NIPT by biomnis

Focus on...

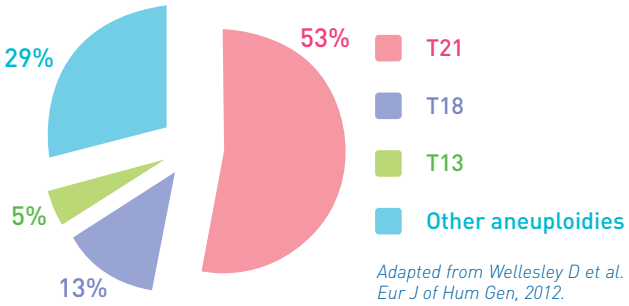
NIPT Prenatal Screen by Biomnis

biomnis
SPECIALISED MEDICAL PATHOLOGY

Introduction

The discovery of foetal DNA in maternal blood, combined with a new and very high-output sequencing method (NGS - Next-Generation Sequencing) has opened numerous perspectives in the field of non-invasive prenatal testing (NIPT). One of the principal applications of this method is the **screening of the main foetal aneuploidies i.e trisomy 21, 18 and 13** and thanks to this innovative new technology, a simple blood sample is now sufficient to perform genetic testing for trisomy 21, 18 & 13, **ensuing no risk for the foetus while remaining highly reliable.**

Prenatal Prevalence of Reported Chromosomal Abnormalities

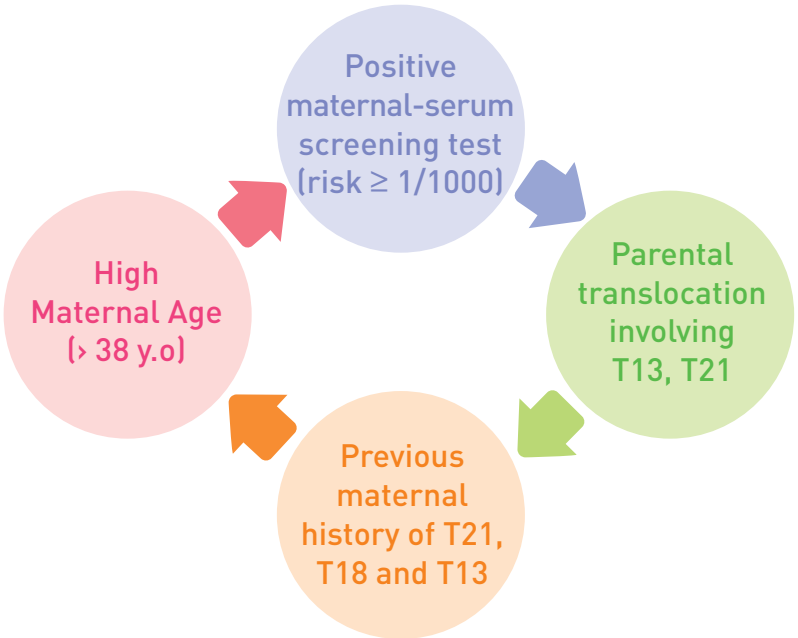


Adapted from Wellesley D et al. Eur J of Hum Gen, 2012.

Due to the prevalency of T21, T18 and T13 aneuploidies, Biomnis has incorporated the technological know-how of Illumina and has developed the Biomnis NIPT, the most accurate and reliable non-invasive screening test available which is performed by massive DNA sequencing on a sequencer powered by Illumina -HiSeq™ 2500. The principle used, relies on reading a large number of target sequences for chromosomes 13, 18 and 21 which are read without any prior differentiation of the maternal fractions from the foetal fractions.

Who should be offered NIPT testing?

The Biomnis NIPT screening test can be performed as early as 10 weeks gestational age in patients with:



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Why choose our NIPT?

Contrary to the targeted approach used by other companies, the massive parallel DNA sequencing covers **all** of the genome and releases a result more quickly, with a failure rate* seen at Biomnis of **only 0.2%.**

**(usually on women with a very high BMI score, which restricts the detection of the foetal fraction).*

Biomnis has a renowned team of prenatal pathologists and scientists who will accompany your patient and recommend any follow-up to be taken if necessary. For positive NIPT results, requiring invasive follow-up testing on chorionic villus or amniocentesis, our experts will be present to advise clinicians on the appropriate steps to take and Biomnis will perform the confirmatory karyotyping tests on these samples as required.

Prenatal Testing at Biomnis

- SNP array
- Karyotyping on CV and amniotic fluid
- Targeted FISH
- Whole Genome Sequencing-Cystic Fibrosis
- Prenatal Fragile X

By choosing Biomnis NIPT, all of your patient's requirements will be catered for **from providing the test kit, the logistics to our laboratory to the performance of the most efficient and accurate NIPT results available** to ensure peace of mind to the expectant parents.

Advantages to Biomnis NIPT

Exceptional Accuracy › 99%	Minimises unnecessary invasive diagnostic procedures, therefore reducing exposure of foetus to risk
Reduces the risk of false positives, often encountered with traditional risk assessment.	Enables a high detection rate and sensitivity ›99%

Biomnis NIPT vs other NIPT methods available

	BiomNIPT	MateriT21 Sequenom	Harmony Ariosa	Panorama Natera
Method	MPS	MPS	Targeted	Targeted
Specimen	1 tube of the mother's blood	2 tubes of the mother's blood	2 tubes of the mother's blood	2 tubes of the mother's blood; 2 tubes of the father's blood
Failure Rate	*0.2%	1.4%	4.6-4.9%	6.4-8.1%
Turnaround time	7 days	5 days	7-10 days	9.2 days
Egg Donors & Twins	Yes	Yes	Yes (13% failure rate)	No

**Based on a study of 1200 cases*

NIPT Test Requirements

- **Sample type:** 1 x 10 ml tube of whole blood
- **Temperature:** Room temperature
- **Method:** NGS
- **TAT:** 7 days
- **Sample referral:** Please contact your dedicated key account manager for logistical organisation and kit provision. Please follow the sampling protocol provided with our NIPT kit (K17P-INTGB)

NB: All NIPT requests must be accompanied by our patient consent and information form (D17-INTGB / Test request form B17-INTGB) which can be downloaded from our website at www.biomnis.com/international

Contact

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