



COSTS OF TRIPLE THERAPY AND THE HOSPITAL PHARMACIST'S ROLE

Capilla Montes C¹, García Yubero C², Iglesias Bolaños AM¹, Marzal Alfaro MB¹, Cruz Cruz T¹
¹ Servicio de Farmacia Hospital del Sureste
² Servicio de Farmacia del Hospital Infanta Sofía

OBJECTIVES

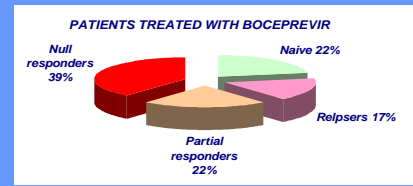
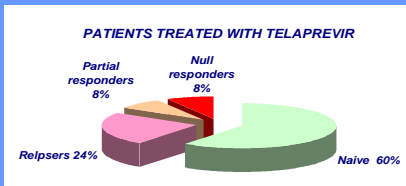
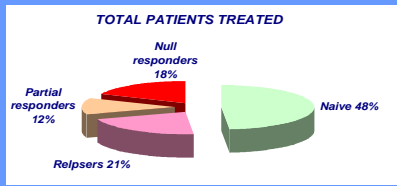
Recently, there have been major changes in hepatitis C cure rates, mostly because of the use of the new protease inhibitor (PI) drugs, but also a significant increase in treatment costs. The application of stopping rules, included in their product information can avoid adverse effects to patients and save costs to the Health System. The objective was to analyze costs of healing and costs associated to PI's treatment failure, including those arising from non compliance with stopping rules of boceprevir (BOC) and telaprevir (TVR) and to establish some improvement measures to reduce them.

METHODS

Retrospective observational study of PI's treatment costs in two hospitals, from January 2012 to February 2014. Data were obtained from the pharmacotherapy management database Farmatools ®. In one of the hospitals we analyzed some avoidable costs, arising from the non-compliance of the stopping rules.

RESULTS

CHARACTERISTICS OF THE TREATED POPULATION



RESULTS AND COSTS

	Both treatments	Boceprevir	Telaprevir
Total cost (€)	1.268.114	346.500	921.599
Cost-effectiveness (€)	31.700	31.500	31.779
Cost of treatment failure (€)	277.157(22%)	78.806 (23%)	187.733 (20%)
Avoidable costs * (€)	22.400	5.333	17.067

	Cured patients	Boceprevir cured patients	Telaprevir Cured patients
Total	71% (40/56)	61%(11/18)	76%(29/38)
Naive	81%(22/27)	75%(3/4)	83%(19/23)
Relapsers	75%(9/12)	100%(3/3)	67%(6/9)
Partial responders	71%(5/7)	75%(3/4)	67%(2/3)
Null responders	40%(4/10)	29%(2/7)	67%(2/3)

* Results from one of the hospitals analyzed

DISCUSSION

We found similar results to that of the clinical trials published of each drug for naive and relapsers patients; better in partial responders and worse in null responders. Besides, there were better results in telaprevir than in boceprevir treated populations. However, these two groups have completely different characteristics, that make the first one more easily to respond. Costs of cured patients as well as failure ones, reflect this differences. On the other hand, we calculated some costs arising from the non-compliance with the stopping rules described in their information product, which represent 12.5 and 19% of the total failure costs of telaprevir and boceprevir respectively.

CONCLUSION

We found efficacy and cost differences between both PIs, probably due to different characteristics of each population treated. A good coordination between pharmacist and physicians from the beginning of each treatment as well as soon pharmaceutical intervention may result in a minimization of costs of the triple therapy, especially those associated to non-compliance with stopping rules.