What are the possible test results?

There are three possible test results:

1. **Normal** – no clinically significant gain or loss of genetic material is detected in the fetal chromosome.
2. **Abnormal** – gain or loss of genetic material is detected in the fetal chromosome. The clinical features associated with these results depend on the specific genetic material that is gained or lost.
3. **Unclear** – gain or loss of genetic material is detected in the fetal chromosome but the effect on the fetus is uncertain. Performing aCGH test on the blood samples taken from both biological parents may help in interpretation.

What are the limitations of this test?

* aCGH test does not look at the structural arrangement of chromosomes (this is supplemented by conventional chromosome study by karyotyping).
* aCGH test does not look for individual gene changes.
* aCGH cannot detect low level mosaicism (presence of cells with different chromosomal makeup in the baby or the placenta).
* A normal aCGH test result cannot exclude all abnormalities.

What are the important considerations in choosing this test?

* It is possible that a diagnosis unrelated to the reason of testing may be found including predisposition to mental retardation, autism, cancer, late-onset disease or other medical conditions.
* There is a small chance of finding a genetic condition affecting the health of yourself or other family members.
* The test result may still be uncertain even after parental blood is tested.
* The above may impose psychological distress.
* You need to indicate what information you would like to know from the test.

Charge

aCGH	$ 4900
aCGH + QF-PCR	$ 5400
aCGH + QF-PCR + karyotyping	$ 6700

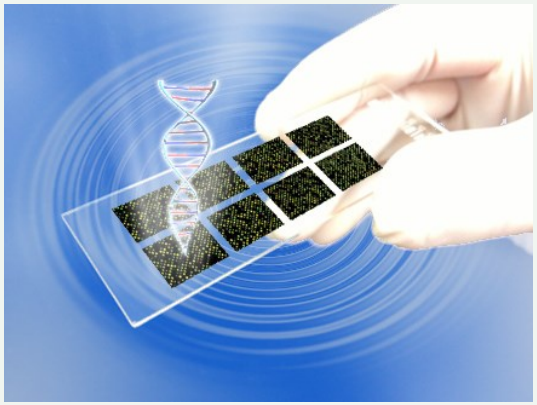
The above service is provided by Mrs Wu Chung Prenatal Diagnostic Laboratory of Tsan Yuk Hospital.

Please ask your doctor if you have any questions about the information in this brochure.

Please visit http://www.obsgyn.hku.hk for more information

V3-1608

Prenatal whole genome array Comparative Genomic Hybridization (aCGH) Testing

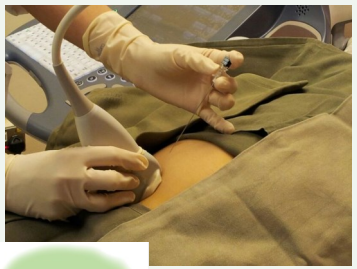


Prenatal Diagnostic and Counselling Division
Department of Obstetrics and Gynaecology
The University of Hong Kong

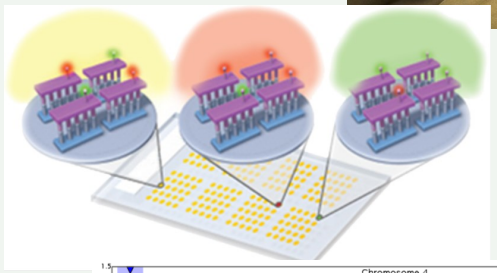
What are the objectives and benefits of prenatal aCGH testing?

aCGH is a special test which finds differences in the amount of genetic material among individuals. It is more sensitive than traditional cytogenetic karyotyping and is able to find a chromosome gain or loss even if testing of the chromosome by karyotyping shows normal results.

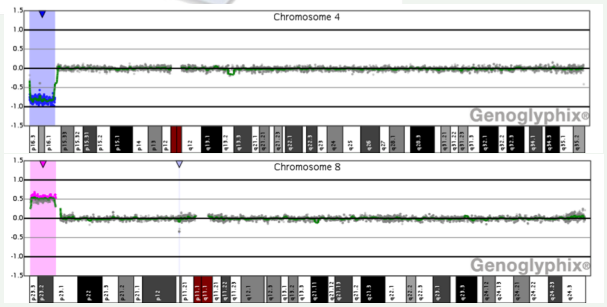
An early prenatal diagnosis of a gain or loss of genetic material on a specific chromosome can provide additional information that may enable your doctors to manage your pregnancy better and may also enable you and your doctors to know what to expect after delivery of the baby.



Amniocentesis under ultrasound guidance



How the test is done



Who should consider having this test?

Women who are at increased risk of having babies with congenital abnormalities may choose to have the test when prenatal invasive diagnostic procedures are performed. Common reasons for invasive diagnostic procedures include:

* Abnormal ultrasound findings of the baby
* Previous history of an abnormal baby
* Family history of a genetic disorder
* Or if Down syndrome screening test indicates an increased risk for a chromosome abnormality

Your doctor may also offer aCGH when karyotype identifies a complex change or a marker chromosome in order to have more detailed information.

Women with stillbirth may also benefit from the test to evaluate the cause of fetal death.

What types of samples are required?

Amniotic fluid or chorionic villi obtained at amniocentesis or chorionic villus sampling (CVS). Placental tissue or skin biopsy from stillbirth.

3 ml blood from both biological parents .

How is the test done?

DNA is taken from amniotic fluid cells or chorionic villi to match with a control DNA sample on the array to detect gain or loss of genetic materials in the fetus.

When will the results be available?

The test will be reported in 7 working days if the sample is adequate and the result is normal.

If a chromosomal problem is suspected, tests to confirm these findings will be performed. Depending on the complexity of the problem, the report will be available in 2-3 weeks or more.

How do I get to know the results?

The test result will be reported to your doctor, who will explain the results to you.

You and your family members may be referred to clinical geneticist for further counselling if there are abnormal or unclear findings.