SHORT TERM SAFETY AND EFFICACY OUTCOMES OF PRESERFLO MICROSHUNT SURGERY IN GLAUCOMA PATIENTS FOLLOWING FAILED DEEP SCLERECTOMY

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PURPOSE
To report the short-term safety and efficacy outcomes of Preserflo Microshunt surgery as a secondary procedure following failed deep sclerectomy (DS) in patients with open-angle glaucoma.

METHODS
Retrospective case series of consecutive eyes (November 2021-December 2022) with open angle glaucoma and previous DS who underwent Preserflo Microshunt (augmented with Mitomycin C 0.4mg/mL) for uncontrolled intraocular pressure or glaucoma progression.

RESULTS
Five eyes of five patients were reviewed. All patients had undergone previous DS. Mean time since DS was 25.8 months (range, 4 to 58 months). All eyes except one, were high myopes, average axial length was 25.23mm (SD1.7) and had undergone at least one or more other ocular procedures. Mean pre-operative IOP was 23.0mmHg (SD 10.0) and number of medications was 2.4 (SD 0.9), decreasing after Preserflo Microshunt to 12.0mmHg (SD 5.6; range, 6-20mmHg) and 0.2 (SD0.4) respectively, at latest follow up. Mean follow up was 6.7 months (SD 4.1; range 6 weeks to 12 months). There were no cases of clinical hypotony or choroidal effusion. No patients suffered visual acuity loss of 2 lines or more. One eye lost 1 line of vision from posterior capsule opacification. One eye required bleb needling with 5-Fluoruracil at 4 weeks post operatively and has been recommenced on one glaucoma agent with a pressure of 20mmHg. All other eyes remain off all glaucoma drops and have not required further intervention.

CONCLUSION
We found an excellent safety profile and promising short-term efficacy outcomes for Preserflo Microshunt as a second surgery following failed DS.