

**PRECONCEPTION CARRIER SCREENING CONDITIONS LIST**

<b>DISEASE</b>	<b>GENE SYMBOL</b>
	<i>HMGCS2</i>
3-Hydroxy-3-Methylglutaryl-CoA Synthase 2 Deficiency	<i>MCCC1</i>
3-Methylcrotonyl-CoA carboxylase 1 deficiency	<i>MCCC2</i>
3-Methylcrotonyl-CoA carboxylase 2 deficiency	<i>ACADM</i>
Acyl-CoA Dehydrogenase Deficiency,Medium-Chain	<i>ACADS</i>
Acyl-CoA Dehydrogenase Deficiency,Short-Chain	<i>ACADVL</i>
Acyl-CoA Dehydrogenase Deficiency,Very Long-Chain	<i>ADA</i>
Adenosine Deaminase Deficiency	<i>MAN2B1</i>
Alpha-Mannosidosis	<i>HBA1, HBA2</i>
Alpha-thalassemia	<i>COL4A3, COL4A4</i>
Alport syndrome 2, autosomal recessive	<i>ASL</i>
Argininosuccinic aciduria	<i>TGM1</i>
Autosomal Recessive Congenital Ichthyosis 1	<i>ABCA12</i>
Autosomal Recessive Congenital Ichthyosis 4A	<i>ABCA12</i>
Autosomal Recessive Congenital Ichthyosis 4B	<i>GJB2</i>
Autosomal Recessive Deafness 1A	<i>SLC26A4</i>
Autosomal Recessive Deafness 4, with Enlarged Vestibular Aqueduct	<i>TCIRG1</i>
Autosomal Recessive Osteopetrosis 1	<i>ACAT1</i>
Beta-Ketothiolase Deficiency	<i>HBB</i>
Beta-thalassemia	<i>BTD</i>
Biotinidase Deficiency	<i>ASPA</i>
Canavan Disease	

Carbamoylphosphate Synthetase I Deficiency	<i>CPS1</i>
Citrullinemia	<i>ASS1</i>
COACH syndrome	<i>TMEM67, CC2D2A</i>
Congenital Disorders of Glycosylation Ia	<i>PMM2</i>
Cystic Fibrosis	<i>CFTR</i>
Duchenne Muscular Dystrophy	<i>DMD</i>
Ellis-van Creveld Syndrome	<i>EVC2</i>
Fabry Disease	<i>GLA</i>
Familial Hyperinsulinemic Hypoglycemia 2	<i>KCNJ11</i>
Familial Hyperinsulinemic Hypoglycemia 4	<i>HADH</i>
Fanconi anemia, complementation group A	<i>FANCA</i>
Fanconi anemia, complementation group C	<i>FANCC</i>
Fanconi anemia, complementation group D2	<i>FANCD2</i>
Fanconi anemia, complementation group G	<i>FANCG</i>
Fanconi anemia, complementation group I	<i>FANCI</i>
Galactosemia	<i>GALT</i>
Glutaric Acidemia I	<i>GCDH</i>
Glutaric acidemia IIA	<i>ETFA</i>
Glutaric acidemia IIB	<i>ETFB</i>
Glutaric acidemia IIC	<i>ETFDH</i>
Glycine encephalopathy	<i>AMT, GLDC</i>
Glycogen Storage Disease Type Ia	<i>G6PC</i>
Glycogen Storage Disease Type Ib	<i>SLC37A4</i>
Glycogen Storage Disease Type Ic	<i>SLC37A4</i>

	<i>GAA</i>
Glycogen Storage Disease Type II	
	<i>GBE1</i>
Glycogen Storage Disease type IV	
	<i>PRF1</i>
Hemophagocytic lymphohistiocytosis, familial, 2	
	<i>UNC13D</i>
Hemophagocytic lymphohistiocytosis, familial, 3	
	<i>STX11</i>
Hemophagocytic lymphohistiocytosis, familial, 4	
	<i>STXBP2</i>
Hemophagocytic lymphohistiocytosis, familial, 5	
	<i>F9</i>
Hemophilia B	
	<i>HPS1</i>
Hermansky-Pudlak Syndrome 1	
	<i>HPS3</i>
Hermansky-Pudlak Syndrome 3	
	<i>HLCS</i>
Holocarboxylase synthetase deficiency	
	<i>CBS</i>
Homocystinuria Due to Cystathionine Beta-Synthase Deficiency	
	<i>MTRR</i>
Homocystinuria-megaloblastic anemia cbIE type	
	<i>MTR</i>
Homocystinuria-Megaloblastic Anemia cbIG type	
	<i>IDUA</i>
Hurler Syndrome	
	<i>IDUA</i>
Hurler-Scheie Syndrome	
	<i>SLC25A15</i>
Hyperornithinemia-Hyperammonemia-Homocitrullinuria Syndrome	
	<i>PTS</i>
Hyperphenylalaninemia, BH4-deficient, A	
	<i>ALPL</i>
Hypophosphatasia, childhood	
	<i>ALPL</i>
Hypophosphatasia, infantile	
	<i>DNMT3B</i>
Immunodeficiency-centromeric instability-facial anomalies syndrome 1	
	<i>IVD</i>
Isovaleric Acidemia	

Joubert Syndrome 17	<i>C5orf42</i>
Joubert Syndrome 2	<i>TMEM216</i>
Joubert Syndrome 3	<i>AHI1</i>
Joubert Syndrome 5	<i>CEP290</i>
Joubert Syndrome 6	<i>TMEM67</i>
Joubert Syndrome 9	<i>CC2D2A</i>
Krabbe Disease	<i>GALC</i>
LAMA3-Related Junctional Epidermolysis Bullosa	<i>LAMA3</i>
LAMB3-Related Junctional Epidermolysis Bullosa	<i>LAMB3</i>
LAMC2-Related Junctional Epidermolysis Bullosa	<i>LAMC2</i>
Limb-Girdle Muscular Dystrophy type 2A	<i>CAPN3</i>
Limb-Girdle Muscular Dystrophy type 2B	<i>DYSF</i>
Limb-Girdle Muscular Dystrophy type 2C	<i>SGCG</i>
Limb-Girdle Muscular Dystrophy type 2D	<i>SGCA</i>
Maple Syrup Urine Disease Type 1A	<i>BCKDHA</i>
Maple Syrup Urine Disease Type 1B	<i>BCKDHB</i>
MCEE-Related Methylmalonic Acidemia	<i>MCEE</i>
Meckel Syndrome 2	<i>TMEM216</i>
Meckel Syndrome 3	<i>TMEM67</i>
Meckel Syndrome 4	<i>CEP290</i>
Megalencephalic Leukoencephalopathy with Subcortical Cysts 1	<i>MLC1</i>
Metachromatic Leukodystrophy due to Arylsulfatase A	<i>ARSA</i>
Methylmalonic Aciduria and Homocystinuria cbIC type	<i>MMACHC</i>
Methylmalonic Aciduria and Homocystinuria cbID type	<i>MMADHC</i>

	<i>MMAA</i>
MMAA-Related Methylmalonic Acidemia	
	<i>MMAB</i>
MMAB-Related Methylmalonic Acidemia	
	<i>IDS</i>
Mucopolysaccharidosis II	
	<i>SGSH</i>
Mucopolysaccharidosis Type IIIA	
	<i>NAGLU</i>
Mucopolysaccharidosis Type IIIB	
	<i>HGSNAT</i>
Mucopolysaccharidosis type IIIC	
	<i>GNS</i>
Mucopolysaccharidosis type IIID	
	<i>GALNS</i>
Mucopolysaccharidosis type IVA	
	<i>GLB1</i>
Mucopolysaccharidosis type IVB	
	<i>IDUA</i>
Mucopolysaccharidosis type V	
	<i>ARSB</i>
Mucopolysaccharidosis type VI	
	<i>MUT</i>
MUT-Related Methylmalonic Acidemia	
	<i>TMEM67</i>
Nephronophthisis 11	
	<i>NPHP3</i>
Nephronophthisis 3	
	<i>CTNS</i>
Nephropathic Cystinosis	
	<i>NPHS1</i>
Nephrotic syndrome, type 1	
	<i>SPINK5</i>
Netherton syndrome	
	<i>PPT1</i>
Neuronal Ceroid-Lipofuscinoses 1	
	<i>TPP1</i>
Neuronal Ceroid-Lipofuscinoses 2	
	<i>CLN3</i>
Neuronal Ceroid-Lipofuscinoses 3	
	<i>CLN6</i>
Neuronal Ceroid-Lipofuscinoses 4A	
	<i>CLN5</i>
Neuronal Ceroid-Lipofuscinoses 5	
	<i>CLN6</i>
Neuronal Ceroid-Lipofuscinoses 6	
	<i>MFSD8</i>
Neuronal Ceroid-Lipofuscinoses 7	
	<i>SMPD1</i>
Niemann-Pick Disease Type A	

Niemann-Pick Disease Type B	<i>SMPD1</i>
Niemann-Pick Disease Type C1	<i>NPC1</i>
Niemann-Pick Disease Type C2	<i>NPC2</i>
Oculocutaneous Albinism Type 1	<i>TYR</i>
Oculocutaneous Albinism Type 2	<i>OCA2</i>
Oculocutaneous Albinism Type 3	<i>TYRP1</i>
Oculocutaneous Albinism Type 4	<i>SLC45A2</i>
Oculocutaneous Albinism Type 6	<i>SLC24A5</i>
Oculocutaneous Albinism Type 7	<i>C10orf11</i>
Omenn syndrome	<i>RAG1, RAG2</i>
Ornithine Transcarbamylase Deficiency	<i>OTC</i>
Osteoporosis-pseudoglioma syndrome	<i>LRP5</i>
Peroxisome biogenesis disorder 1A(Zellweger)	<i>PEX1</i>
Phenylketonuria	<i>PAH</i>
Primary Carnitine Deficiency	<i>SLC22A5</i>
Progressive Familial Intrahepatic Cholestasis 2	<i>ABCB11</i>
Progressive Familial Intrahepatic Cholestasis 3	<i>ABCB4</i>
Progressive Familial Intrahepatic Cholestasis 4	<i>TJP2</i>
Propionicacidemia	<i>PCCA, PCCB</i>
Severe combined immunodeficiency, B cell-negative	<i>RAG1, RAG2</i>
Sickle Cell Anemia	<i>HBB</i>
Sitosterolemia	<i>ABCG5, ABCG8</i>
Sjögren-Larsson syndrome	<i>ALDH3A2</i>
Smith-Lemli-Opitz syndrome	<i>DHCR7</i>
Spinal Muscular Atrophy	<i>SMN1</i>

Tay-Sachs Disease	HEXA
Tyrosinemia Type 1	FAH
Wilson Disease	ATP7B
Wolfram Syndrome 1	WFS1
X-Linked Adrenal Hypoplasia Congenita	NR0B1
X-Linked Centronuclear Myopathy	MTM1
X-Linked Hypohidrotic Ectodermal Dysplasia	EDA
X-Linked Ocular Albinism	GPR143
X-Linked Severe Combined Immunodeficiency	IL2RG

