Purpose: To evaluate the functional and anatomic outcome after intravitreal ranibizumab injection in two patients with cystoid macular edema related to Irvine-Gass Syndrome.

Methods: Two patients with pseudophakic cystoid macular edema refractory to current standard topical treatment were enrolled in this study. Intravitreal 0.5 mg (0.05ml) ranibizumab injection was performed. Baseline visits included best-corrected visual acuity (BCVA), fundus examination, optical coherence tomography (OCT) and fundus fluorescein angiography (FFA). The main outcome measures were changes in visual acuity, retinal thickness on optical coherence tomography, and complications related to treatment.

Results: Fluorescein angiography and OCT confirmed the diagnosis of pseudophakic cystoid macular edema in both cases. The initial BCVA was 5/100 in the first case. After one injection of intravitreal ranibizumab, retinal edema totally regressed and best corrected visual acuity improved to 6/10. Central macular thickness measured with OCT was 379 µm at baseline and decreased to 227 µm at the 16-month visit. The initial BCVA was 5/10 in the second case. It improved to 8/10 after two ranibizumab injections and remained unchanged at the 21-month visit. Central macular thickness measured with OCT was 419 µm at baseline and decreased to 243 µm at the final follow-up. There were no ocular or systemic complications related to the intravitreal injections.

Conclusion: Intravitreal ranibizumab appeared to be an effective treatment of macular edema related to Irvine Gass syndrome. Prospective controlled studies are warranted to compare the long-term safety and efficacy between intravitreal ranibizumab and other treatment options in cases of Irvine-Gass Syndrome.