

## **RETREATMENT INTERVAL PROFILING IN RANIBIZUMAB THERAPY FOR NEOVASCULAR AGE-RELATED MACULAR DEGENERATION SHOWS THREE CLASSES OF POSOLOGY**

**Purpose:** To analyse the profile of retreatment interval in real-life ranibizumab therapy for neovascular age-related macular degeneration (AMD).

**Methods:** This is a retrospective review of an electronic medical record (Medisoft Limited, UK). All treatment-naïve patients receiving ranibizumab therapy using a treat-and-extend protocol were eligible. Patients were excluded if they received bilateral intravitreal injections within the first year. The distribution of the maximum re-treatment intervals with no disease re-activation during the first, second and third years for all patients was analysed. The proportion of patients with disease recurrence at 5 weeks or earlier and no disease activity at 8 weeks or longer were calculated.

**Results:** Sixty-six patients were included with 1 year follow-up. Mean age was 83 years. 44 were female. 59, 47 and 24 patients were followed to end of year 2, 3 and 4 respectively. Fluid returned at 4-5 weeks in 30% of patients by the end of year 1. This had dropped to 21% and 8% in years 3 and 4. The retreatment interval (dry macula) reached 8 weeks or greater in 48% of patients at the end of year 1 and this increased to 66% by year 3 and 75% by year 4. There were rapid extenders (reached 12 week in first year), slow extenders and non-extendors (remains at 4 weekly after 2 years).

**Conclusion:** Eight-weekly retreatment can be achieved in two-third of patients using ranibizumab. The 3 types of posology that emerged during first 3 years of treatment warrant further molecular and genetic characterisation.