



PAN Test
**Prenatal
Aneuploidy
NGS Test**

1 in every 150 live births

has a chromosomal abnormality that can result in an abnormal phenotype in fetus or newborns¹

Emerging genetic technologies such as next-generation sequencing (NGS) can offer testing options to clinicians and families seeking a definitive diagnosis.



Why NGS Trumps QFPCR in Prenatal Diagnostic Testing

Research has shown that next-generation sequencing-based testing may help identify genomic abnormalities in **20—30%** of fetuses for which standard testing options show normal results.

NGS, thus, helps in



Detecting copy number variations in all 22 pairs of chromosomes



Identifying chromosomal aneuploidies in sex chromosomes



Initiating quick intervention or response in at-risk mothers



Providing the best assistance before childbirth or the right therapeutic approach before or immediately after the birth of the baby



In fact, both the American College of Obstetricians and Gynecologists (ACOG) and the Society of Maternal-Fetal Medicine (SMFM) have stated that prenatal genetic screening **and invasive testing by chorionic villi sampling (CVS) or amniocentesis should be offered in case of fetuses with structural abnormalities and other high-risk pregnancies².**



Introducing

for the first time in India

PAN Test

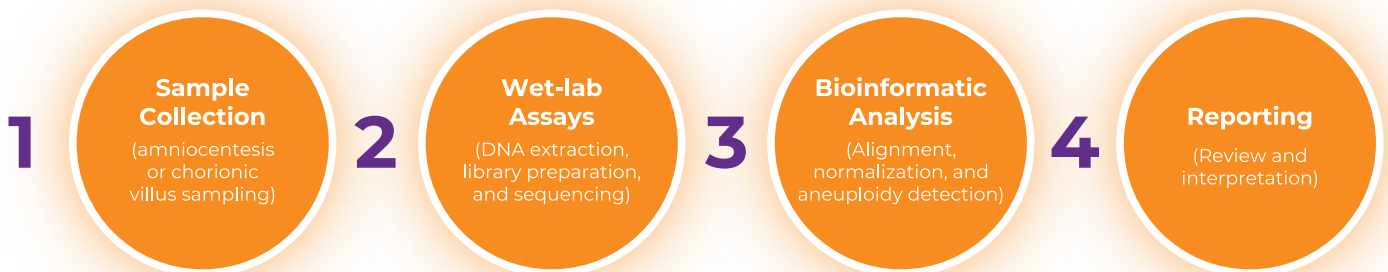
Prenatal Aneuploidy NGS Test

A complete and sophisticated test for in-depth analysis of fetal DNA and health during pregnancy

What Is PAN Test?

Utilizing extensive clinical experience in NGS and molecular genetics, the Neuberg Center for Genomic Medicine (NCGM) has introduced PAN Test, a revolutionary prenatal next-generation sequencing-based test.

A successfully validated diagnostic test, the PAN test primarily involves four steps.



What to Expect from the PAN Test?

What It Covers

Trisomies and monosomies in all 23 pairs of chromosome

Microdeletions and duplications (up to 2 Mb) in all 22 pairs of chromosomes. The most common being

Wolf Hirschhorn syndrome (4p16.3)
Di-George Syndrome (22q11.2 deletion)
Prader-Willi (15q11.2)
William Syndrome (7q11.23 deletion)

What It Does Not Cover

Balanced translocations
Single-gene disorders or mutations
Differentiation between mosaic or true gain/losses
Partial mosaicism
Could not detect other microdeletions/duplications in sex chromosomes

Turnaround time

Results within 48 to 72 hours

Based on our validations results and the given comparable turnaround time, higher throughput, a significant reduction in the technical repeat rate, and the amount of DNA required for the assay, NGS-based prenatal test provides compelling evidence as an alternative to QFPCR.

When to Recommend the PAN Test?



One or more major structural fetal abnormalities in ultrasound



Advanced maternal age (>35 years)



An abnormal prenatal screening test



A prenatal carrier of a chromosomal abnormality



A previous pregnancy with chromosomal abnormality



Why Clinicians and Parents Should Consider the PAN Test?



Unlike QF-PCR, NGS detects aneuploidies in all chromosomes and provides in-depth information



Detects additional copy number variations (up to 2 MB gain/losses) in all 22 pairs of chromosomes, in addition to trisomies



Eliminates the need for cell culture, thus, reducing the failure rate



Offers pre- and post-test genetic counselling support



Ensures quick turnaround time



Affordable, comprehensive, and a validated diagnostic test

Experience. Competency. Accuracy

Choose the PAN Test for definitive prenatal diagnosis



To know more or book the test,

+91 6357244307

or write to us at

contact@ncgmglobal.com

References:

Grossman TB, Chasen ST. Abortion for fetal genetic abnormalities: type of abnormality and gestational age at diagnosis. American Journal of Perinatology Reports. 2020 Jan;10(01):e87-92.
Microarrays and next-generation sequencing technology: the use of advanced genetic diagnostic tools in obstetrics and gynecology. Committee Opinion No. 682. American College of Obstetricians and Gynecologists. Obstet Gynecol 2016;128:e262-8.

MCC required for all prenatal tests