



FOR IMMEDIATE RELEASE

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Transgenomic Announces Partnership with Key Genomics for Ovarian Cancer Assay to Guide Therapeutic Options

Covers Development of Gene Expression Signatures Derived by COXEN Algorithm as Molecular Test of Responsiveness to Current Treatments

Omaha, NE, and Charlottesville, VA, September 16, 2008 – Transgenomic (OTC-Bulletin Board: TBIO.OB) today announced a partnership with Key Genomics to develop a molecular diagnostic test which will guide clinicians in their choice of currently available treatments for ovarian cancer. The new test will be powered by Key Genomics' predictive algorithm, COXEN (“CO-eXpression ExtrapolatioN”).

Ovarian cancers are often diagnosed at the advanced stage of disease, after the tumor has spread beyond the ovary. Initial investigation of COXEN-derived genomic signatures in clinical trials has demonstrated that the test can distinguish responders from patients who do not benefit from a therapy. “Getting the patient the best therapeutic option as quickly as possible is a key factor in survival,” commented Craig Tuttle, CEO of Transgenomic. “Using this approach, we believe physicians will be able to quickly direct ovarian cancer patients towards appropriate lines of therapy.”

Epithelial carcinoma of the ovary is one of the most common gynecologic malignancies and the fifth most frequent cause of cancer death in women. In 2008, ovarian cancer will be diagnosed in more than 20,000 women in the United States.¹ Approximately 15,000 women will die from the disease. In the U.S., we spend an estimated \$2.2 billion per year to treat ovarian cancer.

The Companies plan to work collaboratively with the goal of improving patient outcomes through personalized medicine. Transgenomic's highly sensitive technologies for DNA mutation detection and analysis are expected to complement and enhance COXEN, which combines genomic and pharmacological response data on a set of widely used cancer cell lines to generate molecular signatures of patient response to specific anti-cancer agents.² This innovative test is intended to provide the optimal therapy recommendation according to the molecular characteristics of each patient's tumor.

Tim Gallagher, Key Genomics CEO, said, “An algorithm that could quickly sort molecular information about a patient's particular tumor, and then match this information with the right drug treatment would be a valuable medical breakthrough. COXEN has the potential to bring significant healthcare and economic value by personalizing cancer therapy by using such a method, an algorithm based on *in vitro* response to anti-cancer drugs.”



References

1. National Cancer Institute web site: <http://www.cancer.gov/cancertopics/types/ovarian/>
2. Lee JK et al. A strategy for predicting the chemosensitivity of human cancers and its application to drug discovery. Proc Natl Acad Sci U S A. 2007 Aug 7;104(32):13086-91. Epub 2007 Jul 31.

About Transgenomic

Transgenomic is a global biotechnology company that provides unique products and services of automated high sensitivity genetic variation and mutation analysis. Their offerings include systems, products, discovery and laboratory testing services to the academic and medical research, clinical laboratory and pharmaceutical markets in the fields of Pharmacogenomics and personalized medicine. Specific offerings include WAVE® DHPLC Systems, related consumables and assay kits, Cytogenetics automated systems, and Transgenomic Pharmacogenomics and Reference Laboratory Services. Transgenomic Pharmacogenomics and Laboratory Services utilize their technology and expertise to provide a menu of mutation scanning tests for over 700 cancer-associated genes and more than 60 validated diagnostic tests to meet the needs of pharmaceutical and biotech companies, research and clinical laboratories, physicians and patients. For more information about the innovative systems, products and services offered by Transgenomic, please visit: www.transgenomic.com.

About Key Genomics

Key Genomics works with pharmaceutical and molecular diagnostics companies to improve patient outcomes through new solutions for personalized medicine, drug discovery, and clinical trials by accurately predicting patient response based on cellular assays and patient genomic data. Learn more at www.keygenomics.com.

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Certain statements in this press release constitute “forward-looking statements” of Transgenomic within the meaning of the Private Securities Litigation Reform Act of 1995, which involve known and unknown risks, uncertainties and other factors that may cause our actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. Forward-looking statements include, but are not limited to, those with respect to management’s current views and estimates of future economic circumstances, industry conditions, company performance and financial results, including the ability of the Company to grow its involvement in the diagnostic products and services markets. The known risks, uncertainties and other factors affecting these forward-looking statements are described from time to time in Transgenomic’s reports to the Securities and Exchange Commission. Any change in such factors, risks and uncertainties may cause the actual results, events and performance to differ materially from those referred to in such statements. Accordingly, the company claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 with respect to all statements contained in this press release. All



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