

Data Presented at the 30th San Antonio Breast Cancer Symposium Supports Further Development of INCB7839 as a New Oral Treatment for Breast Cancer

December 16, 2007

WILMINGTON, Del.--(BUSINESS WIRE)--Dec. 16, 2007--Incyte Corporation (Nasdaq:INCY) announced today that three scientific posters have been presented at the 30th San Antonio Breast Cancer Symposium describing the potential benefits of its selective sheddase inhibitor, INCB7839, in the treatment of metastatic breast cancer.

INCB7839 is a novel, orally available ADAM metalloprotease inhibitor that is designed to block activation of the epidermal growth factor (EGFR) pathways. Currently approved therapies that target the EGFR pathways have shown promising efficacy in metastatic disease, validating these pathways as targets; however, efficacy may be limited due to the fact that these drugs inhibit only one or two of the four HER receptor pathways. In contrast, the sheddase inhibitor, INCB7839, has the potential to inhibit activation through all four of the HER receptors, resulting in more complete inhibition of these pathways.

Howard (Skip) Burris III, M.D., Director of Drug Development Sarah Cannon Research Institute (SCRI), Nashville, Tennessee, and a principal investigator for the Phase Ib/IIa clinical trial results presented, stated, "Despite advances in the care of breast cancer patients, including the success of existing targeted therapies, there continues to be a clear need for new treatments. Given the strength of the preclinical results, together with these early clinical results presented today, INCB7839 represents a potentially important new class of targeted breast cancer therapy."

"The early clinical data presented today confirm that INCB7839 can achieve significant inhibition of the EGFR receptor family at novel points of intervention. Going forward it should be possible to select patient populations who are likely to benefit from this agent, particularly when used in combination with approved therapies that have been shown to synergize with INCB7839 in preclinical efficacy models," added Jeffrey R. Infante, M.D., Investigator, Drug Development & GI Cancer Research, also at SCRI and a co-investigator on the Phase Ib/IIa clinical trial.

Data presented at the San Antonio Breast Cancer Symposium demonstrate that INCB7839:

- has shown promising clinical activity in heavily pretreated, refractory cancer patients
- has the potential to provide single-agent efficacy as well as improved clinical outcomes when used in combination with other EGFR targeted therapies, including those that target EGFR or HER2
- has been generally well-tolerated in both preclinical studies and clinical trials

INCB7839 is also currently in Phase II development. The first of two Phase II trials has been initiated and is designed to determine the effectiveness of INCB7839 when used in combination with Herceptin(R). This trial design is based, in part, on the potent synergy demonstrated preclinically with this combination. A second Phase II trial is planned and expected to begin in 2008 that will evaluate INCB7839 as monotherapy.

Below are summaries of the three presented posters which can also be accessed at the following link <http://investor.incyte.com/phoenix.zhtml?c=69764&p=irol-presentations>.

Poster Number 6064

A Multicenter Phase Ib Study of the Safety, Pharmacokinetics, Biological Activity and Clinical Efficacy of INCB7839, a Potent and Selective Inhibitor of ADAM10 and ADAM17

Background: Signaling through the EGFR (or ErbB) family of receptor tyrosine kinases regulates tumor cell proliferation and survival. The ligands that bind and activate the EGFR or ErbB receptors (e.g. TGF alpha and heregulin) as well as the HER2 receptor itself are proteolytically processed into biologically active moieties by members of the ADAM family of metalloproteases. The processing of the HER2 receptor by ADAM10 results in elevated plasma extracellular domain levels, (ECD) which correlates with poor patient prognosis.

Results: In this multicenter Phase Ib study, INCB7839, a potent and selective inhibitor of ADAM10 and ADAM17, demonstrated, in subjects with HER2 positive breast cancer and elevated plasma ECD, that there was a marked reduction (greater than 60%) in ECD levels early after the initiation of treatment. These reductions were maintained throughout the study.

All five of the HER2+ patients in the study had previously failed trastuzumab (Herceptin(R)) containing regimens and, in 4 of the 5 patients, INCB7839 produced stable disease for 2-4 months, including both patients with elevated ECD. Two of the HER2+ patients who achieved stable disease did not have elevated serum ECD, suggesting that blocking the generation of the truncated highly active HER2 receptor can also benefit patients who do not have elevated plasma ECD levels. Additionally, demonstrable inhibition of ligand shedding was achieved for both TGF-alpha and heregulin, suggesting that INCB7839 can interfere with EGFR-based signaling by reducing EGFR ligand levels, and pathway activation.

In this study, INCB7839 was generally well tolerated. The dose limiting effect was thrombosis. Alternative dosing regimens, including dose interruption with low level prophylactic anticoagulation, are currently being evaluated in a cohort of this study.

Poster Number 6065

Preclinical Characterization of INCB7839, a Potent and Selective Inhibitor of ErbB Ligand and HER2 Receptor shedding: Inhibition of ADAM10 and ADAM17 for the Treatment of Breast Cancer

Data from preclinical studies demonstrated that selective sheddase (ADAM10/17) inhibitors, including the clinical compound INCB7839, reduced the formation of active ErbB ligands and prevented the accumulation of the highly oncogenic p95 form of the HER2 receptor. By inhibiting key survival signaling pathways (e.g. Akt), these compounds reduced the proliferation of cancer cells as well as sensitized them to the effects of other chemotherapeutic agents. INCB7839 was shown to synergize with multiple classes of clinically relevant therapeutics, including the HER2 receptor antibody trastuzumab (Herceptin(R)) in reducing tumor growth in xenograft models.

Poster Number 1117

Inhibition of breast cancer growth with the combination of lapatinib and an ADAM protease inhibitor

Dr. Allan Lipton and researchers at the Pennsylvania State University College of Medicine, in collaboration with scientists at Incyte, reported on preclinical studies examining the effects of combining a dual kinase inhibitor of EGFR and HER-2, similar to lapatinib, with a sheddase inhibitor. This combination produced synergistic growth inhibition in both HER-2 positive human breast cancer cell lines. In mice bearing HER-2 positive human tumor xenografts the combination of lapatinib and INCB7839 produced synergistic inhibition of tumor growth. These results suggest that combining an ADAM inhibitor with kinase inhibitors of the ErbB family may provide an improved result in the treatment of metastatic breast cancer.

About Incyte

Incyte Corporation is a Wilmington, Delaware-based drug discovery and development company focused on developing proprietary small molecule drugs to treat serious unmet medical needs. Incyte's pipeline includes multiple compounds in Phase I and Phase II development for HIV, diabetes, oncology and inflammation. For additional information on Incyte, visit the Company's web site at www.incyte.com.

Forward Looking Statements

Except for the historical information contained herein, the matters set forth in this press release, including statements with respect to INCB7839 representing a potentially important new class of targeted breast cancer therapy, statements with respect to the utility of INCB7839 as oral treatment for breast cancer alone or in combination with other EGFR targeted agents, expectations regarding the initiation of a second clinical trial for INCB7839 as a monotherapy, expectations regarding the design of the ongoing Phase II clinical trial and the effect of emerging data on those designs and plans are all forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially, including the high degree of risk associated with drug development and clinical trials, results of further research and development, the impact of competition and of technological advances and the ability of Incyte to compete against parties with greater financial or other resources, Incyte's ability to enroll a sufficient number of patients for its clinical trials, and other risks detailed from time to time in Incyte's filings with the Securities and Exchange Commission, including its Quarterly Report on Form 10-Q for the quarter ended September 30, 2007. Incyte disclaims any intent or obligation to update these forward-looking statements.

CONTACT: Incyte Corporation
Pamela M. Murphy
Vice President, Investor Relations/
Corporate Communications
302-498-6944

SOURCE: Incyte Corporation