



Ocular disorders known or presumed to be inherited (published)

	Diagnosis	Description and comments specific to the breed	Inheritance	Gene/ marker test	References
A	Progressive Retinal Atrophy (PRA)	Night blindness by 6 months of age; sometimes later	Unknown	NO	1,2,3,4,5
B	Progressive Retinal Atrophy (PRA)	Rcd4-PRA Late onset; clinical signs from 10-12 y.o.	Autosomal recessive	C2orf71 (rcd4)	2,6
C	Cone degeneration - achromatopsia		Unknown	NO	7

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	Distichiasis	ACVO genetics committee
B	Persistent pupillary membranes -all forms	ACVO genetics committee
C	Persistent hyaloid artery	ACVO genetics committee
D	Ectropion	ACVO genetics committee
E	Entropion	ACVO genetics committee
F	Uveal cysts	ACVO genetics committee
G	Retinal dysplasia -multifocal	ACVO genetics committee
H	Cataract	ACVO genetics committee
I	Eversion of the cartilage of the nictitating membrane	French National Panel
J	Microphthalmia	French National Panel

References

1. Rubin LF. Inherited eye diseases in purebred dogs. Williams &Wilkins 1989;159-161.
2. Chaudieu G. Chahory S. Affections oculaires héréditaires ou à prédisposition raciale chez le chien.2nd ed. Ed. du Point Vétérinaire 2013;349-351.
3. Magnusson H. Om nattblindhet hos hund sasom foljd af slaktkapsafvel (On night blindness in the dog following inbreeding). Svensk Vet Tidskr. 1909; 14: 462.
4. Magnusson H. Uber retinites pigmentosa und konsanguinitat beim hunde (On retinitis pigmentosa and consanguinity in dogs). Arch Vergi Ophthalmol. 1911; 2: 147.

5. Magnusson H. Noch ein fall von nachtblindheit beim hunde (Another case of night blindness in the dog). Graefes Arch Ophthal. 1917; 93: 404.
6. Downs LM, Bell JS, Freeman J, Hartley C, Hayward LJ, Mellersh CS. Late-onset progressive retinal atrophy in the Gordon and Irish Setter breeds is associated with a frameshift mutation in C2orf71. Anim Genet (2013) 44(2):169-77.
7. Good KL, Komaromy AM, Kass PH, et al. Novel retinopathy in related Gordon setters: a clinical, behavioral, electrophysiological, and genetic investigation. Vet Ophthalmol. 2015:1-11.