Objective: To evaluate the efficacy and safety of needle revision of failed filtering blebs with high-dose mitomycin-C.

Methods: Twenty-five patients with failing filters received an injection of 0.1 ml of 0.5 mg/ml mitomycin-C into the filtering bleb. Needling of the bleb was performed with a 30-gauge needle by a single surgeon at a single institution.

Results: The bleb needle revision with high-dose mitomycin-C was a success or qualified success after 12 months in 21 patients. Mean preoperative intraocular pressure was $21.6 \pm 3.2$ using an average of $1.4 \pm 0.9$ glaucoma medications.

Conclusions: Bleb needle revision with high-dose mitomycin-C that successfully maintains long-term filtration with few complications. Complications of needle revision were minor and resolved without sequelae.