

## **Microarray technology proves superior to sequencing for non-invasive prenatal testing**

SAN JOSE, California, Sept. 15, 2014 /PRNewswire/ -- Ariosa Diagnostics, Inc. today announced that its scientists have successfully tested and implemented a microarray DNA quantification method for Ariosa's Harmony™ Non-Invasive Prenatal Test (NIPT) which offers significant advantages, including shorter turn-around time, over the previous sequencing approach. The results were published online in Fetal Diagnosis and Therapy.

Until now, all NIPTs in the market using cfDNA had relied on DNA sequencing which can be a lengthy and complex process. "This is the first application of microarray technology to non-invasive pre-natal testing with cell-free DNA," said Ken Song, CEO of Ariosa. "Microarray imaging is a proven and robust technology that has been used for many clinical applications. Ariosa's implementation of the microarray NIPT method shows promising results to enhance performance and to deliver faster results as compared to DNA sequencing".

This technological advancement in NIPT was innovated by Ariosa scientists as part of a long term vision to enhance performance and reduce turnaround time for patients to receive results from this type of test. "The targeted approach of the Harmony test with the integration of microarrays has allowed for further enhancement of quality with a significantly shorter process," said Arnold Oliphant, Chief Scientific Officer of Ariosa.

The Harmony test is uniquely capable of leveraging this method due to the targeted focus on chromosomes of interest with the DANSR™ assay. When integrated with Ariosa's proprietary FORTE™ algorithm, the new custom microarrays improved fetal fraction quantification and significantly lowered the variance of chromosome concentration, when compared to DNA sequencing. Completely concordant test results were achieved with a significant reduction in turn-around time. The microarrays were designed by Ariosa and sourced from Affymetrix, Inc.

### About the Harmony Test

The Harmony prenatal test is a non-invasive blood test for pregnant women that can be used as early as 10 weeks into pregnancy. By evaluating cell-free DNA found in maternal blood, the test can assess the risk of Trisomy 21 (Down syndrome) in the fetus. It has been validated with the largest clinical data set in the prenatal cell-free DNA space, making it the most broadly studied cell-free DNA test. It is available in more than 90 countries and has been used to guide clinical care in over 300,000 pregnancies worldwide.

### About Ariosa Diagnostics

Ariosa Diagnostics, Inc. is a leading global molecular diagnostics company committed to improving overall patient care by developing and delivering innovative, affordable and widely-accessible testing. Tests are fully validated by rigorous and comprehensive methodologies, to ensure health care practitioners and patients can be confident in the test's performance. Ariosa has developed leading-edge technologies to perform a directed analysis of cell-free DNA in blood. The company is headquartered in San Jose, California.

For more information, visit [www.ariosadx.com](http://www.ariosadx.com).

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