

# Supply and use of Immunoglobulins in Times of Crises:

## Health Technology Assessment (HTA) to Inform the use of Immunoglobulin and Ensure Appropriate Allocation

Pr Isabelle Durand-Zaleski

# Disclosures

- Scientific advisory boards and conferences:  
Abbvie, Amgen, BMS, Boston scientific,  
Medtronic, MSD, Sanofi, Takeda
- Chair of the scientific committee of the French  
Blood Agency

# Context

- IV Ig are among the most expensive items for tertiary care hospitals
- Indications are monitored and adherence to guidelines measured in many countries
- The yearly growth of Ig use is above 10% (driven by the treatment of secondary immunodeficiencies)
- Example in Spain (authorized indications)= 92million €

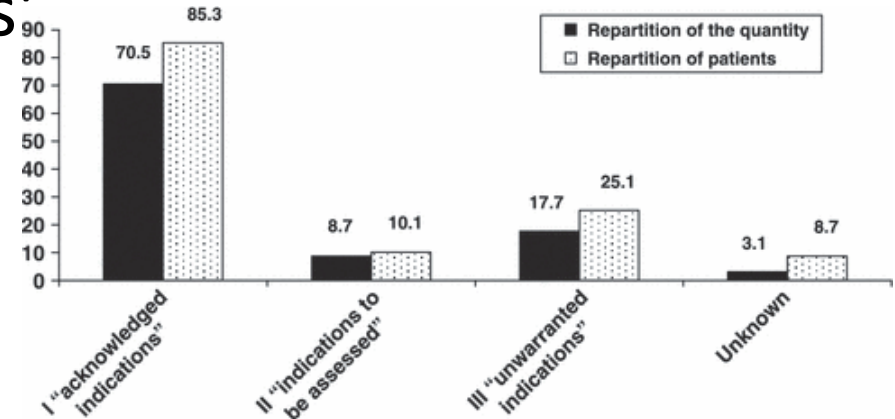
Guillevin L. Pharmacoeconomics of immunoglobulins and indications for their use. *Curr Opin Allergy Clin Immunol.* 2013 Jul;13 Suppl 2:S53-5.

Darbà J, Restovic G, Kaskens L, de Agustín T. Direct medical costs of liquid intravenous immunoglobulins in children, adolescents, and adults in Spain. *J Clin Pharmacol.* 2012 Apr;52(4):566-75.

# French hospitals (Marseille)



- 70% of the IVIg use was for 'acknowledged indications'
- 9% for 'indications to be assessed' and
- 18% for 'unwarranted indications'

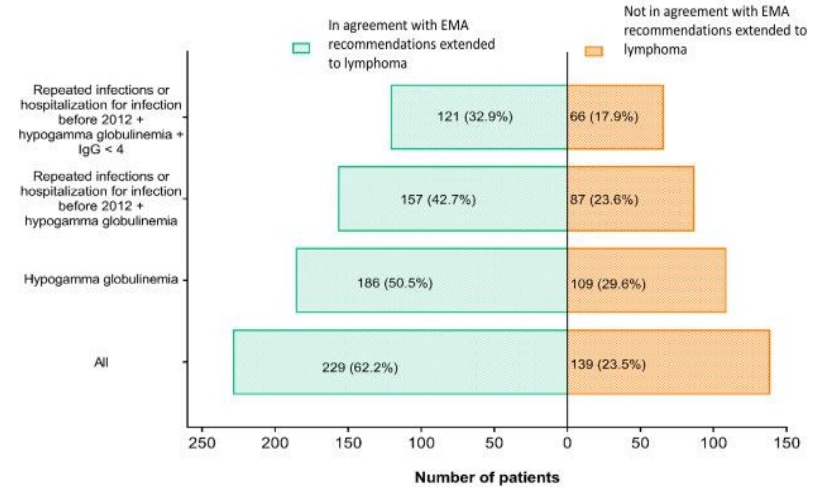
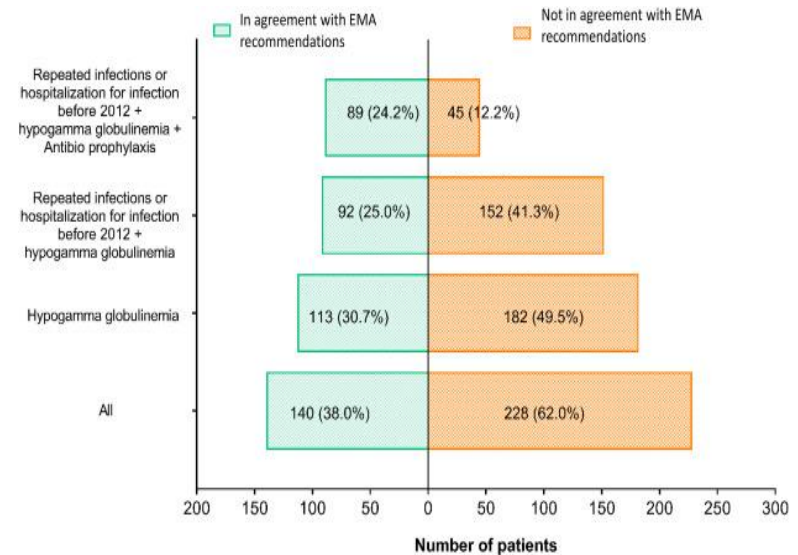


indications'  
Nevertheless, the two most reported indications: multifocal motor neuropathy and idiopathic chronic polyneuropathy were not approved by the French Health Products Agency (AFSSAPS) at the time of the study and were approved since.

# French hospitals (Paris)

In 2017, IgRT use for patients with SID represented 18% of polyvalent Ig use in the Ile de France region and a total expenditure of €9.7 million (out of a total of €54 million or €8678 per patient for all indications).

Although our population ( $n = 368$ ) was not fully representative (*of all SID indications*), only one quarter of patients received IgRT in agreement with EMA guidelines and 75% not in agreement. The estimated cost of IgRT misuse was €8.2 million (or €12.1 million including hospital admissions) in our cohort, for the entire region.



# Spanish hospitals

- 40% of patients treated with IVIG and almost a third of prescriptions were for off label indications [...]with a notable cost.
- There is an important variability in IVIG prescriptions between hospitals, indicating room for improvement in IVIG use and the need for a consensus of protocol use.

# Belgian hospitals

- IMS Health hospital disease database
- €33.5 million (or 17% of Belgian hospital drug expenditure).
- Around 50–60% of intravenous immunoglobulin use was associated with approved indications
- and around 40–50% with off-label use,
- Off-label use occurred in unspecified conditions, surgery, orthopedics and oncology.

# General impression on IV Ig

## use

- Rapid changes in indications
- High % of off label / inappropriate (?) indications
- Poor documentation of the compassionate indications
- Informed consent?

Simoens S. The use of intravenous immunoglobulins in Belgium. *Int Arch Allergy Immunol.* 2011;154(2):173-6.

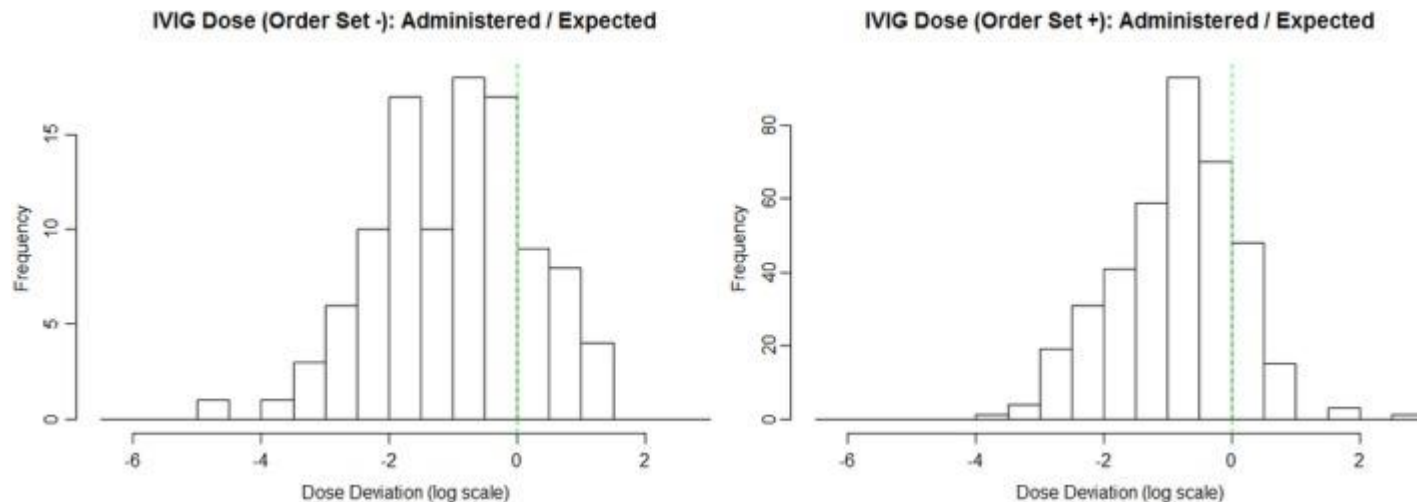


# Problems and proposals

- New indications
- Timelines for full HTA (rapid access)
- Inappropriate use
- costs

# Decision support for IV Ig prescriptions

- 74 unique indications were included in the final list of appropriate uses of IVIG. The appropriate dosages for each indication were programmed into the final order set
- Reduction in dose deviation (variability)



# HTA resources

- Strict application of approved labelling indications,
- Optimization of doses prescribed
- Treatment duration
- Use of SCIGs whenever possible
- Available alternative therapies