Purpose: Risuteganib is a small synthetic peptide that regulates select integrin functions involved in the pathogenesis of dry age-related macular degeneration (AMD). This study evaluated the safety and efficacy of risuteganib in intermediate non-exudative AMD.

Methods: A randomised, double-masked, placebo-controlled, multicentre trial enrolled 180 patients with intermediate non-exudative AMD. Patients were treated with risuteganib 2 mg subcutaneously every 28 days or placebo for 24 weeks. The primary endpoint was a composite of disease progression and adverse events. Additional endpoints included changes in best-corrected visual acuity (BCVA), the Macular Photocoagulation Study photocoagulation score (MPS), and the Amsler grid.

Results: Among the 180 patients, 91 (50.6%) had confirmed progression of intermediate AMD during the 24-week treatment period. However, the majority (80.9%) of those patients had no adverse events. The mean change in BCVA from baseline to week 24 was -8.0 letters in the risuteganib group and -14.8 letters in the placebo group (p=0.007). The mean change in MPS from baseline to week 24 was -0.4 in the risuteganib group and -0.8 in the placebo group (p=0.04). The mean change in Amsler grid from baseline to week 24 was -1.5 in the risuteganib group and -2.9 in the placebo group (p=0.01). No significant differences were observed between the groups in terms of the incidence of adverse events.

Conclusion: Risuteganib was well tolerated and did not increase the risk of adverse events in patients with intermediate non-exudative AMD. The drug was associated with a statistically significant improvement in visual acuity, MPS, and Amsler grid score compared to placebo.
Safety and Efficacy of Risuteganib in Intermediate Non-exudative Age-Related Macular Degeneration

Efficacy of risuteganib for the treatment of dry AMD.

Methods: Randomized, double-masked, placebo-controlled Phase 2 study in eyes with intermediate dry AMD presenting with best-corrected visual acuity (BCVA) between 20/40-20/200 was conducted across multiple centers in the United States. Patients were randomized to receive either intravitreal 1.0mg risuteganib or sham injection at baseline. At week 16, patients in the risuteganib group received a second dose and the sham group crossed over and receive a single dose of 1.0mg risuteganib. The primary endpoint was the percentage of population with ≥ 8 letters BCVA gain from baseline to week 28 in 1.0mg risuteganib vs baseline to week 12 for sham.

Results: Forty-five patients were enrolled in the study. At baseline, mean patient age was 78.8 and 75.9 years and mean baseline BCVA was 67.1 and 64.4 letters in the sham and risuteganib groups, respectively. The primary endpoint was met; 48% of patients in the risuteganib group at week 28 and 7% of patients in the sham group at week 12 gained > 8 letters from baseline (p=0.013). Of the risuteganib treated patients, 20% gained > 15 letters at week 28; no patients in the sham group at week 12 had this gain. On a post-hoc masked analysis by 2 independent reading centers, greater outer retinal and photoreceptor thickness and volume and smaller ellipsoid zone defect area in the central 1 mm zone at baseline were associated with increased BCVA response to risuteganib. Risuteganib demonstrated a good safety profile in this study.

Conclusions: Risuteganib showed significant benefit over sham in patients with dry AMD with respect to proportion of patients gaining > 8 letters of BCVA from baseline. Furthermore, post hoc analysis provides preliminary insights into baseline anatomic features that may help to determine likelihood of BCVA response to risuteganib. These findings will be confirmed in an upcoming larger trial.

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