

Economic Analyses of Therapeutics for Macular Degeneration: A Cross-national Systematic Review

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PURPOSE

Several options are currently available for the treatment of choroidal neovascularization (CNV) due to AMD, and potential new drugs are in the pipeline. The study's purpose was to systematically review economic analyses of AMD therapeutics. Such economic analyses will become increasingly valuable tools for health technology assessment of new therapeutic modalities for AMD particularly by government and third-party payers.

METHODS

We performed searches using PubMed, National Institute for Clinical Excellence, Cochrane, the Tufts CEA Registry, and the Canadian Council of Technology Assessment in Health Care for economic studies of AMD therapeutics published between January 1990 and February 2006. Reviewers independently reviewed articles to determine if they were original studies, and whether they were eligible to be considered cost-effectiveness analyses by established criteria. We used a validated rating scale to grade articles that met these eligibility criteria.

RESULTS

Only 23 articles met our criteria. The majority (48%) were cost-effectiveness analyses. Forty-five percent measured outcome as quality-adjusted life years (QALYs). Several articles measured outcome strictly as improvement in visual acuity. One study was a costminimization study. Several shortcomings were noted including lack of discussion of potential bias, and lack of standardization regarding how well small improvements in visual acuity correlate with substantive improvements in quality of life.

CONCLUSION

Relatively few economic analyses have been conducted for therapeutic modalities of AMD. Overall quality of the studies was good, but varied widely. Many of the studies used QALYs as an outcome measure, which is appropriate since it is familiar to policy makers. A limitation in these studies is the lack of understanding of how well small improvements in visual acuity correlate with quality of life.