Neuberg DIAGNOSTICS

● India ● UAE ● South Africa ● USA

Neu INSIGHTS

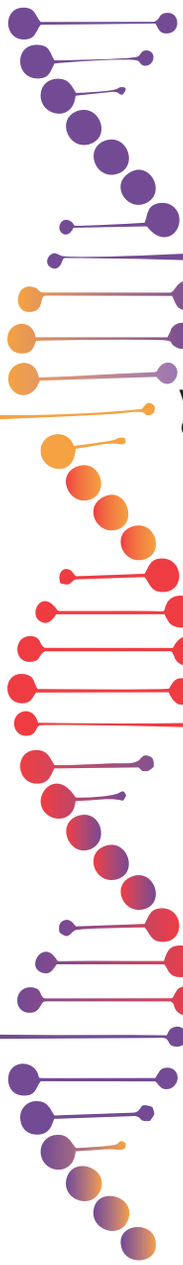
Neuberg DIAGNOSTICS CENTER FOR GENOMIC MEDICINE

ORION

Intelligent Genomics

Serial number : 021 Edition : 1. 2022

ORION



01

Plus

Whole Exome Sequencing + CNV calling + Mitochondrial Genome Sequencing

02

Whole Exome

Whole Exome + CNV calling

03

Focus

Panel testing on a Mendeliome backbone

04

Single Gene*

Targeted analysis of single gene by NGS

*** Kindly contact the laboratory to check the coverage of the gene**

Validated For

- Single nucleotide variants
- Indels upto 30bp
- Copy number variants: Multi Exon (more than 3 exons) deletions and duplications

Does Not Include

- Triplet Repeat Expansions
- Methylation Abnormalities
- Somatic Mutations

Acceptable Samples

- EDTA Whole Blood
- Dried Blood Spots (DBS)
- Amniotic fluid (AF)#
- Chorionic Villous Biopsy (CVS)#

We Also Offer

- Microarray 315K and 750K
- Multiplex Ligation-dependent Probe Amplification (MLPA)*
- TP-PCR for Fragile – X

 # Kindly contact the lab before sending a prenatal sample

Turn Around Time for ORION : 28 Business Days

ORION Highlights

Customized Gene Curation

Towards evidence based medicine

Phenotype Specific

Regularly Updated Gene Lists

Expert Variant Annotation

Adding relevance to reporting

Gene-Disease Association

Variant-Disease Association

Coverage

Inclusive of

>19000 genes

100X Mean Depth

>95% Coverage @20X

Enhanced Variant Calling

Enriching Analysis!

Customized Pipeline

Extensively Validated

Best-In-Class Reports

Peer Reviewed by

Bioinformatician

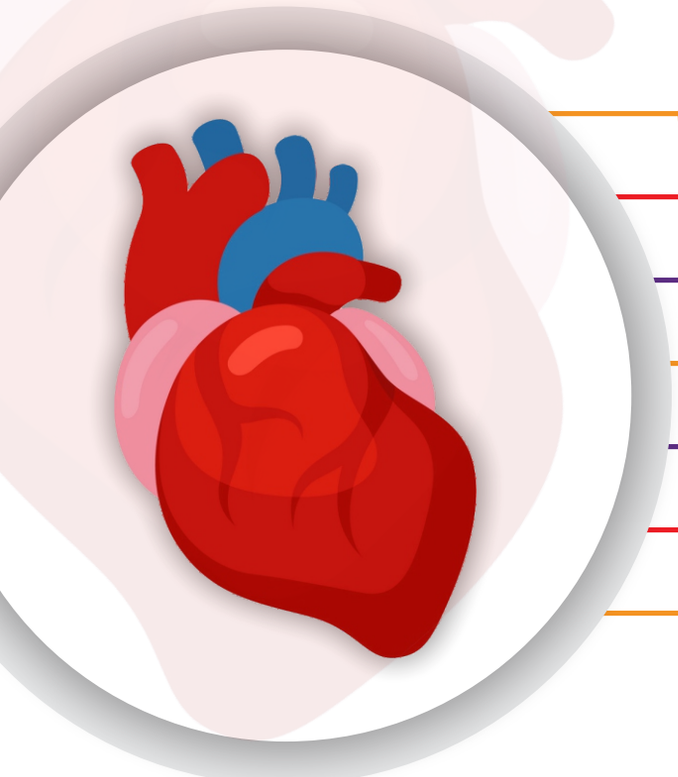
PhD Scientist

Genetic Counselor

Clinical Geneticist

- Cardiology
- Dermatology
- Endrocrinology
- Gastroenterology
- Hematology
- Metabolic Disorders
- Nephrology
- Neurology
- Oncology
- Opthalmology & ENT
- Pulmonology
- Skeletal Disorder

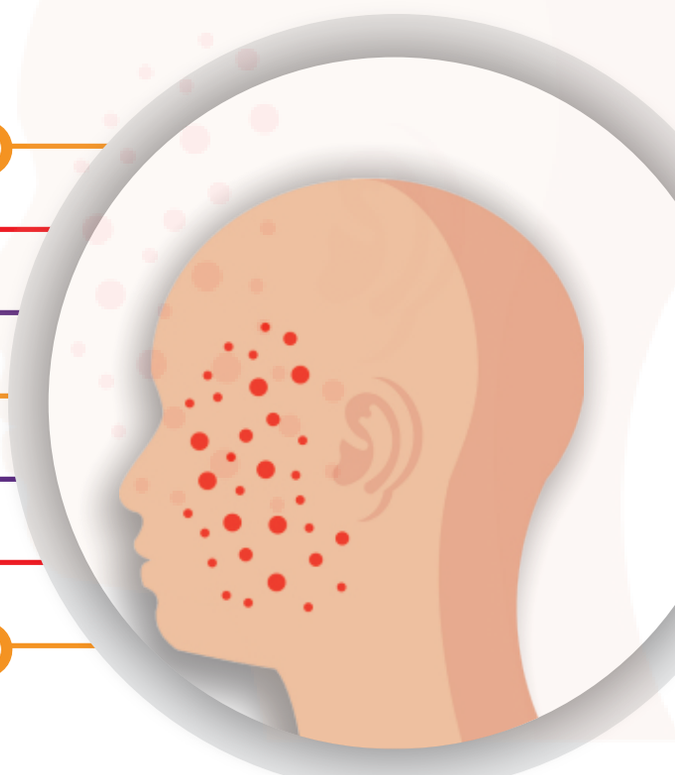
Cardiology



- **Congenital Heart Defects** (ORION Focus)
- **Congenital Cardiomyopathy** (ORION Focus)
- **Cardiac Channelopathy** (ORION Focus)
- **Connective Tissue Disorders** (ORION Focus)
- **Familial Pulmonary Arterial Hypertension** (ORION Focus)
- **Familial Lipidemias** (ORION Focus)
- **COMPREHENSIVE CARDIOLOGY** (ORION Whole Exome)

Dermatology

- **Albinism** (ORION Focus)
- **Epidermolysis Bullosa** (ORION Focus)
- **Ectodermal dysplasia** (ORION Focus)
- **Ichthyosis** (ORION Focus)
- **Neurocutaneous Disorders** (ORION Focus)
- **Photosensitivity Syndromes** (ORION Focus)
- **COMPREHENSIVE DERMATOLOGY** (ORION Whole Exome)

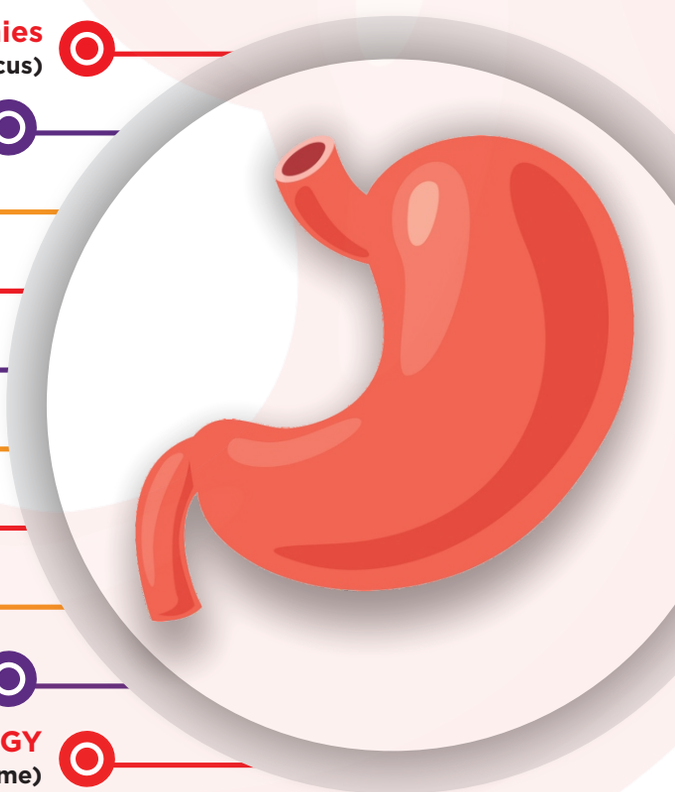


Mandatory: Duly filled Test Requisition and Consent form
Comprehensive tests assess all genes included in the respective panels.
For the gene list, please visit our website : https://ncgmglobal.com/inherited-genetic-disorders/orion-focus/

Endocrinology

- CAH - 21 hydroxylase deficiency (ORION Focus)
- Disorders of Calcium and Phosphate Homeostasis (ORION Focus)
- Disorders of Pituitary Hormone (ORION Focus)
- Disorders of Thyroid Hormones (ORION Focus)
- Disorders of Glucose and Insulin Homeostasis (ORION Focus)
- Disorders of Sex Development (ORION Focus)
- Disorders of Growth & Obesity (ORION Focus)
- Disorders of the Adrenal gland (ORION Focus)
- Disorders of Lipid and Cholesterol metabolism(ORION Focus)
- Genetic causes of Infertility (Male and female) (ORION Focus)
- COMPREHENSIVE ENDOCRINOLOGY (ORION Whole Exome)

Gastroenterology



- Ciliopathies (ORION Focus)
- Cholestasis and Biliary Disorders (ORION Focus)
- Congenital Diarrhea (ORION Focus)
- Hereditary Pancreatitis (ORION Focus)
- Inflammatory Bowel Disease (ORION Focus)
- Inherited Cancers of Gastrointestinal Tract (ORION Focus)
- Lysosomal Storage Disorders (ORION Focus)
- Liver Metabolic Disorders (ORION Focus)
- Porphyria (ORION Focus)
- COMPREHENSIVE GATROENTEROLOGY (ORION Whole Exome)

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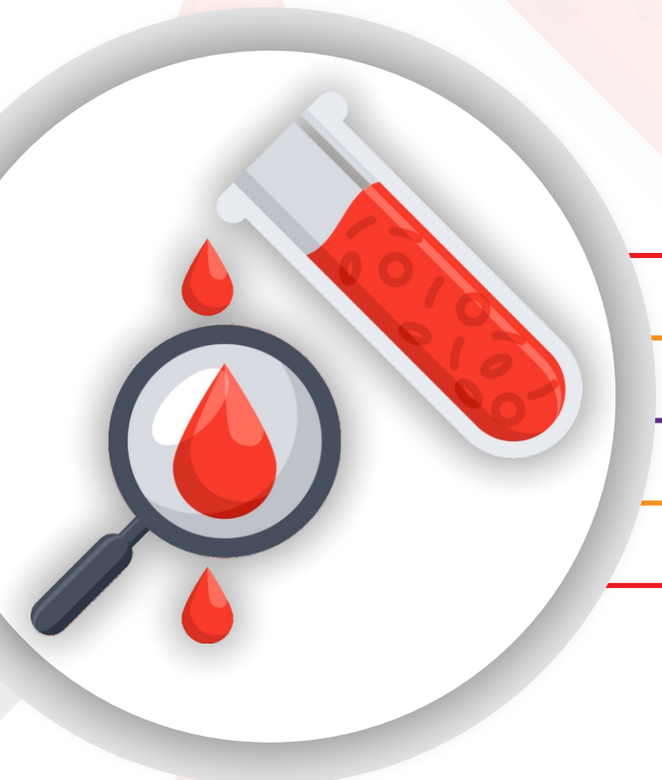
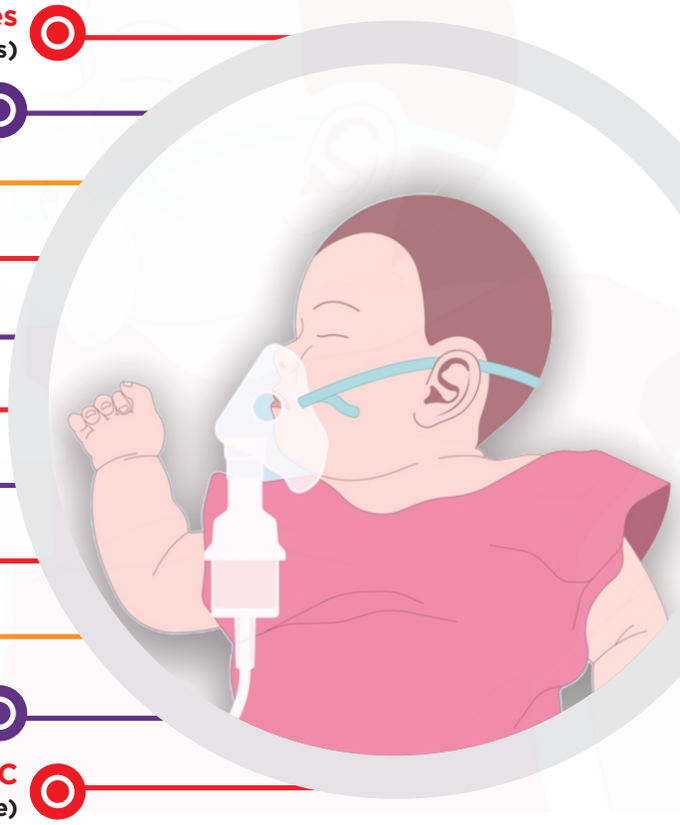
Hematology



- **Anemia** (ORION Focus)
- **Bleeding disorders** (ORION Focus)
- **Immunodeficiency** (ORION Focus)
- **Inherited Bone Marrow Failure syndromes** (ORION Focus)
- **COMPREHENSIVE HEMATOLOGY** (ORION Whole Exome)

Metabolic Disorders

- **Aminoacidopathies** (ORION Focus)
- **Congenital Disorders of Glycosylation** (ORION Focus)
- **Glycogenosis Defects** (ORION Focus)
- **Glycogen Storage Disorders** (ORION Focus)
- **Lysosomal Storage Disorders** (ORION Focus)
- **Mitochondrial Disorders** (ORION Focus)
- **Organic Acidemias** (ORION Focus)
- **Porphyrias** (ORION Focus)
- **Peroxisomal Disorders** (ORION Focus)
- **Urea Cycle Disorders** (ORION Focus)
- **COMPREHENSIVE METABOLIC DISORDER** (ORION Whole Exome)



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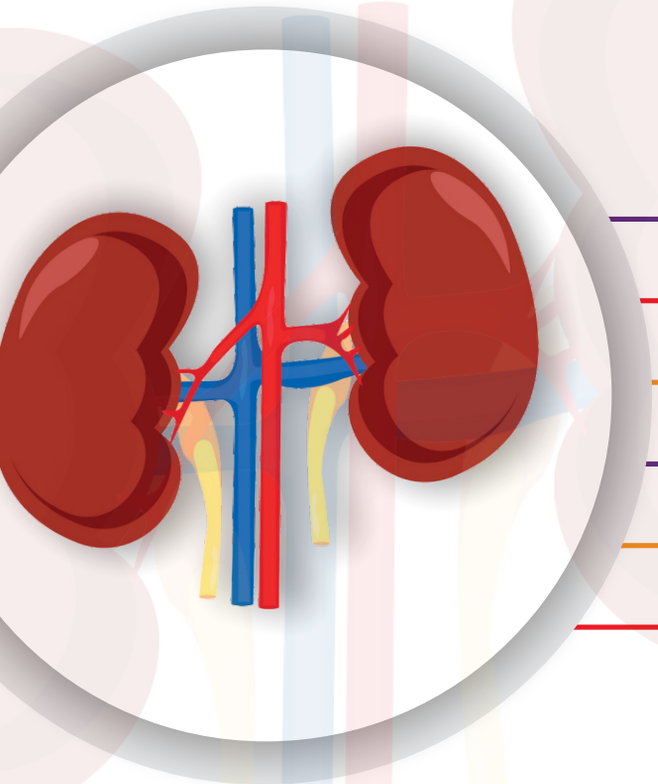
Nephrology



- **Cystic Kidney Diseases and Ciliopathies** (ORION Focus)
- **Hemolytic Uremic Syndrome** (ORION Focus)
- **Nephrotic Syndrome** (ORION Focus)
- **Renal stone disorders** (ORION Focus)
- **Tubulopathies** (ORION Focus)
- **COMPREHENSIVE NEPHROLOGY** (ORION Whole Exome)

Neurology

- **CNS Malformations & Neuronal Migration Disorders** (ORION Focus)
- **Genetic Epilepsy** (ORION Focus)
- **Neuromuscular Disorders** (ORION Focus)
- **Neurodegenerative Disorders** (ORION Focus)
- **Neurocutaneous Disorders** (ORION Focus)
- **Movement Disorders** (ORION Focus)
- **COMPREHENSIVE NEUROLOGY** (ORION Whole Exome)

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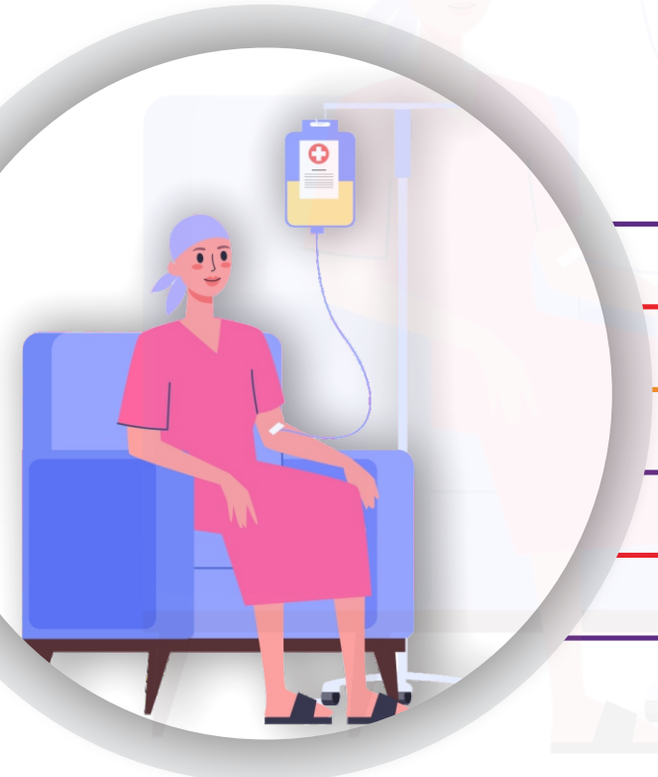
Oncology



- **Breast and Gynaecological Cancer (includes HBOC)** (ORION Focus)
- **Comprehensive Gastrointestinal Tract Cancer with Lynch Syndrome** (ORION Focus)
- **Comprehensive Endocrinological cancers** (ORION Focus)
- **Pediatric and Rare Cancers** (ORION Focus)
- **Renal and genitourinary cancers** (ORION Focus)
- **COMPREHENSIVE ONCOLOGY** (ORION Whole Exome)

Ophthalmology and ENT

- **Anophthalmia / Microphthalmia** (ORION Focus)
- **Congenital Glaucoma** (ORION Focus)
- **Corneal Dystrophy** (ORION Focus)
- **Cataract** (ORION Focus)
- **Deafness** (ORION Focus)
- **Leber Congenital Amaurosis** (ORION Focus)
- **Ocular Albinism** (ORION Focus)
- **Retinitis Pigmentosa** (ORION Focus)
- **Stargardt macular degeneration** (ORION Focus)
- **Usher syndrome** (ORION Focus)
- **COMPREHENSIVE OPTHALMOLOGY & ENT** (ORION Whole Exome)

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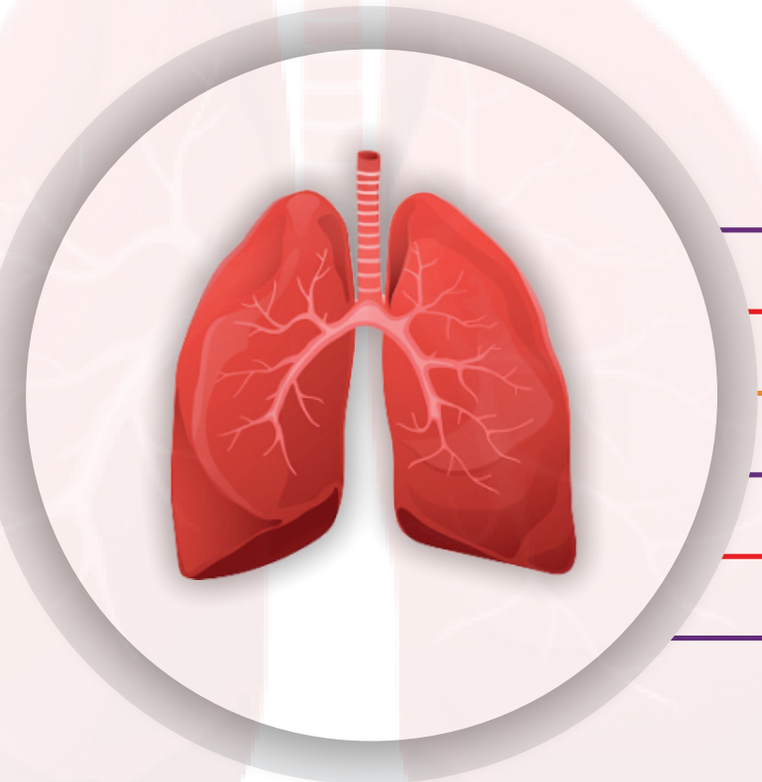
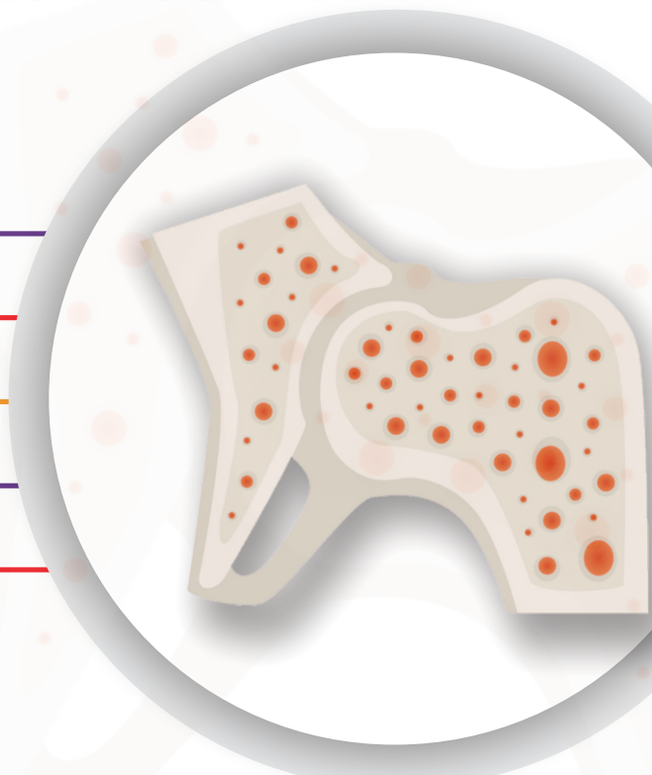
Pulmonology



- **Ciliopathies** (ORION Focus)
- **Cystic Fibrosis** (ORION Focus)
- **Interstitial Lung Disease** (ORION Focus)
- **Pulmonary Arterial Hypertension** (ORION Focus)
- **Surfactant Deficiency** (ORION Focus)
- **COMPREHENSIVE PULMONOLOGY** (ORION Whole Exome)

Skeletal Disorders

- **Achondroplasia** (ORION Focus)
- **Craniosynostosis** (ORION Focus)
- **Osteogenesis Imperfecta** (ORION Focus)
- **Osteopetrosis** (ORION Focus)
- **COMPREHENSIVE SKELETAL DYSPLASIAS** (ORION Whole Exome)



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Genetic Testing from the comfort of your home in 5 steps

1. Enquire
2. Pre -Test Counselling
3. Take your Test
4. Download Report
5. Post -Test Counselling

Pre and post-test genetic counseling is recommended for any genetic test. | Kindly contact: gc.team@ncgmglobal.com
Kindly contact lab before sending a prenatal sample. Form G and Maternal Cell Contamination Testing are mandatory for all Prenatal tests

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