

Ranibizumab in Diabetic Retinopathy (DRCR S) - 2015



Objective

To compare ranibizumab versus panretinal photocoagulation (PRP) for proliferative diabetic retinopathy (PDR).

Methods

Design: Multi-center RCT

Sample Size: 305 adults, 394 eyes

Treatment Groups:

- Ranibizumab: 191 eyes
 - PRP: 203 eyes
- * Eyes in both groups could received Ranibizumab for DME

Outcome Measures:

- Mean visual acuity (VA) change
- Peripheral visual field loss, DME development, neovascularization, safety

Results

Point 1: Ranibizumab was non-inferior to PRP for visual acuity at 2-years of follow

- At two years, the mean VA letter score improvement from baseline was +2.8 in the ranibizumab group vs +0.2 in the PRP group ($P = .11$)
- The difference between groups was greater at 1 year than at 2 years

Point 2: Secondary outcomes tended to favor, or were at least non-inferior, for Ranibizumab

- At the 2-year visit, visual field loss as measured by mean change combining 30-2 and 60-4 total point scores was higher for the PRP group than the ranibizumab group ($P < .001$)
- A vitrectomy was performed more often in the PRP group (15%) than the ranibizumab group (4%); difference 9% more in the PRP group ($P < .001$)
- No statistically significant difference in NEI-VFQ scores
- 1 patient in the Ranibizumab group developed endophthalmitis

Point 3: Real-world costs and patient adherence were not adequately analyzed in the study

TLDR: Among eyes with PDR, ranibizumab was non-inferior for prevention of visual acuity loss over a 2-year period compared to PRP, and therefore may be a reasonable alternative treatment