

The Standard Care vs Corticosteroid for Central Retinal Vein Occlusion (SCORE-CRVO)



Objective

To evaluate the benefit of corticosteroids as a treatment for vision loss associated with macular edema secondary to perfused central retinal vein occlusion (CRVO).

Methods

Design: Multicenter study, RCT

Sample Size: 271 (66 sites)

- N = 238 at 12 month follow up
- N = 81 at 36 month follow up

Treatment Groups:

- 88 to observation
- 92 to 1-mg intravitreal triamcinolone
- 91 to 4-mg intravitreal triamcinolone

Outcome Measures:

- Primary: Gain in visual acuity letter score >15 from baseline to month 12
- Secondary: Retinal thickness & OCT-measured center-point thickness

Results

Point 1: Intravitreal triamcinolone groups improved visual acuity letter score of 15 or more from baseline after 12 months

- 26.5% of 1-mg and 25.6% of 4-mg, compared to 6.8% of observation group
- Odds Ratio 5.0 for 1-mg (95% CI, 1.8-14.1; $P=.001$) and 5.0 for 4-mg (95% CI, 1.8-14.4; $P=.001$)

Point 2: No difference in retinal thickness between groups at 12 months

- All groups showed similar decrease in OCT center-point thickness at 12 months
- Exception at month 4 where 4-mg triamcinolone group demonstrated greater effect than 1-mg and observation groups ($P=0.002$, χ^2 test)

Point 3: Triamcinolone associated with dose-dependent higher frequency of initiating IOP-lowering medications

- 41% in the 4-mg group and 7% in the 1-mg group, compared with 2% in the standard-care group
- Rate of adverse effects was highest in 4-mg triamcinolone group

TLDR: 1 mg intravitreal triamcinolone was effective for the treatment of vision loss associated with macular edema secondary to perfused CRVO and safer than 4 mg dose in the context of glaucoma and cataract risk