Breed-Relevant Conditions Tested

Nevaeh did not have the variants that we tested for, that are relevant to her breed:

- **Progressive Retinal Atrophy, prcd (PRCD Exon 1)**
- **Golden Retriever Progressive Retinal Atrophy 1, GR-PRA1 (SLC4A3)**
- **Golden Retriever Progressive Retinal Atrophy 2, GR-PRA2 (TTC8)**
- **Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 Deletion, Golden Retriever Variant)**
- **Degenerative Myelopathy, DM (SOD1A)**
- **Muscular Dystrophy (DMD, Golden Retriever Variant)**
- **Congenital Myasthenic Syndrome, CMS (COLQ, Golden Retriever Variant)**
- **Dystrophic Epidermolysis Bullosa (COL7A1, Golden Retriever Variant)**
- **Osteogenesis Imperfecta, Brittle Bone Disease (COL1A1, Golden Retriever Variant)**
- **Retina Dysplasia and/or Optic Nerve Hypoplasia (SIX6 Exon 1, Golden Retriever Variant)**

Additional Conditions Tested

Nevaeh did not have the variants that we tested for, in the following conditions that the potential effect on dogs with Nevaeh's breed may not yet be known.

- **MDR1 Drug Sensitivity (ABCB1)**
- **P2Y12 Receptor Platelet Disorder (P2Y12)**
- **Factor IX Deficiency, Hemophilia B (F9 Exon 7, Terrier Variant)**
- **Factor IX Deficiency, Hemophilia B (F9 Exon 7, Rhodesian Ridgeback Variant)**
- **Factor VII Deficiency (F7 Exon 5)**
- **Factor VIII Deficiency, Hemophilia A (F8 Exon 10, Boxer Variant)**
- **Factor VIII Deficiency, Hemophilia A (F8 Exon 11, German Shepherd Variant 1)**
- **Factor VIII Deficiency, Hemophilia A (F8 Exon 1, German Shepherd Variant 2)**
- **Thrombopathia (RASGRP1 Exon 5, Basset Hound Variant)**
- **Thrombopathia (RASGRP1 Exon 8, Landseer Variant)**
- **Thrombopathia (RASGRP1 Exon 5, American Eskimo Dog Variant)**
- **Von Willebrand Disease Type III, Type III vWD (VWF Exon 4, Terrier Variant)**
- **Von Willebrand Disease Type III, Type III vWD (VWF Exon 7, Shetland Sheepdog Variant)**
- **Von Willebrand Disease Type I, Type I vWD (VWF)**
- **Von Willebrand Disease Type II, Type II vWD (VWF, Pointer Variant)**
- **Canine Leukocyte Adhesion Deficiency Type I, CLAD I (ITGB2, Setter Variant)**
- **Canine Leukocyte Adhesion Deficiency Type III, CLAD III (FERMT3, German Shepherd Variant)**
- **Congenital Macrothrombocytopenia (TUBB1 Exon 1, Cairn and Norfolk Terrier Variant)**
- **Canine Elliptocytosis (SPTB Exon 30)**
- **Glanzmann's Thrombasthenia Type I (ITGA2B Exon 13, Great Pyrenees Variant)**

Additional Conditions Tested

- Glanzmann's Thrombasthenia Type I (ITGA2B Exon 12, Otterhound Variant)
- May-Hegglin Anomaly (MYH9)
- Prekallikrein Deficiency (KLKB1 Exon 8)
- Pyruvate Kinase Deficiency (PKLR Exon 5, Basenji Variant)
- Pyruvate Kinase Deficiency (PKLR Exon 7, Labrador Retriever Variant)
- Pyruvate Kinase Deficiency (PKLR Exon 7, Pug Variant)
- Pyruvate Kinase Deficiency (PKLR Exon 7, Beagle Variant)
- Pyruvate Kinase Deficiency (PKLR Exon 10, Terrier Variant)
- Trapped Neutrophil Syndrome, TNS (VPS13B)
- Ligneous Membranitis, LM (PLG)
- Platelet Factor X Receptor Deficiency, Scott Syndrome (TMEM16F)
- Methemoglobinemia (CYB5R3)
- Bernard-Soulier Syndrome, BSS (GP9, Cocker Spaniel Variant)
- Congenital Hypothyroidism (TPO, Tenterfield Terrier Variant)
- Congenital Hypothyroidism (TPO, Rat, Toy, Hairless Terrier Variant)
- Congenital Dyshormonogenic Hypothyroidism with Goiter (SLC5A5, Shih Tzu Variant)
- Complement 3 Deficiency, C3 Deficiency (C3)
- Severe Combined Immunodeficiency, SCID (PRKDC, Terrier Variant)
- Severe Combined Immunodeficiency, SCID (RAG1, Wetterhoun Variant)
- X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG Exon 1, Basset Hound Variant)

Additional Conditions Tested

- X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG, Corgi Variant)
- Progressive Retinal Atrophy, rcd1 (PDE6B Exon 21, Irish Setter Variant)
- Progressive Retinal Atrophy, rcd3 (PDE6A)
- Progressive Retinal Atrophy, CNGA (CNGA1 Exon 9)
- Progressive Retinal Atrophy, PRA1 (CNGB1)
- Progressive Retinal Atrophy (SAG)
- Progressive Retinal Atrophy, crd1 (PDE6B, American Staffordshire Terrier Variant)
- Progressive Retinal Atrophy, crd4/cord1 (RPGRIP1)
- X-Linked Progressive Retinal Atrophy 1, XL-PRA1 (RPGR)
- Progressive Retinal Atrophy, PRA3 (FAM161A)
- Collie Eye Anomaly, Choroidal Hypoplasia, CEA (NHEJ1)
- Day Blindness, Cone Degeneration, Achromatopsia (CNGB3 Deletion, Alaskan Malamute Variant)
- Day Blindness, Cone Degeneration, Achromatopsia (CNGB3 Exon 6, German Shorthaired Pointer Variant)
- Achromatopsia (CNGA3 Exon 7, German Shepherd Variant)
- Achromatopsia (CNGA3 Exon 7, Labrador Retriever Variant)
- Autosomal Dominant Progressive Retinal Atrophy (RHO)
- Canine Multifocal Retinopathy, cmr1 (BEST1 Exon 2)
- Canine Multifocal Retinopathy, cmr2 (BEST1 Exon 5, Coton de Tulear Variant)
- Canine Multifocal Retinopathy, cmr3 (BEST1 Exon 10 Deletion, Finnish and Swedish Lapphund, Lapponian Herder Variant)
- Primary Open Angle Glaucoma (ADAMTS10 Exon 9, Norwegian Elkhound Variant)

Additional Conditions Tested

- **Primary Open Angle Glaucoma (ADAMTS10 Exon 17, Beagle Variant)**
- **Primary Open Angle Glaucoma (ADAMTS17 Exon 11, Basset Fauve de Bretagne Variant)**
- **Primary Open Angle Glaucoma and Primary Lens Luxation (ADAMTS17 Exon 2, Chinese Shar-Pei Variant)**
- **Goniodysgenesis and Glaucoma, Pectinate Ligament Dysplasia, PLD (OLFM3)**
- **Hereditary Cataracts, Early-Onset Cataracts, Juvenile Cataracts (HSF4 Exon 9, Australian Shepherd Variant)**
- **Primary Lens Luxation (ADAMTS17)**
- **Congenital Stationary Night Blindness (RPE65, Briard Variant)**
- **Congenital Stationary Night Blindness (LRIT3, Beagle Variant)**
- **Macular Corneal Dystrophy, MCD (CHST6)**
- **2,8-Dihydroxyadenine Urolithiasis, 2,8-DHA Urolithiasis (APRT)**
- **Cystinuria Type I-A (SLC3A1, Newfoundland Variant)**
- **Cystinuria Type II-A (SLC3A1, Australian Cattle Dog Variant)**
- **Cystinuria Type II-B (SLC7A9, Miniature Pinscher Variant)**
- **Hyperuricosuria and Hyperuricemia or Urolithiasis, HUU (SLC2A9)**
- **Polycystic Kidney Disease, PKD (PKD1)**
- **Primary Hyperoxaluria (AGXT)**
- **Protein Losing Nephropathy, PLN (NPHS1)**
- **X-Linked Hereditary Nephropathy, XLHN (COL4A5 Exon 35, Samoyed Variant 2)**
- **Autosomal Recessive Hereditary Nephropathy, Familial Nephropathy, ARHN (COL4A4 Exon 30, English Springer Spaniel Variant)**
- **Autosomal Recessive Hereditary Nephropathy, Familial Nephropathy, ARHN (COL4A4 Exon 3, Cocker Spaniel Variant)**

Additional Conditions Tested

- Fanconi Syndrome (FAN1, Basenji Variant)
- Primary Ciliary Dyskinesia, PCD (CCDC39 Exon 3, Old English Sheepdog Variant)
- Primary Ciliary Dyskinesia, PCD (NME5, Alaskan Malamute Variant)
- Congenital Keratoconjunctivitis Sicca and Ichthyosiform Dermatosis, Dry Eye Curly Coat Syndrome, CKCSID (FAM83H Exon 5)
- X-linked Ectodermal Dysplasia, Anhidrotic Ectodermal Dysplasia, XHED (EDA Intron 8)
- Renal Cystadenocarcinoma and Nodular Dermatofibrosis, RCND (FLCN Exon 7)
- Canine Fucosidosis (FUCA1)
- Glycogen Storage Disease Type II, Pompe's Disease, GSD II (GAA, Finnish and Swedish Lapphund, Lapponian Herder Variant)
- Glycogen Storage Disease Type IA, Von Gierke Disease, GSD IA (G6PC, Maltese Variant)
- Glycogen Storage Disease Type IIIA, GSD IIIA (AGL, Curly Coated Retriever Variant)
- Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, Dachshund Variant)
- Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, New Zealand Huntaway Variant)
- Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 5, Terrier Brasileiro Variant)
- Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 3, German Shepherd Variant)
- Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Whippet and English Springer Spaniel Variant)
- Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Wachtelhund Variant)
- Lagotto Storage Disease (ATG4D)
- Neuronal Ceroid Lipofuscinosis 1, NCL 1 (PPT1 Exon 8, Dachshund Variant 1)
- Neuronal Ceroid Lipofuscinosis 2, NCL 2 (TPP1 Exon 4, Dachshund Variant 2)
- Neuronal Ceroid Lipofuscinosis, Cerebellar Ataxia, NCL4A (ARSG Exon 2, American Staffordshire Terrier Variant)

Additional Conditions Tested

- Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 SNP, Border Collie Variant)
- Neuronal Ceroid Lipofuscinosis 6, NCL 6 (CLN6 Exon 7, Australian Shepherd Variant)
- Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Exon 2, English Setter Variant)
- Neuronal Ceroid Lipofuscinosis 7, NCL 7 (MFSD8, Chihuahua and Chinese Crested Variant)
- Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8, Australian Shepherd Variant)
- Neuronal Ceroid Lipofuscinosis 10, NCL 10 (CTSD Exon 5, American Bulldog Variant)
- Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Insertion, Saluki Variant)
- Late-Onset Neuronal Ceroid Lipofuscinosis, NCL 12 (ATP13A2, Australian Cattle Dog Variant)
- GM1 Gangliosidosis (GLB1 Exon 15, Shiba Inu Variant)
- GM1 Gangliosidosis (GLB1 Exon 15, Alaskan Husky Variant)
- GM1 Gangliosidosis (GLB1 Exon 2, Portuguese Water Dog Variant)
- GM2 Gangliosidosis (HEXB, Poodle Variant)
- GM2 Gangliosidosis (HEXA, Japanese Chin Variant)
- Globoid Cell Leukodystrophy, Krabbe disease (GALC Exon 5, Terrier Variant)
- Autosomal Recessive Amelogenesis Imperfecta, Familial Enamel Hypoplasia (ENAM Deletion, Italian Greyhound Variant)
- Autosomal Recessive Amelogenesis Imperfecta, Familial Enamel Hypoplasia (ENAM SNP, Parson Russell Terrier Variant)
- Persistent Mullerian Duct Syndrome, PMDS (AMHR2)
- Deafness and Vestibular Syndrome of Dobermans, DVDob, DINGS (MYO7A)
- Shar-Pei Autoinflammatory Disease, SPAID, Shar-Pei Fever (MTBP)
- Neonatal Interstitial Lung Disease (LAMP3)

Additional Conditions Tested

- **Recurrent Inflammatory Pulmonary Disease, RIPD (AKNA, Rough Collie Variant)**
- **Alaskan Husky Encephalopathy, Subacute Necrotizing Encephalomyelopathy (SLC19A3)**
- **Alexander Disease (GFAP)**
- **Cerebellar Abiotrophy, Neonatal Cerebellar Cortical Degeneration, NCCD (SPTBN2, Beagle Variant)**
- **Cerebellar Ataxia, Progressive Early-Onset Cerebellar Ataxia (SEL1L, Finnish Hound Variant)**
- **Cerebellar Hypoplasia (VLDLR, Eurasier Variant)**
- **Spinocerebellar Ataxia, Late-Onset Ataxia, LoSCA (CAPN1)**
- **Spinocerebellar Ataxia with Myokymia and/or Seizures (KCNJ10)**
- **Hereditary Ataxia, Cerebellar Degeneration (RAB24, Old English Sheepdog and Gordon Setter Variant)**
- **Benign Familial Juvenile Epilepsy, Remitting Focal Epilepsy (LGI2)**
- **Fetal-Onset Neonatal Neuroaxonal Dystrophy (MFN2, Giant Schnauzer Variant)**
- **Hypomyelination and Tremors (FNIP2, Weimaraner Variant)**
- **Shaking Puppy Syndrome, X-linked Generalized Tremor Syndrome (PLP1, English Springer Spaniel Variant)**
- **Neuroaxonal Dystrophy, NAD (TECPR2, Spanish Water Dog Variant)**
- **Neuroaxonal Dystrophy, NAD (VPS11, Rottweiler Variant)**
- **L-2-Hydroxyglutaricaciduria, L2HGA (L2HGDH, Staffordshire Bull Terrier Variant)**
- **Neonatal Encephalopathy with Seizures, NEWS (ATF2)**
- **Alaskan Malamute Polyneuropathy, AMPN (NDRG1 SNP)**
- **Narcolepsy (HCRTR2 Intron 4, Doberman Pinscher Variant)**
- **Narcolepsy (HCRTR2 Intron 6, Labrador Retriever Variant)**