

NIPT Disclaimer:

The information provided in this brochure is for educational purposes only. Non-Invasive Prenatal Test (NIPT)[®] is a screening test based on analysis of cell-free fetal DNA (cfDNA) in maternal blood. It is not a diagnostic tool.

Key Points Supported by Evidence:

➤ Gender (Sex) Detection:

- NIPT can predict fetal sex by detecting Y-chromosome sequences with >99% accuracy when fetal fraction is sufficient ($\geq 4\%$) (Gil et al., 2017; JAMA Pediatrics).
- False results may occur due to low fetal fraction, maternal mosaicism, or vanishing twins (American College of Obstetricians and Gynecologists [ACOG], 2020).

➤ Accuracy & Limitations:

- Trisomies 21, 18, 13: Sensitivity and specificity exceed 99% (Norton et al., 2015; NEJM).
- Rare Conditions: Detection rates vary (e.g., 80–90% for 22q11.2 microdeletions) (Wapner et al., 2015; AJOG).

➤ False Positives/Negatives:

- Confirmatory diagnostic testing (e.g., amniocentesis) is recommended for high-risk results (ACOG Practice Bulletin No. 226, 2020).

➤ Ethical and Legal Considerations:

- Gender disclosure may be restricted in some regions to prevent sex-selective practices (WHO, 2012).
- NIPT should not replace comprehensive prenatal care or genetic counseling (International Society for Prenatal Diagnosis, 2017).

✓ Recommendations:

- Consult a qualified healthcare provider to discuss results, limitations, and further steps.
- This test complies with ISO 15189 and CAP/CLIA standards but may be subject to local regulations.

Novo Genomics - CR1010772277
Riyadh, kingdom of Saudi Arabia

شركة العلوم الحيوية الطبية - س.ج ١٠٧٧٢٧٧٧
الرياض - المملكة العربية السعودية