

Horizon Conditions List

CONDITION	GENE	AUTOSOMAL RECESSIVE	X-LINKED	SCREENING RECOMMENDATIONS		PANEL AVAILABILITY					
				ACOG*	ACMG	H4	H14	H27	H106	H274	H421
17-Beta Hydroxysteroid Dehydrogenase 3 Deficiency	HSD17B3	•									•
3-Beta-Hydroxysteroid Dehydrogenase Type II Deficiency	HSD3B2	•								•	•
3-Hydroxy-3-Methylglutaryl-Coenzyme A Lyase Deficiency	HMGCL	•								•	•
3-Hydroxyacyl-CoA Dehydrogenase Deficiency	HADH	•								•	•
3-Methylcrotonyl-CoA Carboxylase 1 Deficiency	MCCC1	•								•	•
3-Methylcrotonyl-CoA Carboxylase 2 Deficiency	MCCC2	•			○					•	•
3-Phosphoglycerate Dehydrogenase Deficiency	PHGDH	•							•	•	•
6-Pyruvoyl-Tetrahydropterin Synthase (PTPS) Deficiency	PTS	•								•	•
Abetalipoproteinemia	MTTP	•							•	•	•
Achondrogenesis, Type 1B	SLC26A2	•			○					•	•
Achromatopsia, CNGB3-Related	CNGB3	•			○					•	•
Acrodermatitis Enteropathica	SLC39A4	•								•	•
Action Myoclonus–Renal Failure (AMRF) Syndrome	SCARB2	•								•	•
Acute Infantile Liver Failure, TRMU-Related	TRMU	•							•	•	•
Acyl-CoA Oxidase I Deficiency	ACOX1	•								•	•
Adrenal Hypoplasia Congenita, X-Linked	NR0B1		•		○					•	•
Adrenoleukodystrophy, X-Linked	ABCD1		•		○				•	•	•
Agammaglobulinemia, X-Linked	BTK		•							•	•
Aicardi-Goutières Syndrome	SAMHD1	•								•	•
Aicardi-Goutières Syndrome, RNASEH2A-Related	RNASEH2A	•								•	•
Aicardi-Goutières Syndrome, RNASEH2B-Related	RNASEH2B	•			○					•	•
Aicardi-Goutières Syndrome, RNASEH2C-Related	RNASEH2C	•								•	•
Alpha-1 Antitrypsin Deficiency	SERPINA1	•								•	•
Alpha-Mannosidosis	MAN2B1	•								•	•
Alpha-Thalassemia	HBA1/HBA2	•			○	○	•	•	•	•	•
Alpha-Thalassemia Intellectual Disability Syndrome	ATRX		•							•	•
Alport Syndrome, COL4A3-Related	COL4A3	•							•	•	•
Alport Syndrome, COL4A4-Related	COL4A4	•								•	•
Alport Syndrome, X-Linked	COL4A5		•							•	•
Alstrom Syndrome	ALMS1	•								•	•
Amish Infantile Epilepsy Syndrome	ST3GAL5	•								•	•
Andermann Syndrome	SLC12A6	•								•	•
Argininemia	ARG1	•								•	•
Argininosuccinate Lyase Deficiency	ASL	•			○					•	•
Aromatase Deficiency	CYP19A1	•								•	•
Arts Syndrome	PRPS1		•							•	•
Asparagine Synthetase Deficiency	ASNS	•							•	•	•
Aspartylglycosaminuria	AGA	•			○					•	•
Ataxia with Vitamin E Deficiency	TTPA	•								•	•
Ataxia-Telangiectasia	ATM	•							•	•	•
Ataxia-Telangiectasia-Like Disorder 1	MRE11	•								•	•
Autism Spectrum, Epilepsy and Arthrogyposis	SLC35A3	•							•	•	•
Autoimmune Polyglandular Syndrome, Type 1	AIRE	•			○				•	•	•
Autosomal Recessive Spastic Ataxia of Charlevoix-Saguenay	SACS	•								•	•
Bardet-Biedl Syndrome, BBS1-Related	BBS1	•			○					•	•
Bardet-Biedl Syndrome, BBS2-Related	BBS2	•			○				•	•	•
Bardet-Biedl Syndrome, BBS4-Related	BBS4	•								•	•
Bardet-Biedl Syndrome, BBS7-Related	BBS7	•								•	•
Bardet-Biedl Syndrome, BBS9-Related	BBS9	•								•	•
Bardet-Biedl Syndrome, BBS10-Related	BBS10	•								•	•
Bardet-Biedl Syndrome, BBS12-Related	BBS12	•								•	•
Bardet-Biedl Syndrome, TTC8-Related	TTC8	•								•	•
Bare Lymphocyte Syndrome, CIITA-Related	CIITA	•								•	•
Barth Syndrome	TAZ		•							•	•
Bartter Syndrome, BSND-Related	BSND	•								•	•
Batten Disease, CLN3-Related	CLN3	•						•	•	•	•
Bernard-Soulier Syndrome, Type A1/A2	GP1BA	•								•	•
Bernard-Soulier Syndrome, Type C	GP9	•								•	•
Beta-Hemoglobinopathies	HBB	•			○	○	•	•	•	•	•
Beta-Ureidopropionase Deficiency	UPB1	•								•	•
Bilateral Frontoparietal Polymicrogyria	GPR56 (ADGRG1)	•								•	•
Biotinidase Deficiency	BTBD	•			○					•	•
Bloom Syndrome	BLM	•			○	○		•	•	•	•
Canavan Disease	ASPA	•			○	○		•	•	•	•
Carbamoyl Phosphate Synthetase I Deficiency	CPS1	•								•	•
Carnitine Deficiency	SLC22A5	•								•	•
Carnitine Palmitoyltransferase IA Deficiency	CPT1A	•								•	•
Carnitine Palmitoyltransferase II Deficiency	CPT2	•			○				•	•	•
Carnitine-Acylcarnitine Translocase Deficiency	SLC25A20	•								•	•
Carpenter Syndrome	RAB23	•								•	•
Cartilage-Hair Hypoplasia	RMRP	•								•	•
Cerebrotendinous Xanthomatosis	CYP27A1	•			○				•	•	•
Charcot-Marie-Tooth Disease with Deafness, X-Linked	GJB1		•							•	•
Charcot-Marie-Tooth Disease, Type 4D	NDRG1	•								•	•
Chediak-Higashi Syndrome	LYST	•								•	•
Choreoacanthocytosis	VPS13A	•							•	•	•
Choroideremia	CHM		•							•	•
Chronic Granulomatous Disease, CYBA-Related	CYBA	•							•	•	•
Chronic Granulomatous Disease, X-Linked	CYBB		•							•	•

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Ciliopathies, RPGRIP1L-Related	RPGRIP1L	•								•	•
Citrin Deficiency	SLC25A13	•								•	•
Citrullinemia, Type 1	ASS1	•						•	•	•	•
CLN10 Disease	CTSD	•								•	•
Cohen Syndrome	VPS13B	•								•	•
Combined Malonic and Methylmalonic Aciduria	ACSF3	•								•	•
Combined Oxidative Phosphorylation Deficiency 1	GFM1	•								•	•
Combined Oxidative Phosphorylation Deficiency 3	TSMF	•								•	•
Combined Pituitary Hormone Deficiency-2	PROP1	•								•	•
Congenital Adrenal Hyperplasia, 11-Beta-Hydroxylase Deficiency	CYP11B1	•								•	•
Congenital Adrenal Hyperplasia, 17-Alpha-Hydroxylase Deficiency	CYP17A1	•								•	•
Congenital Adrenal Hyperplasia, 21-Hydroxylase Deficiency	CYP21A2	•			○					•	•
Congenital Amegakaryocytic Thrombocytopenia	MPL	•						•	•	•	•
Congenital Disorder of Glycosylation, Type 1A, PMM2-Related	PMM2	•			○			•	•	•	•
Congenital Disorder of Glycosylation, Type 1B	MPI	•								•	•
Congenital Disorder of Glycosylation, Type 1C	ALG6	•								•	•
Congenital Finnish Nephrosis	NPHS1	•			○					•	•
Congenital Hyperinsulinism, KCNJ11-Related	KCNJ11	•								•	•
Congenital Insensitivity to Pain with Anhidrosis (CIPA)	NTRK1	•						•	•	•	•
Congenital Myasthenic Syndrome, CHAT-Related	CHAT	•								•	•
Congenital Myasthenic Syndrome, CHRNE-Related	CHRNE	•			○					•	•
Congenital Myasthenic Syndrome, COLQ-Related	COLQ	•								•	•
Congenital Myasthenic Syndrome, DOK7-Related	DOK7	•								•	•
Congenital Myasthenic Syndrome, RAPSN-Related	RAPSN	•						•	•	•	•
Congenital Nephrotic Syndrome, PLCE1-Related	PLCE1	•								•	•
Congenital Neutropenia, HAX1-Related	HAX1	•								•	•
Congenital Neutropenia, VPS45-Related	VPS45	•								•	•
Corneal Dystrophy and Perceptive Deafness	SLC4A11	•								•	•
Corticosterone Methyloxidase Deficiency	CYP11B2	•						•	•	•	•
Costeff Syndrome (3-Methylglutaconic Aciduria, Type 3)	OPA3	•						•	•	•	•
Cowchock Syndrome	AIFM1		•								•
CRB1-Related Retinal Dystrophies	CRB1	•								•	•
Creatine Transporter Defect (Cerebral Creatine Deficiency Syndrome 1, X-Linked)	SLC6A8		•		○					•	•
Cystic Fibrosis	CFTR	•		○	○	•	•	•	•	•	•
Cystinosis	CTNS	•								•	•
Cytochrome C Oxidase Deficiency, PET100-Related	PET100	•								•	•
D-Bifunctional Protein Deficiency	HSD17B4	•								•	•
Deafness, Autosomal Recessive 77	LOXHD1	•								•	•
Dent Disease, Type 1	CLCN5		•								•
Dent Disease, Type 2 / Lowe Syndrome	OCRL		•								•
Dihydropyrimidine Dehydrogenase Deficiency	DPYD	•									•
Duchenne/Becker Muscular Dystrophy	DMD		•		○	•	•	•	•	•	•
Dyskeratosis Congenita, DKC1-Related	DKC1		•								•
Dyskeratosis Congenita, RTEL1-Related	RTEL1	•								•	•
Dystrophic Epidermolysis Bullosa, COL7A1-Related	COL7A1	•			○					•	•
Ehlers-Danlos Syndrome, Type VIIC	ADAMTS2	•						•	•	•	•
Ellis-van Creveld Syndrome, EVC-Related	EVC	•								•	•
Ellis-van Creveld Syndrome, EVC2-Related	EVC2	•			○					•	•
Emery-Dreifuss Muscular Dystrophy 1, X-Linked	EMD		•							•	•
Enhanced S-Cone Syndrome	NR2E3	•								•	•
Epiphyseal Dysplasia, Multiple, 7 / Desbuquois Dysplasia 1	CANT1	•									•
ERCC6-Related Disorders	ERCC6	•									•
ERCC8-Related Disorders	ERCC8	•									•
Ethylmalonic Encephalopathy	ETHE1	•									•
Fabry Disease	GLA		•		○						•
Factor IX Deficiency	F9		•		○						•
Factor XI Deficiency	F11	•								•	•
Familial Dysautonomia	IKBKAP (ELP1)	•			○	○		•	•	•	•
Familial Hemophagocytic Lymphohistiocytosis, PRF1-Related	PRF1	•				○					•
Familial Hemophagocytic Lymphohistiocytosis, STX11-Related	STX11	•									•
Familial Hemophagocytic Lymphohistiocytosis, STXBP2-Related	STXBP2	•									•
Familial Hypercholesterolemia, LDLRAP1-Related	LDLRAP1	•								•	•
Familial Hypercholesterolemia, LDLR-Related	LDLR	•								•	•
Familial Hyperinsulinism, ABCC8-Related	ABCC8	•			○	○				•	•
Familial Mediterranean Fever	MEFV	•								•	•
Familial Nephrogenic Diabetes Insipidus, AQP2-Related	AQP2	•								•	•
Fanconi Anemia, Group A	FANCA	•			○					•	•
Fanconi Anemia, Group B	FANCB		•								•
Fanconi Anemia, Group C	FANCC	•			○	○		•	•	•	•
Fanconi Anemia, Group D2	FANCD2	•									•
Fanconi Anemia, Group E	FANCE	•									•
Fanconi Anemia, Group F	FANCF	•									•
Fanconi Anemia, Group G	FANCG	•			○						•
Fanconi Anemia, Group I	FANCI	•									•
Fanconi Anemia, Group L	FANCL	•									•
Farber Lipogranulomatosis	ASAH1	•									•
Fragile X Syndrome	FMR1		•		○	○	•	•	•	•	•
Fumarase Deficiency	FH	•									•
GABA-Transaminase Deficiency	ABAT	•									•

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Galactokinase Deficiency (Galactosemia, Type II)	GALK1	•								•	•
Galactosemia	GALT	•			○		•	•	•	•	•
Galactosialidosis	CTSA	•									•
Gaucher Disease	GBA	•			○		•	•	•	•	•
Gitelman Syndrome	SLC12A3	•								•	•
Glucose-6-Phosphate Dehydrogenase Deficiency	G6PD		•								•
Glutaric Acidemia, Type 1	GCDH	•								•	•
Glutaric Acidemia, Type 2A	ETFA	•								•	•
Glutaric Acidemia, Type 2B	ETFB	•									•
Glutaric Acidemia, Type 2C	ETFDH	•								•	•
Glycine Encephalopathy, AMT-Related	AMT	•								•	•
Glycine Encephalopathy, GLDC-Related	GLDC	•								•	•
Glycogen Storage Disease, Type 1A	G6PC	•			○	○		•		•	•
Glycogen Storage Disease, Type 1B	SLC37A4	•			○	○				•	•
Glycogen Storage Disease, Type 2 (Pompe Disease)	GAA	•				○			•	•	•
Glycogen Storage Disease, Type 3	AGL	•							•	•	•
Glycogen Storage Disease, Type 4	GBE1	•				○			•	•	•
Glycogen Storage Disease, Type 5 (McArdle Disease)	PYGM	•							•	•	•
Glycogen Storage Disease, Type 7	PFKM	•							•	•	•
GRACILE Syndrome	BCS1L	•								•	•
Guanidinoacetate Methyltransferase Deficiency	GAMT	•								•	•
Harlequin Ichthyosis	ABCA12	•									•
Hemochromatosis, Type 2A	HFE2 (HJV)	•								•	•
Hemochromatosis, Type 3, TFR2-Related	TFR2	•								•	•
Hepatocerebral Mitochondrial DNA Depletion Syndrome, MPV17-Related	MPV17	•								•	•
Hereditary Fructose Intolerance	ALDOB	•				○				•	•
Hereditary Spastic Paraparesis, Type 49	TECPR2	•							•	•	•
Hermansky-Pudlak Syndrome, AP3B1-Related	AP3B1	•									•
Hermansky-Pudlak Syndrome, HPS1-Related	HPS1	•				○				•	•
Hermansky-Pudlak Syndrome, HPS3-Related	HPS3	•				○			•	•	•
Hermansky-Pudlak Syndrome, HPS4-Related	HPS4	•									•
Heterotaxy Syndrome, ZIC3-Related	ZIC3	•	•								•
Holocarboxylase Synthetase Deficiency	HLCS	•								•	•
Homocystinuria due to Deficiency of MTHFR	MTHFR	•							•	•	•
Homocystinuria, CBS-Related	CBS	•				○				•	•
Homocystinuria, Type cblE	MTRR	•								•	•
Hydrolethaus Syndrome	HYLS1	•								•	•
Hyper IgM Syndrome, X-Linked	CD40LG		•								•
Hyperomithinemia-Hyperammonemia-Homocitrullinuria (HHH Syndrome)	SLC25A15	•								•	•
Hyperphosphatemic Familial Tumoral Calcinosis, GALNT3-Related	GALNT3	•									•
Hypohidrotic Ectodermal Dysplasia, X-Linked	EDA	•	•							•	•
Hypophosphatasia, ALPL-Related	ALPL	•				○				•	•
Immune Dysregulation, Polyendocrinopathy, Enteropathy, X-Linked (IPEX) Syndrome	FOXP3	•	•								•
Inclusion Body Myopathy 2	GNE	•							•	•	•
Infantile Cerebral and Cerebellar Atrophy	MED17	•							•	•	•
Infantile Nephronophthisis	INVS	•									•
Infantile Neuroaxonal Dystrophy	PLA2G6	•									•
Infantile Spinal Muscular Atrophy, X-Linked	UBA1	•	•								•
Isolated Lissencephaly Sequence / Subcortical Band Heterotopia	DCX	•	•								•
Isovaleric Acidemia	IVD	•						•	•	•	•
Johanson-Bizzard Syndrome	UBR1	•									•
Joubert Syndrome 2 / Meckel Syndrome 2	TMEM216	•			○	○			•	•	•
Joubert Syndrome, AHI1-Related	AHI1	•			○	○					•
Joubert Syndrome, ARL13B-Related	ARL13B	•			○	○					•
Joubert Syndrome, B9D1-Related	B9D1	•			○	○					•
Joubert Syndrome, B9D2-Related	B9D2	•			○	○					•
Joubert Syndrome, C2CD3-Related / Orofaciodigital Syndrome 14	C2CD3	•			○	○					•
Joubert Syndrome, CC2D2A-Related / COACH Syndrome	CC2D2A	•			○	○					•
Joubert Syndrome, CEP104-Related	CEP104	•			○	○					•
Joubert Syndrome, CEP120-Related / Short-Rib Thoracic Dysplasia 13 with or without Polydactyly	CEP120	•			○	○					•
Joubert Syndrome, CEP41-Related	CEP41	•			○	○					•
Joubert Syndrome, CPLANE1-Related / Orofaciodigital Syndrome 6	CPLANE1	•			○	○					•
Joubert Syndrome, CSPP1-Related	CSPP1	•			○	○					•
Joubert Syndrome, INPP5E-Related	INPP5E	•			○	○					•
Junctional Epidermolysis Bullosa, LAMA3-Related	LAMA3	•									•
Junctional Epidermolysis Bullosa, LAMB3-Related	LAMB3	•									•
Junctional Epidermolysis Bullosa, LAMC2-Related	LAMC2	•									•
Juvenile Retinoschisis, X-Linked	RS1	•	•			○				•	•
Ketothiolase Deficiency	ACAT1	•				○				•	•
Krabbe Disease	GALC	•								•	•
L1 Syndrome	L1CAM	•	•			○					•
Lamellar Ichthyosis, Type 1	TGM1	•								•	•
Leber Congenital Amaurosis 2	RPE65	•							•	•	•
Leber Congenital Amaurosis, IQCB1-Related / Senior-Loken Syndrome 5	IQCB1	•									•
Leber Congenital Amaurosis, Type CEP290	CEP290	•				○				•	•
Leber Congenital Amaurosis, Type LCA5	LCA5	•								•	•
Leber Congenital Amaurosis, Type RDH12	RDH12	•								•	•
Leigh Syndrome, French-Canadian Type	LRPPRC	•								•	•
Lesch-Nyhan Syndrome	HPRT1		•								•

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Lethal Congenital Contracture Syndrome 1	GLE1	•								•	•
Leukoencephalopathy with Vanishing White Matter	EIF2B5	•								•	•
Limb-Girdle Muscular Dystrophy, Type 2A	CAPN3	•								•	•
Limb-Girdle Muscular Dystrophy, Type 2B	DYSF	•						•		•	•
Limb-Girdle Muscular Dystrophy, Type 2C	SGCG	•								•	•
Limb-Girdle Muscular Dystrophy, Type 2D	SGCA	•								•	•
Limb-Girdle Muscular Dystrophy, Type 2E	SGCB	•								•	•
Limb-Girdle Muscular Dystrophy, Type 2F	SGCD	•									•
Limb-Girdle Muscular Dystrophy, Type 2I	FKRP	•				○				•	•
Lipoamide Dehydrogenase Deficiency (Dihydroipoamide Dehydrogenase Deficiency)	DLD	•				○			•	•	•
Lipoid Adrenal Hyperplasia	STAR	•								•	•
Lipoprotein Lipase Deficiency	LPL	•								•	•
Long Chain 3-Hydroxyacyl-CoA Dehydrogenase Deficiency	HADHA	•								•	•
Lysinuric Protein Intolerance	SLC7A7	•								•	•
Malonyl-CoA Decarboxylase Deficiency	MLYCD	•								•	•
Maple Syrup Urine Disease, Type 1A	BCKDHA	•			○					•	•
Maple Syrup Urine Disease, Type 1B	BCKDHB	•			○	○			•	•	•
Maple Syrup Urine Disease, Type 2	DBT	•			○						•
McKusick-Kaufman Syndrome	MKKS	•									•
Meckel Syndrome 7 / Nephronophthisis 3	NPHP3	•									•
Meckel-Gruber Syndrome, Type 1	MKS1	•								•	•
Medium Chain Acyl-CoA Dehydrogenase Deficiency	ACADM	•			○	○	•	•	•	•	•
MEDNIK Syndrome	AP1S1	•									•
Megalencephalic Leukoencephalopathy with Subcortical Cysts	MLC1	•							•	•	•
Menkes Syndrome	ATP7A		•								•
Merosin-Deficient Muscular Dystrophy	LAMA2	•									•
Metabolic Encephalopathy and Arrhythmias, TANGO2-Related	TANGO2	•									•
Metachromatic Leukodystrophy, ARSA-Related	ARSA	•							•	•	•
Metachromatic Leukodystrophy, PSAP-Related	PSAP	•								•	•
Methylmalonic Aciduria and Homocystinuria, Type cb1C	MMACHC	•						•	•	•	•
Methylmalonic Aciduria and Homocystinuria, Type cb1D	MMADHC	•								•	•
Methylmalonic Aciduria, MMAA-Related	MMAA	•									•
Methylmalonic Aciduria, MMAB-Related	MMAB	•									•
Methylmalonic Aciduria, Type mut(0)	MUT (MMUT)	•				○					•
Microphthalmia/Anophthalmia, VSX2-Related	VSX2	•							•	•	•
Mitochondrial Complex 1 Deficiency, ACAD9-Related	ACAD9	•								•	•
Mitochondrial Complex 1 Deficiency, NDUFAF5-Related	NDUFAF5	•							•	•	•
Mitochondrial Complex 1 Deficiency, NDUF56-Related	NDUF56	•							•	•	•
Mitochondrial Complex I Deficiency, Nuclear Type 1	NDUF54	•									•
Mitochondrial Complex I Deficiency, Nuclear Type 17	NDUFAF6	•									•
Mitochondrial Myopathy and Sideroblastic Anemia (MLASA1)	PUS1	•							•	•	•
Mitochondrial Trifunctional Protein Deficiency, HADHB-Related	HADHB	•									•
Molybdenum Cofactor Deficiency, Type A	MOCS1	•									•
Mucopolidosis III/IIIA	GNPTAB	•									•
Mucopolidosis III gamma	GNPTG	•									•
Mucopolidosis, Type IV	MCOLN1	•			○	○			•	•	•
Mucopolysaccharidosis, Type I (Hurler Syndrome)	IDUA	•				○			•	•	•
Mucopolysaccharidosis, Type II (Hunter Syndrome)	IDS	•	•								•
Mucopolysaccharidosis, Type IIIA (Sanfilippo A)	SGSH	•									•
Mucopolysaccharidosis, Type IIIB (Sanfilippo B)	NAGLU	•									•
Mucopolysaccharidosis, Type IIIC (Sanfilippo C)	HGSNAT	•									•
Mucopolysaccharidosis, Type IIID (Sanfilippo D)	GNS	•									•
Mucopolysaccharidosis, Type IVA (Morquio Syndrome)	GALNS	•									•
Mucopolysaccharidosis, Type IVB / GM1 Gangliosidosis	GLB1	•									•
Mucopolysaccharidosis, Type IX	HYAL1	•									•
Mucopolysaccharidosis, Type VI (Maroteaux-Lamy)	ARSB	•									•
Mucopolysaccharidosis, Type VII	GUSB	•									•
Mulibrey Nanism	TRIM37	•									•
Multiple Pterygium Syndrome, CHRNG-Related / Escobar Syndrome	CHRNG	•									•
Multiple Sulfatase Deficiency	SUMF1	•							•	•	•
Muscle-Eye-Brain Disease, POMGNT1-Related	POMGNT1	•									•
Myoneurogastrintestinal Encephalopathy (MNGIE)	TYMP	•							•	•	•
Myotubular Myopathy, X-Linked	MTM1		•								•
N-acetylglutamate Synthase Deficiency	NAGS	•									•
Nemaline Myopathy, NEB-Related	NEB	•				○			•	•	•
Nephronophthisis 1	NPHP1	•									•
Neuronal Ceroid Lipofuscinosis, CLN5-Related	CLN5	•									•
Neuronal Ceroid Lipofuscinosis, CLN6-Related	CLN6	•									•
Neuronal Ceroid Lipofuscinosis, CLN8-Related	CLN8	•									•
Neuronal Ceroid Lipofuscinosis, MFSD8-Related	MFSD8	•									•
Neuronal Ceroid Lipofuscinosis, PPT1-Related	PPT1	•									•
Neuronal Ceroid Lipofuscinosis, TPP1-Related	TPP1	•									•
Niemann-Pick Disease, Type C1/D	NPC1	•			○						•
Niemann-Pick Disease, Type C2	NPC2	•			○						•
Niemann-Pick Disease, Types A/B	SMPD1	•			○	○		•	•	•	•
Nijmegen Breakage Syndrome	NBN	•									•
Nonsyndromic Hearing Loss, GJB2-Related	GJB2	•							•	•	•
Nonsyndromic Hearing Loss, MYO15A-Related	MYO15A	•									•
Odonto-Onycho-Dermal Dysplasia / Schopf-Schulz-Passarge Syndrome	WNT10A	•									•

CONDITION	GENE	AUTOSOMAL RECESSIVE	X-LINKED	SCREENING RECOMMENDATIONS		PANEL AVAILABILITY					
				ACOG*	ACMG	H4	H14	H27	H106	H274	H421
Omenn Syndrome, RAG2-Related	RAG2	•							•	•	•
Ornithine Aminotransferase Deficiency	OAT	•							•	•	•
Ornithine Transcarbamylase Deficiency	OTC		•		○					•	•
Osteopetrosis, Infantile Malignant, TCIRG1-Related	TCIRG1	•							•	•	•
Pendred Syndrome	SLC26A4	•			○					•	•
Periman Syndrome	DIS3L2	•									•
Phenylketonuria	PAH	•			○				•	•	•
Pituitary Hormone Deficiency, Combined 3	LHX3	•								•	•
POLG-Related Disorders	POLG	•			○						•
Polycystic Kidney Disease, Autosomal Recessive	PKHD1	•			○		•	•	•	•	•
Pontocerebellar Hypoplasia, EXOSC3-Related	EXOSC3	•									•
Pontocerebellar Hypoplasia, RARS2-Related	RARS2	•			○				•	•	•
Pontocerebellar Hypoplasia, TSEN2-Related	TSEN2	•									•
Pontocerebellar Hypoplasia, TSEN54-Related	TSEN54	•									•
Pontocerebellar Hypoplasia, Type 1A	VRK1	•							•	•	•
Pontocerebellar Hypoplasia, Type 2D	SEPSECS	•							•	•	•
Pontocerebellar Hypoplasia, VPS53-Related	VPS53	•									•
Primary Ciliary Dyskinesia, DNAH5-Related	DNAH5	•							•	•	•
Primary Ciliary Dyskinesia, DNAI1-Related	DNAI1	•							•	•	•
Primary Ciliary Dyskinesia, DNAI2-Related	DNAI2	•							•	•	•
Primary Congenital Glaucoma / Peters Anomaly	CYP1B1	•									•
Primary Hyperoxaluria, Type 1	AGXT	•			○						•
Primary Hyperoxaluria, Type 2	GRHPR	•								•	•
Primary Hyperoxaluria, Type 3	HOGA1	•							•	•	•
Progressive Familial Intrahepatic Cholestasis, Type 1 (PFIC1)	ATP8B1	•									•
Progressive Familial Intrahepatic Cholestasis, Type 2 (PFIC2)	ABCB11	•								•	•
Progressive Familial Intrahepatic Cholestasis, Type 4 (PFIC4)	TJP2	•									•
Prolidase Deficiency	PEPD	•									•
Propionic Acidemia, PCCA-Related	PCCA	•								•	•
Propionic Acidemia, PCCB-Related	PCCB	•								•	•
Pseudocholesterase Deficiency	BCHE	•									•
Pseudoxanthoma Elasticum	ABCC6	•									•
Pycnodysostosis	CTSK	•								•	•
Pyridoxine-Dependent Epilepsy	ALDH7A1	•									•
Pyruvate Carboxylase Deficiency	PC	•									•
Pyruvate Dehydrogenase Deficiency, PDHB-Related	PDHB	•								•	•
Pyruvate Dehydrogenase Deficiency, X-Linked	PDHA1		•							•	•
Refsum Disease, PHYH-Related	PHYH	•									•
Renal Tubular Acidosis and Deafness, ATP6V1B1-Related	ATP6V1B1	•							•	•	•
Renal Tubular Acidosis, Proximal, with Ocular Abnormalities and Mental Retardation	SLC4A4	•									•
Retinitis Pigmentosa 25	EYS	•							•	•	•
Retinitis Pigmentosa 26	CERKL	•							•	•	•
Retinitis Pigmentosa 28	FAM161A	•							•	•	•
Retinitis Pigmentosa 59	DHDDS	•			○				•	•	•
Rhizomelic Chondrodysplasia Punctata, Type 1	PEX7	•						•	•	•	•
Rhizomelic Chondrodysplasia Punctata, Type 2	GNPAT	•									•
Rhizomelic Chondrodysplasia Punctata, Type 3	AGPS	•								•	•
Roberts Syndrome	ESCO2	•								•	•
Salla Disease	SLC17A5	•								•	•
Sandhoff Disease	HEXB	•								•	•
Schimke Immunoosseous Dysplasia	SMARCAL1	•								•	•
Segawa Syndrome, TH-Related	TH	•								•	•
Senior-Loken Syndrome 4 / Nephronophthisis 4	NPHP4	•									•
Severe Combined Immunodeficiency, ADA-Related	ADA	•								•	•
Severe Combined Immunodeficiency, RAG1-Related	RAG1	•								•	•
Severe Combined Immunodeficiency, Type Athabaskan	DCLRE1C	•								•	•
Severe Combined Immunodeficiency, X-Linked	IL2RG		•							•	•
Shwachman-Diamond Syndrome, SBDS-Related	SBDS	•									•
Sialidosis	NEU1	•									•
Sjögren-Larsson Syndrome	ALDH3A2	•								•	•
Smith-Lemli-Opitz Syndrome	DHCR7	•			○	○		•	•	•	•
Spastic Paraplegia, Type 15	ZFYVE26	•							•	•	•
Spastic Tetraplegia, Thin Corpus Callosum, and Progressive Microcephaly (SPATCCM)	SLC1A4	•									•
Spinal Muscular Atrophy	SMN1	•			○	○	•	•	•	•	•
Spinocerebellar Ataxia, Autosomal Recessive 12	WWOX	•									•
Spondylothoracic Dysostosis, MESP2-Related	MESP2	•								•	•
Steel Syndrome	COL27A1	•									•
Steroid-Resistant Nephrotic Syndrome	NPHS2	•								•	•
Stuve-Wiedemann Syndrome	LIFR	•								•	•
Tay-Sachs Disease	HEXA	•			○	○	•	•	•	•	•
Trichohepatoenteric Syndrome, TTC37-Related	TTC37	•									•
Trichothiodystrophy 1 / Xeroderma Pigmentosum, Group D	ERCC2	•								•	•
Triple A Syndrome	AAAS	•									•
Tyrosinemia, Type 1	FAH	•							•	•	•
Tyrosinemia, Type 2	TAT	•									•
Usher Syndrome, Type 1B	MYO7A	•								•	•
Usher Syndrome, Type 1C	USH1C	•								•	•
Usher Syndrome, Type 1D	CDH23	•								•	•
Usher Syndrome, Type 1F	PCDH15	•			○	○			•	•	•

CONDITION	GENE	AUTOSOMAL RECESSIVE	X-LINKED	SCREENING RECOMMENDATIONS		PANEL AVAILABILITY					
				ACOG*	ACMG	H4	H14	H27	H106	H274	H421
Usher Syndrome, Type 1J / Deafness, Autosomal Recessive, 48	<i>CIB2</i>	•									•
Usher Syndrome, Type 2A	<i>USH2A</i>	•			○				•	•	•
Usher Syndrome, Type 2C	<i>ADGRV1</i>	•									•
Usher Syndrome, Type 3	<i>CLRN1 (USH3)</i>	•		○	○				•	•	•
Very Long-Chain Acyl-CoA Dehydrogenase Deficiency	<i>ACADVL</i>	•			○					•	•
Vitamin D Dependent Rickets, Type 1A	<i>CYP27B1</i>	•			○						•
Walker-Warburg Syndrome, FKTN-Related	<i>FKTN</i>	•			○				•	•	•
Walker-Warburg Syndrome, ISPD-Related	<i>ISPD (CRPPA)</i>	•									•
Walker-Warburg Syndrome, LARGE1-Related	<i>LARGE1</i>	•									•
Walker-Warburg Syndrome, POMT1-Related	<i>POMT1</i>	•									•
Walker-Warburg Syndrome, POMT2-Related	<i>POMT2</i>	•									•
Werner Syndrome	<i>WRN</i>	•									•
Wilson Disease	<i>ATP7B</i>	•			○				•	•	•
Wiskott-Aldrich Syndrome	<i>WAS</i>		•								•
Wolcott-Rallison Syndrome	<i>EIF2AK3</i>	•									•
Wolman Disease	<i>LIPA</i>	•							•	•	•
Xeroderma Pigmentosum, Group A	<i>XPA</i>	•									•
Xeroderma Pigmentosum, Group C	<i>XPC</i>	•			○						•
X-Linked Chondrodysplasia Punctata 1	<i>ARSE (ARSL)</i>		•								•
X-Linked Lissencephaly with Abnormal Genitalia	<i>ARX</i>		•		○						•
Zellweger Spectrum Disorders, PEX1-Related	<i>PEX1</i>	•						•	•	•	•
Zellweger Spectrum Disorders, PEX2-Related	<i>PEX2</i>	•							•	•	•
Zellweger Spectrum Disorders, PEX6-Related	<i>PEX6</i>	•							•	•	•
Zellweger Spectrum Disorders, PEX10-Related	<i>PEX10</i>	•								•	•
Zellweger Spectrum Disorders, PEX12-Related	<i>PEX12</i>	•									•
Zellweger Spectrum Disorders, PEX26-Related	<i>PEX26</i>	•									•

* Note that ACOG screening recommendations listed here include diseases in ACOG Committee Opinion 690 example expanded carrier screening panel, as well as the diseases listed in ACOG Committee Opinion 691.

1. American College of Obstetricians and Gynecologists, Committee Opinion # 690, March 2017.
2. American College of Obstetricians and Gynecologists, Committee Opinion # 691, March 2017.
3. Gregg et al. Screening for autosomal recessive and X-linked conditions during pregnancy and preconception: a practice resource of the American College of Medical Genetics and Genomics (ACMG), July 2021.