

A LONG TERM SINGLE SURGEON, SINGLE FACILITY CLINICAL AUDIT OF IOL GLISTENINGS

Background: Vacuole formation in IOLs, particularly hydrophobic lenses, is a well-documented issue. Alcon introduced a program of incremental manufacturing improvements between 2003 and 2013 aimed at reducing these changes. This audit examines changes in the incidence of glistenings over a 20 year period.

Benchmarking/Standard: The review article by Lili- ana Werner includes a glistening density scale with example photos which was used for the slit lamp assessment. (J Cataract Refract Surg 2010;36:1398-1420).

All consecutive patients, with at least one IOL with more than one year since insertion, were audited. After 200 eyes only those with more than five years were assessed. 243 eyes were assessed of which 233 were of Acrysof material. No lenses from manufacturers other than Alcon had glistenings.

Results: Of the 233 Acrysof lenses analysed, 63% showed glistenings.

When the Alcon lenses were grouped by date of insertion little change in incidence was found when patients treated prior to 2006 were compared with recent insertions.

Glistening Density Grade

(Patient Numbers by Grade as Percentages) Insertion Date 0 1 2 3 4

10/16 to 01/14 49 28 17 7 0 N = 72

12/13 to 01/07 27 38 24 8 4 N = 112

12/06 to 12/96 43 24 12 16 4 N = 49

Recommendations: IOL glistenings still occur in patients with lenses inserted after Alcon's improvement program. Surgeons need to consider this issue when choosing an IOL for their patients