

Table S1

# Dog	Country	Unique Identifier	Clinical report	Age of biopsy (months)	Histopathological features	Diagnosis	Pedigree information	Genotype (PTPLA locus)
1	USA	US-3	WK, HypoT		-	HMLR	Compatible with AR transmission (see Fig. 2B)	cnm/cnm
2	USA	US-7	-	5	AF, ARF, rare NF	Neuromyopathy group of HMLR	-	cnm/cnm
3	USA	US-8	GA, Cervical WK, HypoT, no PR	2	Neurogenic atrophy	HMLR	-	cnm/cnm
4	USA	US-9	-	3	AF, fibrosis, FatI, "Wallerian-like" degeneration, NR	Chronic nonInf myopathy, early neuropathy	-	cnm/cnm
5	USA	US-10	-	-	AF, ARF, FSV, type 1P, rare NF	NonInf myopathy consistent with HMLR	-	cnm/cnm
6	USA	US-11	-	-	type 1P, no other abnormality	HMLR	-	+/cnm
7	USA	US-12	-	7	AF, ARF, FSV	NonInf myopathy consistent with HMLR	-	cnm/cnm
8	USA	US-13	-	6	AF, ARF, FSV, type 1P, several NF	NonInf myopathy consistent with HMLR	-	cnm/cnm
9	USA	US-14	GA, WK, HypoT, no PR, abnormal EMG	12	FSV, rare NF	NonInf myopathy consistent with HMLR	-	cnm/cnm
10	USA	US-15	-	4	AF, FSV	NonInf myopathy consistent with HMLR	-	cnm/cnm
11	USA	US-16	-	7	AF, ARF, FSV, FatI	NonInf myopathy consistent with HMLR	-	cnm/cnm
12	USA	US-17	-	6	ARF, FSV, type 1P	NonInf myopathy consistent with HMLR	-	cnm/cnm
13	USA	US-18	-	4	AF, ARF, FSV, type 1P	NonInf myopathy consistent with HMLR	-	cnm/cnm
14	USA	US-19	-	7	AF, ARF, FSV	Neuromyopathy group of HMLR	-	cnm/cnm
15	USA	US-20	GA, WK, no PR	3	AF, FSV	HMLR	-	cnm/cnm
16	Germany	DE-1	Severely affected, fibrillation potentials, post-stimulations waves	-	FSV, NF, no atrophy, type 1P	Labrador myopathy	Swiss pedigree	cnm/cnm
17	Germany	DE-2		5	ARF, FSV, NF, focal atrophy, type 1P	HMLR		cnm/cnm
18	Germany	DE-3	Traumatic lesion of the plexus brachialis	-		Neuropathy	-	+/+
19	Germany	DE-4	Apathy, low appetite, HypoT	5	ARF, FSV, NF, focal atrophy in type I and II fibers	Chronic necrotic myopathy consistent with HMLR	<u>Grandfather</u> : UK champion <u>Great-grandparents</u> : Four out of 8 were UK champions	cnm/cnm
20	Germany	DE-5	WK, symptoms of myasthenia gravis	16	Few ARF, light FSV, NF no InternN	Chronic neuromyopathy	<u>Grandparents</u> : Belgian and Swedish champions <u>Great-grandparents</u> : Belgian and Norwegian champions <u>Great-great-grandparents</u> : US, UK, Swedish and Norwegian champions	+/+
21	Germany	DE-6	-	-	Focal neurogenic lesions	Neuromyopathy	-	+/+
22	Germany	DE-7	Affected	-		Muscular dystrophy	-	cnm/cnm
23	Germany	DE-8	Normal	-		Labrador myopathy	Swiss pedigree	+/+
24	Germany	DE-9	Normal	-		Labrador myopathy	Swiss pedigree	+/+
25	Germany	DE-10	Affected	-		Labrador myopathy	-	+/+
26	Germany	DE-11	Lameness	-		Labrador myopathy	-	+/+
27	UK	UK-1	-			HMLR	-	cnm/cnm
28	UK	UK-2	-			HMLR	-	cnm/cnm
29	UK	UK-3	-			HMLR	-	+/+
30	Denmark	DK-1	Low weight, no PR	4	-	HMLR	-	cnm/cnm
31	France	FR-2	GA, Cervical WK, fatigability, HypoT, hypotonicity, no PR	5	AF, ARF, FSV, NF, type 1P, few InternN, FatI	CNM	<u>Father</u> : UK champion <u>Paternal grandparents</u> : UK <u>Great-grandparents</u> : All (8/8) from UK	cnm/cnm
32	France	FR-3	Fatigability	5	AF, FSV, type 1P, few InternN	CNM	-	cnm/cnm