IMAGE



Infographic: Low-Pressure Glaucoma Treatment Study (LoGTS)

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Low-pressure Glaucoma Treatment Study (LOGTS): A Randomized Infographic created by: Y N Mau, C Henein, R G Mathew Trial of Brimonidine Versus Timolol in Preserving Visual Function Krupin et al., Am J Ophthalmol. 2011;151(4):671-681. doi:10.1016/j.ajo.2010.09.026 Fewer brimonidine-treated Randomized Multi-centre **Inclusion Criteria Exclusion Criteria** patients had visual field Untreated IOP ≤ 21mm Hg History of IOP > 21 mmHg BCVA worse than 20/40 in progression by pointwise Open iridocorneal angles linear regression ≥ 2 reproducible visual fields with glaucomatous defect in 1 or both eyes either eye History of angle closure / 79 99 occludable angle by gonioscopy Prior glaucoma incisional Visual field progression by Timolol Brimonidine GCPM analysis reported field defect consistent with surgery Inflammatory eye disease Prior ocular trauma similar findings. Diabetic retinopathy Extensive glaucomatous visual field damage with a mean deviation worse than -16 dB Clinically determined threat to Age ≥ 30 years Mean treated IOP similar in 4-week washout period Baseline IOP ≤ 21mm Hg in both eyes with < 5mm Hg Twice daily monotherapy drops in both eyes Delivered in blocks of 7 (4 brimonidine to 3 timolol) both treatment groups Bottles labelled with allocated randomization central fixation in either eye Other ocular treatment not permitted More brimonidine-treated patients discontinued the End Points for Discontinuation study due to drug-related Treated IOP > 21 mmHg adverse effects. · Safety concerns as judged by the treating physician Ocular allergic adverse events · Retinal events that could alter visual acuity or visual field Visual field progression in either eye determined by pointwise linear regression · Systemic adverse events that prevented the administration of Brimonidine preserves visual field better than timolol in a Non-ocular intolerable events associated with brimonidine Earliest field progression detection at month-16 examination subset of open-angle • If patients moved/ decline continued participation glaucoma patients with Study Visit statistically normal IOP. Visual field progression in either eye evaluated by Humphrey glaucoma change • Patients examined at 1 and 4 months after the initiation probability maps (GCPM)

Fig. 1 The Low-Pressure Glaucoma Treatment Study (LoGTS) showed that brimonidine better preserves visual field compared to timolol in a subset of open-angle normal tension glaucoma patients. IOP intraocular pressure, POAG primary open angle glaucoma, CI confidence interval, GCPM glaucoma change probability maps.

Reference to original study: Krupin T, Liebmann JM, Greenfield DS, Ritch R, Gardiner S, Low-Pressure Glaucoma Study G. A randomized trial of brimonidine versus timolol in preserving visual function: results from the Low-Pressure Glaucoma Treatment Study. Am J Ophthalmol. 2011;151(4):671–681.

Compliance with ethical standards

Conflict of interest The authors declare no competing interests.

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• Subsequent visits were at 4-months interval

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