Regenesis BioTech

Nutrigenetics Panel	
Genetic Test	**Description**
Nutrigenetics Panel	This genetic report provides a non-technical overview of your Nutrigenetics test, offering insights into how genetic variants can influence your response to foods and nutrients. By optimizing your diet based on these insights, you may reduce the risk of certain health conditions like diabetes, obesity, and cardiovascular diseases. While not designed to diagnose diseases, the report highlights genetic variations that affect dietary responses. Consultation with a healthcare provider is recommended before making significant dietary changes, particularly if you have an existing health condition. The insights obtained from learning about your genes may enable you, in partnership with your healthcare provider, to formulate a plan to live a longer, healthier life.

Pharmacogenetics Panel	
Genetic Test	**Description**
Pharmacogenetics Panel	The Pharmacogenetics Report analyzes genetic data to associate variants with scientific literature findings. The report relies on third-party studies without independent validation. As scientific knowledge evolves, report accuracy and risk assessments may change, and it does not account for factors like diet or lifestyle. This report should not replace professional medical advice, and any treatment changes must be discussed with a healthcare provider.

Stem Cell Therapy-Related Diseases Panel	
Genetic Test	**Description**
Stem Cell Therapy-Related Diseases Panel	The "Stem Cell Therapy-Related Diseases" panel analyzes germline DNA mutations, examining both common and rare variants across over 205 genes. Unlike traditional gene-targeting panels, it provides comprehensive coverage of genomic regions, including intragenic and intergenic areas. This test supports advancements in regenerative medicine by identifying genetic factors linked to diseases treatable with stem cells, including those in hematology, oncology, immunology, and hereditary metabolic disorders.

Dental and Oral Genetic Diseases Panel	
Genetic Test	**Description**
Dental & Oral Genetic Diseases Panel	The Dental and Oral Panel analyzes germline DNA mutations, examining all common and rare variants linked to tooth diseases, including congenital abnormalities. It covers 77 genes with full genomic region analysis, including intragenic and intergenic areas. Genetics, alongside environmental factors, plays a significant role in regulating tooth diseases, distinguishing them from other dental issues like enamel hypoplasia and tooth wear.

Cancer Panels	
Genetic Test	**Description**
Hereditary Cancer Panel	The Hereditary Cancer Test analyzes germline DNA for common and rare variants linked to hereditary cancers, offering comprehensive insights beyond traditional genetic panels to assess elevated cancer risk.
ACMG Panel (The American College of Medical Genetics and Genomics Panel)	The ACMG Test analyzes germline DNA mutations in 77 genes linked to actionable medical conditions, providing insights into inherited risks for cancer, heart disease, and more. This information empowers proactive health management.
Hereditary Colorectal Cancers	The Hereditary Colorectal Cancers Test uses germline DNA analysis to identify common and rare variants associated with hereditary colorectal cancers (HCRC), including Lynch Syndrome and polyposis syndromes. It covers over 30 genes with 100% genomic region coverage, analyzing both intragenic and intergenic regions. This test aids in early detection of genetic predispositions that increase colorectal cancer risk, which accounts for 6-10% of cases globally, distinguishing it from sporadic cases often linked to lifestyle factors.
Oncology Panel	The Oncology Panel analyzes germline DNA for common and rare variants linked to hereditary and non-hereditary cancers, covering over 520 genes with 100% genomic region coverage. It identifies risks for conditions like Hereditary Breast and Ovarian Cancer Syndrome, Li-Fraumeni Syndrome, and Cowden Syndrome, providing comprehensive insights into cancer predisposition.

Neurological Panels	
Genetic Test	**Description**
Neurology Panel	The Neurology Test is based on Whole Genome Sequencing Test. As such, it analyzes all Common and Rare Variants associated with Neurological Diseases, including Parkinson's disease and Alzheimer's disease, instead of a limited set of genes, like old genetic target panels.

Amyotrophic lateral sclerosis (ALS) Panel	The ALS Test analyzes all common and rare variants linked to Amyotrophic Lateral Sclerosis (ALS), a neurological disorder causing neuron degeneration, stiff muscles, twitching, and progressive muscle weakness. Genetics, alongside environmental factors, plays a crucial role in ALS development. The test covers 48 genes with 100% genomic region analysis, including intragenic and intergenic regions, and reports all variants.
Ataxia Panel	The Ataxia Test uses germline DNA mutation analysis to identify all common and rare variants associated with Ataxia, a neurological disorder affecting coordination, including gait, speech, and eye movements. It examines dysfunction in movement-regulating systems like the cerebellum and conditions such as hemiataxia, dystaxia, and Friedreich's ataxia. Genetics, alongside environmental factors, plays a key role in Ataxia. The test analyzes 194 genes with 100% genomic coverage, including intragenic and intergenic regions, and reports all variants.
Hereditary Optic Neuropathy Panel	The Hereditary Optic Neuropathies Test uses germline DNA mutation analysis to detect all common and rare variants linked to these disorders, which affect the optic nerve through various genetic transmissions. It includes Autosomal Dominant Optic Neuropathy (early childhood visual impairment with dyschromatopsia), Autosomal Recessive Optic Neuropathy (severe visual reduction from birth), and Leber Hereditary Optic Neuropathy (progressive vision loss in young males via mitochondrial transmission). Genetics, alongside environmental factors, plays a key role. The test analyzes 15 genes with 100% genomic coverage, including intragenic and intergenic regions, and reports all variants.
Parkinson's Disease Panel	The Parkinson's Disease Test uses germline DNA analysis to identify all common and rare genetic variants linked to Parkinson's and related conditions, analyzing over 70 genes with 100% genomic coverage. Parkinson's, the second most common neurodegenerative disorder after Alzheimer's, affects the substantia nigra, a brain region controlling movement. Loss of dopamine-producing neurons here leads to symptoms like tremors, rigidity, slow movements, and balance issues. As the disease progresses, motor symptoms worsen, affecting tasks like walking and fine motor skills, along with non-motor symptoms such as cognitive decline, neuropsychiatric changes, and autonomic dysfunction. Parkinson's is influenced by genetic and environmental factors, with about 5-10% of cases showing autosomal dominant inheritance. Key genes include PRKN (linked to juvenile and

	later-onset forms), LRRK2, PINK1, and SNCA, while others like GBA and UCHL1 modify risk. Intraneuronal "Lewy bodies," protein aggregates of alpha-synuclein, are often present and associated with cognitive decline in advanced stages. The test also covers genes linked to Parkinsonism, a group of related conditions with similar symptoms but different causes.
Schizophrenia Panel	The Schizophrenia Test uses germline DNA analysis to detect all common and rare genetic variants linked to schizophrenia, analyzing over 28 genes with 100% genomic coverage. Schizophrenia is a severe mental disorder marked by altered thinking, perception, and behavior, with symptoms divided into positive (hallucinations, delusions) and negative (apathy, lack of motivation, social withdrawal). It typically appears between ages 18-28, with genetic factors playing a significant role, particularly for those with a family history. Environmental triggers, such as maternal infections or complications, may also contribute. Early-onset forms are rarer but more severe. Schizophrenia impacts daily life, leading to complications like substance abuse, isolation, and suicide risk. The test analyzes genes related to both adult and childhood-onset schizophrenia.

Cardiology Panels	
Genetic Test	**Description**
Cardiomyopathies Panel	The Cardiomyopathies Test analyzes over 600 genes for common and rare genetic variants linked to various heart muscle disorders. Cardiomyopathies, which can result from genetic causes or other health conditions, affect the structure and function of the heart, potentially leading to heart failure, arrhythmias, or cardiac arrest. The main types include hypertrophic (thickened heart walls), dilated (enlarged heart cavities), and restrictive (stiff heart muscle), along with arrhythmogenic right ventricular dysplasia (replacing heart tissue with fatty tissue). Environmental factors and genetics both play key roles. The test covers 100% of relevant genomic regions, including intragenic and intergenic areas, and reports all variants.
Cardiometabolic Disorders Panel	The Cardiometabolic Test analyzes over 500 genes for common and rare variants linked to disorders affecting heart health and metabolic balance, such as insulin resistance, hypertension, and dyslipidemia. These conditions, which have rapidly increased in prevalence, are major risk factors for heart attack, stroke, and type 2 diabetes. They are influenced by lifestyle factors like poor diet,

	lack of exercise, and smoking, especially in genetically predisposed individuals. Central adiposity, or abdominal fat, is a key risk factor. The test covers all relevant genomic regions and reports all variants, with genetics playing a crucial role alongside environmental factors.
Cardiovascular Panel	The Cardiovascular Report is based on Germline DNA mutation analysis. As such, it analyzes all Common and Rare Variants associated with Cardiovascular Diseases instead of a limited set of genes, like old genetic target panels. Cardiovascular Diseases affect the heart and blood vessels.

Newborn Panels	
Genetic Test	**Description**
Newborn Screening Panel	It is estimated that around 3%-4% of newborns have a genetic condition. The Newborn Screening Panel is a multi-gene panel aimed at investigating hundreds of disorders or diseases transmitted from parents to children and, in most cases, manifest themselves from the very first months of life. More than 1000 genes related to pathologies inherited in an autosomal dominant, autosomal recessive and X-linked manner are investigated in this panel. Some of the diseases studied in the Newborn Screening Panel are the following: achondrogenesis, Alport disease, Bardet-Biedl syndrome 1 and argininosuccinic aciduria, among others. The Test offers an overview of pathologies affecting various organs and systems; in fact, diseases related to areas of interest such as neurology and neuromuscular disorders, endocrinology, metabolism, immunopathology, pulmonology and haematology are included. The clinical impact of the Newborn Screening Panel is well reflected in its potential: infants suffering from medical conditions that have a particular effect on the quality of life need a rapid and precise diagnosis. This provides a fundamental contribution to the diagnostic process and to the therapeutic plan. This test analyzes mutations consisting of Single Nucleotide Polymorphisms (SNPs) and small insertions/deletions (INDELs). - 1045 genes analyzed - 100% genomic regions covered - Intragenic and intergenic regions analyzed - All variants reported.

Autism & Neurodevelopmental Disorders Panel	The Autism and Neurodevelopmental Disorders test is based on the analysis of germline DNA mutations. As such, it analyzes all the common and rare variants associated with autism and neurodevelopmental disorders instead of a limited set of genes. Autism spectrum disorder (ASD) is a condition that appears very early in childhood development, varies in severity and is characterized by reduced social skills, communication problems and repetitive behaviours. These difficulties can interfere with the ability of those affected to function in social, academic and occupational settings. In addition, people with ASD have a higher risk of experiencing psychiatric problems such as anxiety, depression, obsessive-compulsive disorder, and eating disorders. Autism spectrum disorder, together with intellectual disability, attention deficit/hyperactivity disorder (ADHD), specific learning disorder and communication and movement disorders, belongs to the group of so-called Neurodevelopmental Disorders, characterized by onset precocious (from the earliest stages of life) and global deficit of social and personal skills. Along with environmental factors, genetics play a key role in the regulation of Autism and Neurodevelopmental Disorders. - 153 genes analyzed - 100% of the genomic regions covered - Intragenic and intergenic regions analyzed - All variants (SNPs) reported.
Stem Cell Therapy-Related Diseases Panel	The 'Stem Cell Therapy-Related Diseases' panel is based on DNA germline mutation analysis. As such, it analyses all common and rare variants associated with various diseases treated with stem cells instead of a limited set of genes like the old gene targeting panels. Over the past decades, the in-depth study of stem cell biology has enabled the development of innovative techniques that allow their use in what is now called regenerative medicine. The use of stem cells is aimed at curing or treating various diseases belonging to multiple fields of interest, such as haematology, oncology, immunology and hereditary metabolic disorders. Genetics play a crucial role in developing many of these stem cell therapy-related diseases, which have been analysed in this panel. In this Test, we analyse germline mutations such as single nucleotide polymorphisms (SNPs) and INDELs of 150 bp or less in length. More than 205 genes analysed - 100% of genomic regions covered – Intragenic and intergenic regions analysed - All variants reported.
Dental & Oral Genetic Diseases Panel	The Dental and Oral Panel analyzes germline DNA mutations, examining all common and rare variants linked to tooth diseases, including congenital abnormalities. It covers 77 genes with full

	genomic region analysis, including intragenic and intergenic areas. Genetics, alongside environmental factors, plays a significant role in regulating tooth diseases, distinguishing them from other dental issues like enamel hypoplasia and tooth wear.

Wellness Panels Valuable information on how genetics may impact an individual's health and wellbeing, including personalized Fitness, Skincare, Wellness and Nutrition.	
Genetic Test	**Description**
Personalized Fitness Panel	**Unlock Your Fitness Potential with Personalized Insights!** Our personalized fitness report is the key to unlocking your ultimate fitness goals. With this comprehensive and easy-to-understand report, you'll gain invaluable insights into your genetic predispositions and how your body responds to different types of fitness activities. Additionally, it highlights your susceptibility to specific sports-related injuries, empowering you to take proactive measures. By collaborating with a personal trainer, you can leverage this information to design a custom training plan that aligns perfectly with your unique genetic makeup. Imagine having a fitness regime

	tailored specifically for you—maximizing your strengths and addressing potential vulnerabilities. Understanding your DNA variations can be a game-changer in achieving your physical fitness aspirations. Remember, this report is just one crucial component of your fitness journey. A continuous dialogue with your personal trainer ensures you stay on the right track and make the most out of your personalized plan.
Your Ultimate Skincare Panel	Welcome to Your Ultimate Skincare Report, a personalized journey into understanding your skin's unique genetic makeup! This comprehensive and easy-to-understand report provides valuable insights into how your genes influence your skin's health and your susceptibility to certain conditions. Armed with this knowledge, you and your beauty specialist can craft a bespoke skincare regimen tailored specifically to your genetic profile. Remember, genetic variations differ from person to person and can increase the risk of developing certain skin conditions.
Health and Disease Risk Panel	**Discover Your Health and Take Charge of Your Future!** Your Health and Disease Risk Panel offers a clear, easy-to-understand summary of the insights from your Genetic Health Risk Test. This personalized report empowers you to take control of your health by uncovering how your unique DNA may influence your chances of developing certain health conditions. Your genes hold powerful information about your health. By understanding how specific genetic variants—small differences in your DNA—impact your risk for certain conditions, you can work with your healthcare provider to create a proactive plan for a healthier, more vibrant life. Genetic variants may increase the likelihood of developing some health conditions. Since families share DNA, these variants can run in families, meaning your loved ones may also carry the same risks. However, genes are only part of the story. Lifestyle, environment, and other factors can also influence your overall risk. The good news? Many risks can be managed by making informed choices. With this knowledge, you can outsmart your genes and take steps toward a longer, healthier life. Your journey to better health starts here!
Nutrigenetic Panel	This genetic report provides a non-technical overview of your Nutrigenetics test, offering insights into how genetic variants can influence your response to foods and nutrients. By optimizing your diet based on these insights, you may reduce the risk of certain health conditions like diabetes, obesity, and cardiovascular diseases. While not designed to diagnose diseases, the report highlights genetic variations that affect dietary responses.

	Consultation with a healthcare provider is recommended before making significant dietary changes, particularly if you have an existing health condition. The insights obtained from learning about your genes may enable you, in partnership with your healthcare provider, to formulate a plan to live a longer, healthier life.

Family Planning Panels

Your DNA holds valuable insights—discover them to make informed choices for your family's future.

Plan for a Healthy Future with the Family Planning Test

Genetic Test	Description
Achromatopsia Panel	Starting a family is an exciting journey, and understanding your genetic health can help
ACMG Panel	

Acrodermatitis Enteropathica Panel	you make informed choices for your child's well-being. Our **Family Planning Test** is a **comprehensive carrier screening** that identifies whether you and your partner carry inherited genetic mutations that could be passed on to your children. By taking this test **before or early in pregnancy**, you gain valuable insights that can help you and your healthcare provider take proactive steps in **family planning and preparation**. **Why Choose Our Family Planning Test?** ✔ **Powered by Whole Genome Sequencing (WGS):** Unlike traditional tests, we analyze **100% of your DNA** for a complete and accurate picture. ✔ **Comprehensive Screening:** We examine **X genetic conditions** that could affect your future child. ✔ **Actionable Insights:** If both parents carry a mutation in the same gene, there may be a risk of passing it on. Understanding this risk early gives you options. ✔ **Reproductive Guidance:** If your results indicate an increased risk, there are several reproductive options available to help you plan for a healthy family.
Acute Hepatic Porphyria Report	
Afibrinogenemia Panel	
Aicardi-Goutières Syndrome Panel	
Alagille Syndrome Panel	
Alkaline Phosphatase Panel	
Alport Syndrome Panel	
Amyloidogenic transthyretin amyloidosis Panel	
Aneurysm risk Panel	
Aortic Aneurysm Panel	
Asthma Susceptibility Panel	
Autism and Neurodevelopmental Disorders Panel	
Autism Panel	
Autoimmunity Panel	
Autoinflammatory Panel	
Autophagy Panel	
Bardet Biedl Syndrome Panel	
Bartter and Gitelman's Syndromes Report	
Breast Cancer Panel	
Brugada Syndrome Panel	
CADASIL Panel	
Cardiometabolic Disorders Panel	
Cardiomyopathies Panel	
Cardiovascular Panel	
Carrier Screening Panel	
Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT) Panel	
Cerebral Amyloid Angiopathy Report	
Cerebral cavernous malformations Panel	
Charcot-Marie-Tooth Disease Panel	
Chédiak-Higashi Syndrome Panel	
Chronic Granulomatous Disease Panel	
Chronic Traumatic Encephalopathy Panel	
Ciliopathies Panel	
Circadian Panel	
COL7A1 Panel	
Combined Pituitary Hormone Deficiency Panel	
Congenital Adrenal Hyperplasia Panel	
Congenital Cataracts Panel	
Congenital Disorders of Glycosylation Panel	
Congenital Myasthenic Syndrome Panel	
Congenital Neutropenia Panel	

Congenital Sucrase-Isomaltase Deficiency Panel	
Connective Tissue Panel	
Copper Metabolism Disorders Panel	
Cowden Syndrome Panel	
Crohn Disease Panel	
Cutis Laxa Panel	
Cystic Fibrosis Panel	
Cystinuria Panel	
Dentist Panel	
Dermatology Panel	
Diabetes Panel	
Diamond-Blackfan Anemia Panel	
Dilated Cardiomyopathy Panel	
Distal Myopathies Panel	
Dyskeratosis Congenita Panel	
Dystonia, Myotonia and Paroxysmal Dyskinesia Report	
Ectodermal Dysplasias Panel	
Ectopia Lentis Panel	
Ehlers-Danlos Syndrome Panel	
Endocrinology Panel	
Epidermolysis Bullosa Panel	
Epilepsy Panel	
Erythropoietin Receptor Report	
Fallot's Tetralogy Panel	
Familial Hypercholesterolemia Panel	
Familial Intrahepatic Cholestasi Panel	
Fanconi Anemia Panel	
Female infertility Panel	
Focal Segmental Glomerulosclerosis and Complement Genetic Study Report	
Frontotemporal Dementia Panel	
Gastroenterology Panel	
Gilbert Syndrome Panel	
Glaucoma Panel	
Glucocorticoid Deficiency Panel	
Glycogen Storage Diseases	
Graves' Disease Panel	
Hearing Loss and Deafness Panel	
Hematology Panel	
Hemiplegic Migraine Panel	
Hemochromatosis Panel	
Hemolytic Uremic Syndrome and Autosomal Dominant Interstitial Nephritis Reports	

Hereditary Amyloidosis Panel	
Hereditary Cancer Panel	
Hereditary Colorectal Cancers Panel	
Hereditary Hemorrhagic Telangiectasia Panel	
Hereditary Kidney Cancers Report	
Hereditary Myopathies Panel	
Hereditary Optic Neuropathy Panel	
Hereditary Pancreatitis Panel	
Hereditary Prostate Cancer Report	
Hereditary Spastic Paraplegia (HSP) Panel	
Hereditary Vitreoretinopathy Panel	
Hermansky-Pudlak syndrome Panel	
Hyper IgE syndromes Panel	
Hypertrophic Cardiomyopathy Panel	
Hypothyroidism Panel	
Idiopathic short stature Panel	
Inflammatory Bowel Disease Panel	
Joubert and Meckel-Gruber syndromes Panel	
Leigh Syndrome Panel	
Leukodystrophy Panel	
Long QT Syndrome Panel	
Lysosomal Storage Disorders Panel	
Male infertility Panel	
Marfan Syndrome Panel	
McArdle Disease Report	
Metabolic Panel	
Methylation Mechanisms Panel	
MODY Panel	
Multiple Sclerosis Panel	
Nephrology Panel	
Neurofibromatosis Panel	
Neurology Panel	
Neuronal Ceroid Lipofuscinosis Panel	
Non-syndromic Retinitis Pigmentosa Panel	
Noonan Syndrome Panel	
Nuclear Mitochondrial Genes Panel	
Obesity Panel	
Obstructive Hypertrophic Cardiomyopathy Panel	
Oncology Panel	
Ophthalmology Panel	
Osteoarthritis and rare cartilage diseases Panel	
Osteogenesis Imperfecta Panel	
Osteopetrosis Panel	

Oxidative Stress Panel	
Palb2 Panel	
Parkinson - Alzheimer - Dementia Panel	
Parkinson's Disease Panel	
Pediatric Panel	
Pendred Syndrome Panel	
Periodic Paralysis Panel	
Polycystic Kidney Disease Panel	
Polycystic Ovary Syndrome Panel	
Porphyria Panel	
Premature Ventricular Contractions Panel	
Primary Ciliary Dyskinesia Panel	
Primary Immunodeficiency Report	
PRKDC Panel	
Pulmonary Arterial Hypertension	
Pulmonary Surfactant Dysfunctions Panel	
Pulmunology Panel	
RASopathies Panel	
Recurrent pregnancy loss Panel	
Red Blood Cell Membrane Disorders Panel	
Rheumatoid Arthritis Panel	
Schizophrenia Panel	
Seckel Syndrome Panel	
Secondary Hypogonadism Panel	
Sensory Panel	
Serotonin Metabolism Deficiency Panel	
Short QT Syndrome Panel	
Sjögren's Syndrome Panel	
Skeletal and Connective Tissue Disorders Panel	
Skeletal Dysplasias Panel	
Systemic lupus erythematosus Panel	
Systemic mastocytosis Panel	
Type 4 Spastic Paraplegia Report	
Tyrosinemia Panel	
Ulcerative Colitis Panel	
Urea cycle disorder Panel	
Valosin-Containing Protein Panel	
Vascular Dementia Panel	
Very long chain acyl-CoA dehydrogenase deficiency Panel	
Von Willebrand Panel	
Waardenburg Syndrome Panel	
WEST Syndrome Panel	
Wilson Disease Panel	