



Infinity Paper On Discovery of Its Novel Hedgehog Inhibitor, IPI-926, Published in Journal of Medicinal Chemistry

-- Paper Features Chemistry and Preclinical Data Leading to
Discovery of IPI-926 - Currently in Phase 1 Development --

-- Publication Follows Recent Paper in Science Demonstrating
Potential of Hedgehog Pathway Inhibition with IPI-926 as a
Promising New Approach in Chemo-Resistant Pancreatic Cancer --

CAMBRIDGE, Mass., July 23, 2009 (GLOBE NEWSWIRE) -- Infinity Pharmaceuticals, Inc. (Nasdaq:INFI), an innovative cancer drug discovery and development company, today announced that the chemistry and data leading to the discovery of its novel Hedgehog signaling pathway inhibitor, IPI-926, have been published in the Journal of Medicinal Chemistry. The paper, titled "Discovery of a Potent and Orally Active Hedgehog Pathway Antagonist (IPI-926)" and authored by Infinity's Martin R. Tremblay, Ph.D., Alfredo C. Castro, Ph.D., et al., is featured in today's issue of the journal (Volume 52, Issue 14, pages 4400-4418).

The Journal of Medicinal Chemistry publication provides detailed insights into Infinity's medicinal chemistry efforts to develop its Hedgehog signaling pathway inhibitor, IPI-926. The paper discusses how a team of Infinity scientists began with the naturally occurring plant *Veratrum californicum*, which contains an antagonist of the Hedgehog pathway, and performed a sequence of synthetic transformations leading to the synthesis of a new series of analogs with improved potency and solubility. IPI-926 was selected as Infinity's lead clinical candidate from these semi-synthetic compounds due to its improved pharmaceutical properties and potency and its superior pharmacokinetic profile relative to the naturally occurring compound. The paper highlights data regarding these improvements in potency and solubility, and in vivo and in vitro biological activity demonstrated with IPI-926.

"The discovery of IPI-926 is an example of the fearless chemistry our team is utilizing to identify and develop novel new product candidates," said Julian Adams, Ph.D., Chief Scientific Officer and President of Research and Development. "We are pleased and proud to tell the story of how we took a starting point from nature and then used Infinity's core chemistry expertise to discover, and now advance through clinical development, our novel Hedgehog pathway inhibitor, IPI-926."

Infinity has demonstrated anti-tumor activity of IPI-926 in a number of preclinical models, including those of pancreatic cancer, small cell lung cancer, and medulloblastoma. IPI-926 has also demonstrated excellent pharmaceutical properties, including oral bioavailability, long plasma half-life and duration of action, and dose-dependent inhibition of tumor growth.

A paper featuring IPI-926 further supporting Hedgehog signaling pathway inhibition as a promising new approach to treat cancer was recently published in the May 2009 volume of Science. The data showed that administration of IPI-926 in combination with gemcitabine in a preclinical mouse model of chemo-resistant pancreatic cancer increased tumor cell death, resulting in a reduction of tumor size and increased survival. These data suggest that IPI-926 may enable chemotherapeutic agents to successfully access and kill tumor cells.

Infinity is currently evaluating IPI-926 in a Phase 1 clinical trial in patients with advanced solid tumors.

About the Journal of Medicinal Chemistry

The Journal of Medicinal Chemistry publishes studies that contribute to an understanding of the relationship between molecular structure and biological activity or mode of action. The Journal of Medicinal Chemistry is the most-cited journal in Medicinal Chemistry with 45,190 total citations in 2008.

About the Hedgehog Pathway

The Hedgehog signaling pathway is highly active in regulating tissue and organ formation during embryonic development.

However, abnormal activation of the Hedgehog pathway is believed to play a central role in the proliferation and survival of several types of cancers, including pancreatic, prostate, lung, breast, and certain brain cancers. In addition, recent evidence also suggests a role for the Hedgehog pathway in cancer stem cells, a subpopulation of self-renewing "progenitor-like" cells that are chemo-resistant and Hedgehog-dependent. This subpopulation of cells may be responsible for tumor re-growth and progression, despite treatment with conventional chemotherapeutic agents.

About Infinity Pharmaceuticals, Inc.

Infinity is an innovative cancer drug discovery and development company seeking to discover, develop, and deliver to patients best-in-class medicines for the treatment of cancer and related conditions. Infinity combines proven scientific expertise with a passion for developing novel small molecule drugs that target emerging cancer pathways. Infinity's two most advanced programs in Hsp90 inhibition and Hedgehog signaling pathway inhibition are evidence of its innovative approach to oncology drug discovery and development. For more information on Infinity, please refer to the company's website at <http://www.infi.com>.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. These statements involve risks and uncertainties that could cause actual results to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. Such forward-looking statements include statements regarding the utility of Hedgehog inhibitors, including IPI-926, in treating various types of cancer. Such statements are subject to numerous factors, risks and uncertainties that may cause actual events or results to differ materially from the company's current expectations. For example, there can be no guarantee that IPI-926 will successfully complete necessary preclinical and clinical development phases. In particular, management's expectations could be affected by risks and uncertainties relating to: results of clinical trials and preclinical studies, including subsequent analysis of existing data and new data received from ongoing and future studies; the content and timing of decisions made by the U.S. Food and Drug Administration and other regulatory authorities and investigational review boards at clinical trial sites; Infinity's ability to enroll patients in its clinical trials; Infinity's reliance on its strategic alliance with Mundipharma International and Mundipharma's ability to meet its agreed-upon funding obligations; unplanned cash requirements and expenditures; and Infinity's ability to obtain, maintain and enforce patent and other intellectual property protection for any product candidates it is developing. These and other risks which may impact management's expectations are described in greater detail under the caption "Risk Factors" included in Infinity's annual report on Form 10-Q filed with the Securities and Exchange Commission on May 6, 2009. Further, any forward-looking statements contained in this press release speak only as of the date hereof, and Infinity expressly disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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