Contact Us

	Location	Tel	Fax
NUH Women's Clinic - Emerald / Ruby	Level 3, Kent Ridge Wing	6772 2277	6872 0103
Clinic G	Level 1, Main Building	6772 5403	6774 4352

Please visit our website at **www.nuhgynae.com.sg**

Location

NUH
National University Hospital

NUH Women's Centre
Is My Answer

Non-Invasive Prenatal Testing (NIPT)

A member of the NUHS

What is the present available test for prenatal screening?

The First Trimester Screen (FTS, i.e. nuchal translucency measurement and first trimester serum screening) involves a blood sample and an ultrasound to measure the thickness of the back of the baby's neck (nuchal translucency).

Besides assessing the baby's risk of having chromosomal abnormalities, the ultrasound component of the test also provides early detection of certain major birth defects such as spina bifida (the incomplete development of the spine). A high risk FTS result only suggests that further confirmatory testing is needed to determine if the baby has Down Syndrome. The FTS cannot confirm the genetic diagnosis. Of all the high risk FTS results, only 5% of babies truly have Down Syndrome and 95% of babies are normal. This is known as a false positive result.

What is Non-Invasive Prenatal Test (NIPT)?

NIPT is a non-invasive prenatal blood test that will screen for chromosomal abnormalities including trisomy 21 (Down syndrome), 18 (Edwards syndrome) and 13 (Patau syndrome).

It poses no risk to your pregnancy and is performed on your blood sample which contains the baby's genetic information (DNA). This test, like the first trimester screen, assesses the fetus' risk of having Down syndrome, and therefore it is poses no risk to your pregnancy.

How can NIPT help in my pregnancy?

NIPT can be used to screen pregnancies for Down syndrome with a reasonably high accuracy to identify potentially affected pregnancies for further testing.

NIPT has a detection rate of over 99% and a low false positive rate of less than 1%. This means that in fewer than 1 in 100 pregnancies, an abnormal laboratory test is obtained although the baby may not have Down Syndrome.

How is NIPT different from the present prenatal screenings?

Although NIPT does not screen for birth defects, it identifies babies with Down syndrome with greater accuracy than FTS. NIPT can reduce the number of patients requiring invasive tests such as amniocentesis by reducing false positive FTS results.

Can NIPT replace Amniocentesis and CVS?

While the NIPT is reasonably accurate with a low false positive rate, abnormal results need to be confirmed by amniocentesis or Chorionic villus sampling.

What happens if my NIPT result is positive?

In the event of a positive result by NIPT, an invasive diagnostic procedure (Chorionic villus sampling or amniocentesis) will be offered to determine the final chromosomal diagnosis of the fetus and help you make informed choices.

Is NIPT safe for me and my child?

NIPT is a safe and non-invasive prenatal test that poses no risk to the baby, as compared to other invasive procedures (Amniocentesis and Chorionic villus sampling) which carry a slight risk for miscarriage.

Who should do NIPT?

NIPT is recommended for the following groups:
- Women with a high risk FTS result
- Women with a previous pregnancy affected by Down Syndrome or other chromosomal abnormalities.

How is NIPT done?

An ultrasound will be conducted beforehand to date the pregnancy accurately and determine the number of babies present. NIPT is done by taking a blood sample from the mother after 10 weeks of pregnancy. Currently, the test may take 10 to 14 days to give a result. In about 5% of cases, it may not be able to give a result and the test will have to be repeated at no additional cost.

Is NIPT available in Singapore?

Yes. Please speak with your doctor for further information and to arrange the test.