



**Ocular disorders known or presumed to be inherited (published)**

	<b>Diagnosis</b>	<b>Description and comments specific to the breed</b>	<b>Inheritance</b>	<b>Gene/ marker test</b>	<b>References</b>
<b>A</b>	Microphthalmos	Associated with multiple ocular anomalies and blepharophimosis	Unknown	NO	1
<b>B</b>	Entropion	Early in life (up to 3 w.); associated to trichiasis (upper eyelid); frequent corneal lesions	Unknown	NO	2
<b>C</b>	Ectropion		Unknown	NO	1
<b>D</b>	Trichiasis	See B	Unknown	NO	See B
<b>E</b>	Distichiasis		Suspected autosomal dominant with incomplete penetrance	NO	1
<b>F</b>	Prolapsed gland of the nictitating membrane	Often observed associated with entropion and chemosis	Polygenic suspected	NO	2

<b>G</b>	Corneal dystrophy - epithelial	Dogs > 3 y.o.	Unknown	NO	1
<b>H</b>	Cataract	Dogs > 2 y.o., polar posterior cortical.  Congenital	Unknown	NO	2
<b>I</b>	Lens luxation*	3-6 y.o. dogs	Autosomal recessive	ADAMTS17	3,5
<b>J</b>	Progressive Retinal Atrophy (PRA)	Early ophthalmoscopic lesions and night blindness (1,5 y.o. dogs)	Autosomal recessive	NO	1
<b>K</b>	Retinal dysplasia, - multifocal - geographical	Associated with congenital cataract	Unknown	NO	2
<b>L</b>	Strabismus	Exotropia (6-10 w.o. dogs)	Unknown	NO	4
<b>M</b>	Primary open-angle glaucoma (POAG)*		Autosomal recessive	ADAMTS17	5

\*same mutation, two phenotypes according to [5]

### **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)**

	<b>Diagnosis</b>	<b>Source</b>
<b>A</b>	Chronic superficial keratitis	ACVO Genetics Committee
<b>B</b>	Persistent pupillary membranes	ACVO Genetics Committee
<b>C</b>	Pectinate ligament anomaly	ACVO Genetics Committee Personal observations (G. Chaudieu)

**References**

1. Chaudieu G, Chahory S (2013) Affections oculaires héréditaires ou à prédisposition héréditaire chez le chien. Rueil-Malmaison : Ed. du Point Vétérinaire, Wolters Kluwer France, 202-05.
2. Rubin LF (1989) Inherited diseases in purebred dogs. Williams & Wilkins, Baltimore, 247-249.
3. Lazarus JA (1998) Primary lens luxation in the Chinese Shar Pei : clinical and hereditary characteristics. Vet Ophthalmol 1 : 101-107.
4. Gross SL (1986) Severe acquired strabism in a Shar Pei. Trans Am Coll Vet Ophthalmol, 428-434.
5. Oliver JAC, Rustidge S, Pettitt L, Jenkins CA et al. Evaluation of ADAMTS17 in Chinese Shar-Pei with primary open-angle glaucoma , primary lens luxation, or both. Am J Vet Res 79:98-106, 2018.