



**Neuberg**  
DIAGNOSTICS

• India • UAE • South Africa • USA

# Neu INSIGHTS



**Neuberg**  
DIAGNOSTICS

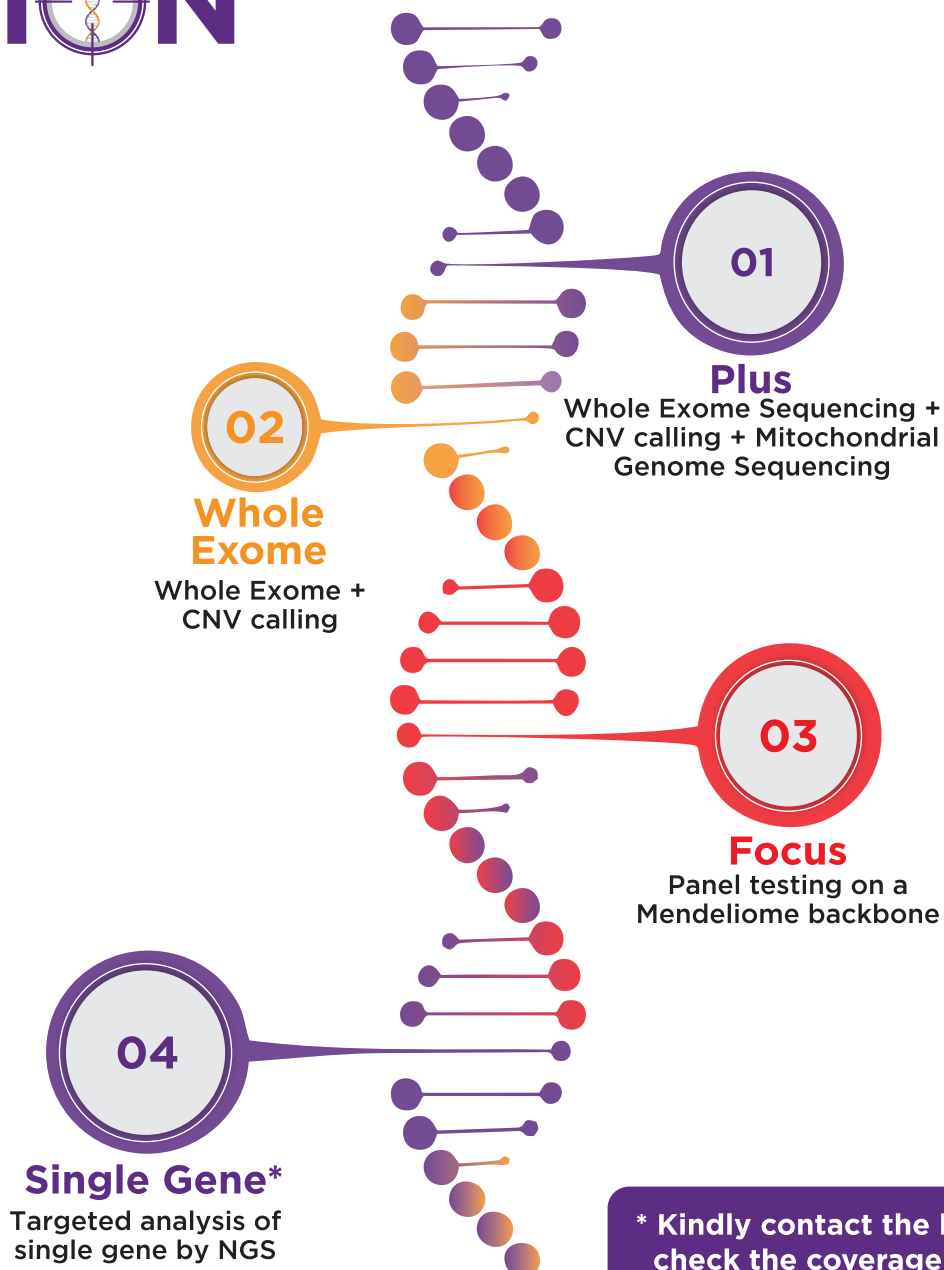
CENTER FOR  
GENOMIC  
MEDICINE



# ORION

**Intelligent Genomics**

Serial number : 021 Edition : 1. 2022



## Validated For

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

## Acceptable Samples

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

## Does Not Include

- ▶ Triplet Repeat Expansions
- ▶ Methylation Abnormalities
- ▶ Somatic Mutations

## 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**



**Endocrinology**



**Gastroenterology**



**Hematology**



**Metabolic Disorders**



**Nephrology**



**Neurology**



**Oncology**



**Ophthalmology & ENT**



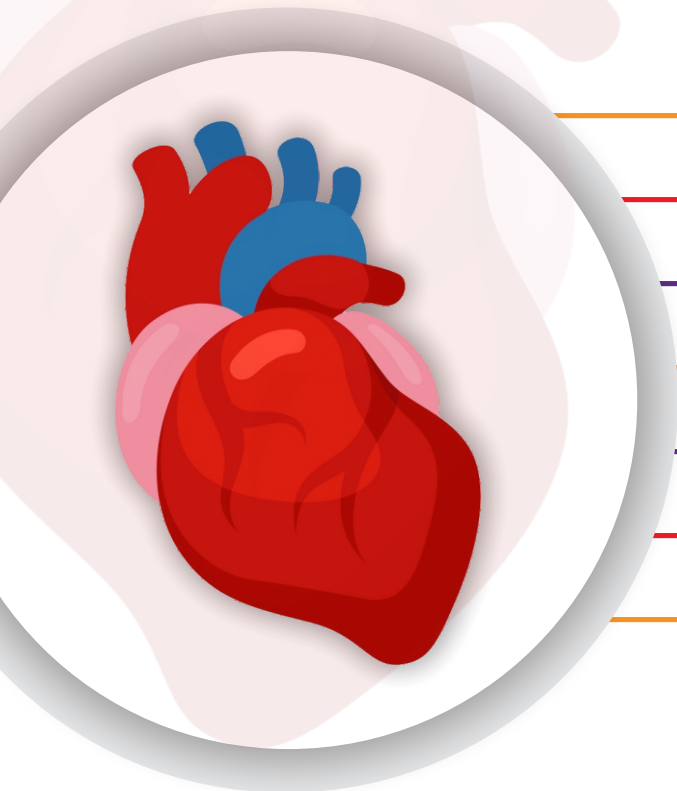
**Pulmonology**



**Skeletal Disorder**

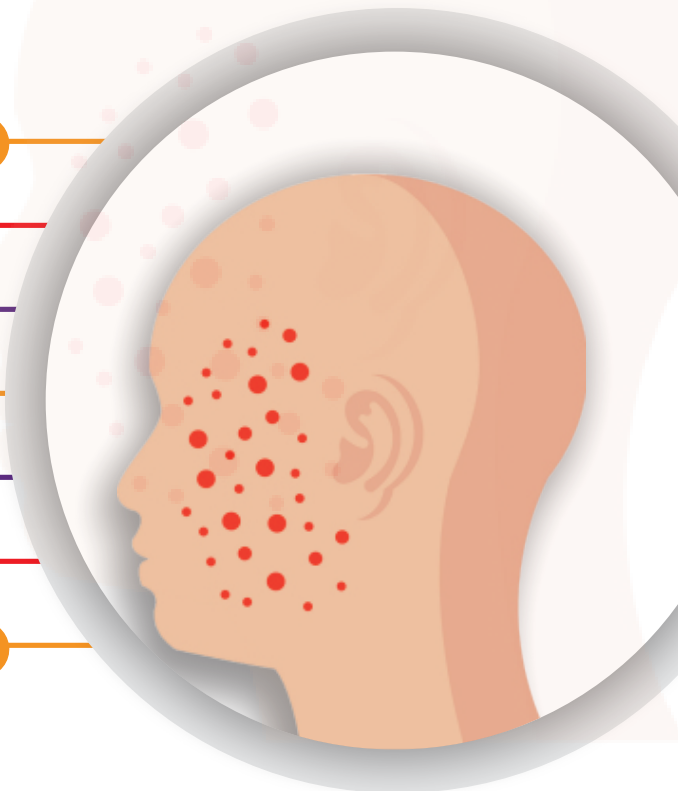


# Cardiology



- 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)

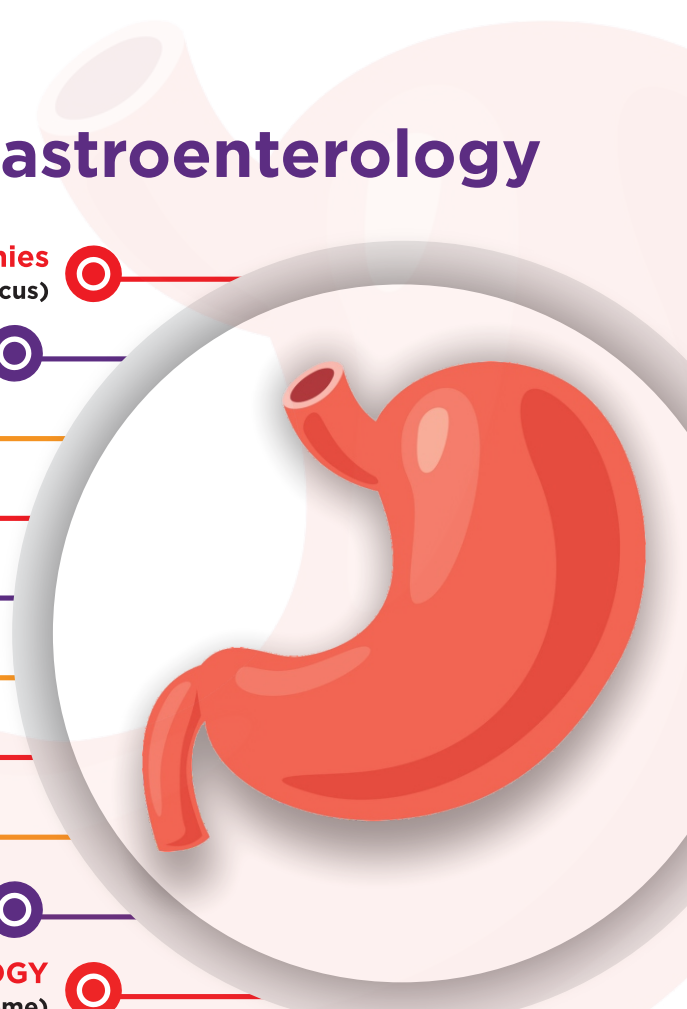
**Mandatory:** Duly filled Test Requisition and Consent form  
Comprehensive tests assess all genes included in the respective panels.  
For the gene list, please visit our website : <https://ncmgglobal.com/inherited-genetic-disorders/orion-focus/>

# 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 GASTROENTEROLOGY (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://ncmgglobal.com/inherited-genetic-disorders/orion-focus/>

# 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)

**Glycogenesis Defects**  
(ORION Focus)

**Glycogen Storage Disorders** (ORION Focus)

**Lysosomal Storage Disorders** (ORION Focus)

**Mitochondrial Disorders** (ORION Focus)

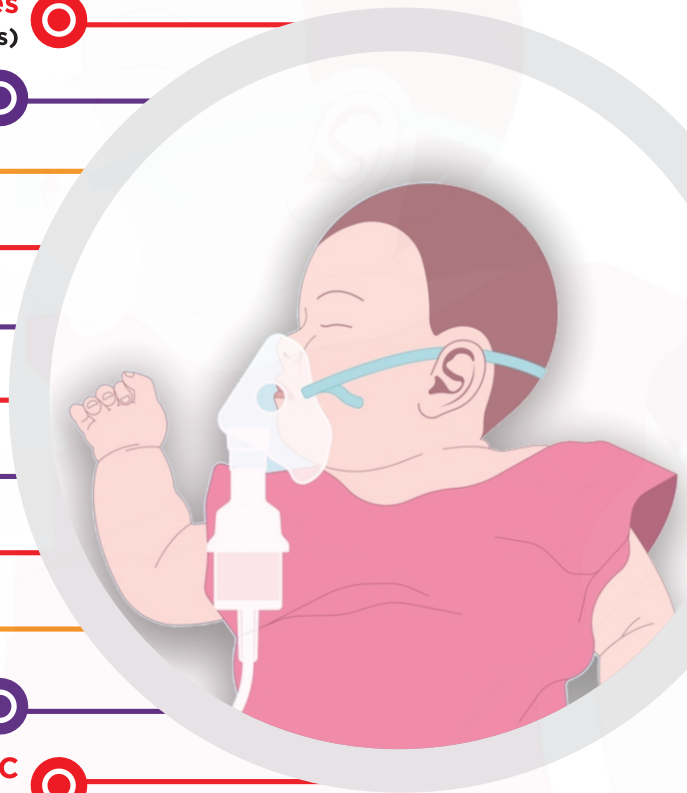
**Organic Acidemias**  
(ORION Focus)

**Porphyrias**  
(ORION Focus)

**Peroxisomal Disorders** (ORION Focus)

**Urea Cycle Disorders**  
(ORION Focus)

**COMPREHENSIVE METABOLIC DISORDER**  
(ORION Whole Exome)

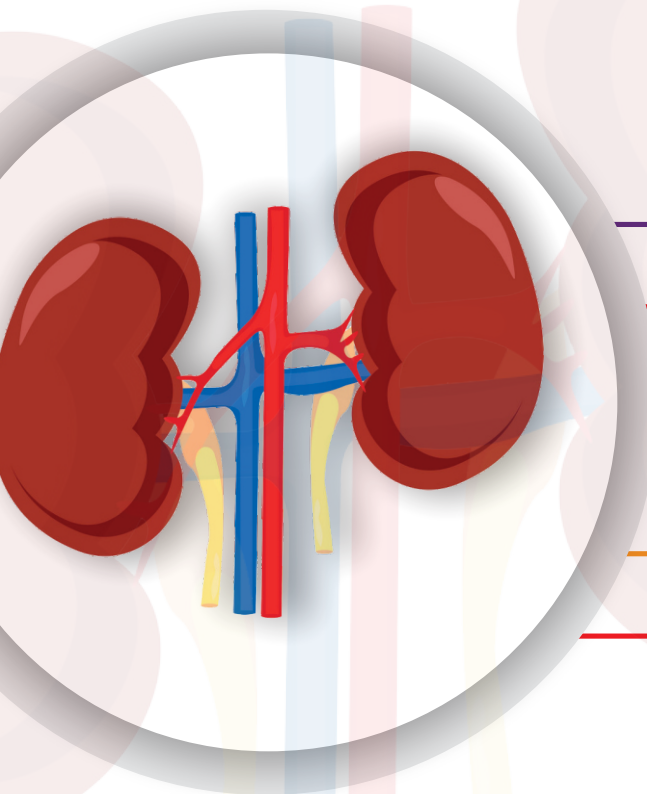


**Mandatory:** Duly filled Test Requisition and Consent form

Comprehensive tests assess all genes included in the respective panels.

For the gene list, please visit our website : <https://ncmglobal.com/inherited-genetic-disorders/orion-focus/>

# 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)

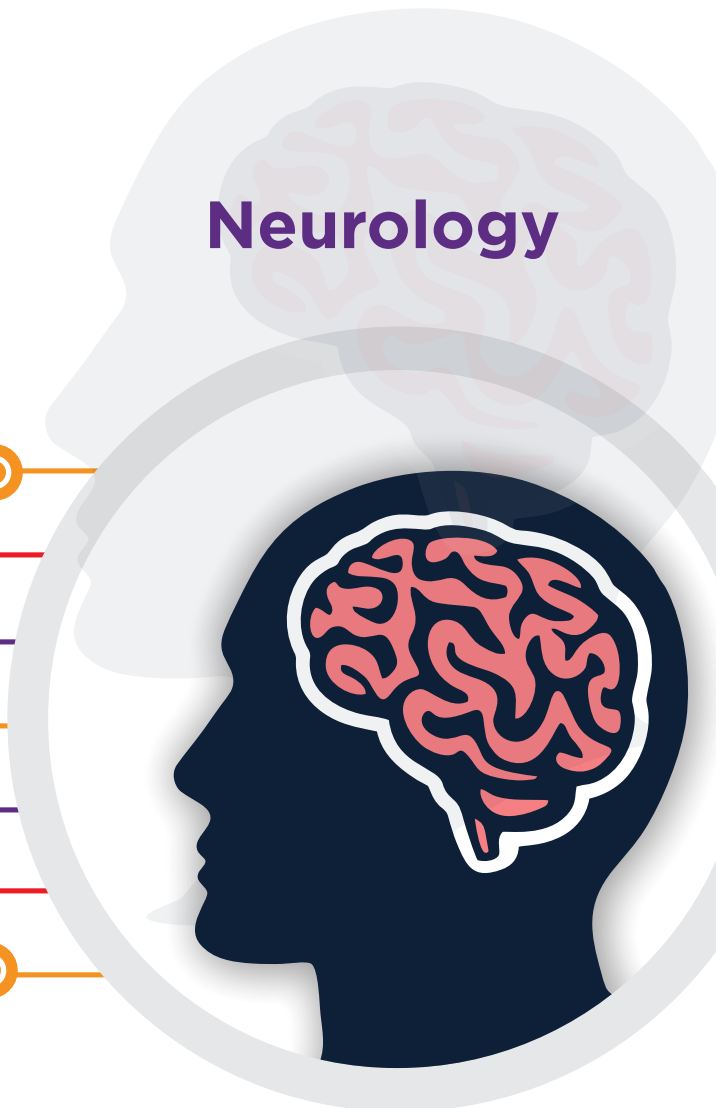
**Neuromuscular Disorders** (ORION Focus)

**Neurodegenerative Disorders** (ORION Focus)

**Neurocutaneous Disorders** (ORION Focus)

**Movement Disorders** (ORION Focus)

**COMPREHENSIVE NEUROLOGY** (ORION Whole Exome)

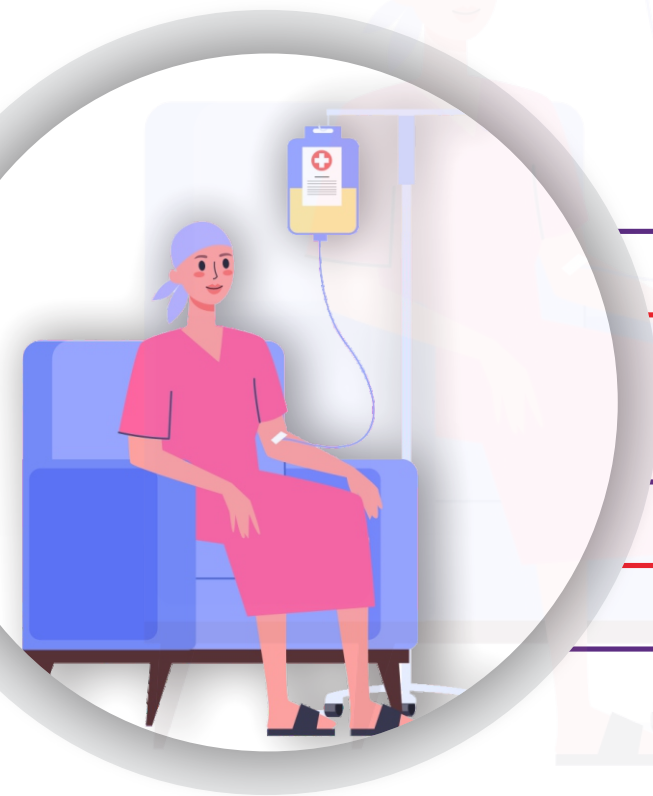


**Mandatory:** Duly filled Test Requisition and Consent form

Comprehensive tests assess all genes included in the respective panels.

For the gene list, please visit our website : <https://ncmgglobal.com/inherited-genetic-disorders/orion-focus/>

# 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

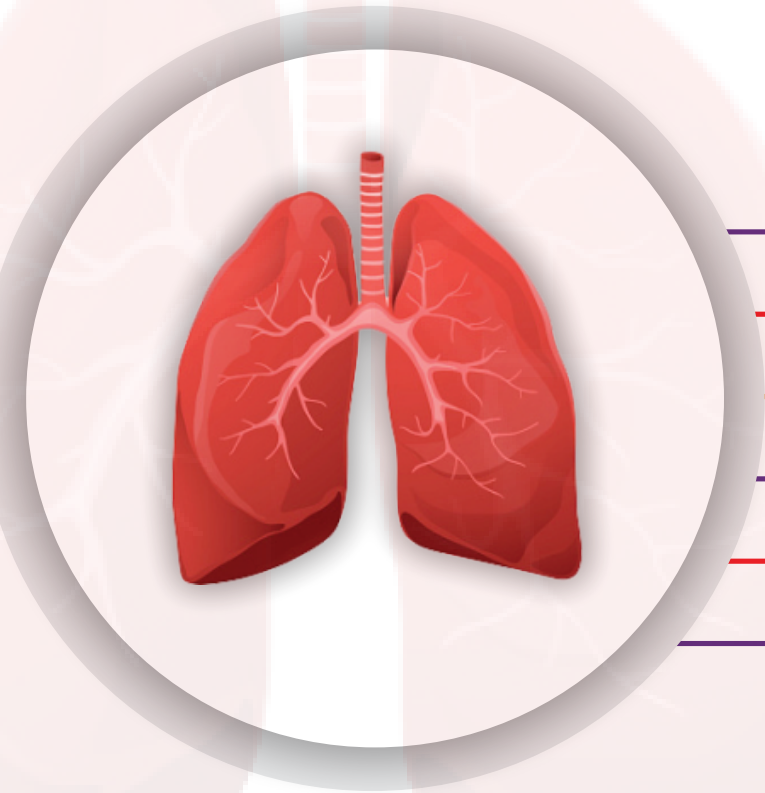
- Anophthalmia / Microphthalmia** (ORION Focus)
- Congenital Glaucoma** (ORION Focus)
- Corneal Dystrophy** (ORION Focus)
- Cataract** (ORION Focus)
- Deafness** (ORION Focus)
- Leber Congenital Amaurosis** (ORION Focus)
- Ocular Albinism** (ORION Focus)
- Retinitis Pigmentosa** (ORION Focus)
- Stargardt macular degeneration** (ORION Focus)
- Usher syndrome** (ORION Focus)
- COMPREHENSIVE OPHTHALMOLOGY & ENT** (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://ncmgglobal.com/inherited-genetic-disorders/orion-focus/>

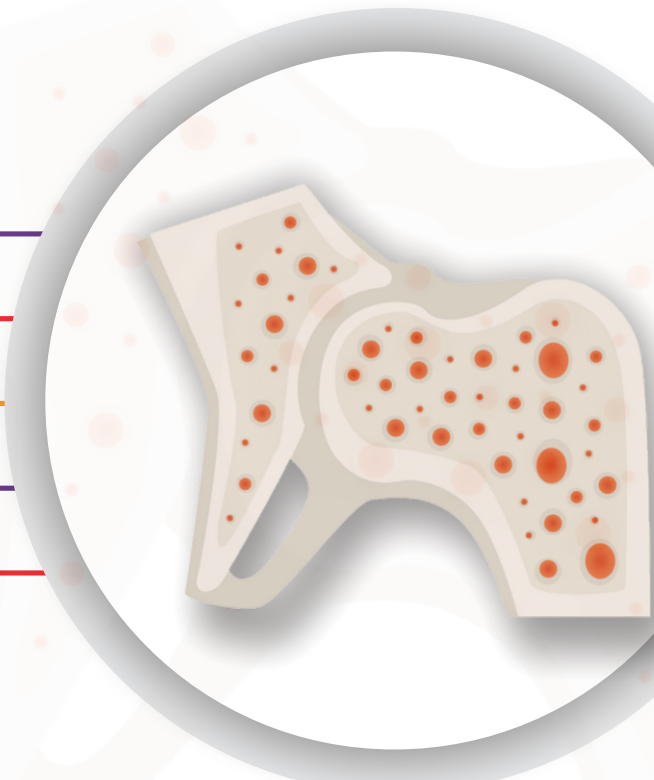







# Pulmonology



-  **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) 

**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://ncmgglobal.com/inherited-genetic-disorders/orion-focus/>

## Genetic Testing from the comfort of your home in 5 steps



**Enquire**



**Pre -Test Counselling**



**Take your Test**



**Download Report**



**Post -Test Counselling**

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

# PARTNERS IN HEALTH



## DR. SHEETAL SHARDA

Director - Clinical Genomics  
Development & Implementation  
M.D. Pediatrics  
D.M. Medical Genetics  
[sheetal.sharda@ncgmglobal.com](mailto:sheetal.sharda@ncgmglobal.com)



## DR. UDHAYA KOTECHA

Head of Division Inherited Disorders (NGS)  
Clinical Geneticist  
M.D. Pediatrics  
Fellowship in Medical Genetics  
[udhaya.kotecha@ncgmglobal.com](mailto:udhaya.kotecha@ncgmglobal.com)



## DR. MEHUL MISTRI

Scientist- Inherited Genetics & Metabolism  
PhD Biochemistry  
[mehul.mistri@ncgmglobal.com](mailto:mehul.mistri@ncgmglobal.com)



## DR. SANDIP SHAH

Consultant Pathologist  
M.D. (Pathology & Bacteriology)  
Laboratory Director  
[drsandip@neubergdiagnostics.com](mailto:drsandip@neubergdiagnostics.com)

FOR MORE DETAILS, CONTACT US AT



**079 61618111**

**079 40408181**

[ncgmglobal.com](http://ncgmglobal.com)



**Neuberg**  
DIAGNOSTICS

● India ● UAE ● South Africa ● USA