

# OPTIMIZATION OF HUMAN NORMAL IMMUNOGLOBULINS IN PAEDIATRIC CANCER: A MULTIDISCIPLINARY TEAM WORK

M. Sánchez Celma, F. Bossacoma Busquets, J.L. Vinent Genestar, A. Comes Escoda, J. Arrojo Suárez  
Hospital Sant Joan de Déu, Pharmacy, Barcelona, Spain

## BACKGROUND

Human normal immunoglobulins (HNIg) have multiple indications such as replacement therapy or as immunomodulatory therapy for several autoimmune disorders. The use HNIg in cancer patients is controversial, especially in children. Since HNIg represents a high cost and limited resource, it is necessary to evaluate their use basing it on evidence medicine indications.

## PURPOSE

To optimize HNIg prescriptions of cancer patients in a paediatric teaching hospital, to achieve better efficiency of treatments.

## MATERIAL AND METHODS

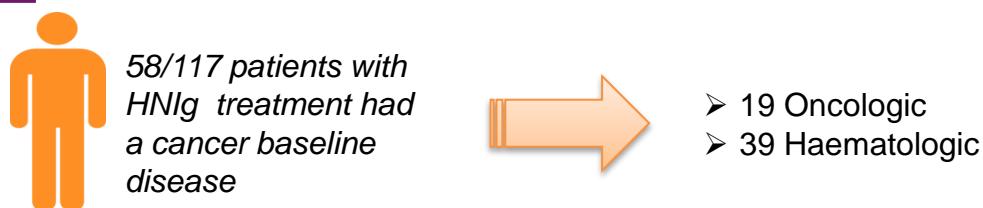
In a Day Care Unit (DCU) from a 262 bed paediatric teaching hospital, a multidisciplinary adequacy program (MAP) of HNIg prescription was implemented.

The team members were 2 pharmacists and 7 subspecialist paediatricians: 1 Oncologist, 2 haematologists, 2 Immunologist and 2 Infectious disease doctors.

A treatment algorithm was elaborated to harmonize the HNIg prescription criteria. Patient's prescriptions were verified and discussed monthly according to the criteria, reducing potentially inappropriate HNIg prescriptions and/or optimizing their duration or dose.

The use of HNIg was compared with the first year before of MAP implementation.

## RESULTS



Following the multidisciplinary adequacy criteria we reviewed 14 old and 44 new prescriptions checking their indication, dosing and treatment length.

Comparing the HNIg use between one year before the MAP was implemented and the first year after its implementation, both drug use and DCU appointments decreased (by a 47% and a 27% respectively).

Only 1 treatment had to be reintroduced after its discontinuation.

## CONCLUSION

- ✓ A MAP to optimize HNIg prescriptions was successfully implemented and improved efficiency in paediatric cancer patients. Since it allowed deprescription and/or reduction in treatment duration, both the drug use and, in consequence, the risk of adverse events decreased.
- ✓ Other MAP can be established in other health care areas to control prescriptions in order to harmonize the criteria for treating the patients.