Non-Invasive Prenatal Test (NIPT) - neoBona Test

General :

neoBona Test: The test we offer is the neoBona test (a new generation non-invasive prenatal test for fetal abnormalities) by Synlab.

NIPT Test : Non-invasive prenatal testing (also knows as NIPT Test) analyzes cell-free DNA from the fetus circulating in the pregnant mother's blood. This is a prenatal screening test for Down syndrome (trisomy 21) and two other common fetal chromosomal abnormalities (trisomies 18 (Edwards syndrome) and 13 (Patau syndrome)). Also, testing for X and Y chromosomes is possible upon request.

Indication:	Although NIPT screening can be performed in every pregnancy, it is especially indicated in: 1.Pregnant women of age > 35yrs 2.Increased risk with first trimester screening 3.Affected previous child
Preanalytics:	Please send your patient to the lab for blood extraction or contact FML for the special tubes.
Material:	Blood sample from the mother (1 x 10 ml whole blood in special tube).
TAT:	7-10 days*
Method:	Targeted sequencing of cell-free fetal DNA in maternal blood.
Note:	Patient must be in WOG 10 (gestation week 10) or later.For singleton and twin pregnancies, live fetus, WOG > 10 weeks by ultrasound, no vanishing twin.

Background

DNA from the fetus can be found circulating in the mother's blood. The fetal cells are naturally broken down, resulting in the fetal DNA circulating freely in the mother's blood. This cell-free DNA (cfDNA) can be analyzed to estimate the risk of the fetus having trisomies 21, 18 or 13.

Benefits

Since it is non-invasive there are no risks to the fetus as with invasive procedures (amniocentesis, CVS). NIPT test is highly sensitive and specific when compared to existing screening approaches for Down Syndrome. It detects around 99% of all babies with Down, Edwards and Patau syndromes.

Results

A 'HIGH RISK' result indicates a high risk for a trisomy. Following up with invasive procedures is recommended in this case. The test identifies more than 99% of fetuses with trisomy 21, 98% of fetuses with trisomy 18, and 94% of fetuses with trisomy 13. The test is highly specific for Trisomy 21 (99.9%), 18 (99%) and 13 (99.9%).

X/Y analysis for singleton pregnancies

Extra, or incomplete copies of one of the sex chromosomes can be detected (XXX, XYY, XXYY, XXY and a missing X chromosome in a girl).

X/Y analysis for twin pregnancies

Absence or presence of the Y chromosome can be detected. Absence of Y = both twins are female, presence of Y = one or both twins are male.

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit http://www.fml-dubai.com/parameter-listings/