What Is Microarray Testing?

The human body contains genetic information that is bundled into packages called chromosomes. Genetic information within each chromosome tells a person’s body how to grow and develop. Changes in the amount of genetic information, such as extra or missing pieces of a chromosome, may cause medical conditions such as birth defects, delays in early development, learning difficulties, autism or other health issues.

Genetic testing during your pregnancy may detect some types of medical conditions before birth. The most common prenatal testing looks at the baby’s chromosomes. Very small chromosomal changes may go undetected by traditional tests, which focus on the whole chromosome structure (karyotype). Prenatal microarray testing is an advanced type of genetic test that may detect both large and very small chromosomal changes.

About Us

We are a genetic testing laboratory whose mission is to provide specialized genetic tests that make a difference. Our testing services provide patients and physicians with information that can assist in making better-informed healthcare decisions.
Prenatal Microarray Testing
Most pregnancies result in the birth of a healthy baby. About 3 out of 100 babies have some type of medical condition, such as a birth defect. Genetic testing during pregnancy can sometimes detect these types of medical conditions before birth; however, it is important to note that the majority of women who undergo genetic testing for their pregnancy will have normal results.

Your doctor has recommended a type of genetic test called CombiSNP™ Array for Prenatal Diagnosis. You may wonder what makes microarray testing different from other tests and what microarray testing can tell you. The information in this pamphlet can help answer some of your questions.

Why Is Microarray Testing Being Offered to Me?
Your doctor may be considering microarray testing for you and your pregnancy for many reasons. Common reasons may include any of the following:
• If maternal blood tests during pregnancy were abnormal, indicating an increased chance of a medical condition or birth defect
• If an abnormal finding is seen on ultrasound and other genetic testing has been normal
• If your baby’s karyotype (chromosome test) shows an uncertain or abnormal result
• If you previously had a child with a medical condition, particularly one associated with chromosomal changes
• If you have experienced multiple miscarriages
• If you are over 35 years of age

How Is Prenatal Microarray Testing Performed?
As with many prenatal genetic tests, microarray testing requires an amniocentesis or chorionic villus sampling (CVS) procedure. These are both ways to obtain cells that contain the baby’s chromosomes during pregnancy. Should you choose to have prenatal microarray testing, your doctor will discuss the details of the amniocentesis or CVS procedure with you. After the procedure, the sample will be sent to our laboratory where the prenatal microarray testing is performed.

What Are the Types of Test Results?
There are typically three types of microarray analysis test results:

Normal: A normal test result means that microarray testing did not detect extra or missing chromosomal information. Most pregnancies will have normal test results. A normal test result rules out most conditions caused by changes to the chromosomes, but not all genetic disorders. Your doctor may recommend more tests during your pregnancy.

Abnormal: An abnormal test result means that microarray testing did detect extra or missing chromosomal information. If your test result is abnormal, your doctor will provide more specific information about the condition.

Variant of Uncertain Significance (VOUS): A VOUS test result means that the microarray testing identified a change that has been rarely, or perhaps never before detected. The meaning of VOUS test results may be unclear. In these situations, blood samples from you and the father of the baby may be needed to help better understand the result.

What Are the Chances That the Test Result Will Be Abnormal?
Most prenatal microarray results are normal. The chance that the result will be abnormal depends on the reason your doctor has offered this testing to you. Your doctor will discuss the chances for an abnormal result with you based on your specific situation.

How Long Will It Take to Get My Test Results?
Prenatal microarray results generally take 7-8 days to complete. However, it is common for this test to be performed after the completion of the baby’s karyotype test. A karyotype test requires cells grown from an amniocentesis or CVS sample, which typically takes 10-12 days. Once complete, the results will be returned to the doctor who ordered the test, and your doctor will review the test results with you.

Will My Insurance Cover Microarray Testing?
Some insurance companies will pay the full cost of microarray testing, while others may pay only a portion of the cost. CombiMatrix accepts samples from all patients with commercial health insurance coverage and will bill your insurance company directly on your behalf. We strive to minimize your financial burden and offer a flexible patient payment plan to help make microarray testing affordable for you and your family.

Do You Have Additional Questions?
If you still have questions or want to learn more, ask your doctor, genetic counselor or other healthcare provider.

Additional information is also available on our website at www.combimatrix.com.