blocking DLL4 results in broad-spectrum anti-tumor activity via multiple mechanisms, including disrupting angiogenesis, inhibiting cancer stem cell growth and promoting cell differentiation. OMP-21M18 is currently in a Phase 1 clinical trial in patients with advanced solid tumors. This trial will also assess pharmacokinetics and provide initial indications of efficacy. OMP-21M18 is part of OncoMed’s Notch pathway collaboration with GlaxoSmithKline.

About OncoMed Pharmaceuticals

OncoMed Pharmaceuticals is a clinical-stage company that discovers and develops novel therapeutics targeting cancer stem cells, the cells believed to be capable of driving tumor growth, recurrence and metastases. A leader in cancer stem cell research, the company has established a library of antibodies to cancer stem cell proteins for the treatment of solid tumors such as pancreatic, breast, colorectal and lung cancers. OncoMed’s lead candidate, OMP-21M18 is currently in Phase I clinical trials. In addition to OMP-21M18, OncoMed’s pipeline includes several novel preclinical product candidates targeting multiple validated cancer stem cell pathways. Privately-held, OncoMed’s investors include: Nomura Phase4 Ventures, US Venture Partners, Latterell Venture Partners, Morgenthaler Ventures, The Vertical Group, Adams Street Partners, De Novo Ventures, Delphi Ventures, Bay Partners and GlaxoSmithKline. Additional information can be found at the company’s website: www.oncomed.com.

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