

Intravitreal aflibercept cost effective for wet AMD

Age-related macular degeneration (AMD) is a major cause of vision loss in older adults and occurs in dry and wet forms, the latter being less common and also known as neovascular or exudative AMD. Two economic analyses presented as posters at ISPOR compared intravitreal aflibercept injection (IAI) administered every 2 months following three initial monthly injections versus monthly ranibizumab for the treatment of wet AMD in the USA, and both analyses* favoured IAI.

The first was a cost-effectiveness analysis that used a Markov model with a 2-year time horizon and incorporated data from two clinical trials showing similar efficacy between IAI and ranibizumab in terms of improving visual acuity in patients with wet AMD.¹ In the model, patients transitioned between health states based on visual acuity in the better-seeing eye, and only 10% of patients were assumed to be treated in both eyes. The majority of costs for both hypothetical treatment groups were related to drug acquisition costs.

Over 2 years, the per-patient treatment cost of IAI was \$US30 700 compared with \$54 300 for ranibizumab and there was essentially no between-group difference in QALYs, indicating that IAI was the cost-effective alternative.

The second analysis was a budgetary impact study that used a similar Markov model and incorporated data from the same comparative clinical trials.² For a hypothetical US healthcare plan covering 1 million individuals, which would include ≈2800 newly treated patients for wet AMD, the current scenario of using ranibizumab had total budget costs of \$79.2 million in year 1, \$147.9 million in year 2 and \$152.4 million in year 3. Corresponding costs were lower (\$71.9, \$126.5 and \$121.2 million) for a future scenario in which IAI market share is 22%, 42% and 51% in years 1, 2 and 3.

* Both studies were funded by Regeneron Pharmaceuticals.

1. Vitti R, et al. Budgetary Impact of Intravitreal Aflibercept Injection (Iai) in Treating Neovascular Age-Related Macular Degeneration in a Us Health Plan of Adults Ages 65 Years and Older. 18th Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research : abstr. PSS5, 18 May 2013.

2. Vitti R, et al. Cost-Effectiveness of Intravitreal Aflibercept Injection (Iai) in Treating Neovascular Age-Related Macular Degeneration in the Us. 18th Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research : abstr. PSS10, 18 May 2013.