

Title Evaluation of Photodynamic Therapy for the Treatment of Exudative

Age-related Macular Degeneration (ARMD) with Subfoveal

Neovascularization: A Technology Assessment

Agency AÉTMIS, Agence d'Evaluation des Technologies et des Modes d'Intervention en Santé

2021, avenue Union, bureau 1040, Montréal, Québec, Canada H3A 2S9

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### Aim

To assess the efficacy of photodynamic therapy (PDT) in treating ARMD, and to examine the costs, care organization, and services involved in applying PDT in Québec.

### Conclusions and results

Neovascular ARMD, which currently affects 16,000 Québecers, is the only treatable form of this degenerative condition of the retina. The efficacy of PDT (using verteporfin as a photosensitizer) is well established for ARMD with: a) predominately classic neovascularization (more than 50%) and b) pure occult neovascularization. PDT reduces moderate to severe loss of visual acuity for people with these conditions and reduces the number of people who become legally blind after 2 years. Economic analysis favors PDT in patients with either of these conditions if improvement in quality of life is taken into account (the report provides data on the cost utility ratio and net annual budget impact). Budgetary restraints, the nature of the condition, and the unavailability of specialists have led to inconsistent access to PDT in Québec.

#### Recommendations

AÉTMIS recommends that:

- PDT be considered a technology that effectively slows the progression of certain forms of ARMD
- ARMD be recognized as an important public health problem
- Québec initiatives to manage ARMD populationwide be made part of a broader effort to manage preventable blindness
- A task force be established to create a concrete care and service plan in light of this research.

# Method

AÉTMIS conducted:

• A systematic review of the scientific literature (1975 to June 2004)

- Interviews with experts in ophthalmology and visual rehabilitation
- Semi-structured interviews with specialists, receptionists, and nurses at all Québec hospitals and selected private clinics concerning the organization of care and services provided to ARMD patients.

Tests of a Markov-type decision tree to predict the costs and effects of: a) the PDT treatment option for all Québecers diagnosed with ARMD and b) a non-treatment option.

## Further research/reviews required

The Vision Network/FRSQ should prioritize the evaluation of ARMD detection tools and undertake further research on care and services related to preventable blindness in Québec.