

BGI China, INEX develop blood test for Down syndrome

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BGI, INEX to set-up nex-gen sequencing facility in Singapore



Singapore: INEX Innovations Exchange (INEX), a leading women's health diagnostics company based in Singapore, has partnered with BGI, the world's largest genomic sequencing institute and bioinformatics powerhouse, to establish a next generation sequencing facility in Singapore to offer a suite of molecular genetics tests, starting with iGeneScreen, a non-invasive prenatal test to detect fetal chromosomal abnormalities in pregnant women. The facility in Singapore is expected to be operational by the first quarter of 2013.

Developed by researchers at BGI using a modern genomic sequencing technology called next generation sequencing (NGS), iGeneScreen is a blood test that analyzes fetal DNA in maternal blood to detect chromosomal abnormalities. It is a non-invasive screening test requiring only a 5ml blood sample from pregnant women at 12 weeks or later, and it provides highly accurate prenatal test results for Trisomy 13 (Patau Syndrome), Trisomy 18 (Edwards Syndrome) and Trisomy 21 (Down Syndrome).

Amniocentesis is currently the most common invasive prenatal diagnosis procedure and it carries a one percent risk of miscarriage. The new test will provide a safer alternative for pregnant women at risk of having babies with chromosomal abnormalities.

Dr Sidney Yee, executive director, INEX, said that, "Singapore will be the only facility in Asia outside of China offering such a test. This entity is poised to be a center-of-excellence facility that receives and processes tests from South and South East Asia, the Middle East and Australasia. This first trimester non-invasive prenatal test has huge advantages in that it is highly accurate with a sensitivity of over 99 percent, and an extremely low false positive rate of below one percent. All this while

posing absolutely no risk to the fetus, so we are confident that it will be well received by all pregnant women."

Dr. Yin Ye, COO, BGI, said that, "This new state-of-the-art facility here in Singapore is an important next step for BGI, as Singapore is renowned for its robust regulatory framework, highly-skilled molecular technologists, and its excellent reputation for translational research and medical diagnostics. With this facility here in Singapore, and working closely with INEX, we are looking forward to expanding our influence and offerings within the sphere of medical genomics and medical diagnostics in the Asia-Pacific region."