Patient Report

Clinic Information

Clinic Name
Animal Care Clinic, SLO

Patient Information

Pet Name
Porter McGovern

Gender
Male

Date of Birth
04/04/2022

Pet Owner Name
Sydney McGovern

Species
dog

Breed Information

Herding Group

Highly likely Australian Shepherd
Likely Border Collie

Sporting Group

Likely Labrador Retriever

Clear

What does "clear" mean?

The dog is negative (i.e., has zero copies) for all of the remaining markers for which we tested that are known to be associated with a particular disease. This result, however, should not rule out the need to seek a professional diagnosis by a veterinarian, should the dog develop symptoms connected to this disease. It is still possible that the dog is positive for markers that are yet to be discovered that could be associated with a disease. In some cases, environmental factors could contribute to a dog's potential to develop the disease.

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Disease	Gene	Mutation	Status
Cardiomyopathy, YARS2-related	YARS2	C>T	0 copy
Dilated cardiomyopathy, RBM20-related	RBM20	delGAA..	0 copy
C3 deficiency	C3	delC	0 copy
Ciliary dyskinesia, CCDC39-related	CCDC39	G>A	0 copy
Ciliary dyskinesia, NME5-related	NME5	delTTT..	0 copy
Gangliosidosis, GM1	GLB1	delC	0 copy
Gangliosidosis, GM1	GLB1	TCC..>TCC..	0 copy
Gangliosidosis, GM1	GLB1	G>A	0 copy
Gangliosidosis, GM2, type I	HEXA	C>T	0 copy
Gangliosidosis, GM2, type II	HEXB	delCCT	0 copy

Gangliosidosis, GM2, type II	HEXB	delG	0 copy
Glycogen storage disease, type II	GAA	C>T	0 copy
Glycogen storage disease, type IIIA	AGL	delT	0 copy
Hypocatalasia (Acatalasemia)	CAT	C>T	0 copy
Hypophosphatasia	ALPL	A>C	0 copy
Krabbe disease	GALC	ins20+..	0 copy
Krabbe disease	GALC	T>G	0 copy
Leukocyte adhesion deficiency, type I	ITGB2	C>G	0 copy
Leukodystrophy, TSEN54-related	TSEN54	C>T	0 copy
Menkes disease	ATP7A	C>T	0 copy
Mucopolysaccharidosis IIIA	SGSH	insA	0 copy

Mucopolysaccharidosis IIIA	SGSH	delCCA	0 copy
Mucopolysaccharidosis VI	ARSB	C>T	0 copy
Mucopolysaccharidosis VI	ARSB	G>A	0 copy
Mucopolysaccharidosis VII	GUSB	C>T	0 copy
Mucopolysaccharidosis VII	GUSB	G>A	0 copy
Neuronal ceroid lipofuscinosis, PPT1-related	PPT1	insC	0 copy
Neuronal ceroid lipofuscinosis, CTSD-related	CTSD	C>T	0 copy
Neuronal ceroid lipofuscinosis, ATP13A2-related	ATP13A2	delG	0 copy
Neuronal ceroid lipofuscinosis, ATP13A2-related	ATP13A2	C>T	0 copy
Neuronal ceroid lipofuscinosis, TPP1-related	TPP1	delG	0 copy
Neuronal ceroid lipofuscinosis, ARSG-related	ARSG	G>A	0 copy

Neuronal ceroid lipofuscinosis, CLN6-related	CLN6	A>G	0 copy
Neuronal ceroid lipofuscinosis, CLN8-related	CLN8	G>A	0 copy
Neuronal ceroid lipofuscinosis, CLN8-related	CLN8	T>C	0 copy
Pyruvate dehydrogenase deficiency	PDP1	C>T	0 copy
Erythrocytic pyruvate kinase (PK) deficiency	HCN3	ACC..>ACC..	0 copy
Erythrocytic pyruvate kinase (PK) deficiency	HCN3	T>C	0 copy
Erythrocytic pyruvate kinase (PK) deficiency	HCN3	C>T	0 copy
Erythrocytic pyruvate kinase (PK) deficiency	HCN3	G>A	0 copy
Erythrocytic pyruvate kinase (PK) deficiency	PKLR	delCC	0 copy
Severe combined immunodeficiency disease, X-linked	IL2RG	delGAG..	0 copy
Severe combined immunodeficiency disease, X-linked	IL2RG	C>CC	0 copy

Severe combined immunodeficiency disease, DNA-PKcs-related	PRKDC	C>A	0 copy
Severe combined immunodeficiency disease, RAG1-related	RAG1	C>A	0 copy
Succinic semialdehyde dehydrogenase deficiency	ALDH5A1	G>A	0 copy
Trapped Neutrophil Syndrome	VPS13B	delGTT..	0 copy
Beta-mannosidosis	MANBA	T>A	0 copy
Dwarfism, GH1-related	GH1	delTCT..	0 copy
Congenital hypothyroidism, TPO-related	TPO	C>T	0 copy
Congenital hypothyroidism, TPO-related	TPO	T>C	0 copy
Dwarfism, LHX3-related	POU1F1	C>A	0 copy
Dwarfism, LHX3-related	LHX3	insACA	0 copy
Familial Adenomatous Polyposis	APC	TT>AA	0 copy

Gallbladder mucoceles	ABCB4	insG	0 copy
Imerslund-Gräsbeck syndrome, CUBN-related	CUBN	delC	0 copy
Lundehund syndrome	LEPREL1	C>G	0 copy
Wilson's disease, ATP7B-related	ATP7B	G>A	0 copy
Bleeding disorder, P2RY12-related	P2RY12	delGAG	0 copy
Elliptocytosis	SPTB	G>A	0 copy
Factor VII deficiency	F7	G>A	0 copy
Factor XI deficiency	F11	ins20+..	0 copy
Haemophilia A	F8	ins20+..	0 copy
Haemophilia A	F8	G>C	0 copy
Haemophilia A	F8	C>T	0 copy

Haemophilia A	F8	G>A	0 copy
Haemophilia A	F8	C>T	0 copy
Haemophilia B	F9	GCA..>T	0 copy
Haemophilia B	F9	G>A	0 copy
Haemophilia B	F9	delC	0 copy
Haemophilia B	F9	G>A	0 copy
Haemophilia B	F9	AA>AAA	0 copy
Haemophilia B	F9	ins20+..	0 copy
Ligneous membranitis	PLG	A>T	0 copy
May-Hegglin anomaly	MYH9	G>A	0 copy
Methemoglobinaemia	CYB5R3	G>A	0 copy

Methemoglobinaemia	CYB5R3	A>C	0 copy
Canine Scott syndrome (CSS)	ANO6	G>A	0 copy
Polycythemia	JAK2	GTC..>TTC..	0 copy
Prekallikrein deficiency	KLKB1	A>T	0 copy
Thrombasthenia	ITGA2B	GGT..>GGT..	0 copy
Thrombasthenia	ITGA2B	G>C	0 copy
Thrombopathia	RASGRP1	C>T	0 copy
Thrombopathia	RASGRP2	delTCT	0 copy
Thrombopathia	RASGRP2	insA	0 copy
Von Willebrand disease I	VWF	C>T	0 copy
Von Willebrand disease II	VWF	A>C	0 copy

Von Willebrand disease II	VWF	T>C	0 copy
Von Willebrand disease III	VWF	delG	0 copy
Von Willebrand disease III	VWF	AAA..>AAA	0 copy
Von Willebrand disease III	VWF	C>T	0 copy
Darier disease	ATP2A2	CTC..>20+..	0 copy
Ehlers-Danlos syndrome, classic type	COL5A1	delG	0 copy
Ehlers-Danlos syndrome, classic type	COL5A1	G>A	0 copy
Ehlers-Danlos syndrome, Dermatosparaxis type	ADAMTS2	C>T	0 copy
Dystrophic epidermolysis bullosa	COL7A1	G>A	0 copy
Dystrophic epidermolysis bullosa	COL7A1	C>T	0 copy
Junctional epidermolysis bullosa, LAMA3-related	LAMA3	T>A	0 copy

Junctional epidermolysis bullosa, LAMB3-related	LAMB3	A>G	0 copy
Epidermolysis bullosa simplex (EBS)	PLEC	C>T	0 copy
Hyperkeratosis, KRT10-related	KRT10	G>T	0 copy
Hyperkeratosis, FAM83G-related	FAM83G	G>C	0 copy
Hyperkeratosis, DSG1-related	DSG1	delAGC..	0 copy
Ichthyosis, TGM1-related	TGM1	ins20+..	0 copy
Ichthyosis, PNPLA1-related	PNPLA1	delACC	0 copy
Ichthyosis, SLC27A4-related	SLC27A4	C>T	0 copy
Musladin-Lueke syndrome	ADAMTSL2	C>T	0 copy
Nasal parakeratosis	SUV39H2	delACT..	0 copy
Inflammatory linear verrucous epidermal nevi (ILVEN)	NSDHL	G>A	0 copy

Inflammatory linear verrucous epidermal nevi (ILVEN)	NSDHL	delGAA..	0 copy
Exercise-induced collapse syndrome (EIC)	DNM1	C>A	0 copy
Chondrodysplasia, ITGA10-related	ITGA10	G>A	0 copy
Craniomandibular osteopathy	SLC37A2	G>A	0 copy
Craniomandibular osteopathy	SLC37A2	C>T	0 copy
Inflammatory myopathy	SLC25A12	A>G	0 copy
Muscular dystrophy, COL6A3-related	COL6A3	C>T	0 copy
Muscular dystrophy, COL6A3-related	COL6A3	G>A	0 copy
Duchenne muscular dystrophy	DMD	TTT..>TTT	0 copy
Limb-girdle muscular dystrophy, type R3	SGCA	G>A	0 copy
Muscular hypertrophy (double muscling)	MSTN	delCA	0 copy

Inherited Myopathy of Great Danes (IMGD)	BIN1	A>G	0 copy
Myotonia	CLCN1	G>A	0 copy
Myotonia	CLCN1	insAGA..	0 copy
Myotonia	CLCN1	insT	0 copy
Myotonia	CLCN1	delT	0 copy
Oculoskeletal dysplasia, COL9A3-related	COL9A3	C>T	0 copy
Osteogenesis imperfecta, COL1A2-related	COL1A2	insCCC	0 copy
Osteogenesis imperfecta, COL1A2-related	COL1A2	delCTG..	0 copy
Osteogenesis imperfecta, COL1A2-related	COL1A2	G>A	0 copy
Osteogenesis imperfecta, COL1A1-related	COL1A1	C>G	0 copy
Osteogenesis imperfecta, SERPINH1-related	SERPINH1	A>G	0 copy

Skeletal dysplasia 2 (SD2)	COL11A2	C>G	0 copy
Spondylocostal dysostosis	HES7	delC	0 copy
Leukoencephalomyelopathy	NAPEPLD	CCC..>CCC..	0 copy
Leukoencephalomyelopathy	NAPEPLD	G>C	0 copy
Alexander disease	GFAP	G>A	0 copy
Spongy degeneration with cerebellar ataxia (SDCA)	ATP1B2	ins20+..	0 copy
Spinocerebellar ataxia, KCNJ10-related	KCNJ11	C>G	0 copy
Cerebellar ataxia, RAB24-related	RAB24	A>C	0 copy
Spinocerebellar ataxia, SCN8A-related	SCN8A	G>T	0 copy
Spinocerebellar ataxia, SPTBN2-related	SPTBN2	delTCA..	0 copy
Degenerative myelopathy	SOD1	G>A	0 copy

Benign familial juvenile epilepsy (BFJE)	LGI2	A>T	0 copy
Generalized myoclonic epilepsy with photosensitivity	DIRAS1	delAGA..	0 copy
L-2-hydroxyglutaricacidemia	L2HGDH	G>A	0 copy
L-2-hydroxyglutaricacidemia	L2HGDH	A>G	0 copy
Leukodystrophy, CYTB-related	CYTB	G>A	2 copies
Reduced ability to metabolize cognitive enhancer 5-(3-methoxyphenyl)-3-(5-methyl1,2,4-oxadiazol-3-yl)-2-oxo-1,2-dihydro-1,6-naphthyridine (AC-3933)	CYP1A2	C>T	0 copy
Congenital myasthenic syndrome, CHAT-related	CHAT	G>A	0 copy
Congenital myasthenic syndrome, CHRNE-related	CHRNE	->G	0 copy
Congenital myasthenic syndrome, CHRNE-related	CHRNE	insC	0 copy
Narcolepsy	HCRTR2	ins20+..	0 copy
Narcolepsy	HCRTR2	G>A	0 copy

Narcolepsy	HCRTR2	G>A	0 copy
Leigh-like subacute necrotizing encephalopathy (SNE)	SLC19A3	C>TTG..	0 copy
Neonatal encephalopathy with seizures	ATF2	A>C	0 copy
Neuroaxonal dystrophy, PLA2G6-related	PLA2G6	G>A	0 copy
Neuroaxonal dystrophy, VPS11-related	VPS11	T>C	0 copy
Juvenile-onset neuroaxonal dystrophy, TECPR2-related	TECPR2	C>T	0 copy
Neurodegenerative vacuolar storage disease	ATG4D	C>T	0 copy
Sensory neuropathy	RETREG1	C>T	0 copy
Sensory ataxic neuropathy	MT-TY	delT	0 copy
Polyneuropathy, NDRG1-related	NDRG1	C>A	0 copy
Polyneuropathy, NDRG1-related	NDRG1	delGTC..	0 copy

Polyneuropathy, GJA9-related	GJA9	delAG	0 copy
Polyneuropathy, SBF2-related	SBF2	C>A	0 copy
Polyneuropathy, RAB3GAP1-related	RAB3GAP1	CC>C	0 copy
Polyneuropathy, RAB3GAP1-related	RAB3GAP1	ins20+..	0 copy
Spongy degeneration with cerebellar ataxia 1 (SDCA1)	KCNJ12	T>C	0 copy
Pelizaeus-Merzbacker disease (shaking pup disease)	PLP1	A>C	0 copy
Mitochondrial neurodegenerative disease with epileptic encephalopathy	PITRM1	delCTG..	0 copy
Primary open angle glaucoma (POAG), ADAMTS17-related	ADAMTS17	G>A	0 copy
Glycogen storage disease, type VII	PFKM	C>T	0 copy
Glycogen storage disease, type VII	PFKM	G>A	0 copy
Imerslund-Gräsbeck syndrome, CUBN-related	CUBN	delC	0 copy

Imerslund-Gräsbeck syndrome, CUBN-related	CUBN	G>A	0 copy
Primary open-angle glaucoma (POAG), primary lens luxation (PLL), or both	ADAMTS17	delCGT..	0 copy
Achromatopsia, CNGB3-related	CNGB3	C>T	0 copy
Achromatopsia, CNGA3-related	CNGA3	G>A	0 copy
Achromatopsia, CNGA3-related	CNGA3	delCCA	0 copy
Congenital keratoconjunctivitis sicca and ichthyosiform dermatosis (CKCSID)	FAM83H	GGG>GG	0 copy
Early retinal degeneration (erd)	STK38L	insAGT..	0 copy
Early retinal degeneration (erd)	STK38L	ins20+..	0 copy
Congenital eye malformation	SIX6	C>T	0 copy
Leber congenital amaurosis	RPE65	delAAG..	0 copy
Macular corneal dystrophy	CHST6	C>A	0 copy

Congenital stationary night blindness	LRIT3	delC	0 copy
Rod-cone dysplasia 3 (rcd3)	PDE6A	delAA	0 copy
Progressive retinal atrophy, RHO-related	RHO	G>C	0 copy
Progressive retinal atrophy, CCDC66-related	CCDC66	insA	0 copy
Primary open-angle glaucoma (POAG), ADAMTS10-related	ADAMTS10	C>T	0 copy
Primary open-angle glaucoma (POAG), ADAMTS10-related	ADAMTS10	C>T	0 copy
Progressive retinal atrophy, SLC4A3-related	SLC4A3	CCC..>CCC..	0 copy
Progressive retinal atrophy, TTC8-related	TTC8	AA>A	0 copy
Multifocal retinopathy 1	BEST1	G>A	0 copy
Multifocal retinopathy 2	BEST1	C>T	0 copy
Multifocal retinopathy 3	BEST1	ins-	0 copy

Progressive Retinal Atrophy, IFT122-related	CNGB1	ACT>CTA..	0 copy
Progressive Retinal Atrophy, IFT122-related	IFT122	C>T	0 copy
Progressive Retinal Atrophy, SAG-related	SAG	T>C	0 copy
Progressive Retinal Atrophy, HIVEP3-related	HIVEP3	G>A	0 copy
Progressive Retinal Atrophy, NECAP1-related	NECAP1	C>T	0 copy
Progressive retinal atrophy, CNGA1-related	CNGA1	delAGT..	0 copy
Progressive rod-cone degeneration	PRCD	C>T	0 copy
Stargardt disease 1	ABCA4	insC	0 copy
Multiple Drug Sensitivity (MDR1)	ABCB1	delATC..	0 copy
Amelogenesis imperfecta, ENAM-related	ENAM	delTTT..	0 copy
Deafness, bilateral, and vestibular dysfunction	MYO7A	C>T	0 copy

Dental hypomineralization	FAM20C	G>A	0 copy
Non-syndromic hearing loss	LOXHD1	G>C	0 copy
Periodic Fever Syndrome	MTBP	G>A	0 copy
Cystinuria, type IA	SLC3A1	C>T	0 copy
Cystinuria, type IA	SLC3A1	GGG>GG	0 copy
Cystinuria, type IIA	SLC3A1	ins-	0 copy
Cystinuria, type IIB	SLC7A9	G>A	0 copy
Cystinuria, type IIB	SLC7A9	G>A	0 copy
Diffuse cystic renal dysplasia and hepatic fibrosis	INPP5E	G>A	0 copy
Nephritis, X-linked	COL4A5	G>T	0 copy
Nephropathy	COL4A4	G>A	0 copy

Nephropathy	COL4A4	T>A	0 copy
Polycystic kidney disease	PKD1	G>A	0 copy
Renal cystadenocarcinoma and nodular dermatofibrosis	FLCN	A>G	0 copy
Urolithiasis, SLC2A9-related	SLC2A9	G>T	0 copy
Primary hyperoxaluria, type I (Oxalosis I)	AGXT	G>A	0 copy
Recurrent inflammatory pulmonary disease	AKNA	delCTG..	0 copy
Pulmonary surfactant metabolism dysfunction	LAMP3	C>T	0 copy
Rod-cone dysplasia 1 (rcd1), PDE6B-related	PDE6B	delGTT..	0 copy
Rod-cone dysplasia 1 (rcd1), PDE6B-related	PDE6B	C>T	0 copy
Congenital myasthenic syndrome, COLQ-related	COLQ	T>C	0 copy
Dilated cardiomyopathy, TTN-related	TTN	C>T	0 copy

Goniodysgenesis and early-onset glaucoma	OLFML3	G>A	0 copy
2,8-DHA urolithiasis	APRT	G>A	0 copy

Porter McGovern's Breed Profile

Highly likely	Likely	Likely
Australian Shepherd	Labrador Retriever	Border Collie

Australian Shepherd

Australian Shepherds may be prone to conditions such as lumbosacral syndrome, degenerative myelopathy, persistent pupillary membrane, distichiasis, von Willebrand Disease, epilepsy and patent ductus arteriosus, nasal solar dermatitis, hypothyroidism, Pelger-Huet Syndrome, and hip dysplasia. They may also suffer from eye disorders including iris coloboma, Collie Eye Anomaly, cataracts, multifocal retinopathy (type 1), progressive rod-cone degeneration, and progressive retinal atrophy. Genetic testing for these and other conditions such as hyperuricosuria, intestinal cobalamin malabsorption, multidrug resistance 1 drug sensitivity, coagulation factor VII deficiency, craniomandibular osteopathy, exercise-induced collapse, neuronal ceroid lipofuscinosis, and von Willebrand's disease can assist veterinarians with diagnosis and proactive care, as well as help breeders identify affected and carrier dogs.

Labrador Retriever

Labrador Retrievers can suffer from hip, elbow, and shoulder dysplasia, degenerative myelopathy, patellar luxation, osteochondritis dissecans, exercise-induced collapse, distichiasis, tricuspid valve dysplasia, muscular dystrophy, diabetes, hypothyroidism, and hot spots. Labs may be affected by centronuclear myopathy, congenital myasthenic syndrome, hereditary nasal parakeratosis, oculoskeletal dysplasia 1, skeletal dysplasia 2, Stargardt Disease, cystinuria, elliptocytosis, hyperuricosuria, ichthyosis, myotubular myopathy 1, narcolepsy, pyruvate kinase (PK) deficiency, chondrodystrophy with or without chondrodysplasia, copper toxicosis, achromatopsia, and Alexander Disease. They can also be prone to eye disorders including macular corneal dystrophy, progressive rod-cone degeneration, retinal dysplasia, entropion, cataracts, and central progressive retinal atrophy. Genetic testing for hereditary conditions can assist veterinarians with diagnosis and proactive care, as well as help breeders identify affected and carrier dogs.

Border Collie

The Border Collie can be affected by conditions such as trapped neutrophil syndrome, epilepsy, seizures, neuronal ceroid lipofuscinosis, hip dysplasia, Collie eye anomaly, progressive retinal atrophy, and deafness. They may also suffer from osteochondritis dissecans, patent ductus arteriosus, lens luxation, and hypothyroidism. Genetic testing for some of these and other conditions including dental hypomineralization, glaucoma, intestinal cobalamin malabsorption, multidrug resistance 1, sensory neuropathy, degenerative myelopathy, exercise-induced collapse, and myotonia congenita can assist veterinarians with diagnosis and proactive care, as well as help breeders identify affected and carrier dogs.

For a brief walkthrough of the Basepaws Veterinary genetic report features and interpretation guide, including how breed similarity is determined, click here.