# Introducing the Universal Genetic Test

## Comprehensive

### The New Standard of Care

- Test for cystic fibrosis, spinal muscular atrophy (SMA), Tay-Sachs disease, sickle cell disease and more than 100 other single gene disorders with a single saliva-based test.
- Individually rare, collectively common, these single gene disorders account for more than 10% of pediatric deaths and 80% occur in children with no known family history of the disorder.

## Convenient

### Simple, Non-Invasive, and Cost-Effective

- This single saliva-based assay is applicable to all ethnicities and encompasses major standard of care carrier tests.
- Counsyl provides a clear, easy-to-digest report that can be shared and discussed with the patient.
- The test quickly identifies IVF patients who can benefit from preimplantation genetic diagnosis (PGD).

## Reliable

## Clinically Valid, Grounded In Well-Established Science

- Designed by scientists from Stanford and Harvard, Counsyl's assay is 99.9% accurate for all targeted mutations and more thorough than the single gene tests for many disorders.
- Counsyl's CLIA-certified lab adheres to industry best practices in order to ensure the highest possible levels of accuracy and patient privacy.



"I'm excited about offering the Counsyl test in my practice because it's non-invasive, easyto-use, comprehensive and cost-effective."

> - Dr. Mohit Khera. Baylor College of Medicine

"Every adult of reproductive age needs the Counsyl test."

- Professor Pasquale Patrizio, MD Director, Yale Fertility Center





# Disease List

The following diseases are covered on Counsyl's Universal Genetic Test, listed here with the number of mutations tested.

## = Testing for this disease recommended to be offered by ACOG

## = Testing for this disease recommended to be offered by ACMG

#### **CAUCASIAN**

Spinal Muscular Atrophy (1)

Autosomal Recessive Polycystic Kidney Disease (5)

Medium Chain Acyl-CoA Dehydrogenase Deficiency (7)

Phenylalanine Hydroxylase Deficiency (11)

#### **ASHKENAZI JEWISH**

₩ Tay-Sachs Disease (4)

88 € Cystic Fibrosis (109)

Bloom Syndrome (2)

€ Gaucher Disease (9)

Reference Fanconi Anemia Type C (4)

Mucolipidosis IV (2)

Miemann Pick Disease Type A (4)

Spinal Muscular Atrophy (1)

Glycogen Storage Disease Type 1a (21)

Factor XI Deficiency (4)

#### **AFRICAN**

R Cystic Fibrosis (109)

Sickle Cell Disease (37)

Spinal Muscular Atrophy (1)

#### **ASIAN**

₩ Cystic Fibrosis (109)

Beta Thalassemia (35)

Spinal Muscular Atrophy (1)

Glucose-6-Phosphate Dehydrogenase Deficiency (5)

Phenylalanine Hydroxylase Deficiency (11)

Wilson Disease (5)

#### **HISPANIC**

R Cystic Fibrosis (109)

Spinal Muscular Atrophy (1)

Sickle Cell Disease (37)

Phenylalanine Hydroxylase Deficiency (11)

#### MIDDLE EASTERN

Spinal Muscular Atrophy (1)

Beta Thalassemia (35)

Familial Mediterranean Fever (13)

Phenylalanine Hydroxylase Deficiency (11)

#### ADDITIONAL DISEASES

ABCC8-Related Hyperinsulinism (3)

Achromatopsia (6)

Alkaptonuria (7)

Alpha-1 Antitrypsin Deficiency (2)

Andermann Syndrome (2)

ARSACS (2)

Aspartylglycosaminuria (2)

Ataxia With Vitamin E Deficiency (1)

Ataxia-Telangiectasia (1)

Bardet-Biedl Syndrome (2)

Biotinidase Deficiency (7)

Carnitine Palmitoyltransferase IA

Deficiency (2)

Carnitine PalmitoyItransferase II

Deficiency (13)

Cartilage-Hair Hypoplasia (2)

Choroideremia (1)

Congenital Disorder Of Glycosylation (3)

Types Ia and Ib

Congenital Finnish Nephrosis (2)

Cystinosis (4)

Factor V Leiden Thrombophilia (3)

Fumarase Deficiency (1)

Galactosemia (10)

GJB2-Related DFNB 1 Nonsyndromic

Hearing Loss And Deafness (11)

Glutaric Acidemia Type 1 (2)

Glycogen Storage Disease (21)

Types Ib, III, V

GRACILE Syndrome (1)

Hereditary Fructose Intolerance (4)

Hereditary Thymine-Uraciluria (1)

Herlitz Junctional Epidermolysis Bullosa (7)

Hexosaminidase A Deficiency (8)

HFE-Associated Hereditary

Hemochromatosis (11)

Homocystinuria Caused By Cystathionine Beta-Synthase Deficiency (2)

Hurler Syndrome (2)

Hyperornithinemia-Hyperammonemia-Homocitrullinuria Syndrome (1)

Hypophosphatasia, Autosomal Recessive (5)

Inclusion Body Myopathy 2 (1)

Infantile Refsum Disease (1)

Isovaleric Acidemia (1)

Krabbe Disease (3)

Leigh Syndrome, French-Canadian Type (1)

Limb-Girdle Muscular Dystrophy Type 2E (1)

Long Chain 3-Hydroxyacyl-CoA Dehydrogenase Deficiency (2)

Maple Syrup Urine Disease Types

1B and 3 (5)

Metachromatic Leukodystrophy (4)

Muscle-Eye-Brain Disease (1)

MYH-Associated Polyposis (1)

Neuronal Ceroid Lipofuscinosis (10) CLN5-, CLN8-, PPT1- and TPP1-related

Niemann-Pick Disease Type C (4)

Nijmegen Breakage Syndrome (1)

Pendred Syndrome (3)

Polyglandular Autoimmune Syndrome

Type 1 (1)

Primary Hyperoxaluria (4)

Types 1 and 2

Pycnodysostosis (1)

Rhizomelic Chondrodysplasia Punctata

Type 1 (2)

Salla Disease (2)

Segawa Syndrome (1)

Short Chain Acyl-CoA Dehydrogenase

Deficiency (2)

Sjogren-Larsson Syndrome (1)

Smith-Lemli-Opitz Syndrome (11)

Sulfate Transporter-Related

Oseochondrodysplasia (5)

Achondrogenesis Type 1B

Diastrophic Dysplasia

Recessive Multiple Epiphyseal Dysplasia

Tyrosinemia Type I (5)

Usher Syndrome (2)

Types 1F and 3

X-Linked Juvenile Retinoschisis (3)