Subcutaneous versus intravenous immunoglobulin for primary immunodeficiencies: 
systematic review and economic evaluation

Ho C, Membe S, Cimon K, Roifman C, Kanani A, Morrison A

Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
"The aim of this systematic review was to assess the clinical and cost-effectiveness of SCIg compared with IVIg. The budget impact of switching between therapies, and the use of Ig in Canadian patients with conditions other than PIDs were also investigated." (executive summary)

Authors' conclusions
The comparison between IVIg and SCIg is based on limited clinical evidence. It is reasonable, however, to consider SCIg as an alternative to IVIg in patients with contra-indications to IVIg and poor venous access. The overall use of Ig in Canada requires stricter controls, because it is used in more than 80 off-label indications, many based on limited evidence of efficacy. Under the assumption that SCIg, hospital IVIg, and home IVIg are equally effective, hypothetical home IVIg is a potentially cost saving Ig route, because it yields the larger net gain from the avoidance of hospital and treatment or diagnostic charges. Further investigation of the PID prevalence rate, patients suitable for home-based IVIg, and most importantly, the magnitude of initial investment needed to switch to home-based IVIg, is required to determine its cost-effectiveness position.

When differences in effectiveness are considered, the economic arguments for SCIg are appealing. Compared with hospital-based IVIg, SCIg dominates (greater expected benefits at less expected costs). In comparison with home-based IVIg, it is potentially cost-effective, depending on the willingness to pay for a QALY. There is uncertainty about the cost and comparative clinical effectiveness of SCIg. The cost-effectiveness of SCIg is likely to change because of the availability of a Canadian price for infusion pumps and kits, information about a less expensive method of administering SCIg, reliable comparative estimates of mortality rates among interventions, and reliable comparative utility estimates for infections. Until reliable comparative clinical and costeffectiveness conclusions can be drawn, an option for Canadian decision makers may be to gradually establish SCIg as an alternative for patients who are willing and clinically suitable to switch to SCIg.

Project page URL

INAHTA brief and checklist

Indexing Status
Subject indexing assigned by CRD

MeSH
Immunoglobulins, Intravenous /economics /therapeutic use