United Kingdom Glaucoma Treatment Study (UKGTS) - 2015



Objective

To evaluate the time to visual field deterioration in primary open-angle glaucoma (POAG) patients given once daily latanoprost compared to POAG patients given placebo.

Methods

Design: Multicenter RCT

Sample Size: 516 patients with newly diagnosed POAG

Treatment Groups:

- 258 in the latanoprost group
 - 231 at the end of 24 months due to attrition
- 258 in the placebo group
 - 230 at the end of 24 months due to attrition

Outcome Measures:

- Primary: Time to visual field deterioration within 24 months.
- Other: Intraocular pressure

Results

Point 1: The time to visual field deterioration was longer in the latanoprost group than the placebo group

- Visual field preservation was significantly longer in the latanoprost group than the placebo group, with an adjusted hazard ratio of 0.44 (95% CI 0.28 – 0.69; p = 0.0003).
- Signs of glaucomatous visual field loss were more frequent in the placebo group (25.6% vs. 15.2%, p = 0.006)

Point 2: IOP reduction was greater in the latanoprost group than the placebo group

- At 24 months, mean reduction in IOP was 3.8 mmHg in the latanoprost group (n=231) and 0.9 mmHg in the placebo group (n=230)
- Note that baseline mean IOP was slightly lower in the latanoprost group (19.6 mmHg) than in the placebo group (20.1 mmHg)

TLDR: Treatment of POAG with latanoprost lowers IOP and preserves visual field function

Garway-Heath et al. Latanoprost for open-angle glaucoma (UKGTS): a randomised, multicentre, placebo-controlled trial. Lancet. 2015 Apr 4;385(9975):1295-304.