

The next generation of non-invasive prenatal screening

Non-invasive prenatal testing (NIPT) analyzes cell-free DNA in a pregnant woman's blood to estimate the risk of fetal chromosomal abnormalities.

Panorama® uniquely distinguishes between fetal (placental) and maternal cell-free DNA, leading to fewer false positives and a more comprehensive basic panel compared with other screening methods.

Professional societies recognize the role of NIPT



Considers NIPT appropriate as primary screening test for all women.¹



Recommends providers educate patients on benefits and limitations of NIPT and other testing options.²

Panorama has validated performance in both high and average risk pregnancies

	Validation T21, T18, T13 and MX ³		Clinical Outcomes T21, T18, T13 and MX ⁴ (Aneuploidy Incidence)
	Sensitivity	Specificity	PPV*
High Risk**	98.0% (98/100)	99.5% (389/391)	82.9% (2.4%)
Average Risk**	100% (5/5)	100% (469/469)	87.2% (1.0%)

* PPV = positive predictive value.

** For the purposes of calculating PPV, high risk was defined as women ≥35 years old at delivery, and average risk was defined as women <35 years old at delivery.

Panorama's advantages, when compared to traditional maternal serum screening



Higher sensitivity
for the conditions screened



Fewer false positives
fewer unnecessary invasive procedures⁵



More conditions included
more informative results

Support every step of the way

1 SEAMLESS INTEGRATION into your workflow	2 SAFE, EASY sample collection	3 ADVANCED TECHNOLOGY for results you can trust	4 FAST, CLEAR REPORTING with support from our team
- You can offer Panorama as early as 9 weeks gestation.	- Your samples can be sent via a pre-packaged, post-marked kit to LifeLabs Genetics.	- Panorama utilizes SNP-based sequencing and Natera's proprietary algorithms to deliver highly accurate and comprehensive results.	- Results will be available within 7-10 calendar days and will be faxed to the requesting healthcare provider. - Reports include risk score, PPV (if high risk) and fetal fraction to give you confidence in the results and the care plan for your patient.

This test was developed by Natera, Inc., a laboratory certified under the Clinical Laboratory Improvement Amendments (CLIA).



Highly accurate, comprehensive results you can trust



Ordering Information

To order a Panorama Prenatal Screen collection kit
CALL: **1-84-GENE-HELP (1-844-363-4357)**
OR EMAIL: Ask.Genetics@Lifelabs.com

Turnaround time: 7-10 business days, 7 on average



The Panorama® Prenatal Screen identifies:

Whole Chromosome Conditions

Trisomy 21, 18, 13
Monosomy X
Sex chromosome trisomies
Triploidy
Complete molar pregnancy

Optional

22q11.2 deletion syndrome
Additional microdeletion syndromes
Fetal sex

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LifeLabs | www.lifelabsgenetics.com | 1-855-412-4495 or 1-877-507-5595 (BC) | 1-877-849-3637 (ON) | contactus@lifelabs.com
Toll Free: 1-84-GENEHELP (1-844-363-4357) or e-mail us at Ask.Genetics@lifelabs.com

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A superior first-line screening test for all women

Panorama screens for more chromosomal abnormalities, with greater accuracy

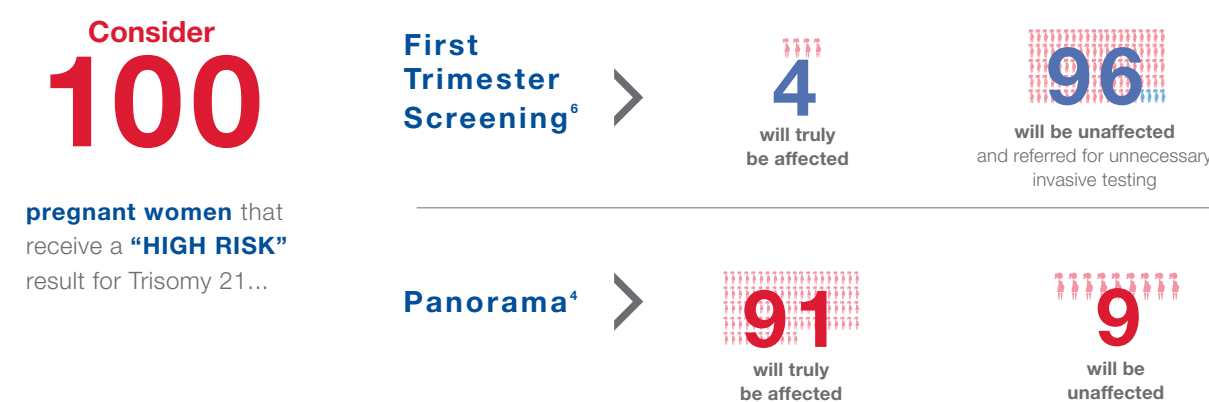
Compared to First Trimester Screening, Panorama has higher sensitivity and lower false positive rate for the conditions screened.

HIGHLY ACCURATE AND COMPREHENSIVE SCREENING

Condition	First Trim. Screen ⁶	Panorama ^{3,7}
	Sensitivity False Positive Rate	Sensitivity False Positive Rate
Trisomy 21 <i>Down Syndrome</i>	79% 5%	>99.9 (83/83) 0%
Trisomy 18 <i>Edwards Syndrome</i>	80% 0.3%	96.4% (27/28) <0.1%
Trisomy 13 <i>Patau Syndrome</i>	50% 0.3%	>99% (13/13) 0%
Monosomy X <i>Turner Syndrome</i>	Does not screen for	92.9% (13/14) <0.1%
Triploidy	Does not screen for	>99% (8/8)
Female	Does not determine	>99.9% (469/469) 0%
Male	Does not determine	>99.9% (533/533) 0%
Optional Microdeletion Syndromes		
22q11.2 deletion <i>DiGeorge syndrome</i>	Does not screen for	95.7% (45/47)
Additional microdeletions*	Does not screen for	93.8 - >99%

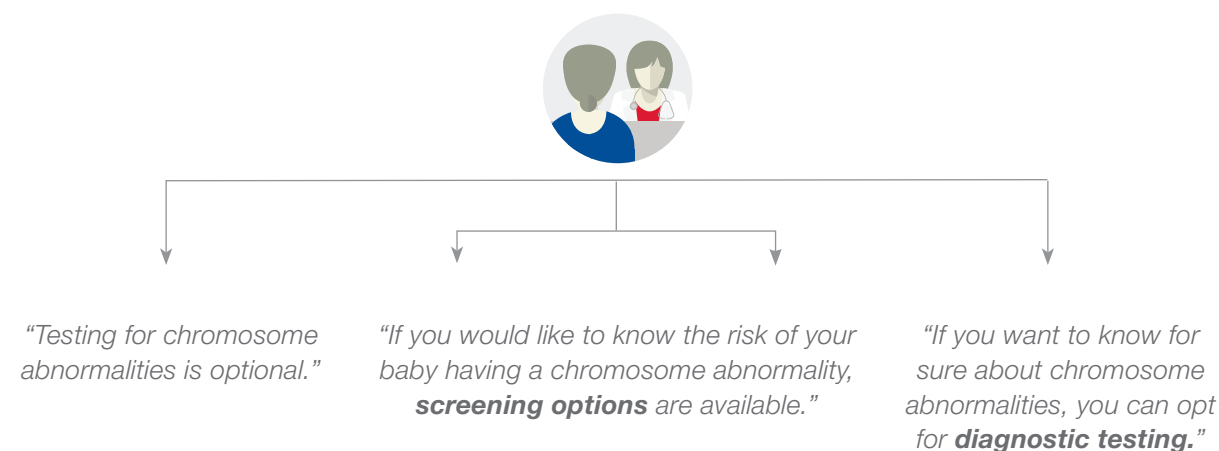
*Additional microdeletions include: Angelman, Cri-du-chat, 1p36 deletion & Prader-Willi

Higher PPV = less anxiety for patients



Non-invasive method with more informative results

Discussing NIPT with your patients, per ACOG guidelines²

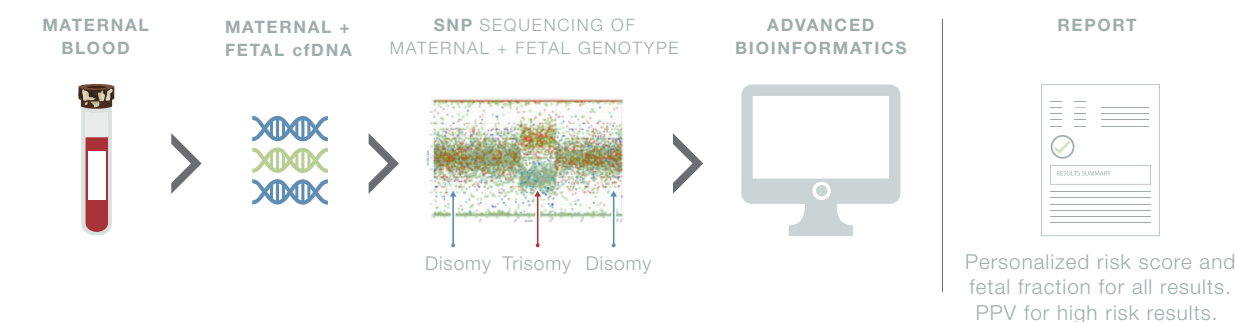


	Least Information Most Information			
	No testing	Traditional Serum Screen	NIPT	CVS/AMNIO
BENEFITS	<ul style="list-style-type: none"> - Less anxiety for women who may worry about testing - No difficult decisions to make in case of abnormal results 	<ul style="list-style-type: none"> - Non-invasive - If performed in 2nd trimester, screens for certain birth defects like spina bifida 	<ul style="list-style-type: none"> - Non-invasive - Screens for more conditions* - Higher sensitivity & positive predictive value* - Most women receive low risk results,⁴ thereby reducing anxiety - Screen as early as 9 weeks 	<ul style="list-style-type: none"> - Definitive results - More comprehensive than NIPT or serum screening - Ability to plan for baby's care in case of abnormal results
LIMITATIONS	<ul style="list-style-type: none"> - Inability to plan medically, financially & emotionally - Missed opportunity to engage with specialists & community support resources 	<ul style="list-style-type: none"> - Not diagnostic - Limited to Trisomy 21, 18 and 13 - Lower sensitivity, higher false positive rate and lower positive predictive value than NIPT 	<ul style="list-style-type: none"> - Not diagnostic; false positives and false negatives do occur - Does not screen for all chromosome abnormalities - May not be able to report results in a small number of patients 	<ul style="list-style-type: none"> - Invasive; small risk of miscarriage - Amnio results not available until 2nd trimester - Possible results of uncertain significance

*Compared to serum screening

High accuracy through SNP-based NIPT methodology

Panorama targets single nucleotide polymorphisms (SNPs) in cell-free DNA



Unique clinical benefits due to SNP-based methodology

REDUCES FALSE POSITIVES COMPARED TO OTHER NIPT METHODS	IDENTIFIES CONDITIONS ASSOCIATED WITH COMPLICATIONS FOR MOM
<p>VANISHING TWIN</p> <p>Only Panorama can identify a vanishing twin, which may contribute to >15% of false positive results with other NIPTs.^{8,9}</p> <p>>99.9% FETAL SEX ACCURACY³</p> <p>No incorrect gender calls in validation studies. Less anxiety and unnecessary work-up for patients.</p> <p>MATERNAL ABNORMALITIES</p> <p>Only Panorama minimizes the chance that a maternal abnormality leads to a false positive result. This is a significant cause of false positives when using other NIPTs.¹⁰</p>	<p>COMPLETE MOLAR PREGNANCY</p> <p>Only Panorama identifies complete molar pregnancy, which can be associated with preeclampsia, hemorrhage, and gestational trophoblastic neoplasia, and rarely, metastatic choriocarcinoma.¹¹</p> <p>TRIPLOIDY</p> <p>Only Panorama identifies triploidy, which is often associated with stillbirth, severe birth defects and preeclampsia.^{8,12}</p>

Measuring fetal fraction is critical for high-confidence NIPT results

- ✓ NIPTs target fetal (placental) DNA for determining fetal risk of chromosomal abnormalities
- ✓ ACOG emphasizes the importance of fetal fraction as “essential for accurate test results”²
- ✓ Failure to measure fetal fraction can correlate to false negative results¹³

Extensive clinical experience around the world¹⁴

>500,000 ... Panorama cases have been reported.

1 out of 5 ... OBGYN/MFM physicians have ordered Panorama in the US alone.

60+ ... countries around the world have Panorama commercially available.