



Title Octaplas Compared with Fresh Frozen Plasma to Reduce the Risk of Transmitting Lipid-Enveloped Viruses: An Economic Analysis and Budget Impact Analysis

Agency CADTH, Canadian Agency for Drugs and Technologies in Health
Suite 600, 865 Carling Ave, Ottawa, Ontario K1S 5S8 Canada;
Tel: +1 613 226 2553, Fax: +1 613 226 5392; publications@cadth.ca, www.cadth.ca

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Aim

To investigate the cost-effectiveness position of Octaplas against standard fresh frozen plasma (FFP) and its budgetary impact on the Canadian healthcare system.

Conclusions and results

Results of the cost-utility analysis (CUA) showed that frozen plasma (FP)/FFP is less costly and more effective (dominates) compared to Octaplas. Octaplas produces fewer safety benefits at a higher cost than standard FP/FFP. The incremental cost (additional budget) to the healthcare system resulting from switching 100% of total demand of all forms of plasma to Octaplas would be about 16.4 million Canadian dollars per year. Cost-ineffectiveness of Octaplas results from low transfusion-related risks for FP/FFP, engineered by advances in the safety measures of blood transfusion, eg, testing, donor screening, and deferral. From a net-benefit standpoint, switching to Octaplas provides absolute benefits to the healthcare system, as it increases the volume of much needed IVIg and albumin. However, overall, in relative terms, the healthcare system incurs a net loss, as it could purchase the added volume of IVIg and albumin at a lower total cost from its current suppliers.

Recommendations

None given.

Methods

A comprehensive literature search involved electronic databases, relevant websites, and the scrutiny of retrieved papers to identify reports of published and ongoing studies. Two independent reviewers screened all articles, reaching consensus on the articles and data identified. Two analyses were conducted using data from the literature. A Markov decision CUA model was constructed to represent 5 possible transfusion-related complications in hypothetical cohorts of patients. The results were presented as incremental cost per quality-

adjusted life-years. A decision analytical time series cost-effectiveness model was built. The outcome of the model was cost per life-year saved.

Further research/reviews required

None specified.