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COMPANY PRESS RELEASE

Transgenomic, Inc. Files Patents on Novel Somatic Mutations in Receptor Tyrosine Kinases Important in Angiogenesis; Potential Clinical Markers for Cancer Prognosis and Treatment Selection, and Targets for New Therapies

Omaha, Neb., February 2, 2007 – Transgenomic, Inc. ([Nasdaq:TBIO](#)) today announced that it has filed patent applications directed to somatic mutations in the genes for five well-known receptor tyrosine kinases which may be useful as predictive biomarkers for various cancers and provide the potential for highly-targeted cancer therapies. The genes harboring these newly described cancer mutations are KDR, FLT1, and FLT4, which encode receptors for different isoforms of Vascular Endothelial Growth Factor (VEGF); and PDGFRA and PDGFRB, which encode alpha and beta forms of the receptors for Platelet-Derived Growth Factor (PDGF). These receptors are targets for some cancer drugs currently available, as well as a variety of experimental therapeutics in pre-clinical and clinical development phase. Novel mutations in these receptors have been consistently found in a number of different cancer types including bladder, breast, colorectal, esophageal, gastric, glioma, head and neck, liver, lung, melanoma, ovarian, pancreatic, prostate, and uterine. These patent applications are the first group in a series that Transgenomic intends to file protecting similar discoveries in other genes.

The discoveries were made using HTMA™ (High-Throughput Mutation Analysis), Transgenomic's proprietary mutation scanning strategy that integrates multiple processes and technologies for large-scale cancer genome screening that is accurate, robust and cost-effective. "By implementing HTMA, we were able to conduct a thorough screening of the entire coding region of each gene amplified from over one-thousand tumor specimens. This revealed previously unknown mutations not only in the tyrosine kinase catalytic domains, but in other functional domains as well," explained Dr. Stan Lilleberg, Chief Scientist of Translational and Clinical Research for Transgenomic and co-developer of HTMA. "The intrinsic efficiency and sensitivity of this mutation screening strategy was achieved through a complete assessment and tactical refinement of each process involved, yielding a very powerful discovery tool – in the case of HTMA, the whole is definitely greater than the sum of its parts," added Dr. Lilleberg, who will be presenting the results of some of these new discoveries at *Oncogenomics 2007: Dissecting Cancer through Genomic Research*, an AACR Special Conference being held in Phoenix, Arizona, January 31-February 3rd.

Key technologies critical for HTMA include SURVEYOR® Nuclease, a double-stranded DNA mismatch cleaving endonuclease, and WAVE® HS, a high-sensitivity system for nucleic acid fragment analysis; both of which are also proprietary to Transgenomic. "The majority of these somatic mutations would have been missed by any genomics laboratory using standard PCR methods, along with high-throughput DNA sequencing and automated data analysis. All of our procedures have been specifically optimized for somatic mutation detection, where tissue heterogeneity and low mutation loads present challenges for cancer genome screening in a discovery mode," stated Michael Nickerson, Director of Genomic Research and Biomarker Discovery at Transgenomic and co-developer of HTMA.

Transgenomic's CEO, Craig Tuttle, notes, "These discoveries are the first in a series of patents that Transgenomic intends to file as was first disclosed in our discussion of 3rd Quarter 2006 results. The new mutations have implications not only for assessing disease stage and prognosis, but are also useful to predict whether the cancer will be aggressive. They may also help determine which individuals will respond best to new drug therapies in clinical trials, and even to predict which drug or drug combinations will be most successful. These newly filed patent applications, and others soon to follow, showcase the unique capabilities of Transgenomic Laboratories discovery team and our proprietary technologies in the area of low level somatic mutation detection. We are actively looking for new partners to aid us in our efforts to bring these new discoveries to market so they will benefit patients."

About Transgenomic: A decade of discovery 1997 - 2007

Transgenomic is a global biotechnology company that provides unique systems, products, discovery and laboratory testing services to the academic and medical research, clinical and pharmaceutical markets for automated high sensitivity genetic variation and mutation analysis in the fields of pharmacogenomics and personalized medicine. This is accomplished through their offerings of Wave[®] DHPLC systems, reagents, consumables and assay kits, automated cytogenetics systems and Transgenomic Discovery and CLIA Lab Services. To date there have been over 1,200 Wave systems installed in over 600 customer sites in over 35 countries and approximately 1,500 publications utilizing Transgenomic products or services. Transgenomic Discovery and Lab 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.

Transgenomic Cautionary Statements

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 information in this press release is as of the date of the release and Transgenomic does not undertake any duty to update this information, including any forward-looking statements, unless required by law.