Irish Red & White Setter	

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)	1. Rod-Cone dysplasia 1(PRA-rcd1) :Night blindness by 6 weeks of age; by 1-2 years of age most affected dogs are completely blind. 2. Rcd4-PRA : Late onset; clinical signs from 10-12 years of age	1. Autosomal recessive 2. Autosomal recessive	1. PDE6B 2. C2orf71	1,2,3

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	Distichiasis	ACVO genetics committee
B	Persistent pupillary membranes -iris to iris	ACVO genetics committee
C	Retinal dysplasia -multifocal	ACVO genetics committee
D	Posterior polar cataract -variable age of onset	BSAVA (Eye Scheme) committee

References

1. Suber ML, Pittler SJ, Qin N, Wright GC, Holcombe V, Lee RH , Craft CM, Lolley RN, Baehr W, Hurwitz RL. Irish setter dogs affected with rod/cone dysplasia contain a nonsense mutation in the rod cGMP phosphodiesterase beta-subunit gene. Proc Natl Acad Sci USA (1993) 90(9): 3968–3972.

2. 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.