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Objective

To disclose the use of IVIg in hospitalized patients and outpatients in a tertiary hospital:

- 1) Adequacy of use to label indications.
- 2) Economic impact on the conditions used (label and off-label indications).

Material and methods

- Retrospective study (January-2014 to December-2014).
- Collected data, from Farmatools® software and medical records: sex, age, IVIg indication, dose and number of administrations to each patient, and treatment costs.
- Descriptive analysis of IVIg use per patient and indication and associated cost.

Results

138 patients
received IVIg

average age 59.1

58.7%

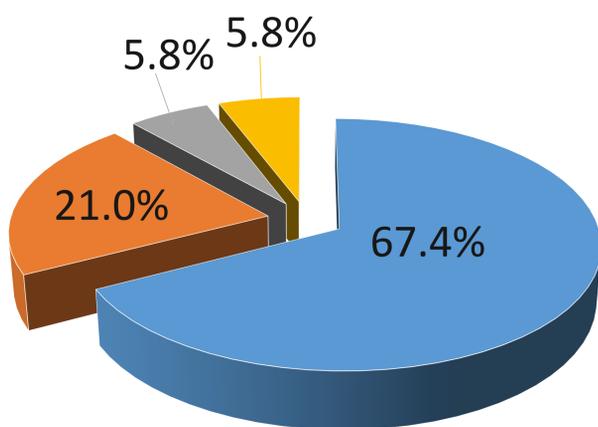


41.3%

55.9% outpatients and 44.1% hospitalized patients

- **Label indications:** common variable immunodeficiency (55/93), IgG-immunodeficiency (13/93), idiopathic thrombocytopenic purpura (12/93), Guillain-Barré syndrome (6/93), Kawasaki disease (3/93), secondary-immunodeficiency (2/93), hyperIgM-immunodeficiency (1/93), unspecified hypogammaglobulinemia (1/93). 22,252.5 g IVIg dispensed (716,350 €)

- **Off-label indications supported by clinical evidence:** myasthenia gravis (7/29), multifocal motor neuropathy (6/29), non-specific demyelinating neuropathy (4/29), chronic inflammatory demyelinating polyradiculoneuropathy (3/29), inclusion body myositis (3/29), autoimmune hemolytic anemia (2/29), polymyositis (1/29), dermatomyositis (1/29), Rasmussen syndrome (1/29), alloimmune thrombocytopenia (1/29). 16,632.5 g IVIg dispensed (591,596 €)



- **Off-label indications not sufficiently supported by clinical evidence: Immune-mediated disorders with limited evidence of immunoglobulin efficacy:** systemic vasculitits (2/8), scleroderma (2/8), polyarteritis nodosa (2/8), microscopic polyarteritis (1/8), acute disseminated encephalomyelitis (1/8). 7,287.5 g IVIg dispensed (241,225 €)

- **Off-label indications not sufficiently supported by clinical evidence: Presumed immune-mediated disorders with little or no evidence of efficacy:** systemic lupus erythematosus (3/8), epilepsy (2/8), proximal diabetic neuropathy (1/8), aplastic anaemia (1/8), paraneoplastic syndrome (1/8). 5,247.5 g IVIg dispensed (180,830 €)

Conclusion

- Despite the fact that most of the dispensed IVIg were used either for label or for off-label supported by clinical evidence indications, uses with unproven clinical benefit, means an important expense in our hospital.
- Due to the frequent off-label use of IVIg, implementing a protocol would be useful to adjust IVIg treatments to the guidelines recommendations and to optimize its use.