OBJECTIVES

The aim of this study is to assess the impact of 2nd generation antiviral agents (DAAs) on the Italian National Health Service budget, using a simulation model to design different scenarios for second generation direct antiviral agents (DAAs).

METHODS

We considered the base case. Considering AISF guidelines that recommend a 4-week lead-in with dual therapy, we assumed a cost of €12,000 for interferon+ribavirine. On average, in 2010, there were around 10,000 patients on therapy with IF and 5,000 patients in dual therapy for around 1,000 patients.

In this case, assuming to have a higher mean SVR rate for second generation DAAs (interferon free) vs the first generation, with a 20% price reduction, 25,000 patients would be treated and 22,500 (+291% vs. base case) would be cured.

RESULTS

1. In order to forecast what could be the financial scenario for the Italian Health System (SSN), we first assumed to have a stable budget or a decrease in the budget (18 million €).

2. The second scenario assumes a price lower than the base case, considering to get a higher number of patients to be treated, the theory of price-volume elasticity can be easily applied also to drugs. In this case, of course, the price-volume elasticity implies that to get a significant price reduction a huge increase of volume is also needed, which is the HCV case, if we consider that in Italy, a very limited proportion of patients to be treated on the total number of HCV patients. The price-volume elasticity can be applied also to drugs, if we consider that the average drug development cost is similar (around 1 bill. $ per drug) and the price is set mainly on the population (so competing diseases in the primary care drug).

CONCLUSIONS

In conclusion, we can state that the country with the highest number of HCV patients in Italy is in 2010, but one with the lowest treatment cost, the Italian SSN should invest in an increased budget on HCV treatments, only in view of very high rates of response. Both payers (higher budget) and pharma companies (lower prices) need to have a conjoint effort in order to get a point of flexibility on pricing strategies in view of the increase in the number of treated patients.

REFERENCES


2. Total HCV drugs budget.

3. MethoDs

