Ranibizumab Treatment in Treatment-Naive Neovascular Age-related Macular Degeneration: Results From LUMINOUS, A Global Real-World Study

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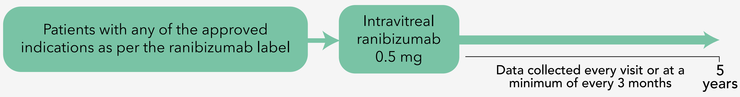
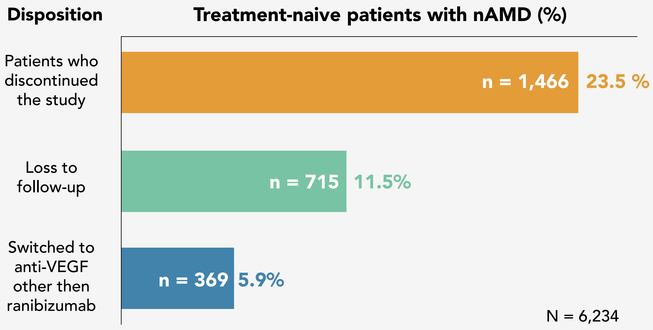
In this paper, the researchers evaluated the effectiveness, safety, and treatment patterns of ranibizumab 0.5 mg in treatment-naive patients with neovascular age-related macular degeneration (nAMD) enrolled in the LUMINOUS study. LUMINOUS (NCT01318941) was a large, prospective, observational trial designed to evaluate the long-term effectiveness, safety, and treatment pattern outcomes with intravitreal ranibizumab treatment in routine clinical practice across 5 US Food and Drug Administration (FDA)- approved indications (nAMD, diabetic macular edema, branch retinal vein occlusion [RVO], central RVO, and myopic choroidal neovascularization [CNV]) over 5 years.

This study recruited 30,138 adult patients (treatment-naive or previously treated with ranibizumab or other ocular treatments).

This was a 5-year, prospective, observational, multicenter, open-label, single-arm, global study.

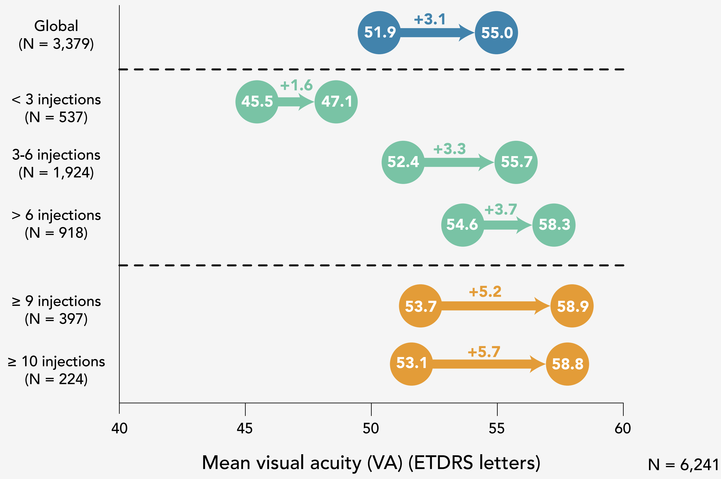


A large percentage of patients discontinued the study, were lost to follow-up, or switched to an anti–vascular endothelial growth factor (VEGF) therapy other than ranibizumab.

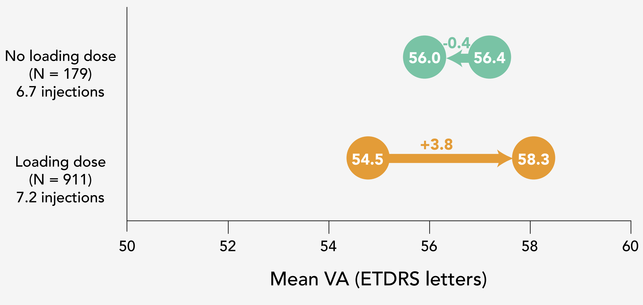


In patients with exudative AMD, those with a higher frequency of injections had a better visual outcome at 1 year. Greater than 9 to 10 injections had almost a 6-letter gain versus those with less injections who faired poorer.

Global median time from diagnosis to first treatment = 12 days



Those receiving a loading dose for nAMD did better than those who did not receive a loading dose.



Conclusions

In the LUMINOUS study, ranibizumab treatment resulted in a mean visual acuity gain of 3.1 letters (N = 3,379) at 1 year with a mean of 5.0 injections in treatment-naive patients with nAMD across all countries. A major challenge in routine clinical settings is the provision of adequate individualized treatment and monitoring to optimize patient visual outcomes.

In LUMINOUS globally, 72.9% of treatment-naive patients with nAMD (who received ≤ 6 injections) were thus effectively undertreated in the first year of treatment.

These results demonstrate the effectiveness and safety of ranibizumab in treatment-naive patients with neovascular age-related macular degeneration.