

Special Studies

Latanoprost Versus Rescula

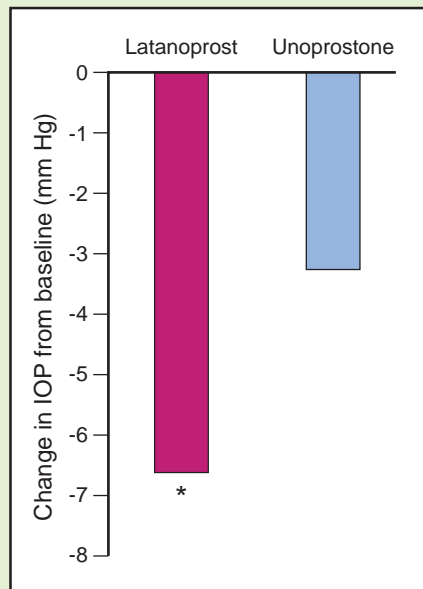


Prof. R. Susanna
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Prof. Susanna presented the results of a comparison of the efficacy and safety of latanoprost 0.005% once daily versus Rescula (unoprostone 0.12%) twice daily in patients with glaucoma or ocular hypertension in an 8-week, randomised, double-masked study in Brazil.

There was a sustained IOP reduction during the treatment period for both groups. However, latanoprost was more effective in reducing IOP — the mean reduction in IOP at 8 weeks was 6.6 mm Hg (-27%) for patients receiving latanoprost and 3.3 mm Hg (-14%) for those given unoprostone ($p < 0.001$; figure 4). The percentage of patients who reached the

Figure 4. Mean reduction in intraocular pressure (IOP) at 8 weeks following treatment with latanoprost or unoprostone. * $p < 0.001$.



target IOP after 8 weeks' treatment was greater with latanoprost than for unoprostone. For example, 30% IOP reduction was achieved by 40% of patients receiving latanoprost, and only 2% of the unoprostone group.

In Conclusion

Latanoprost administered once daily was significantly ($p < 0.001$) more effective than unoprostone administered twice daily. The incidence of adverse events was low and comparable between the 2 groups. A reduction of 30% or more has been shown to be important in halting or decreasing the rate of visual field progression in patients with normal tension glaucoma.¹ This may well be more important for high tension glaucoma. In this study, an IOP reduction was achieved by 40% of the patients treated with latanoprost compared with 0% of the patients given unoprostone.

Reference



1. Collaborative Normal-tension Glaucoma Study Group. Comparison of glaucomatous progression between untreated patients with normal-tension glaucomas and patients with therapeutically reduced intraocular pressures. *Am J Ophthalmol* 1998;**126**:487-497.

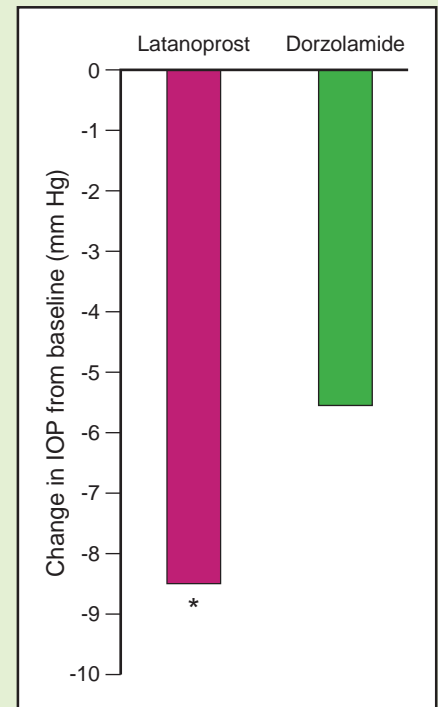
Latanoprost Versus Trusopt



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The objective of this study was to compare the effect on IOP of latanoprost 0.005% once daily with dorzolamide 2%

Figure 5. Diurnal intraocular pressure (IOP) reduction at 3 months following treatment with latanoprost or dorzolamide. * $p < 0.001$.



3 times daily in patients with open angle glaucoma or ocular hypertension, and to document the safety of latanoprost and dorzolamide. 224 patients were randomised to receive latanoprost or dorzolamide, and were assessed at baseline, week 2, and month 3 after the start of treatment. All patients had an IOP of ≥ 21 mm Hg controlled with previous treatment or ≥ 25 mm Hg untreated. Eight patients withdrew from the study, 3 from the latanoprost group and 5 patients receiving dorzolamide.

Diurnal IOP reduction at 3 months was significantly higher in patients receiving latanoprost ($p < 0.001$; figure 5). The mean IOP reduction with latanoprost was 31% (8.5 mm Hg) and 20% (5.6 mm Hg) with dorzolamide — a difference of 2.9 mm Hg. The percentage of patients who reached a specific diurnal IOP and a specific reduction in IOP at 3 months was higher in the latanoprost group. 52% of patients receiving latanoprost achieved a 30% IOP

reduction compared with only 14% of patients receiving dorzolamide. Similarly, 28% vs 5%, respectively, achieved a diurnal IOP of 17 mm Hg.

In Conclusion

Latanoprost 0.005% once daily was significantly more effective (2.9 mm Hg) than dorzolamide 3 times daily in reducing mean diurnal IOP at 3 months ($p < 0.001$). Both drugs were well tolerated systemically and locally.

Latanoprost Versus Cosopt

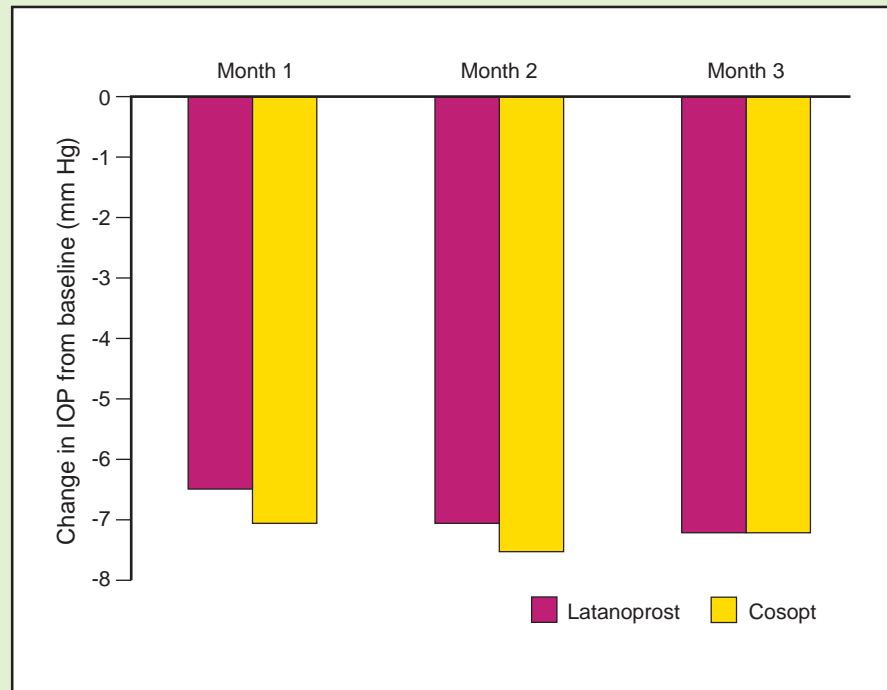


Prof. R Fechtner
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Several studies have shown the combination of timolol and dorzolamide to have a greater IOP lowering effect than timolol alone. Cosopt (dorzolamide and timolol in combination) has been shown to be similarly effective to the concomitant administration of its components. Studies of latanoprost show a greater efficacy of this agent when compared with timolol alone. A recent study to compare the effect of latanoprost with dorzolamide plus timolol found a similar efficacy in IOP reduction between latanoprost alone or timolol and dorzolamide in combination.

Dr Fechtner described a trial comparing Cosopt with latanoprost in terms of efficacy and safety for patients with open angle glaucoma or ocular hypertension. As expected, there was no significant difference between latanoprost and Cosopt in IOP lowering efficacy (figure 6). To date, there have been no published studies directly comparing latanoprost and Cosopt. In this study, both medications

Figure 6. Intraocular pressure (IOP) reduction during 3 months' treatment with latanoprost or Cosopt.



were generally well tolerated with a similar efficacy in both groups.

Latanoprost in Closed Angle Glaucoma



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Prof. Chew described a study comparing the IOP lowering effect and side effect profiles of latanoprost 0.005% with timolol 0.5% in chronic angle closure glaucoma (CACG). CACG was defined as typical glaucomatous optic neuropathy with compatible visual field defect. The

Table 4. Mean intraocular pressure (IOP) reduction from baseline in patients with chronic angle closure glaucoma receiving latanoprost or timolol

IOP (mm Hg)	Latanoprost	Timolol
Baseline	25.7±3.6	25.2±4.1
Day 14	16.9±5.2	19.5±2.4
Total reduction	8.8±4.3	5.7±3.5

study parameters were comparison of the mean diurnal IOP at baseline with that on day 14 and, if both eyes were treated, the mean IOP of both eyes was used for the analysis. 32 patients of Asian race (Malay, Chinese, Indian) were included in the study, and 3 patients randomised to receive timolol withdrew.

After 2 weeks of treatment, the mean IOP reduction of latanoprost was 3.1 mm Hg higher than that of timolol ($p = 0.04$; table 4). While both timolol and latanoprost were effective at lowering IOP in patients with CACG, the effect of latanoprost was similar to that seen in patients with POAG. The mean IOP reduction from baseline was 34.2% in patients receiving latanoprost and 22.6% for the timolol group. No systemic side effects were noted, and the ocular side effects were similar and mild for both groups.

In conclusion, latanoprost in the treatment of CACG requires further evaluation in larger numbers of patients for longer periods of treatment. The action of IOP reduction in CACG is not yet clear.

