

AMD Treat-and-Extend Therapy: Outcomes During the Maintenance Phase

Investigators aimed to describe the treatment patterns, disease activity and visual outcomes of eyes in the maintenance phase of a treat-and-extend regimen for neovascular age-related macular degeneration. They compared the maintenance phase behavior of eyes with a shorter induction phase (≤ 3 injections) with those requiring a longer induction phase (> 3 injections), as part of a database, observational study. Eyes with nAMD receiving anti-vascular endothelial growth factor treatment using a treat-and-extend protocol were included in the study. Persistently active eyes were excluded, as were eyes with < 12 months of follow-up during the maintenance phase. Investigators analyzed clinical information from a large, voluntary, international registry of nAMD. They defined the maintenance phase as starting at the first clinician-reported grading of lesion inactivity. For eye analyses, main outcome measures included: treatment interval at first reactivation; time to first reactivation; and visual acuity change during the study period. For visit analyses, main outcome measures included: choroidal neovascular membrane activity graded by the treating physician; time since previous injection; and visual acuity loss since previous injection (> 0 letters and ≥ 15 letters). The mean change in VA during the maintenance phase was +1.0 letters at 12 months, -0.6 letters at 24 months and -1.5 at 36 months. Median treatment interval increased from 35 days at study entry to 63 days at 12 months, and was 60 days at 36 months. At all observed visits during the maintenance phase (minimum one-year follow-up, mean 945 days), 38.5 percent of eyes remained inactive. The most common treatment interval at first reactivation was eight weeks. Treatment intervals beyond 12 weeks appeared to be associated with increased risk of disease reactivation, with risk of reactivation reaching 37.4 percent at treatment intervals of ≥ 20 weeks. Eyes with a longer induction phase had worse visual outcomes in the maintenance phase along with earlier and more frequent disease reactivation, although they received injections less frequently. Investigators found that VA was well-maintained in the maintenance phase of treat-and-extend management for nAMD. Reactivation most commonly occurred at eight weeks, and longer duration of the induction phase was associated with worse VA outcomes and earlier disease reactivation, perhaps because of undertreatment, investigators wrote.

SOURCE: Essex RW, Nguyen V, Walton R, et al. Treatment patterns and visual

outcomes during the maintenance phase of treat-and-extend therapy for age-related macular degeneration. *Ophthalmology* 2016; Aug 20. [Epub ahead of print].