



OncoGenex Technologies and Isis Pharmaceuticals Expand Antisense Drug Development Partnership in Oncology

March 16, 2005

VANCOUVER, British Columbia, and CARLSBAD, Calif., March 16, 2005 /PRNewswire-FirstCall via COMTEX/ -- OncoGenex Technologies Inc., and Isis Pharmaceuticals, Inc. (Nasdaq: ISIS) announced today they have broadened their antisense drug development partnership to allow for the development of two additional second-generation antisense anti-cancer drug candidates. OncoGenex and Isis initiated a partnership in December 2001 to co-develop OGX-011, a drug currently in Phase 1/2 development for the treatment of prostate, breast and lung cancers. In 2003, OncoGenex and Isis added a second drug to their collaboration, OGX-225, which is in the research phase of development. OncoGenex has not yet selected the molecular targets for drug development under this new agreement. Specific financial terms of the deal were not disclosed.

"Following the results of our clinical study with OGX-011 which clearly demonstrated that weekly intravenous administration achieves effective distribution of OGX-011 to solid tumours and results in greater than 90 percent target suppression, we believe second-generation antisense drugs are well positioned for clinical success," said Scott Cormack, President and CEO of OncoGenex. "This early achievement in our partnership with Isis justifies advancing new compounds based on this technology."

In the expanded partnership, OncoGenex will be solely responsible for the preclinical and clinical development of the added anti-cancer drugs. OncoGenex will pay Isis an upfront fee, milestone payments for key clinical and regulatory achievements, and royalties on product sales.

"Our collaboration with OncoGenex has been very productive. We are pleased to expand this relationship and increase the number of second-generation antisense drugs being studied for the treatment of cancer," said C. Frank Bennett, Ph.D., Vice President of Antisense Research at Isis. "This partnership is consistent with our overall strategic plan to move multiple antisense drugs forward simultaneously by collaborating with high-quality companies, and through our internal development initiatives, to expand the reach and potential of antisense therapeutics in oncology."

About OGX-011 and OGX-225

OGX-011 is a second-generation antisense inhibitor of clusterin and represents the first second-generation anticancer antisense drug based on Isis' proprietary chemistry to enter clinical development. Clusterin is a cell-survival protein that is over-expressed in many cancers and is associated with treatment resistance and poor clinical outcome. In 2004, OncoGenex and Isis reported that OGX-011, in a dose-dependent fashion, achieved effective drug concentration in prostate cancer tissue and produced up to a 91 percent dose-dependent decrease in clusterin expression. Results from the Phase 1 clinical trial also demonstrated that the inhibition of clusterin was associated with the predicted pharmacological outcome, the death of prostate cancer cells. A second Phase 1 study designed to determine recommended dose of OGX-011 in combination with TAXOTERE® in various solid tumors is in progress. OncoGenex plans to initiate Phase 2 clinical trials of OGX-011 in patients with lung, breast and prostate cancers this year.

In preclinical animal studies, OGX-011 improved the potency of traditional chemotherapies by more than 10-fold in prostate cancer with no increase in toxicity. OGX-011 also significantly delayed disease progression in many tumor model systems including in prostate, non-small cell lung, bladder and renal.

A second drug in development within the partnership is OGX-225, which is the first antisense drug to target two proteins simultaneously: insulin-like growth factor binding protein-5 (IGFBP-5) and insulin-like growth factor binding protein-2 (IGFBP-2). When patients are treated with hormone ablation therapy in certain stages of prostate and breast cancers, tumors adapt and substitute growth factors to continue their growth. IGFBP-2 and IGFBP-5 facilitate access to a key alternate growth factor which enables tumors to grow in the absence of hormone.

Preclinical studies conducted by the Prostate Centre at Vancouver General Hospital demonstrated that over-expression of IGFBP-2 and IGFBP-5 correlates with significantly more aggressive disease progression. Antisense inhibition of IGFBP-2 and IGFBP-5 simultaneously, appears to reduce the tumor's access to the alternate growth factor and thus delay disease progression and metastasis. Therefore, OGX-225 could prove effective as a therapeutic to prevent progression of prostate cancer and other tumor types.

About OncoGenex Technologies Inc.

OncoGenex Technologies Inc. (OncoGenex) is a clinical-stage biotechnology company dedicated to improving survival and quality

of life of cancer patients by developing targeted therapeutics for treatment-resistant and metastatic cancer. OncoGenex's ability to advance drugs quickly and efficiently is the result of its ability to unite groups with a common interest in treating cancer: universities, hospitals, clinical networks, companies, granting agencies and investors. This strategy allows the company to conserve capital resources, leverage excellent science and research facilities, and focus our efforts and finances on adding value through clinical validation. This is an extremely efficient business model that has allowed OncoGenex to rapidly move a validated target to advanced clinical development. After only four years in business, OncoGenex has six products in development and has been testing its lead novel drug candidate in cancer patients for over two years. Additional information about OncoGenex is available at www.OncoGenex.ca.

About Isis Pharmaceuticals, Inc.

Isis Pharmaceuticals, Inc. is exploiting its expertise in RNA to discover and develop novel human therapeutic drugs for its pipeline and for its partners. The company has successfully commercialized the world's first antisense drug and has 10 antisense products in development to treat metabolic, cardiovascular and inflammatory diseases, and cancer. Through its Ibis division, Isis is developing a system to identify infectious organisms. As an innovator in RNA-based drug discovery and development, Isis is the owner or exclusive licensee of more than 1,500 issued patents worldwide. Additional information about Isis is available at <http://www.isispharm.com>.

This press release includes forward-looking statements regarding Isis' collaboration with OncoGenex Technologies and the development, therapeutic potential and safety of OGX-011, OGX-225 and additional antisense drugs to be developed within the collaboration, and in treating cancer. Any statement describing our goals, expectations, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement, including those statements that are described as Isis' clinical goals. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics, in developing and commercializing technology and systems used to identify infectious agents, and in the endeavor of building a business around such products and services. Our forward-looking statements also involve assumptions that, if they never materialize or prove correct, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. As a result, you are cautioned not to rely on these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in Isis' Annual Report on Form 10-K for the year ended December 31, 2003, and quarterly report on Form 10-Q for the quarter ended September 30, 2004, which are on file with the U.S. Securities and Exchange Commission (SEC), and available from the company.

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SOURCE Isis Pharmaceuticals, Inc.; OncoGenex Technologies Inc.

Scott Cormack of OncoGenex Technologies Inc., +1-604-736-3678; or Kristina Peterson, Corporate Communications of Isis Pharmaceuticals, Inc., +1-760-603-2331

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