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INTRODUCTION

- Complexities associated with inferior retinal detachments (RD), including positioning recurrence, and predilection for inferior proliferative vitreoretinopathy (PVR), are well recognized
- A high-density silicone oil (heavier than water) is an ideal endotamponade for complex RDs
- Densiron® XTRA is a heavy silicone oil (SiO) that has not been studied in a clinical setting, to the best of our knowledge

PURPOSE

- Identify the anatomical success (retinal reattachment) at time of oil removal and six months post-oil removal
- Identify the affect on visual acuity (VA) and potential complications

METHODS

- A non-comparative, retrospective chart review of patients aged 18 to 90 years of age that underwent treatment of RD with the intraocular agent Densiron® XTRA
- Information regarding previous ocular surgeries, type of RD, type of surgery, change in VA, length of tamponade, follow up time, and complications were recorded and analyzed

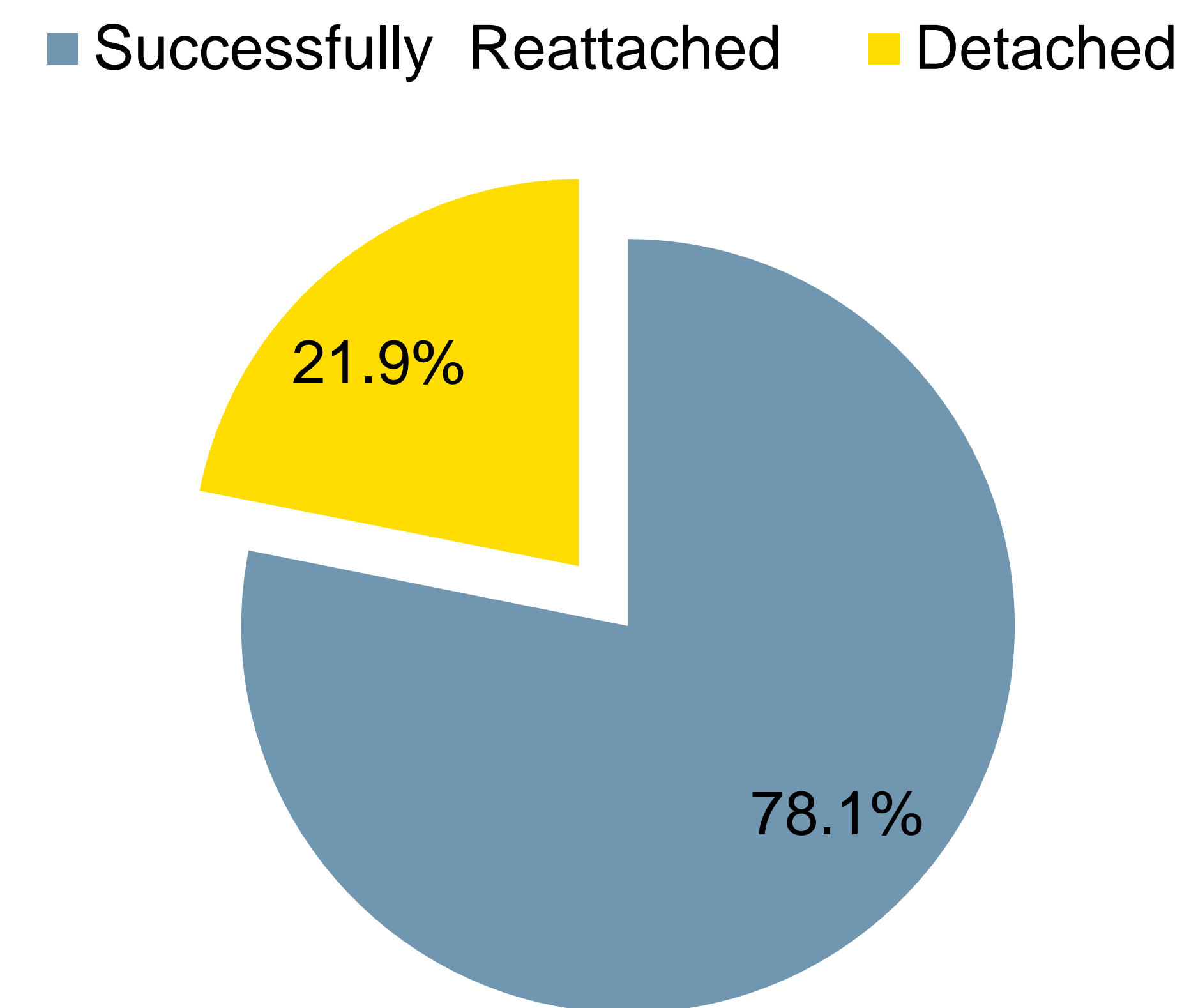


Figure 1. Rate of successful anatomic reattachment at time of Densiron® XTRA silicone oil removal

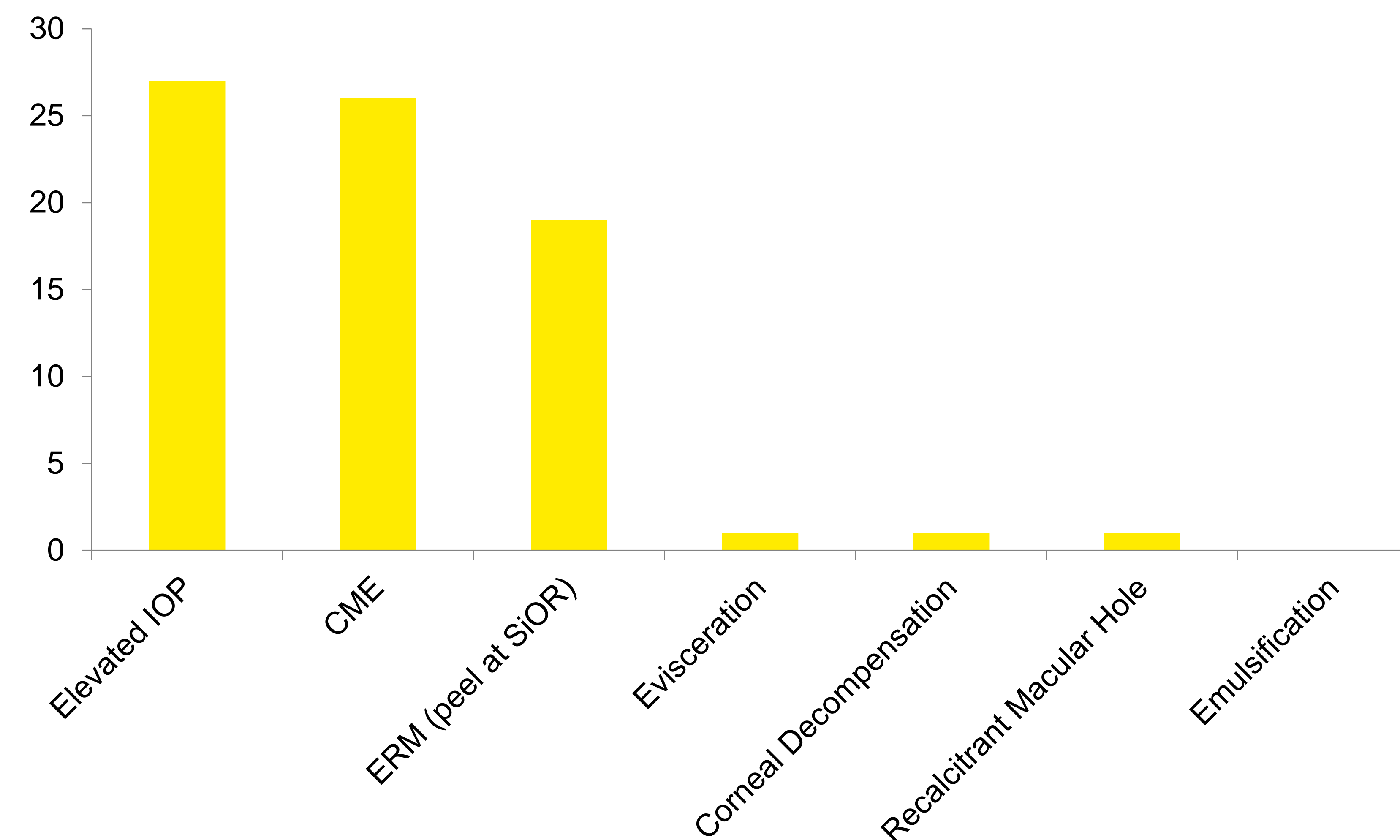


Figure 2. Complications associated with use of Densiron® XTRA in patients with RD.

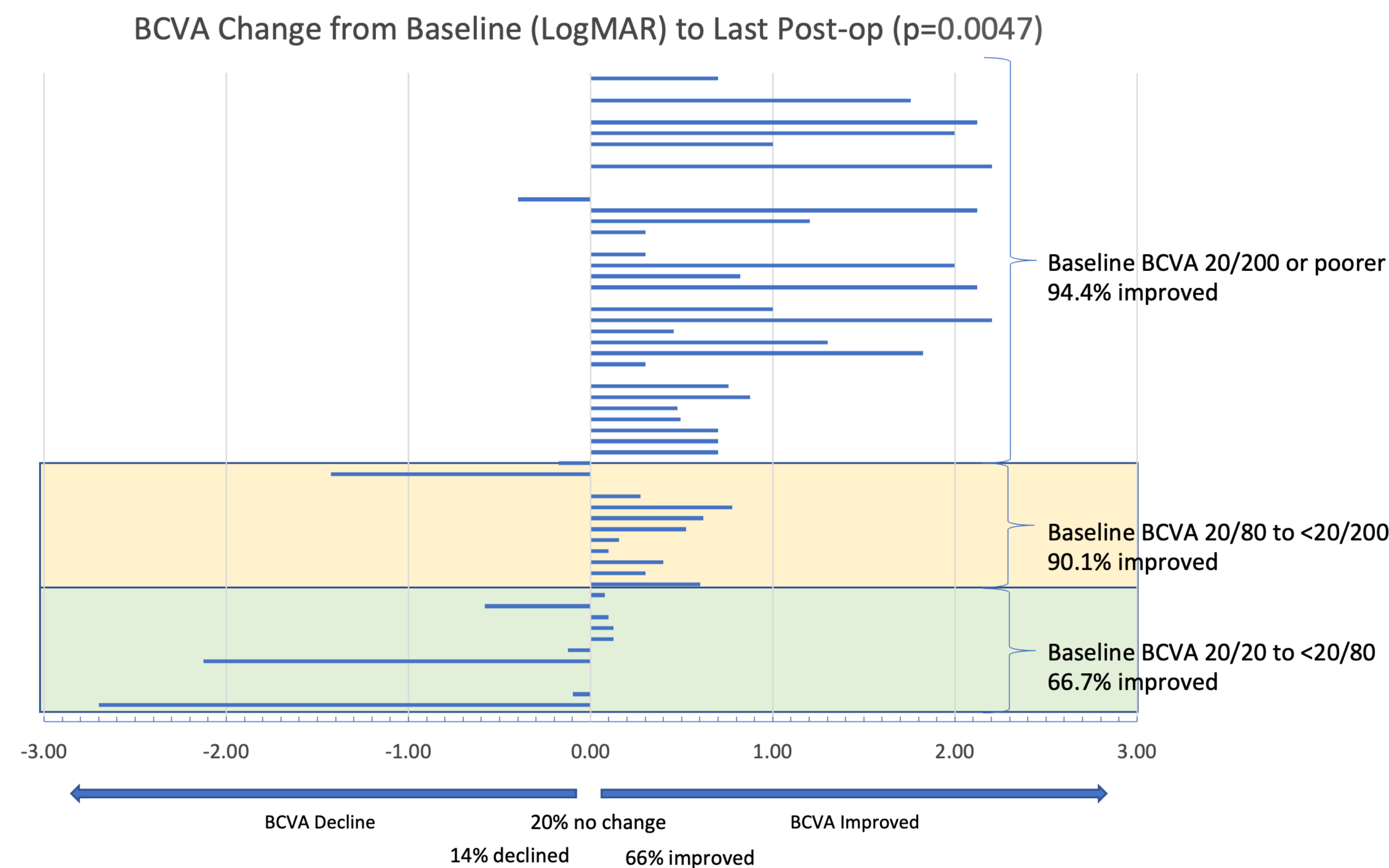


Figure 3. Best-corrected visual acuity (BCVA) change from baseline (LogMAR) to last post-op (p=0.0047) in patients with RD treated with Densiron® XTRA silicone oil.

RESULTS

- 74 patients (50 male, 24 female) were included.
- 50 patients previously underwent an intraocular procedure for RD
- There were 14 macula-on and 60 macula-off RDS
- SiO was removed in 64 (86.5%) of eyes with average duration of 18.03 weeks of tamponade (95% CI: 14.63-21.43)
- At time of SiO removal 50 (78.1%) eyes remained anatomically attached, while 14 (21.9%) re-detached (Figure 1). Of the 14 eyes, four required additional surgery within six months of SiO removal for recurrent RD
- Average follow-up time was 16 months
- The most common complication was elevated intraocular pressure (Figure 2)
- 66% had improvement in VA, 14% had a decline, and 20% had no change (Figure 3)

CONCLUSIONS

- Densiron® XTRA is a safe and effective heavy-silicone oil for the use of retinal detachments.
- The retinal reattachment rate at time of SiO removal was 78.1% with a 74.1% rate of successful anatomic reattachment at 6 months post-oil removal
- Elevated IOP was mostly transient, but some required long-term treatment
- There were zero cases of emulsification

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