



Title	Photodynamic Therapy with Verteporfin for the Treatment of Neovascular Age-Related Macular Degeneration: A Clinical Assessment
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Reference	CCOHTA Technology Report, Issue 31, November 2002. ISBN 1-894620-63-1 (print); ISBN 1-894620-64-X (online): http://www.ccohta.ca

Aim

- To assess the potential harms and benefits of verteporfin photodynamic therapy (PDT) in treating neovascular age-related macular degeneration (AMD)
- To discuss the economic implications of this new therapy.

Conclusions and results

Clinical Effectiveness: Two reports describing three randomized, controlled trials involving 948 participants met the eligibility criteria when rated using the Jadad scale. Compared with placebo, 2 years of treatment with verteporfin PDT reduced the number of cases of central blindness by slowing disease progression. However, most treated individuals will continue to lose visual acuity. Long-term therapy can result in complications, most commonly visual disturbances and injection site events. Compared to placebo, verteporfin PDT did not cause an overall increase in serious adverse events and appears to be reasonably well tolerated. The use of verteporfin PDT will likely increase the need for angiographic screening to determine eligibility for treatment. The direct impact of this treatment on quality of life and visual function is not known. Its impact on individuals with poorer vision is also unknown.

Economic Implications: Four cost effectiveness analyses were identified. These studies suggest that verteporfin PDT will modestly increase patient quality-adjusted life-years. However, the two-year incremental costs for this procedure in Canada are estimated to be between \$10,625 and \$14,250.

Recommendations

Not applicable.

Methods

This systematic review looked at randomized controlled trials comparing verteporfin PDT with placebo or current therapy in adults with wet AMD. Two independent reviewers identified relevant reports from the results of database searches, bibliographic searches, hand searches of reviews and conference abstracts, and information gathered from experts in the field and from the drug manufacturer. Outcome measures included:

- Number of individuals with legal blindness or changed visual acuity
- Impact on quality of life
- Impact on visual function
- Morbidity.

Further research/reviews required

Further research is needed to assess the direct impact of verteporfin PDT on quality of life and visual function.