

Transgenomic Expands Cardiology Genetic Test Offerings

Genetic Tests for Clopidogrel (Plavix[®]) Response and Familial Atrial Fibrillation
Launched at the Annual American Heart Association Meeting

OMAHA, Neb., (November 14, 2011) – Transgenomic, Inc. (OTC/BB: TBIO) today announced the launch of two innovative genetic tests at the annual meeting of the American Heart Association in Orlando, Florida. The PGxPredict:CLOPIDOGREL Panel is a uniquely comprehensive test to predict a patient's response to clopidogrel (Plavix[®]). The company has also expanded its *FAMILION* family of tests for inherited heart diseases with the addition of a test for familial atrial fibrillation (AF).

Clopidogrel (Plavix[®]) is a widely prescribed antiplatelet drug used to reduce the risks of death, stroke, and heart attack in heart disease patients and to prevent blood clots in individuals who have recently received stents to widen blocked or narrowed arteries. About half of patients have dysfunctional versions of two genes responsible for absorbing clopidogrel into the bloodstream and then activating the drug, which puts these patients at an elevated risk of adverse outcomes. For these patients, clopidogrel may not work effectively at recommended doses.

The seriousness of this problem led the FDA in 2010 to add a black box warning to clopidogrel's label to alert physicians and patients about this risk for the gene *CYP2C19*. The other gene, *ABCB1*, which is covered by a pending patent owned by Transgenomic, has been repeatedly confirmed as an independent risk factor for poor response to clopidogrel. Transgenomic's PGxPredict:CLOPIDOGREL Panel is the only clopidogrel genetic panel on the market that assays both genes critical for understanding a patient's individual response to this life-saving drug.

“With clopidogrel being one of the world's most prescribed drugs, the opportunity to offer this critically important combination of these two genes to the general cardiology community represents a tremendous growth opportunity for our Clinical Laboratories division,” said Craig Tuttle, Chief Executive Officer at Transgenomic. “Current clopidogrel tests only look at the *CYP2C19* marker leaving the approximately 25% of patients with reduced *ABCB1* function at risk. The PGxPredict:CLOPIDOGREL Panel is unique since it detects genetic markers in both *ABCB1* and *CYP2C19*, which together identify roughly 50% of patients with a genetic deficiency impacting their response to clopidogrel.”

“The use of the PGxPredict:CLOPIDOGREL Panel by the general cardiologist is an excellent opportunity for those physicians to develop an understanding of the value of genetic testing in their patients,” added Martin Maron, M.D., Director of the Hypertrophic Cardiomyopathy Center (HCM) at Tufts University. “As the general cardiologist becomes more comfortable with genetic testing, they have a real opportunity to impact patient outcomes by earlier detection of conditions like HCM and other cardiomyopathies.”

The *FAMILION* Familial Atrial Fibrillation (AF) Test is the newest addition to Transgenomic's menu of genetic tests for inherited cardiac diseases. AF is a common abnormal heart rhythm that predisposes patients to stroke and typically occurs as the result of an underlying cardiovascular disease, such as heart failure or coronary artery disease. AF may also occur independent of other diseases, which is known as lone or familial AF, and can result from mutations in genes important for maintaining normal heart rhythm.

“Around one-third of AF patients have a family history of AF,” said Michael Gollob, M.D., Director of both the Inherited Arrhythmia Clinic and the Arrhythmia Research Laboratory at the University of Ottawa Heart Institute. “The availability of a genetic test for familial AF provides a new and important screening modality for family members who may be at risk of AF, and will provide us insight as to which family members will benefit from enhanced medical surveillance. This strategy will likely lead to earlier initiation of therapy for stroke prevention

and rhythm control. Ultimately, we may learn that specific genetic sub-types of AF behave differently clinically in the context of stroke risk and pharmacologic response."

About the PGxPredict:CLOPIDOGREL Panel

The PGxPredict:CLOPIDOGREL Panel analyzes the genes *CYP2C19* and *ABCB1* to help predict a patient's response to clopidogrel (Plavix®), a widely used antiplatelet drug. The test results can be used to aid clinicians in developing a treatment plan for their patients being considered for or receiving clopidogrel.

About the FAMILION Tests

The *FAMILION* family of tests detects genetic mutations that can cause cardiac channelopathies, cardiomyopathies, and other cardiopathies. Cardiac channelopathies are rare, potentially lethal inherited heart conditions, including Long QT Syndrome (LQTS), Brugada Syndrome (BrS), Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT), Familial Atrial Fibrillation (Familial AF) and Short QT Syndrome (SQTS). Cardiomyopathies are potentially lethal progressive diseases that affect the heart muscle including, Hypertrophic Cardiomyopathy (HCM), Dilated Cardiomyopathy (DCM), Conduction Disease associated with DCM (CD-DCM), and Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC). Other cardiopathies include Marfan Syndrome and familial Thoracic Aortic Aneurysms and Aortic Dissections (Marfan/TAAD).

For patients suspected of having an inherited cardiac disease, genetic testing can confirm the diagnosis, provide valuable risk stratification information, guide treatment decisions, identify presymptomatic or silent carriers and better enable genetic counseling.

For more information about the PGxPredict:CLOPIDOGREL Panel or the *FAMILION* family of tests, please visit booth #734 at the 2011 American Heart Association meeting or online at labs.transgenomic.com.

About Transgenomic

Transgenomic, Inc. (www.transgenomic.com) is a global biotechnology company advancing personalized medicine in cancer and inherited diseases through its proprietary molecular technologies and world-class clinical and research services. The company has three complementary business divisions: Transgenomic Pharmacogenomic Services is a contract research laboratory that specializes in supporting all phases of pre-clinical and clinical trials for oncology drugs in development. Transgenomic Clinical Laboratories specializes in molecular diagnostics for cardiology, neurology, mitochondrial disorders, and oncology. Transgenomic Diagnostic Tools produces equipment, reagents, and other consumables that empower clinical and research applications in molecular testing and cytogenetics. Transgenomic believes there is significant opportunity for continued growth across all three businesses by leveraging their synergistic capabilities, technologies, and expertise. The company actively develops and acquires new technology and other intellectual property that strengthen its leadership in personalized medicine.

Forward-Looking Statements for Transgenomic

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 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

filings with 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.