

“Drop-free” Subconjunctival Triamcinolone Post-Cataract Surgery May Reduce Rate of Pseudophakic Cystoid Macular Oedema

Authors: Alexander Fraser¹, Yunfei Yang¹, Swetha Ravichandran¹, In-Jung Lee¹, Toby Al-Mugheiry¹, James Myerscough¹

Affiliation: ¹ Southend University Hospital, Mid and South Essex NHS Foundation Trust, United Kingdom

Introduction:

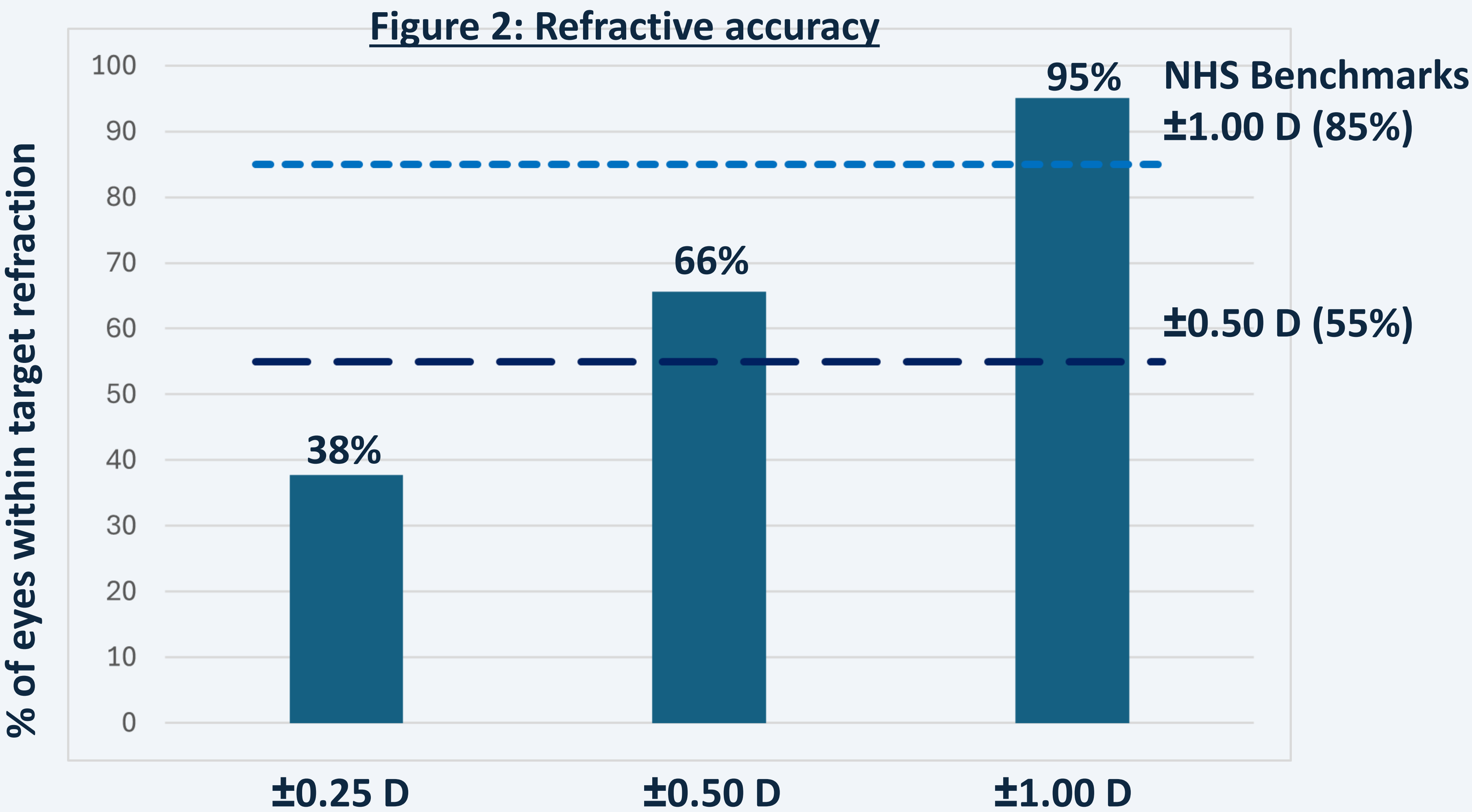
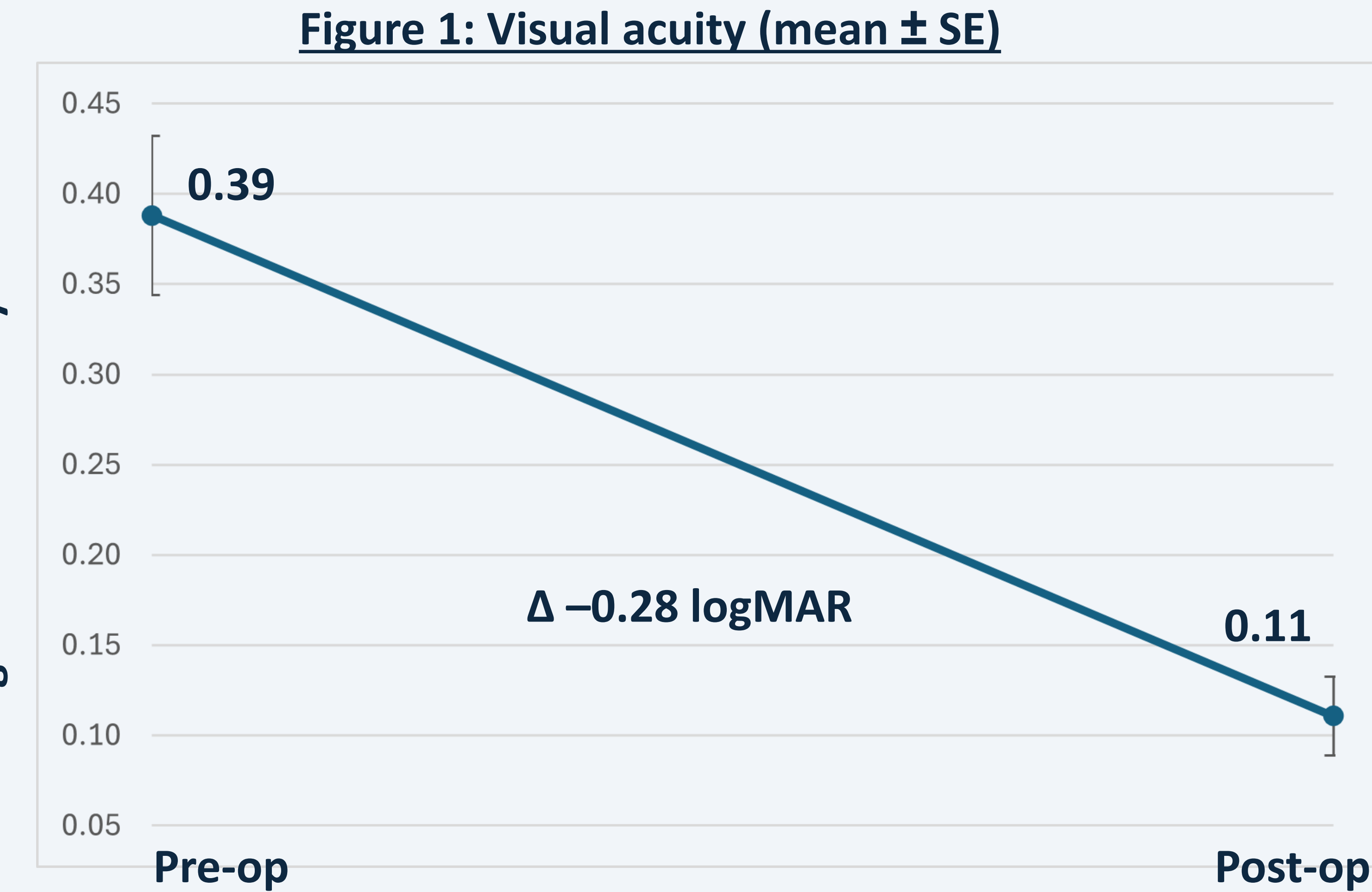
Pseudophakic Cystoid Macular Oedema (PCMO) occurs in 0.1–2.5% after cataract surgery.¹ This may in part be driven by poor compliance with postoperative topical therapy regimes.² “Drop-free” steroid strategies aim to reduce treatment burden. Following its building popularity in independent practice,³ this service evaluation assesses safety and early outcomes of 4 mg subconjunctival triamcinolone acetate (SCTA) (Kenalog® 40 mg/ml; Bristol-Myers Squibb, Princeton, NJ) in routine NHS practice.

Methods:

- Retrospective audit of cataract surgeries using 4 mg SCTA
- Single weekly half-day operating list (Mar–Sep 2025)
- Inclusion: ≥1 month follow-up
- Exclusion: operative complications or advanced glaucoma
- Outcomes assessed: VA, refraction, PCMO, IOP spike (≥30 mmHg or rise ≥10 mmHg), signs of uveitis or endophthalmitis, and unplanned review or casualty visits

Results:

- 69 eyes (55 patients), mean age 74.5 ± 11.1 years, 58% male
- Visual acuity improved Δ −0.28 logMAR (Figure 1)
- 65.6% and 95.1% met target ±0.50 D and ±1.00 D (Figure 2)
- No major safety events observed (See Safety Outcomes)



Safety Outcomes:

- 0% PCMO rate – no episodes reported
- 0% clinically significant postoperative IOP rise observed
- 0% endophthalmitis – no cases reported
- 1 case uveitis (1.5%)* – patient with known recurrent uveitis

Conclusion:

- SCTA was safe and well-tolerated in routine practice
- No PCMO or clinically significant IOP rise observed
- Visual & refractive outcomes meet benchmarks
- Supports feasibility of a drop-free pathway
- Requires prospective comparative validation

“SCTA appears safe and well-tolerated as part of a drop-free cataract pathway in routine NHS practice.”

Scan QR for RCOphth Practice Preference Survey



References:

- Shorstein NH, McCabe SE, Alavi M, Kwan ML, Chandra NS. Triamcinolone Acetate Subconjunctival Injection as Stand-alone Inflammation Prophylaxis after Phacoemulsification Cataract Surgery. *Ophthalmology*. 2024;131(10):1145-1156. doi:10.1016/j.ophtha.2024.03.025
- An JA, Kasner O, Samek DA, Lévesque V. Evaluation of eyedrop administration by inexperienced patients after cataract surgery. *J Cataract Refract Surg*. 2014;40(11):1857-1861. doi:10.1016/j.jcrs.2014.02.037
- UKISCRS RECOMMENDATIONS United Kingdom and Ireland Society of Cataract and Refractive Surgeons (UKISCRS) Recommendations of Practice for Dropless Cataract Surgery 2026.