INAHTA Briefs

Issue 2002/34

Title **Photodynamic Therapy With Verteporfin (PDT-V) for Agerelated Macular Degeneration, July 2001**

Agency **MSAC, Medicare Services Advisory Committee**
Commonwealth Department of Health and Ageing,
GPO Box 9848 Canberra ACT 2601 Australia;
tel: +61 2 6289 6811, fax: +61 2 6289 8799, http://www.msac.gov.au

Reference MSAC application 1039. Assessment report ISSN 1443-7120

Aim

To assess the safety and effectiveness of the service and under what circumstances public funding should be supported for the service.

Conclusions and results

Safety: Randomized controlled trials indicate a relatively high and precise number of adverse events (1 in 7) including visual disturbance (22%), injection site events (16%), infusion-related back pain (2.5%), allergic reactions (2%), and photosensitivity reactions (3.5%). Incidence of adverse events with fluorescein angiography (which is used to assess eligibility PDT-V) is measured at 4.5% (case studies, surveys, and other studies of lower evidence levels).

Effectiveness: PDT-V was more effective than placebo in patients with classic choriodal neovascularisation (CNV) in reducing loss of less than 15 letters after an average of 5.6 treatments over 24 months. Four patients with classic CNV need to be treated to produce one positive result (only 2 where there is no evidence of occult CNV). PDT-V did not reverse visual loss. PDT-V was not more effective than placebo for less typical lesions, patients with occult CNV and patients who were current smokers.

Cost effectiveness: Modeling suggests a cost per vision year gained of $6100 to $35 400 based on assumed clinical advantages and associated offsets. PDT-V funding is estimated to cost $10M to $30M in the first year, $16M to $36M in the second year and $13.6M per annum in subsequent years when testing only new patients. This assumes diagnosis is accurate. However, the difficulty of diagnosing patients may mean additional costs.

This draft report does not include recommendations.

Method

MSAC conducted a systematic review of the biomedical literature from 1966 to April 2001 accessing biomedical electronic databases, the Internet, and international health technology agency websites. Effectiveness was assessed using a randomized controlled trial of 609 patients that compared verteporfin with placebo in PDT for patients with neovascular AMD. Cost effectiveness assessment is based on modeling by the applicant of cost per vision-year gained for different clinical scenarios that compare PDT-V and placebo (and includes sensitivity analysis). Aggregate costings assume that the stock of current patients would be cleared in 2 years.