

# ECONOMIC EVALUATION OF DIFFERENT MODALITIES OF IMMUNOGLOBULIN THERAPY IN CHRONIC DYSIMMUNE POLYRADICULONEUROPATHIES

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**Introduction:** Lifelong and expensive immunoglobulin administration is the main therapy for chronic dysimmune polyneuropathies as chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) and multifocal motor neuropathy (MMN). Based on recent clinical evidence, this treatment can be administered by intravenous immunoglobulin (IVIg) or subcutaneous infusions (SCIg) and delivered at home. IVIg, in responsive and stabilized patients, is usually administered in an outpatient setting with twice a month infusion every 25–35 days (1–2 g/Kg/month). Conversely, SCIg is given at home in most cases with three to five weekly infusions (1–2 g/Kg/month). This study aims to determine whether SCIg is cost-effective compared with IVIg from a regional health service perspective.

**Methods:** We selected 10 patients with chronic dysimmune neuropathy (5 CIDP and 5 MMN) diagnosed according to EFNS/PNS criteria. All the patients had been previously treated with IVIg (1g/Kg/month) for at least 12 months. Before switching from IVIg to SCIg it was necessary for the patient to have shown clinical improvement and to have been clinically stabilized for at least 3 months. All the clinical assessments (MRC, ONLS, INCAT sensory sum score for CIDP) were carried out from 7 to 15 days after the last IVIg infusion and after 6 months of SCIg treatment (final visit). Because both methods of administration provide similar efficacies, a cost-minimization analysis was performed.

**Results and Conclusions:** First, costs were calculated through simulation testing different hypotheses on cost drivers. Secondly, costs were estimated on the basis of field data collected from our patients. We considered only direct medical costs. The results of the simulation show that the yearly direct costs to treat a patients were € 43,456 (IVIg) and € 42,772 (SCIg). Ig acquisition costs were the main cost driver; it represented respectively 97% (SCIg) and 93% (IVIg) of the total cost. 3% only is due to the cost of medical and nursing staff (IVIg) and 3% is due to the cost of IVIg's side effect treatment: this cost is absent for SCIg. Estimation made from the field data were found to be little different: over 6 months the total mean cost was € 21,088 (IVIg) and € 20,878 (SCIg). Our pilot study documents the existence of two treatments, SCIg and IVIg, substantially equivalent as efficacy and costs for treating chronic dysimmune neuropathies.

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## References

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