

PHARMACOECONOMIC AND ADHERENCE ANALYSIS in GROWTH HORMONE ACCORDING TO GALENIC PRESENTATION

In vivo study vs in vitro



Ignacio Díez López¹ Ainhoa Sarasua Miranda², Isabel Lorente Blázquez², Ana Cristina Minguez³, Carlos Martínez Martínez³
 1- Unidad de Endocrino infantil. Servicio de Pediatría, Hospital Universitario Araba, Vitoria. UPV-EHU. Facultad de Medicina. Vitoria.
 2- Unidad de Endocrino infantil. Servicio de Pediatría, Hospital Universitario Araba, Vitoria
 3- Servicio de Pediatría Farmacia Hospital Universitario Araba, Vitoria



INTRODUCTION

The long-term treatments, involves the lack of adherence to GH in pediatric patients, it has been estimated a lack of adherence between 5 and 82%

The main objective of this study is to perform a comparative analysis of costs and product loss among the different GH presentations approved in Spain in pediatric patients. The secondary objective is to observe differences in efficacy in GH treatment, based on the differences in the prescribed and dispensed doses detected according to presentation. It is compared with the in vitro study of the ISCIII (IPE Report 2013/70).

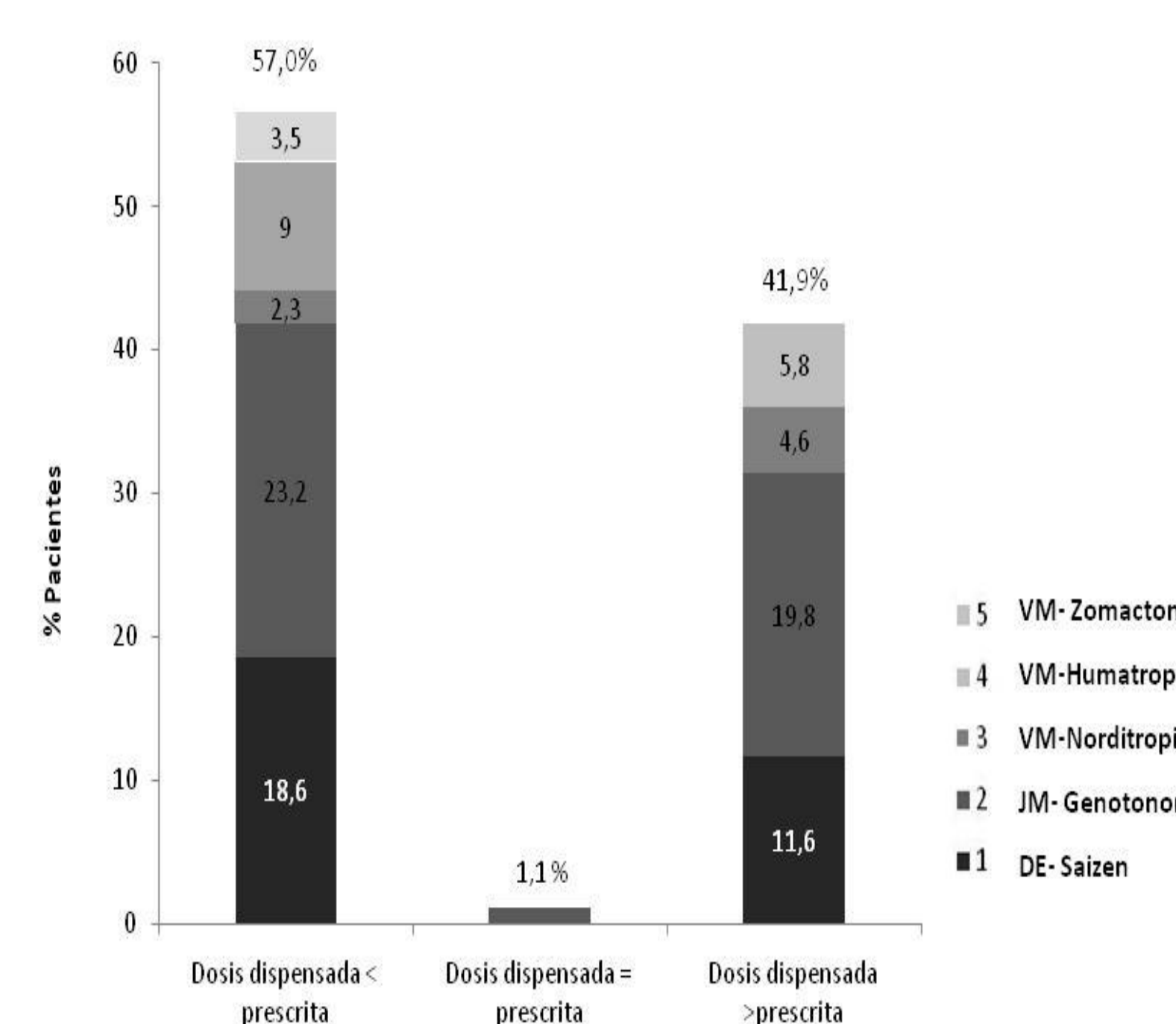
A retrospective, observational study in which a comparative analysis of the doses and costs of GH prescribed by the endocrinologist and that dispensed in the pharmacy service was carried out over 12 months. Variables: sex, age pathology levels of IGF-1. IMMULITE 2000 IGF-1. PIL2KGF-17 The economic impact of administering the total mg prescribed using exclusively each of the GH presentations was estimated. test (X2) for paired samples (n <30) Difference between the dose of GH prescribed and that dispensed in the pharmacy service according to the GH presentations used and according to the pathology for which the treatment is prescribed.

	Dosis prescrita		Dosis dispensada		Diferencia (dosis dispensada - prescrita)		
	mg	Coste (€)	mg	Coste (€)	mg	%	Coste (€)
DE Saizen®	7.360,5	111.879,9	7.318,0	111.233,6	-42,5	-0,6	-646,3
JM Genotonorm®	13.340,6	226.791,0	13.279,6	225.753,2	-61,0	-0,5	-1.037,8
Norditropin®	1.981,8	8.333,5	2.106,0	8.710,0	124,2	6,3	376,5
VM Humatrope®	4.461,7	66.613,3	4.218,0	62.974,7	-243,7	-5,5	-3.638,6
Zomacton®	1.408,0	24.640,2	1.260,0	22.050,0	-148,0	-10,5	-2.590,2
TOTAL	28.552,6	438.257,9	28.181,6	430.721,5	371,0	-1,3	-7.536,4

Dosage and cost values of the different GH presentations used

Type of GH	mg prescription	mg dispensed	Diference (mg)	Cost (€)
DE Saizen®		28.387,1	-164,9	431.484,5
JM Genotonorm®		28.421,4	-130,6	483.164,6
Norditropin®	28.552	30.341,4	1.789,4	407.181,1
VM Humatrope®		26.992,4	-1.559,6	402.996,8
Zomacton®		25.550,8	-3.001,2	447.138,9

Estimation of the impact on adherence (variation of the mgs dispensed vs. prescribed) and the economic impact considering the exclusive use of each of the GH presentations



CONCLUSIONS

The presentation of GH with which the prescribed mgs are closer to those dispensed is that of JM (Genotonorm®), followed very closely by the DE (Saizen®). The one with which a greater difference is obtained with VM formulations

Estimated loss of mgrs dispensed from **7,536 euros / year** (economic impact) considering the exclusive use of each of the GH presentations with less loss.

The study coincides with in vitro results IPE Report 2013/70

