MEDICOVER
GENETICS

PLACING
GENETICS
AT THE CORE
OF MEDICAL
DECISIONS

Reproductive Health Portfolio

www.medicover-genetics.com

Medicover Genetics' extensive reproductive health portfolio covers every aspect of the reproductive journey, including diagnostic and predictive genetic testing. It encompasses a wide range of technologies that empower informed decision-making and family planning.

PRECONCEPTION

Carrier screening
Infertility genetic testing
Preimplantation genetic testing (PGT)
Oocyte and sperm donor-recipient matching program
Endometrial microbiome analysis

PRENATAL

Non-invasive prenatal testing
Invasive prenatal testing
Rhesus factor determination

NEONATAL

Chromosomal analysis
Gene panel sequencing
Whole exome sequencing
Newborn screening
Low coverage whole genome sequencing

PRECONCEPTION

CARRIER SCREENING

Genetic insights to inform, guide, and empower reproductive choices.

Adventia Carrier Screening

2-3 weeks | Buccal swab

Adventia Focus
Individual disorders

Ordered as individual tests: Alpha thalassaemia • Beta haemoglobinopathies • Cystic fibrosis • Dystrophinopathies • Fragile X syndrome • Spinal muscular atrophy

Adventia Core
20 disorders, 22 genes

Includes all disorders tested in the Focus panel and others such as: Fanconi anemia type C • Mucolipidosis type IV • Niemann-Pick disease • Sickle cell disease • Tay-Sachs disease

Adventia Comprehensive
230 disorders, 231 genes

Includes all disorders tested in the Core panel and covers a wide range of disorders: Cardiac • Digestive • Endocrine • Hearing • Haematological • Hepatic • Immunological • Infertility • Metabolic • Muscular • Neurological • Ophthalmological • Renal • Respiratory • Sexual development • Skeletal • Skin

INFERTILITY TESTING

Integrative assessments to guide treatment and clinical management options for a personalised fertility plan.

Rodinia Infertility Testing

2-4 weeks | Buccal swab

Rodinia Female Infertility
55 genes

Panel includes: Hypogonadotropic hypogonadism • Primary ovarian insufficiency • Polycystic ovary syndrome • Ovarian hyperstimulation syndrome • X-chromosomal aneuploidies

Rodinia Male Infertility
40 genes

Panel includes: X and Y chromosomal aneuploidies • Y-chromosome microdeletions • Azoospermia • Hypogonadotropic hypogonadism

Thrombophilia and NAIT Panel
22 variants

Identifies variants that are associated with recurrent pregnancy loss, thrombotic events, and neonatal alloimmune thrombocytopenia.

Chromosomal Analysis & Array CGH (CMA)

Karyotyping using conventional karyotyping and array CGH (CMA).

Additional Infertility Analysis

10-12 working days | Endometrial swab | Fresh semen sample

ebiom+ Endometrial Microbiome Analysis

Identifies whether the bacterial composition of the endometrium, which is associated with infertility, is healthy or unhealthy: ebiom analysis assesses the bacteria in the endometrial flora • ebiomCE analysis identifies sexually transmitted pathogens with high sensitivity • ebiom+ analysis combines ebiom with ebiomCE for a complete diagnostic picture

Sperm DNA Integrity

Identifies DNA fragmentation of sperm cells which leads to reduced fertility.

PREIMPLANTATION GENETIC TESTING (PGT)

Genetic assessment of embryo health to help improve the chances of a successful pregnancy.

Amfira PGT

5-7 working days | Blastomere or blastocyst biopsies

Amfira PGT- A
Aneuploidies

All 23 chromosomal pairs are screened for aneuploidies, including mosaic events at chromosomal level.

Amfira PGT-SR
Structural rearrangements

All 23 chromosomal pairs are screened for aneuploidies and structural rearrangements, including mosaic events at chromosomal level.

PGT for Monogenic Disorders

4 weeks | Blastomere or blastocyst biopsies

PGT-M
Monogenic diseases

Identifies embryos that are either unaffected or affected by a specific genetic disease that the couple has a family history of.

PGT-A + PGT-M
Aneuploidies + Monogenic diseases

Identifies, in the same embryo biopsy, whole, partial, and mosaic chromosomal abnormalities and specific genetic diseases that the couple has a family history of.

OOCYTE AND SPERM DONOR-RECIPIENT MATCHING PROGRAM

Screens gamete (oocyte and sperm) donors for selection/exclusion and recipients for genetic disorders. Additionally, provides donor-recipient matching reports to reduce the likelihood of transmitting inherited genetic disorders.

Test Options — 2-3 weeks — Buccal swab

Donor Genetic Testing

Recipient Genetic Testing

Chromosomal Analysis & Array CGH (CMA)

Matching Report for Donor-Recipient

Genetic testing is performed on gamete donors and recipients to create matching donor-recipient reports to meet the needs of people using assisted reproductive technology. This includes conventional karyotyping and array CGH (CMA) as well as custom gene panels that can screen for autosomal and X-linked diseases.

- Screens donors and recipients for genetic disorders including chromosomal aneuploidies
- Matches recipients with compatible donors
- Reduces risk of passing on a genetic disorder

PRENATAL

NON-INVASIVE PRENATAL TESTING (NIPT)

Next-generation NIPT, empowering accurate and informed prenatal care.

VERACITY

Autosomal Aneuploidies
- Down syndrome (Trisomy 21)
- Edwards syndrome (Trisomy 18)
- Patau syndrome (Trisomy 13)

Sex Chromosome Aneuploidies
- Turner syndrome (Monosomy X)
- Triple X syndrome (Trisomy X)
- Klinefelter syndrome (XXY)
- Jacobs syndrome (XYY)
- XXYY syndrome

Microdeletions
- DiGeorge syndrome (22q11.2)
- 1p36 deletion syndrome
- Smith-Magenis syndrome (17p11.2)
- Wolf-Hirschhorn syndrome (4p16.3)
- Cri-du-chat syndrome (5p)*
- Prader-Willi and Angelman syndromes (15q11.2-q13)*

4-7 working days — Blood sample

VERAgene

Aneuploidies and microdeletions tested in VERACITY and risk to the foetus for 100 monogenic diseases

Autosomal recessive • *X-linked*

4-7 working days — Blood sample from expectant mother, buccal swab from biological father

Rhesus Factor Determination

A non-invasive test to determine fetal RhD status from maternal blood, helping to avoid unnecessary anti-D prophylaxis in RhD-negative pregnant women. Analysis of RHD gene sequences using RT-PCR.

5-8 working days — Blood sample

These enhancements are currently implemented at Medicover Genetics' laboratories in Cyprus and will be progressively introduced across additional laboratories within the Medicover Genetics network.

INVASIVE PRENATAL TESTING

Diagnosis for pregnancies with increased risk of genetic disorders.

Test Options — Chorionic villi — Amniotic fluid cells — Fetal blood

Chromosomal Analysis & Array CGH (CMA)	Molecular karyotyping using conventional karyotyping and array CGH (CMA).
Single Gene / Gene Panels	Tests for pathogenic variants in specific genes.
Prenatal Whole Exome Sequencing	Provides insights on symptoms, complications, best clinical management, and disease progression in pregnancies with abnormal findings.

NEONATAL

Assessment of genetic health after birth, during infancy, or early childhood to screen for treatable or manageable conditions and help support early intervention.

NEONATAL TESTING

Oreana Neonatal Screening Test

2-3 weeks | Buccal swab

Oreana Neonatal Screening
142 disorders, 142 genes

Includes 142 disorders that affect many different processes including: Endocrine • Hearing loss • Haemoglobin • Immunodeficiency • Metabolic • Musculoskeletal • Pulmonary

Developmental Paediatrics

2-6 weeks | Blood sample

Define&Decide

Covers indications associated with global developmental delay, intellectual disability and neurodevelopmental disorders, including: Autism spectrum disorders • Syndromic neurodevelopmental disorders • Overgrowth syndromes • Microcephaly and macrocephaly • Rett and Rett-like disorders

Additional Neonatal Tests

2-3 weeks | Buccal swab or blood

Chromosomal Analysis & Array CGH (CMA)

Molecular karyotyping using conventional karyotyping and array CGH (CMA).

Whole Exome Sequencing

Provides early detection of severe and life-altering conditions that may not be apparent at birth, and for which interventions and management options are available and can benefit the infants' health and quality of life.

Low-coverage Whole Genome Sequencing (lcWGS)

Genome-wide detection of copy number variants, including deletions, duplications and chromosomal aneuploidies.

ABOUT MEDICOVER GENETICS

Medicover Genetics is a leading innovator in genetic diagnostics, laboratory enablement, and clinical testing, with over 25 years of experience supporting healthcare systems worldwide. The company offers a comprehensive portfolio of genetic testing services and clinical counselling, supported by certified diagnostic products and platforms.

At the core of its offering is the proprietary Technology Transfer Platform—an end-to-end genomics solution that enables partner laboratories worldwide to perform high-precision genetic tests in-house.

Medicover Genetics' CE-marked, IVDR-certified portfolio, developed through decades of clinical and medical expertise, includes VERACITY™, a non-invasive prenatal test (NIPT), and TarCET™, a suite of clinical assays addressing hereditary cancers, cardiovascular and metabolic disorders, infertility, neonatal conditions, and other critical health areas.

Driven by continuous research and development, Medicover Genetics is actively expanding into advanced areas such as liquid biopsy for therapy selection and minimal residual disease (MRD) testing. Its laboratories are CAP and ISO 15189 accredited, ISO 9001, and ISO 13485 certified, and comply with GMP and GCP, ensuring the highest quality standards.

Medicover Genetics operates as a global organisation, working closely with laboratories and clinicians to deliver scalable, high-impact genetic solutions that support personalized medicine and enable informed clinical decision-making. www.medicover-genetics.com

Medicover Genetics is part of Medicover, a leading international healthcare and diagnostic services company founded in 1995 and listed on Nasdaq Stockholm. www.medicover.com

Advancing through **every diagnosis**

In-house R&D

Advancing translational research and diagnostics through technology platform development, liquid biopsy and MRD research, integrated bioinformatics, and strategic IP creation.

Laboratory as a Service

Broad portfolio of genetic tests, including both comprehensive and focused panels for every stage of the diagnostic journey.

Technology Transfer & CE-IVD Kits

Scalable laboratory solutions that enable localisation of high-quality services, including CE-marked NIPT and IVDR-certified multidisciplinary assays.

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