HOW IT WORKS

The Nuts and Bolts

The Panorama Prenatal Test

The unique methodology of the Panorama prenatal test utilizes single nucleotide polymorphism (SNP) technology and is much more efficient and accurate than the counting or quantitative methods used by all other available non-invasive prenatal tests.

This NATUS (Next-generation Aneuploidy Testing Using SNPs) methodology evaluates specific genetic loci on the actual mix of maternal and fetal DNA from the mother's blood. This allows the Panorama prenatal test to provide consistent sensitivity and specificity across all chromosomes, even at low fetal fractions. The result is a patient-specific individualized risk score, and better sensitivity and specificity with a decreased chance of false positives or false negatives with a low no call rate.

While fetal fraction of DNA in the mother's blood can vary greatly throughout gestational age, it does tend to be lower earlier in the pregnancy. By using SNP technology, the Panorama prenatal test has strong detection rates even at lower fetal fractions and can be used as early as 9 weeks gestational age.

How does Natera non-invasively examine fetal DNA?

Why the Panorama Prenatal Test?

You and your patients deserve the reassurance that comes from having the most accurate and comprehensive genetic information available.

The Panorama prenatal test provides superior coverage and the best detection and accuracy over any other current screening methods. It provides individualized risk scores for aneuploidy at 13, 18, 21, X, and Y with the highest accuracy among non-invasive prenatal tests currently available.

Double the clinical coverage.

- Identifies more chromosomal abnormalities than other prenatal tests.

Higher accuracy than other prenatal tests available.

- Consistently high levels of detection across all chromosomes evaluated.
- Best results of any non-invasive prenatal test at low fetal fractions.
- Accurate results as early as 9 weeks gestational age.

A safe, convenient method that avoids invasive testing.

- Uses a simple blood draw from the mother.

Natera's NATUS methodology.

- Efficient and effective targeted sequencing through unique SNP technology.
- Enhanced sensitivity and specificity.
- Individualized risk score provided for each patient.

The Panorama prenatal test is comprehensive, accurate and provides a patient-specific individualized risk score

Comprehensive

Identifies risk for aneuploidies of chromosomes 21, 18, 13, X, and Y.

Why are sex chromosomes important?

Recent studies have demonstrated early interventions to address physical, developmental and emotional issues related to these aneuploidies can be effective. If you, your patient and her pediatrician know to look for these characteristics, they are likely to be treated much earlier, improving the quality of life for her child.[1,2,3,4]

Accurate

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Comparison of Prenatal Test Performance*

Detection Rate False Positive Rate	**MPSS** Palomaki (2011 & 2012)	**MPSS with SAFeR**[5] Bianchi (2012)	**Targeted Sequencing with FORTE** Ashoor; Nicolaides; Ashoor (2012)	**The Panorama Test Using NATUS**[6,7]
Trisomy 21 (Down Syndrome)	98.6-99.1% 0.2%	<99.9% 0.2%	100% 0.1%	>99% 0.0%
Trisomy 18	100%	97.4%	98%	>99%

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(Edwards Syndrome)	0.3%	0.4%	0.1%	0.0%
Trisomy 13 (Patau Syndrome)	91.7% 1.0%	87.5% 0.1%	80% 0.05%	>99% 0.0%
45,X (Monosomy X)	Not evaluated	95% 1.0%	Not evaluated	91.7% 0.0%

*Calculated from published live birth incidence rates and reported detection rates above. Calculations are approximate.

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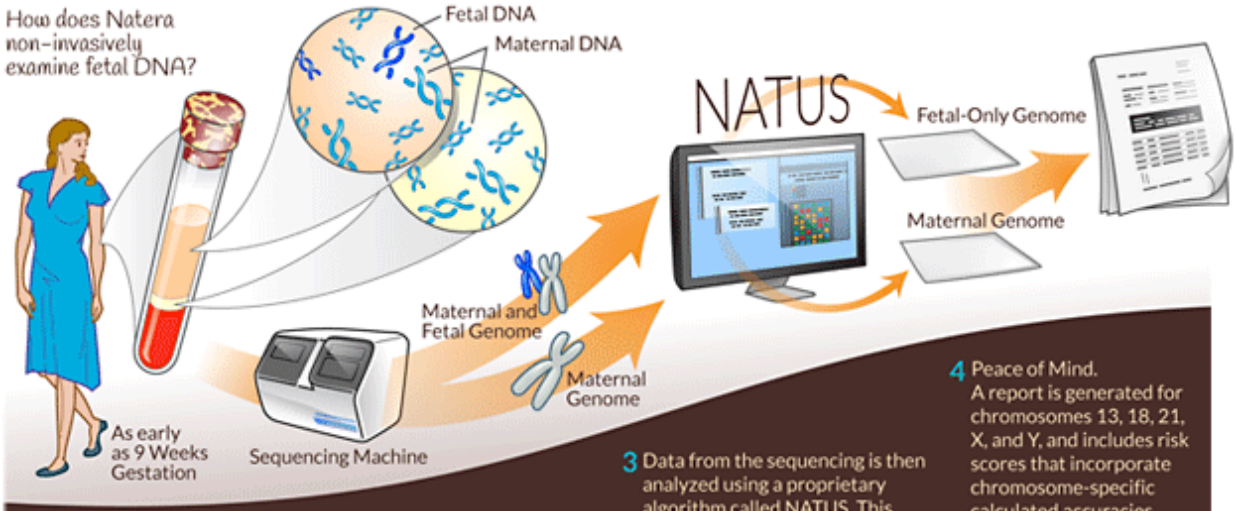
Blood Draw | SNP Targeted Sequencing | Analysis | Accurate Reporting

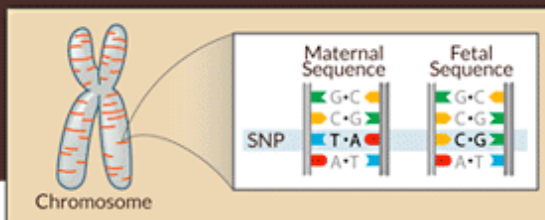


1 Mother's blood sample is separated into layersvia centrifuge. The three layers consist of the plasma, the buffy coat, and the red blood cells, top to bottom respectively.

2 The sample is amplified then analyzed using a sequencing machine. This measures genetic variations of single-nucleotide polymorphisms (SNPs)* between the maternal and fetal genomes.

3 Data from the sequencing is then analyzed using a proprietary algorithm called NATUS. This distinguishes the fetal DNA signal from the maternal DNA signal.

4 Peace of Mind.
A report is generated for chromosomes 13, 18, 21, X, and Y, and includes risk scores that incorporate chromosome-specific calculated accuracies.



*A SNP (Single-Nucleotide Polymorphism) is a DNA sequence variation occurring when a single nucleotide — A, T, C or G — in the genome is changed, which is part of the natural genetic variation within a population.

panorama™ prenatal test