

# Impact of a program to promote sequential therapy with paracetamol and omeprazole

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## BACKGROUND

Oral route is safer and less costly than intravenous route. However, sometimes intravenous therapy is used longer than necessary. Paracetamol and omeprazole are two widely used drugs in hospitalised patients whose oral presentation have a biodisponibility similar to intravenous presentation; therefore, both are good options for sequential therapy.

Our **objective** is to implement and to analyze a program to promote sequential therapy with paracetamol and omeprazole in a general public hospital with 120 beds.

## MATERIAL AND METHODS

Prospective study in hospitalised patients for two months (July-August 2011). The program consisted on a daily checking of intravenous paracetamol and intravenous omeprazole prescriptions by a pharmacist.

- 1º If the patient could tolerate oral diet, a proposal to change to oral presentation was made.
- 2º The recommendation is transmitted to prescribers by electronic prescription.
- 3º Interventions were registered and classified as *accepted*: change to oral presentation and *rejected*: no change after 5 days. Demographic characteristics were collected.
- 4º Economic impact was assessed, analyzing costs reduction with regard to cost drugs.

## RESULTS

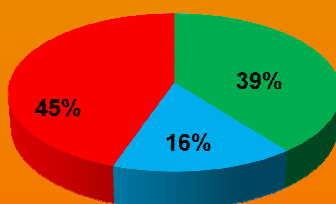
### 73 patients included

53.9% men. Mean age 77.5 years old. Mainly admitted to Internal Medicine (67.1%).

### 76 interventions recorded: 86.8% paracetamol, 13.2% omeprazole

Mean response time was 0.9 days.

### OUTCOME OF INTERVENTIONS



- Accepted interventions
- Not evaluated
- Rejected interventions

**Accepted interventions:** paracetamol: 30.3%, omeprazole: 50.0%  
Cost savings were 342 (paracetamol: 327, omeprazole: 15) euros.

**Not evaluated:** paracetamol: 15.2%, omeprazole: 20.0%  
Patients were discharged or medication was removed the same day.

**Rejected interventions:** paracetamol: 45.5%, omeprazole: 30.0%  
Recommendations were rejected due to patients' oral tolerability worsened.

## CONCLUSIONS

- ✓ 39.5% of recommendations resulted in change in patients' pharmacotherapy.
- ✓ Pharmaceutical validation improves efficiency of pharmacotherapy. However, cost savings is not very high since the cost of these drugs is low.
- ✓ Similar programs could be implemented in some antibiotics to achieve greater savings.