




Infographic: Primary Tube Versus Trabeculectomy Study (PTVT)

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Reference to original study: Gedde SJ, Feuer WJ, Shi W, Lim KS, Barton K, Goyal S et al. Treatment Outcomes in the Primary Tube Versus Trabeculectomy Study after 1 Year of Follow-up. *Ophthalmology* 2018;125(5):650–663.

Compliance with ethical standards

Conflict of interest The authors declare no competing interests.

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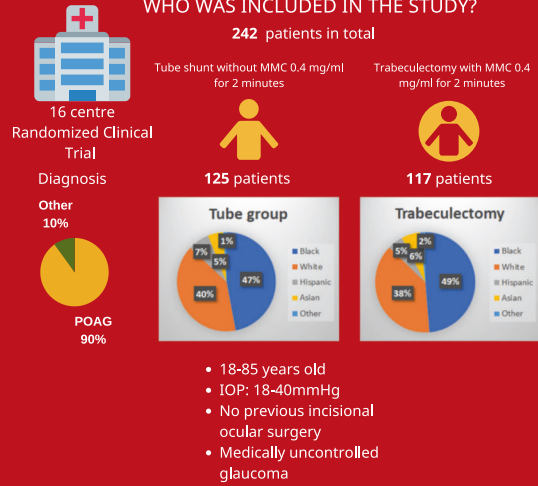
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Primary Tube VS Trabeculectomy

1 YEAR TREATMENT OUTCOMES*

Gedde SJ, Feuer WJ, Shi W, et al. Treatment Outcomes in the Primary Tube Versus Trabeculectomy study after 1 year of follow-up. *Ophthalmology*. 2018;125:650-63.

WHO WAS INCLUDED IN THE STUDY?



PRIMARY OUTCOME CUMULATIVE PROBABILITY OF FAILURE

Tube shunt without MMC	Trabeculectomy with MMC
17.3%	7.9%

Hazard ratio, 2.59 (95% confidence interval 1.20-5.60)

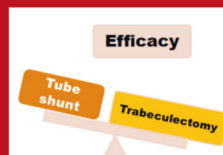
DEFINITION OF SURGICAL FAILURE

- Insufficient IOP reduction
- Reoperation for glaucoma
- Persistent hypotony
- Loss of light perception

SECONDARY OUTCOMES

1 year post-op outcomes	Tube Shunt without MMC	Trabeculectomy with MMC 0.4mg/ml for 2 mins
IOP reduction	37.5%	46%
IOP (mmHg)	13.8±4.1	12.4±4.4
Adjunctive glaucoma medications (mean number)	2.1±1.4	0.9±1.4
Visual Acuity decrease (in logMAR units)	0.05±0.22	0.08±0.32
Incidence of surgical complications	29%	41%
Incidence of serious complications	1%	7%
Incidence of cataract progression	20%	20%

Overall, trabeculectomy with MMC has a higher success rate, however it has more complications.



*3 year outcomes have been recently reported but not presented as primary outcome underpowered at 3 years

Infographic created by T Mantzari, M Khella, C Henein, R G Mathew

Fig. 1 The Primary Tube Versus Trabeculectomy study (pTVT) showed trabeculectomy with mitomycin-C achieved lower intraocular pressure with use of fewer glaucoma medications compared with tube shunt surgery without mitomycin-C at 1 year. IOP intraocular pressure, POAG primary open angle glaucoma, RR relative risk, NNT number needed to treat, MD mean deviation.