

The Golden Retriever Club of America, Inc.

From the GRCA Health and Genetics Committee

Golden Retriever Pigmentary Uveitis

August 2022 Update

Golden Retriever pigmentary uveitis (GRPU) is a common eye disease in the breed, and is a leading cause of blindness and eye pain. Although it is believed to be inherited, the gene(s) and mode of inheritance have not been identified and the American College of Veterinary Ophthalmologists' (ACVO) Genetics Committee recommends that Goldens with GRPU not be bred.

The Canine Health Foundation (CHF), the Golden Retriever Foundation (GRF), and the Golden Retriever Club of America (GRCA) are working together to reduce the impact of this disease. Recent collaborative measures include requesting that ACVO establish clear, consistent diagnostic criteria, which resulted in a peer-reviewed paper written by former and current members of the ACVO Genetics Committee and published in Veterinary Ophthalmology in 2020. Additionally, CHF has developed breeder/owner and clinician summaries of the paper, and a webinar (with continuing education credit for veterinarians and veterinary technicians) is available to anyone online (see below). GRF has paid all applicable fees in advance, so there is no charge for access to any of the following educational resources.

- **1.** The webinar *PU What's that? Golden Retriever pigmentary uveitis* this webinar provides current information on GRPU https://www.akcchf.org/educational-resources/Webinars/pu-whats-that-golden.html
- **2. The scientific publication,** *Golden retriever pigmentary uveitis: Challenges of diagnosis and treatment,* Veterinary Ophthalmology. 2020;23: 774–784, should give owners and breeders confidence that the same diagnostic criteria will be applied to each dog by each ophthalmologist: https://onlinelibrary.wiley.com/doi/epdf/10.1111/vop.12796
 - a. Lay summary: https://www.akcchf.org/educational-resources/library/articles/diagnostic-criteriafor-1.html
 - b. Brief clinician summary highlighting diagnostic features https://www.akcchf.org/educational-resources/library/articles/diagnostic-criteriafor.html

3. Pigmentary Uveitis Basics

a. Mean age at the time of initial GRPU diagnosis is approximately 8.5 years of age, but the reported range is from 4.5 to 14.5 years of age.

- b. GRPU is particularly common in Goldens more than 8 years of age.
- c. GRPU frequently progresses to glaucoma and blindness, but early diagnosis and treatment may optimize outcome.
- d. Examinations should be reported on an OFA Companion Animal Eye Registry (CAER) form and should include detailed drawings of the findings. Using the CAER form provides research data without disclosing the identity of dog or owner, and owners should make or keep a copy to aid in monitoring progression of disease.

4. Current recommendations to decrease the prevalence and severity of GRPU:

- **a.** a. Many ophthalmologists recommend that all Goldens over 4 years of age should have an annual examination by a veterinary ophthalmologist reported on a CAER form, to facilitate early diagnosis.
- **b.** The ACVO Genetics Committee recommends that Goldens with GRPU not be bred
- c. Late age of onset makes breeding decisions challenging. Therefore, the GRCA Code of Ethics recommends yearly examinations by a veterinary ophthalmologist for the entire lifetime of any Golden used for breeding, with findings reported on a CAER form. This enables decisions about breeding descendants to be based on complete information, and contributes to scientific knowledge about GRPU.

5. Ongoing research studies funded by GRF in collaboration with CHF:

- **a.** 02569-MOU: Development of a Polygenic Risk Model for Pigmentary Uveitis in Golden Retrievers (to search for genes involved with GRPU) https://www.akcchf.org/research/research-portfolio/2569-MOU.html
- **b.** 02590-A: Histologic characterization of Golden Retriever Pigmentary Uveitis (to characterize factors involved with progression to glaucoma) https://www.akcchf.org/research/research-portfolio/02590-A.html