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IMAGE

Infographic: A randomized controlled study of ranibizumab in patients with choroidal neovascularization secondary to pathologic myopia: the RADIANCE study

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The study recruited individuals with visual impairment secondary to myopic CNV with greater than -6D of spherical equivalence and axial length >26 mm. In addition to the exclusions presented in the infographic, the study also excluded patients with a history of stroke, intraocular steroids or surgery 3 months prior to randomization. Both ranibizumab arms received sham PDT at baseline. In group 1, vision stabilisation was defined as no change in BCVA in the previous two monthly visits. In group 2, treatment was discontinued if there was no evidence of disease activity (absence of intraretinal or subretinal fluid on optical coherence tomography imaging, or leakage on fluorescein angiography). Non-inferiority (<5 ETDRS letters) was assessed between groups 1 and 2 to determine the effect of retreatment criteria on vision at 6 months. A mean visual acuity value for the PDT group at 6 months is not presented in the paper. There were no reported cases of endophthalmitis, myocardial infarction or death during the study. CNV – choroidal neovascularisation; BCVA – best corrected visual acuity; ETDRS – early treatment diabetic retinopathy study; PRP – panretinal photocoagulation; VEGF – vascular endothelial growth factor; PDT – photodynamic therapy; PRN –pro re nata (i.e., as needed); AE – adverse events; SAE – serious adverse events.

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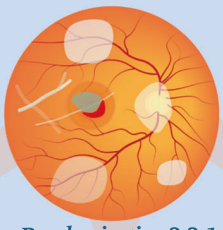
A Randomized Controlled Study of Ranibizumab in Patients with Choroidal Neovascularization Secondary to Pathologic Myopia: The RADIANCE study

Wolf *et al*, *Ophthalmology*, 2014. 121(3):682-92

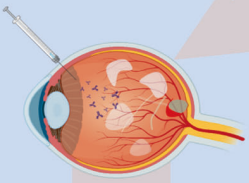
Study Design International, randomized, double-masked, active treatment-controlled Phase 3 clinical trial

277 patients
Active CNV secondary to pathologic myopia
BCVA 24-78 ETDRS letters at baseline
Exclusion: Previous PRP/grid laser/ anti-VEGF/PDT in study eye

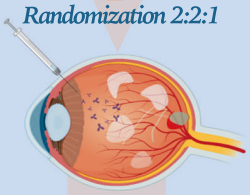


Randomization 2:2:1

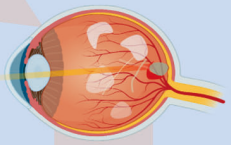
Aims
To compare visual outcomes with Ranibizumab and PDT at 3 months
To compare PRN regimens with ranimizumab at 6 months
To evaluate safety at 12 months



Ranibizumab 0.5mg on Day 1 & Month 1
+ PRN guided by VA
+ sham PDT at baseline
n=106



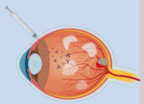
Ranibizumab 0.5mg on Day 1
+ PRN guided by disease activity
+ sham PDT at baseline
n=116



PDT on Day 1
+ Ranibizumab and/or PDT from month 3, guided by disease activity
n=55

Results

Mean number of Ranibizumab injections to 12 months



4.6 | 3.5 | 2.4^

^38/55 received Ranibizumab from month 3

Mean BCVA change at 3 months (letters)

↑10.5* | ↑10.6* | ↑2.2

**P<0.0001 vs PDT group*

Mean BCVA change at 6 months (letters)

↑11.9# | ↑11.7#

#PRN treatment guided by VA criteria is non-inferior to PRN treatment guided by disease activity criteria (P<0.00001)

Mean BCVA change at 12 months (letters)

↑13.8 | ↑14.4 | ↑9.3

Adverse events: ocular / non-ocular

AEs: 46 / 48
SAEs: 1 / 6
n=106

AEs: 44 / 51
SAEs: 1 / 5
n=118

AEs: 16 / 19
SAEs: 0 / 0
n=38 who received Ranibizumab after month 3

Conclusion Ranibizumab treatment, irrespective of retreatment criteria, is superior to photodynamic therapy in the treatment of CNV secondary to pathologic myopia

Reference: Wolf et al., "RADIANCE: a randomized controlled study of ranibizumab in patients with choroidal neovascularization secondary to pathologic myopia". Ophthalmology, 2014.121(3):682–92.

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COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

Correspondence and requests for materials should be addressed to Imran H. Yusuf.

Please note that the infographic is best viewed online.