Medical Retina

EFFICACY AND SAFETY OF INTRAVITREAL PEGCETACOPLAN IN GEOGRAPHIC ATROPHY: 24-MONTH RESULTS FROM THE PHASE 3 OAKS AND DERBY TRIALS

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PURPOSE

Pegcetacoplan, a C3/C3b complement inhibitor, was studied in a broad geographic atrophy (GA) population in two 24-month Phase 3 trials.

METHODS

OAKS (N=637) and DERBY (N=621) enrolled patients ≥60 years old who had best-corrected visual acuity ≥24 ETDRS letters and GA lesion area 2.5–17.5 mm2, with at least one focal lesion ≥1.25 mm^2 if multifocal GA at baseline. Patients were randomized (2:2:1:1) to receive intravitreal pegcetacoplan monthly (PM) or every other month (PEOM), or sham monthly or every other month. The primary endpoint was change in GA lesion area measured by fundus autofluorescence at Month 12. Secondary endpoints at Month 24 included change in GA lesion area and functional outcomes.

RESULTS

Pegcetacoplan reduced GA lesion growth versus sham at 24 months (OAKS: 22% PM, p0.0001; 18% PEOM, p=0.0002; DERBY: 19% PM, p=0.0004; 16% PEOM, p=0.0030). Post-hoc microperimetry analyses in the junctional zone of atrophy showed reduced loss of retinal sensitivity (mean threshold sensitivity: PM +0.564 dB, p=0.0650; PEOM +0.707 dB, p=0.0202) and fewer scotomatous points (PM –0.680 points, p=0.1444; PEOM –1.138 points, p=0.0140). Most ocular study eye adverse events were considered mild to moderate. Intraocular inflammation and infectious endophthalmitis rates per injection were 0.20% (excluding four events in 2018 attributed to drug impurity) and 0.034%, respectively. Rates of new-onset exudative age-related macular degeneration (eAMD) were 12.2% PM, 6.7% PEOM and 3.1% sham over 24 months.

CONCLUSIONS

Pegcetacoplan slowed GA lesion growth and was well tolerated through Month 24. Rates of eAMD were higher with pegcetacoplan versus sham.