Gonioscopy: breeding advice

The BVA/KC/ISDS Eye Scheme is currently trialling a pilot scheme of gonioscopy grading which allows for more informed breeding decisions. Under this pilot scheme, dogs are either classified as Grade 0 (unaffected), Grade 1 (mildly affected), Grade 2 (moderately affected) or Grade 3 (severely affected).

In general, it is recommended that you should not breed from dogs affected by known inherited eye conditions, but it is accepted that other factors such as the prevalence of the condition in the breed and the breed's genetic diversity may also come into play. When considering goniodysgenesis, however, it is preferable to only breed with dogs with Grade 0 or Grade 1 pectinate ligament abnormality (PLA) in most breeds. Dogs scored Grade 2 (moderately affected) have a greater risk of developing and passing on the condition to offspring, in comparison to breeding dogs with Grades 0 and 1. In breeds that have significant concerns relating to maintenance of genetic diversity the KC advises that only Grade 2 dogs in excellent health, and with good results from other screening schemes, may be used cautiously for breeding with particular care to use mates with the best possible gonioscopy results (preferably Grade 0). This advice may change, however, as further research is performed.

Grade	Gonioscopic findings	Breeding Advice
0	Normal iridocorneal angle (ICA) with no/minimal (0%-<1%) pectinate ligament abnormality (PLA)	**Advice:** Normal iridocorneal angle - highly unlikely to develop primary glaucoma Suitable for breeding
1	1-25% of ICA affected by PLA	**Advice:** mildly affected - unlikely to develop primary glaucoma Suitable for breeding
2	26-75% of ICA affected by PLA	**Advice:** moderately affected - low risk of developing primary glaucoma Breed specific advice required if breeding considered
3	>75% of ICA affected, and/or severe narrowing of ICA	**Advice:** severely affected - highest risk of developing primary glaucoma Not recommended for breeding