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**FOR IMMEDIATE RELEASE**

**Transgenomic Completes Licensing Option with Dana-Farber Cancer Institute on Cold-PCR for Enrichment of DNA Mutations**

OMAHA, Neb., April 7, 2009 -- Transgenomic, Inc. (OTC BB: TBIO.OB), a leading global biotechnology company, announces that it has completed a licensing option with the Dana-Farber Cancer Institute, Boston, MA with regard to a method known as Cold-PCR. This variation of the standard PCR technology enriches mutations in samples where normal DNA predominates. Cold-PCR was invented at Dana-Farber by Dr. Mike Makrigiorgos who has demonstrated its effectiveness in enriching for mutations in cancer-related genes in samples where DNA sequencing cannot detect very low concentrations of somatic DNA mutation.

“We are very excited to be able to work with Dana-Farber on continuing to develop this technology. Cold-PCR has the potential to further increase the sensitivity of Transgenomic’s WAVE DHPLC and Surveyor Nuclease products for mutation detection in cancer and mitochondrial diseases,” said Eric Kaldjian, CSO at Transgenomic. “In combination, Cold-PCR and WAVE/Surveyor have the potential to detect one mutant copy of DNA out of a thousand to as many as ten thousand normal copies. This will be particularly valuable in cancer-related mutation detection of free DNA in blood and body fluids and in producing a mutation profile of primary tumors to predict resistance to targeted therapies. It could also have application in analysis of mitochondrial DNA heteroplasmies.”

“We are delighted to be able to develop jointly the application of Cold-PCR with Transgenomic’s existing technologies,” said Dr. Mike Makrigiorgos, Director of Medical Physics and Biophysics Division at Dana-Farber and an associate Professor of Radiation Oncology at Harvard Medical School. “We believe that coupling Cold-PCR with DHPLC and Surveyor Nuclease promises a significant solution to high sensitivity detection of somatic mutations that are key to cancer biology.”

Cold-PCR will have applicability in detection of cancer-related mutations where critical mutations are present at a very low percentage compared to normal DNA. Examples would be in blood and urine or where the tissue collected contains mostly normal cells. This would allow clinicians to use less intrusive methods for genetic analysis or allow more efficient use of tumor tissue samples. Additionally the method could enhance the detection of the emergence of cancer-drug resistance mutations, allowing early detection of relapse.

Transgenomic CEO Craig Tuttle said: “We believe that Cold-PCR is an important addition to our high-sensitivity mutation detection portfolio of cutting edge technologies. It will allow us to continue to be able to offer affordable, state-of-the-art solutions to challenging areas of genetic analysis such as early detection of cancer development, drug resistance and relapse as well as expanding our mitochondrial DNA toolbox.”

**Technical Information**

When mutant and reference DNA samples from the same gene are mixed and re-annealed, variations between these sequences cause double-stranded DNA heteroduplexes to form. The WAVE System employs denaturing HPLC to separate these homo- and hetero-duplexes by ion-pairing reverse-phase HPLC. This technology has been in widespread use for genomic analysis

being cited in over 2000 peer-reviewed publications. As an alternative offering, Transgenomic's SURVEYOR Nuclease cleaves such heteroduplexes with high specificity at sites of base mismatch or small insertions/deletions. It has a proven track record as a robust and reliable tool in analyzing DNA variations, especially where the mutant alleles are at a very low concentration within the sample (less than 1% of the total wild type allele concentration). Cold-PCR protocols preferentially amplify heteroduplexes such that mutant alleles become enriched compared to normal alleles. The range of enrichment demonstrated to date varies from 3 to 100-fold, which will contribute to Transgenomic's target of achieving a 1/10,000 mutant to normal allele ratio detection in a routine, cost-effective and high throughput protocol. This level of detection will allow straightforward tumor analysis via surrogate tissues such as blood and urine.

### **About Transgenomic**

Transgenomic is a global biotechnology company that provides unique products and services for 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](http://www.transgenomic.com).

### **Cautionary Statements**

Certain statements in this press release constitute "forward-looking statements" 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 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 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.