

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.