Chinese Crested Dog	

Ocular disorders known or presumed to be inherited (published)

	Diagnosis	Description and comments specific to the breed	Inheritance	Gene/ marker test	References
A	Lens luxation (primary- PLL)		Autosomal recessive	ADAMTS17	1,2
B	Pigmentary chorioretinopathy	Possible visual problems starting at 4-6 y.o. : slight problems in the dark, progressing to blindness in some cases. Fundus : distinct doughnut-formed pigmented lesions in the peripheral fundus. ERG is not diagnostic.	Unknown	NO	3,7
C	Progressive Retinal Atrophy (PRA)		Autosomal recessive	prcd	4
D	Progressive Retinal Atrophy (PRA)	rcd3-PRA	Autosomal recessive	PDE6A rcd3-PRA	5
E	Neuronal Ceroid lipofuscinosis		Unknown	MFSD8	6

The ECVO's advice relating to hereditary eye disease control

Please see ECVO Manual chapter 8: VET Advice

Recommendations regarding age and frequency for eye examinations

Please see ECVO Manual chapter 7: ECVO Age and Frequency recommendations

Other ocular disorders (reported)

	Diagnosis	Source
A	Keratoconjuntivitis sicca	ECVO HED committee
B	Persistent pupillary membranes	ACVO genetics committee
C	Cataract	ACVO genetics committee
D	Vitreous degeneration	ECVO HED committee ACVO genetics committee
E	Vitreous prolapse	ECVO HED committee
F	Distichiasis	ACVO genetics committee

References

1. Sargan DR et al: Mapping the mutations causing lens luxation in several terrier breeds. J Hered. 98(5): 534-538, 2007

2. Farias FH, Johnson GS, Taylor JF, et al. An ADAMTS17 splice donor site mutation in dogs with primary lens luxation. Invest Ophthalmol Vis Sci. 2010; 51: 4716-4721.

3. Narfström K , Kolamaki S, Mowat F, Samardzija, Chaudieu G et al. Assessment of a novel pigmentary chorioretinopathy in the Chinese crested dog. JSM Ophthalmol 2014; 2: 1018-1031.

4. Zangerl B et al. Identical mutation in a novel retinal gene causes progressive rod-cone degeneration in dogs and retinitis pigmentosa in humans. Genomics 88:551-563, 2006.

5. Petersen-Jones SM, Zhu FX. Development and use of a polymerase chain reaction-based diagnostic test for the causal mutation of progressive retinal atrophy in Cardigan Welsh Corgis. AJVR 617: 844-846, 2000.

6. Guo JY, O'Brien DP, Mhlanga-Mutangadura T, et al. A rare homozygous MFSD8 singlebase-pair deletion and frameshift in the whole genome sequence of a Chinese Crested dog with neuronal ceroid lipofuscinosis. BMC Vet Res. 2015;10:960.

7. Narfström K, Jalomäki S, Mowat F, Samardzija M, Chaudieu G, et al. Assessment of a Novel Pigmentary Chorioretinopathy in the Chinese Crested Dog.2014; JSM Ophthalmol 2(2): 1018.