The most validated NIPT for 22q11.2 deletion screening

Panorama's 22q screening was validated in a real-world population via SMART, the largest prospective noninvasive prenatal testing (NIPT) study with genetic truth on all participants included in the analysis.[1]

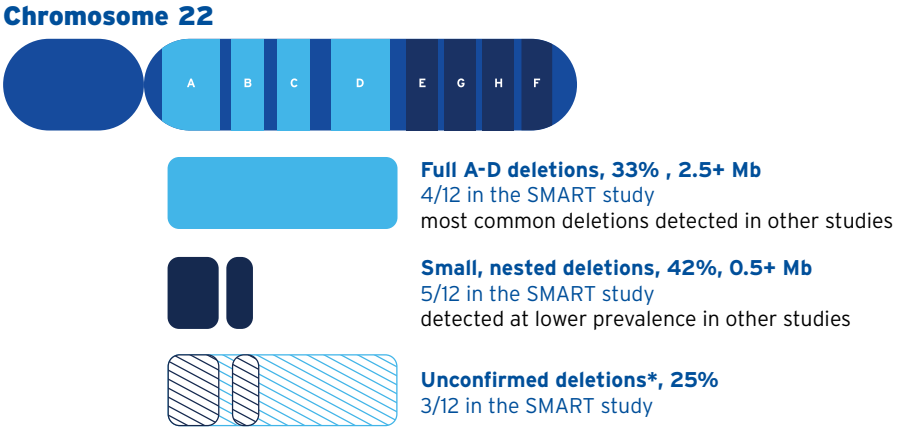
SMART SNP-based Microdeletion and Aneuploidy RegisTry

20K+	18K+	1 in 1,524	83%	53%
patients enrolled	patients with genetic confirmation included in the analysis	prevalence with 12 cases of 22q identified	**Sensitivity** Full and nested deletions (0.5 Mb+)	**PPV** Full and nested deletions (0.5 Mb+)

SNP*-based NIPT is validated to identify full A-D and nested deletions

Smaller deletions can have the same degree of severity as full deletions and require similar intervention[1-4] Sequencing-based counting NIPTs have not been clinically validated to detect small, nested deletions.

*Single Nucleotide Polymorphism



*FISH or BACS-on-beads used for confirmatory testing; the deletion spans A-B region at a minimum. SNP-based NIPT detected 10/12 deletions in the SMART study

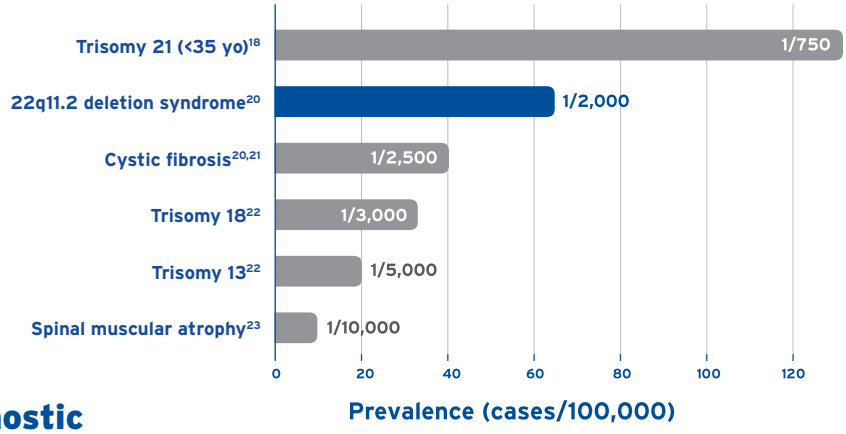
Choose a prenatal screen with published and proven performance

Panorama™ has the highest published sensitivity and specificity based on a real-world population. **Nearly 1 million** pregnancies have Panorama™ with 22q screening each year.[1-8]

	Panorama™[9-15]	Other NIPTs[9-15]
Published study with genetic truth for all NIPT-negative results	Yes	No
Clinical sensitivity validated in a peer-reviewed publication	Yes, 83%	No
Clinical specificity validated in a peer-reviewed publication	Yes, 99.95%	No

22q11.2 deletion syndrome has a higher prevalence compared to other commonly screened conditions

Maternal age is not a risk factor for having a pregnancy affected by 22q, and detection with ultrasound is limited.[16,17] Panorama™ offers noninvasive screening for early identification.



Panorama™ enables access to diagnostic testing to improve outcomes

In a published secondary analysis from SMART[24], pregnancies identified as high risk for 22q by Panorama™ were more likely to undergo diagnostic testing and/or supplemental assessments.

Prevalence of conditions associated with 22q[23-28]

- **Hypocalcemia** 50%
- **Developmental delay & learning differences** 70%-90%
- **Immune deficiencies** 77%
- **Palatal abnormalities** 69%
- **Congenital heart defects** 74%
- **Schizophrenia in adulthood** 25%

Parker's story

Parker was born with 22q, a condition with multiple, seemingly unrelated symptoms that can take years to diagnose.

Learn how early screening for 22q could make a difference.

American College of Medical Genetics (ACMG) endorses routine screening for 22q

ACMG suggests "screening for 22q11.2 deletion syndrome be offered to all patients"[17,29]
ACMG highlights the SMART study as the sole clinical study in support of their conditional recommendation (defined as a recommendation based on a moderate certainty of evidence).

Visit **LifeLabsGenetics.com/Panorama** to learn more about our 22q offering.

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