

Health Quality Ontario

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Retinal Prosthesis System for Advanced Retinitis Pigmentosa: OHTAC Recommendation

ONTARIO HEALTH TECHNOLOGY ADVISORY COMMITTEE RECOMMENDATION

- The Ontario Health Technology Advisory Committee recommends publicly funding the Argus II retinal prosthesis system for advanced retinitis pigmentosa

RATIONALE FOR THE RECOMMENDATION

Members of the Ontario Health Technology Advisory Committee determined that the Argus II system has demonstrated clinical effectiveness in restoring partial functional vision for patients with advanced retinitis pigmentosa. The Ontario Health Technology Advisory Committee took into account value for money, as well as the lived experience of people with retinitis pigmentosa and noted that the Argus II system offers the possibility of quality-of-life improvements in a population for whom there is no other treatment option.¹

Public Comment: Held July 28 to August 18, 2017.

Decision Determinants for the Retinal Prosthesis System for Advanced Retinitis Pigmentosa

Decision Criteria	Subcriteria	Decision Determinants Considerations
Overall clinical benefit How likely is the health technology/intervention to result in high, moderate, or low overall benefit?	Effectiveness How effective is the health technology/intervention likely to be (taking into account any variability)?	Compared with residual vision, the Argus II retinal prosthesis system improved visual function (GRADE moderate), functional outcomes (GRADE moderate), and quality of life (GRADE low to moderate) in patients with advanced retinitis pigmentosa
	Safety How safe is the health technology/intervention likely to be?	The Argus II system has an improved safety profile as a result of updated device design and new surgical techniques
	Burden of illness What is the likely size of the burden of illness pertaining to this health technology/intervention?	Approximately 4,000 patients in Ontario have some form of retinitis pigmentosa, but only those at the advanced stage (<1%) would be eligible for the Argus II system in Ontario
	Need How large is the need for this health technology/intervention?	The Argus II system is the only existing surgical implantable device to restore partial functional vision in patients with advanced retinitis pigmentosa
Consistency with expected societal and ethical values^a How likely is adoption of the health technology/intervention to be congruent with societal and ethical values?	Societal values How likely is adoption of the health technology/intervention to be congruent with expected societal values?	The adoption of the Argus II system is likely to be congruent with expected societal and ethical values
	Ethical values How likely is adoption of the health technology/intervention to be congruent with expected ethical values?	
Value for money How efficient is the health technology/intervention likely to be?	Economic evaluation How efficient is the health technology/intervention likely to be?	The Argus II system would be cost-effective compared with standard care if the willingness to pay was greater than \$97,429 per QALY gained
Feasibility of adoption into health system How feasible is it to adopt the health technology/intervention into the Ontario health care system?	Economic feasibility How economically feasible is the health technology/intervention?	Assuming four Argus II implants per year, the budget required for the next 5 years was estimated at \$0.71 to \$0.78 million per year
	Organizational feasibility How organizationally feasible is it to implement the health technology/intervention?	The University Health Network has assembled a specialized team that can perform the Argus II implant surgery and provide the requisite screening, follow-up, visual training, and rehabilitation

Abbreviations: GRADE, Grading of Recommendations Assessment, Development, and Evaluation; QALY, quality-adjusted life-year.

^aThe anticipated or assumed common ethical and societal values held in regard to the target condition, target population, and/or treatment options. Unless there is evidence from scientific sources to corroborate the true nature of the ethical and societal values, the expected values are considered.

REFERENCE

- (1) Health Quality Ontario. Retinal prosthesis system for advanced retinitis pigmentosa: a health technology assessment update. Ont Health Technol Assess Ser [Internet]. 2017 Nov;17(13):1-62. Available from: <http://www.hqontario.ca/evidence-to-improve-care/journal-ontario-health-technology-assessment-series>

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