NIPT

by GENEPLANET

Non-invasive prenatal testing

NIPT by GenePlanet is the world's leading European non-invasive prenatal test (NIPT). Over 3.500.000 NIPT tests using this tehnology have been performed worldwide.

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Congratulations on your pregnancy!

We know that pregnancy is one of the most exciting periods in life of a woman, it brings immense happiness, but also care for the health of your child.

Based on the latest achievements of the non-invasive prenatal testing, NIPT by GenePlanet test with its new generation sequencing technology can with high accuracy identify the risk of presence of certain genetic defects that may importantly affect your child's health.

What is trisomy?

Most cells in the human body have 23 pairs of chromosomes or in total 46 chromosomes.
Trisomy refers to presence of additional copy of specific chromosome in some or all cells. In children with such an abnormality, several congenital body/physical or mental defects are present. The NIPT by GenePlanet test is primarily intended to detect three the most common trisomies.

Incidence of syndromes in the general population

T21	T18	T13
Down syndrome	Edwards syndrome	Patau syndrome
1/700	1/7900	1/9500

Source:
Oxford Desk Reference: Clinical Genetics by Helen V. Firth and Jane A. Hurst.
Oxford University Press, 2005

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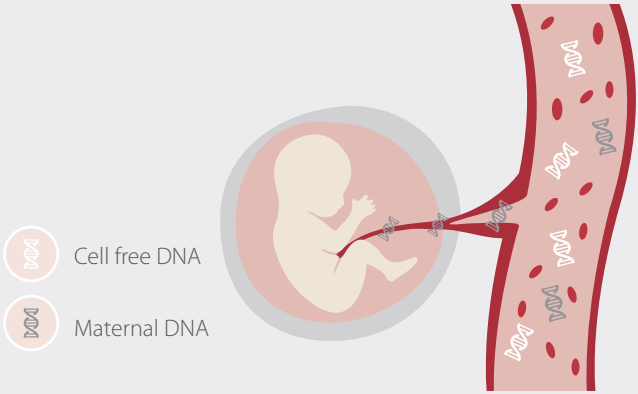
What is NIPT by GenePlanet?

NIPT by GenePlanet is simple, safe and very accurate non-invasive prenatal test, for detecting trisomies 21, 18, and 13 with a sensitivity and specificity higher than 99%.

Test can be performed as early as week 10 of pregnancy. Test also provides others screening options for specific genetic abnormalities of sex chromosomes, other trisomies (9, 16, 22) and deletion/duplications syndromes. In addition, the NIPT by GenePlanet test can also provide gender information on your request.

How does NIPT by GenePlanet work?

During pregnancy, DNA originating from the baby crosses into the mother's blood stream. Small, 10ml of maternal blood sample is needed for NIPT by GenePlanet test as early as week 10 of the pregnancy. From this blood sample, cell free fetal DNA is analysed in order to examine the baby's health and check for too few or too many chromosomes. Results are available within 6 to 10 days.



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Why get a NIPT by GenePlanet test?

Some pregnant women are indicated with higher risk for genetic condition. Your health care provider may recommend NIPT by GenePlanet test because of:

- You are 35 years or older
- There is a personal or family history of chromosomal conditions
- Fetal ultrasonographic findings, serum screen test result or nuchal translucency results indicating an increased risk of aneuploidy

Test is also suitable for:

- Twin pregnancies
- IVF pregnancies
- Pregancies with donated egg cell

Test NIPT by GenePlanet is available for any woman at her own request, regardless of age or a predetermined genetic risk.

How is NIPT by GenePlanet different from other prenatal tests?

	NIPT by GENEPLANET	Nuchal Translucency ultrasound or double hormonal test	Amniocentesis
Screening test	✓	✓	
Non-invasive	✓	✓	
Detection rate for Down syndrome 99,17%	✓		✓
False positive rate <0,5%	✓		✓
Gender information and sex chromosomes abnormalities	✓		✓

Test options

	NIPT by GENEPLANET Basic	NIPT by GENEPLANET Standard	NIPT by GENEPLANET Plus	NIPT by GENEPLANET Twins
SYNDROMS				
Down syndrome (Trisomy 21)	✓	✓	✓	✓
Edwards syndrome (Trisomy 18)	✓	✓	✓	✓
Patau syndrome (Trisomy 13)	✓	✓	✓	✓
SEX CHROMOSOME ANEUPLOIDIES				
Turner syndrome (Monosomy X)		✓	✓	
Klinefelter syndrome (Trisomy XXY)		✓	✓	
Triple X syndrome (Trisomy XXX)		✓	✓	
XYY syndrome		✓	✓	
TRISOMIES				
Trisomy 9			✓	
Trisomy 16			✓	
Trisomy 22			✓	
DELETION/DUPLICATIONS			✓	

- Angelman Syndrome / Prader-Willi syndrome
- Alpha Thalassemia
- Androgen insensitivity Syndrome (AIS)
- Aniridia II & WAGR Syndrome
- Bannayan-Riley-Ruvalcaba Syndrome (BRRS)
- Branchlootorenal dysplasia Syndrome (BOR) / Melnick -Frazer Syndrome
- Cat-eye Syndrome (CES)
- Chromosome 10q deletion Syndrome
- Chromosome 10q22.3-q23.31 microdeletion Syndrome
- Chromosome 18p deletion Syndrome
- Chromosome 18q deletion Syndrome
- Cornelia de Lange Syndrome (CDLS)
- Cowden Syndrome (CD)
- Cri du Chat (5p deletion) Syndrome
- Dandy-Walker Syndrome (DWS)
- DiGeorge Syndrome2 type (DGS2)
- Distal arthrogryposis 2B type (DA2B)
- Duchenne muscular dystrophy (DMD)
- Dyggve-Melchior-Clausen Syndrome (DMC)
- Feingold Syndrome
- Holoprosencephaly 1 type (HPE1)
- Holoprosencephaly 4 type (HPE4)
- Holoprosencephaly 6 type (HPE6)
- Jacobsen Syndrome
- Langer-Giedion Syndrome (LGS)
- Leukodystrophy with 11q14.2-q14.3
- Mental retardation X-linked growth horm. Def (MRGH)
- Microphthalmia Syndrome 6 type, Pituitary hypoplasia
- Microphthalmia with linear skin defects
- Monosomy 9p Syndrome
- Orofaciodigital Syndrome
- Panhypopituitarism X-linked
- Potocki-Lupski Syndrome (17p11.2 duplication Syndrome)
- Prader-Willi-like Syndrome (SIM1 Syndrome)
- Rieger Syndrome 1 type (RIEG1)
- Saethre-Chotzen Syndrome (SCS)
- Sensorineural deafness and male infertility
- Smith-Magenis Syndrome
- Split-Hand / Foot Malformation 5 type (SHFM5)
- Split-Hand / Foot malformation 3 type (SHFM3)
- Syndrome Diaphragmatic hernia, congenital (HCD/DIH1)
- Trichorhinophalangeal Syndrome1 type (TRPS1)
- Van der Woude Syndrome (VWS)
- Wilms tumor 1 (WT1)
- X-linked lymphoproliferative Syndrome (XLP)
- Xp11.22-p11.23 microduplication Syndrome
- 1q41-q42 microdeletion Syndrome
- 12q14 microdeletion Syndrome
- 14q11-q22 deletion Syndrome
- 15q26 overgrowth Syndrome
- 16p11.2-p12.2 microdeletion Syndrome
- 16p11.2-p12.2 microduplication Syndrome
- 17q21.31 deletion Syndrome
- 17q21.31 duplication Syndrome
- 1p36 microdeletion Syndrome
- 11q11-q13.3 duplication Syndrome
- 2q33.1 deletion Syndrome/ Glass syndrome
- 5q21.1-q31.2 deletion Syndrome
- 8p23.1 deletion Syndrome
- 8p23.1 duplication Syndrome

GENDER IDENTIFICATION				
Gender detection	✓	✓	✓	✓

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Advantages of NIPT by GenePlanet test:

Trusted

Over 3.500.000 NIPT tests using this tehnology have been performed worldwide.

Accurate

Proven >99% sensitivity based on a study of nearly 147.000 pregnancies*

Simple

Test from small 10ml maternal blood sample as early as week 10 of pregnancy.

Safe

Non-invasive with no risk of miscarriage

GenePlanet services and materials are not substitute for medical advice, diagnosis or treatment. The NIPT by GenePlanet test can only be administreted by a qualified healthcare professional.

The NIPT by GenePlanet analysis is carried out in cooperation with our partner laboratory Polyclinics Breyer.

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* Non-Invasive Prenatal Testing For Trisomy 21, 18 and 13 – Clinical Experience from 146,958 Pregnancies, Wei Wang et al, Journal of Ultrasound in Obstetrics and Gynecology