



Ocular disorders known or presumed to be inherited (published)

	Diagnosis	Description and comments specific to the breed	Inheritance	Gene/ marker test	References
A	Retinal atrophy (crd1/rcd1b)	Cone-rod dystrophy type 1/Rod-cone dysplasia type 1b. Visual impairment by about 3-6 months of age	Autosomal recessive	PDE6B	1,2
B	Retinal atrophy (crd2)	Complete blindness by 1 y.o.	Autosomal recessive	IQCB1	4
C	Retinal dysplasia -multifocal -geographic	Some of the animals with the geographic form develop total or partial retinal detachments	Autosomal dominant	NO	3

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	Persistent pupillary membranes	ACVO genetics committee

References

1. Kijas JW, Zanger B, Miller B, et al. Cloning of the canine ABCA4 gene and evaluation in canine cone-rod dystrophies and progressive retinal atrophies. *Mol Vis.* 2004; 10: 223-232.
2. Goldstein O, Mezey JG, Schweitzer PA, Boyko AR, Gao C, Bustamante CD, Jordan JA, Aguirre GD, Acland GM. IQCB1 and PDE6B mutations cause similar early onset retinal degenerations in two closely related terrier dog breeds. *Invest Ophthalmol Vis Sci* (2013) 25;54(10):7005-19.
3. Veiga Rodarte-Almeida AC, Petersen-Jones S, Langohr IM et al. Retinal dysplasia in American pit bull terriers – phenotypic characterization and breeding study. *Vet. Ophthalmol.* (2016) 19, 1, 11-21.
4. www.optigen.com.