Assessing the treatment interval patterns in patients with NvAMD treated with aflibercept in a real-world NHS setting

The Royal Liverpool and Broadgreen University Hospitals NHS Trust

Objectives:

Primary objective was to evaluate the durability of intravitreal aflibercept in the management of neovascular age-related macular degeneration (NvAMD) patients over a 24-month period

Secondary objectives were to assess visual acuity (VA) outcomes and evaluate the relationship between anti-VEGF injection frequency and VA change over time

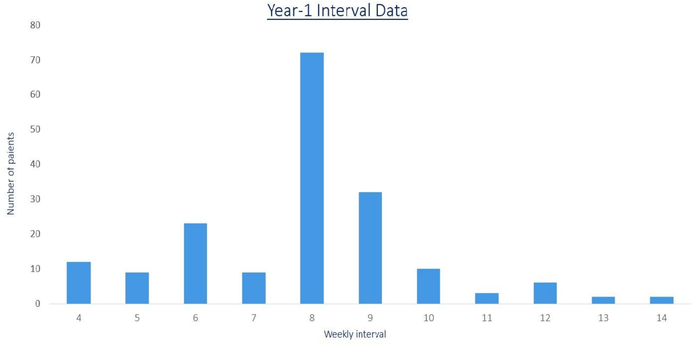
Method:

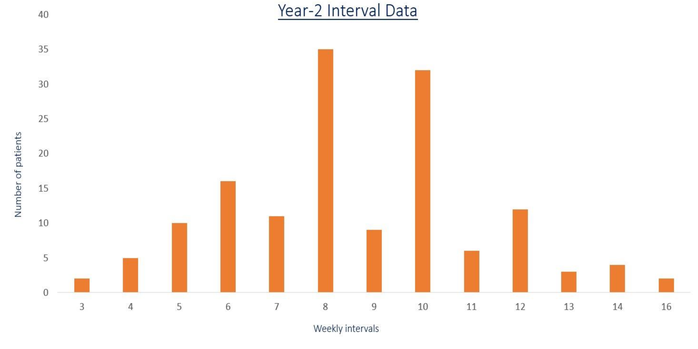
Retrospective, observational, real-world cohort study using anonymized Medisoft electronic medical record (EMR) data from a single UK ophthalmic unit. NvAMD treatment-naïve patients treated with aflibercept were recruited over a 12-month period between 1st January 2017 and 1st January 2018, with a minimum of 24-month follow-up prior to the COVID-19 pandemic.

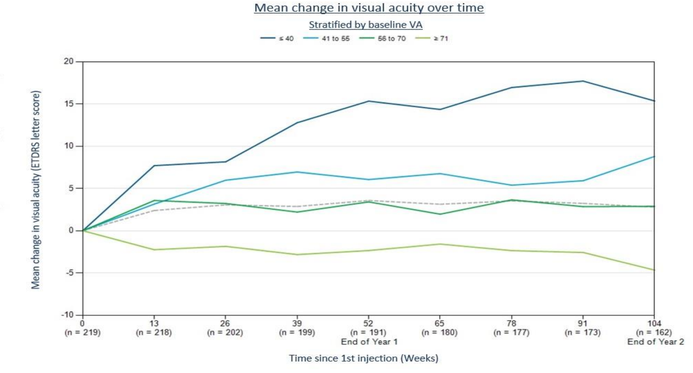
Patients less than 50 years of age, receiving two or fewer intravitreal injections over the follow-up period or prior NvAMD treatment were excluded from the analysis. Treatment protocols allowed for early treat and extend (T&E) and fixed 8-weekly intervals in year-1 with T&E beyond that.

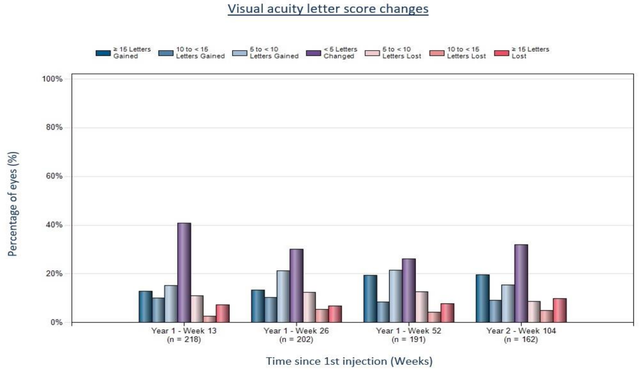
Results:

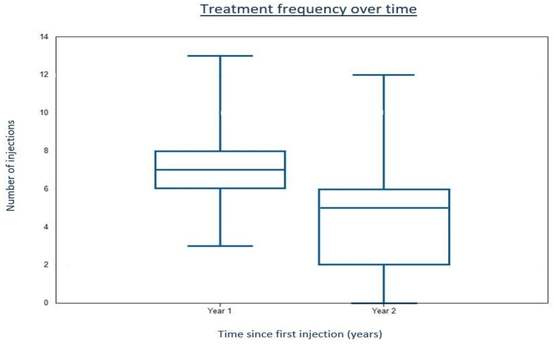
219 eyes were treated, 59.2% being female and 40.8% male with a mean age 78.5 years (range: 51-98). Patients were predominantly white British (82.6%). The mean baseline VA was 60.6 ETDRS letters (range: 9-91). Mean increase in VA was 3.58 ETDRS letters at 12 months and 2.78 ETDRS letters at 24 months, with greater gains in VA observed in patients with lower baseline VAs. The mean number of injections per eye was 7.10 and 4.64 in the 1st and 2nd year respectively. 76.6% maintained or improved VA over 24 months. ≥15 letter gains and losses observed in 19.37% and 7.85% respectively at 12 months and 19.75% and 9.88% respectively at 24months. Durability data was available for 180 eyes over 12-months follow up and 148 eyes over 24-months follow-up. At 12 months, 40% of patients were on q8W intervals, 30% on <q8W, 30% on >q8W with 5% at ≥ q12W. No patients extended beyond q16W. At 24 months, 77% of patients either maintained or increased treatment intervals; 24% on q8W, 30% <q8W, 46% on >q8W; 21% on ≥ q12W. 2% extended to ≥q16W











Conclusion:

In this cohort, only 5% and 21% of patients extend to ≥q12W intervals at 12 and 24-months respectively. Although T&E regimes have absorbed some growth in demand, treatment intervals in the real-world remain relatively short. There is a need for agents/regimes with greater durability to reduce the treatment burden on the patients and providers.

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