



Ocular disorders known or presumed to be inherited (published)

	Diagnosis	Description and comments specific to the breed	Inheritance	Gene/ marker test	References
A	Cataract	In very young dogs or in 6-7 y.o.; in both cases posterior cortical, slowly progressive	Unknown	NO	1,2
B	Progressive Retinal Atrophy (PRA)	Two forms: 1)Initial clinical signs from 3 y.o. 2) PRA clinical signs around four years of age	Presumed autosomal recessive	1)PRCD 2)NECAP1	1,2,3,4,5 6
C	Retinal dysplasia -multifocal	Number decreases with growth of the animal	Unknown	NO	1,2
D	Glaucoma		Unknown	NO	1,2

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	Eversion of the cartilage of the nictitating membrane	ACVO genetics committee
B	Corneal dystrophy -stromal	ACVO genetics committee
C	Primary hyperplastic tunica vasculosa lentis/ Primary hyperplastic primary vitreous (PHTVL/PHPV)	ACVO genetics committee
D	Entropion	French National Panel
E	Persistent pupillary membranes -iris to iris	ACVO genetics committee

References

1. Rubin LF. Inherited eye diseases in purebred dogs. Williams & Wilkins 1989;149-150.
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3. Acland GM, Ray K, Mellersh CS, Gu W, Langston AA, Rine J, Ostrander EA, Aguirre GD. Linkage analysis and comparative mapping of canine progressive rod-cone degeneration (prcd) establishes potential locus homology with retinitis pigmentosa (RP17) in humans. *Proceeding of the National Academy of Sciences of the United States of America* (1998): 95, 3048–3053.
4. Acland GM, Ray K, Mellersh CS, Landston AA, Rine J, Ostrander EA, Aguirre GD. A novel retinal degeneration locus identified by linkage and comparative mapping of canine early retinal degeneration. *Genomics* (1999) 59, 134–142.
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6. Hitti RJ, Oliver JAC, Schofield EC, Bauer A et al. Whole Genome Sequencing of Giant Schnauzer Dogs with Progressive Retinal Atrophy Establishes NECAP1 as a Novel Candidate Gene for Retinal Degeneration. *Genes* 10,385; doi:10.3390/genes 10050385, 2019