Comparison of Age-Related Macular Degeneration Treatments Trials (CATT) - 2012

THE LENS

Objective

To describe effects of ranibizumab and bevacizumab when administered monthly versus as needed for 2 years and to describe the impact of switching to as-needed treatment after 1 year of monthly treatment.

Methods

Design: Multicenter RCT

Sample Size: 1185

Treatment Groups:

- 381 to Ranibizumab monthly
- 286 to Bevacizumab monthly
- 298 to Ranibizumab as needed
- 300 to Bevacizumab as needed

At the end of 1 year, patients initially assigned to monthly treatment retained their drug allocation, but re-randomized to either monthly or as needed

Outcome Measures:

- Mean change in visual acuity

Results

Point 1: Among patients following the same regimen for 2 years, mean gain in visual acuity was similar for both drugs.

- Most of the change in mean visual acuity occurred during year 1, with relatively little change during year 2
- The difference in mean improvement for patients treated with bevacizumab relative to those treated with ranibizumab was -1.4 letters (95% CI -3.7 to 0.8)
- The difference in mean improvement for patients treated by an as-needed regimen relative to those treated monthly was -2.4 letters (95% CI, -4.8 to -0.1)

Point 2: Switching from monthly to as-needed treatment resulted in net vision decrease during year 2

- The mean visual acuity among patients assigned to continue monthly treatment changed little during year 2
- The mean changes in the groups switched from monthly to treatment as needed were -1.8 letters in ranibizumab-treated patients and -3.6 letters in bevacizumab-treated patients (P = 0.03)
- Among switched patients, the mean number of injections was 5.0 for ranibizumab-treated patients and 5.8 for bevacizumab treated patients (P = 0.11)

TLDR: Ranibizumab and bevacizumab had similar effects on visual acuity over a 2-year period, and bevacizumab was found to be clinically non-inferior when used with the same treatment frequency.

Comparison of Age-related Macular Degeneration Treatments Trials (CATT) Research Group et al. *Ranibizumab and bevacizumab for treatment of neovascular age-related macular degeneration: two-year results.* Ophthalmol. 2012 Jul;119(7):1388-98