

# IMPROVEMENT OF EFFICIENCY BY EXTENDING STABILITY OF BORTEZOMIB

R. GAVIRA MORENO<sup>1</sup>, R. GAZQUEZ PEREZ<sup>1</sup>, J.F. SIERRA SANCHEZ<sup>1</sup>, L. JIMENEZ PICHARDO<sup>1</sup>, F. GOMEZ DE RUEDA<sup>1</sup>.  
<sup>1</sup>HOSPITAL SAS JEREZ DE LA FRONTERA, PHARMACY, JEREZ DE LA FRONTERA, Spain.

## BACKGROUND

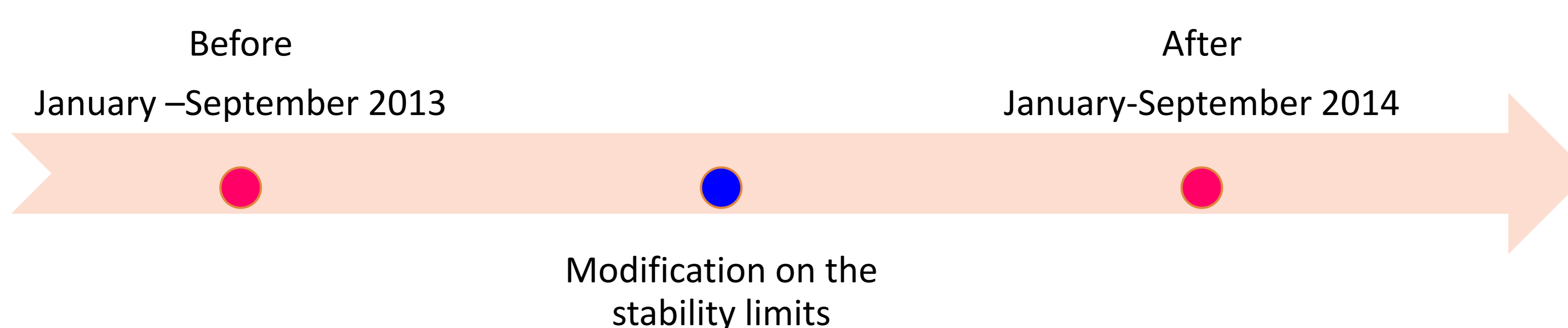
Bortezomib is a high-cost drug characterized by a very short stability. For the subcutaneous administration each vial should be reconstituted with 1.4 mL of NaCl 0.9% (2.5 mg/mL). According to manufacturer, reconstituted it is stable at 25°C only for 8 hours. Considering the recommended dose of 1.3 mg/m<sup>2</sup> and the amount of drug per vial (3.5mg/1.4mL), the loss of product during the preparation may be significant. However, a published study from Walker et co-authors has shown a stability of bortezomib up to 21 days, permitting an optimization of costs.

## PURPOSE

To evaluate the impact of the extended stability limits of bortezomib on the handling practices and the optimization of costs.

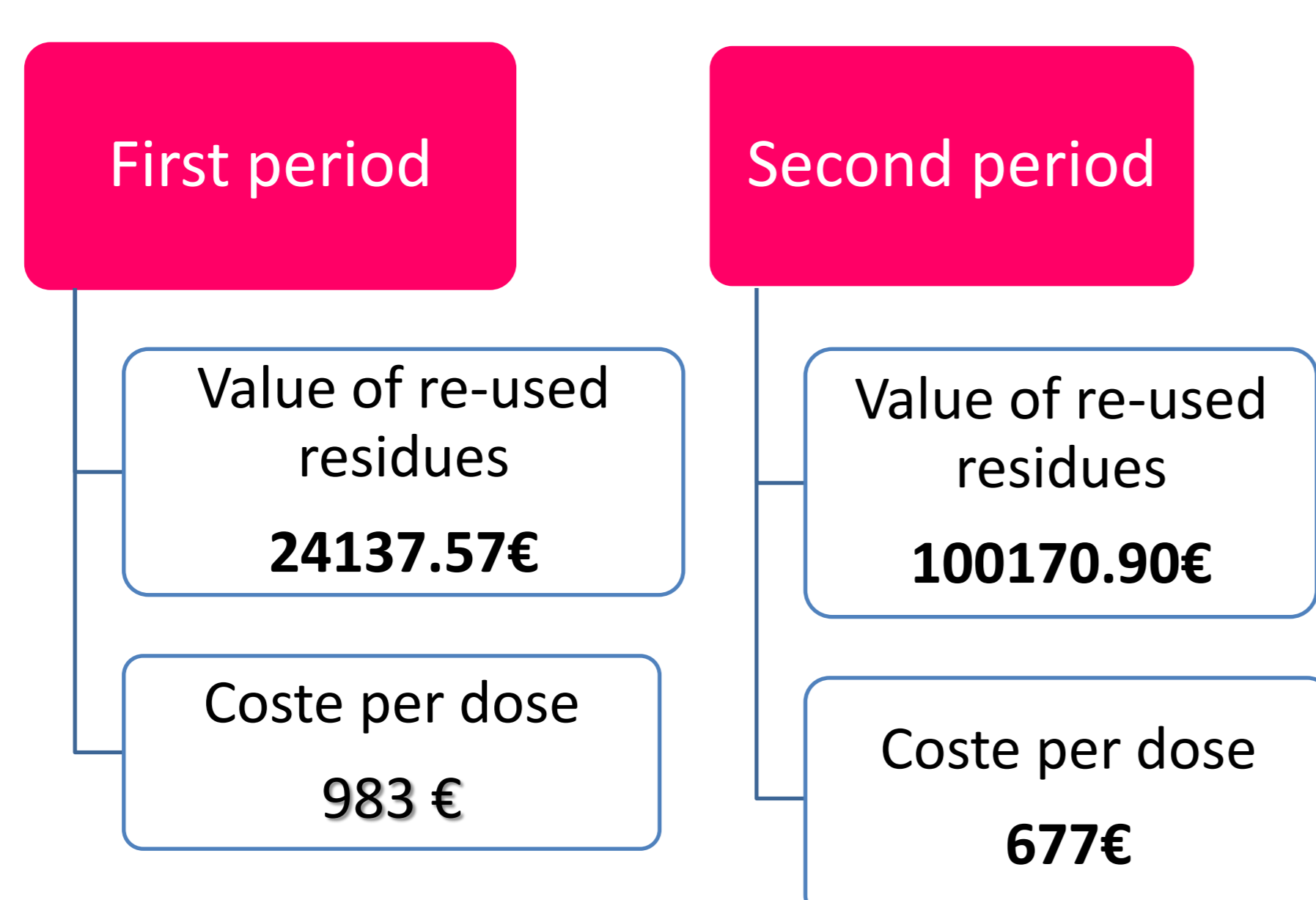
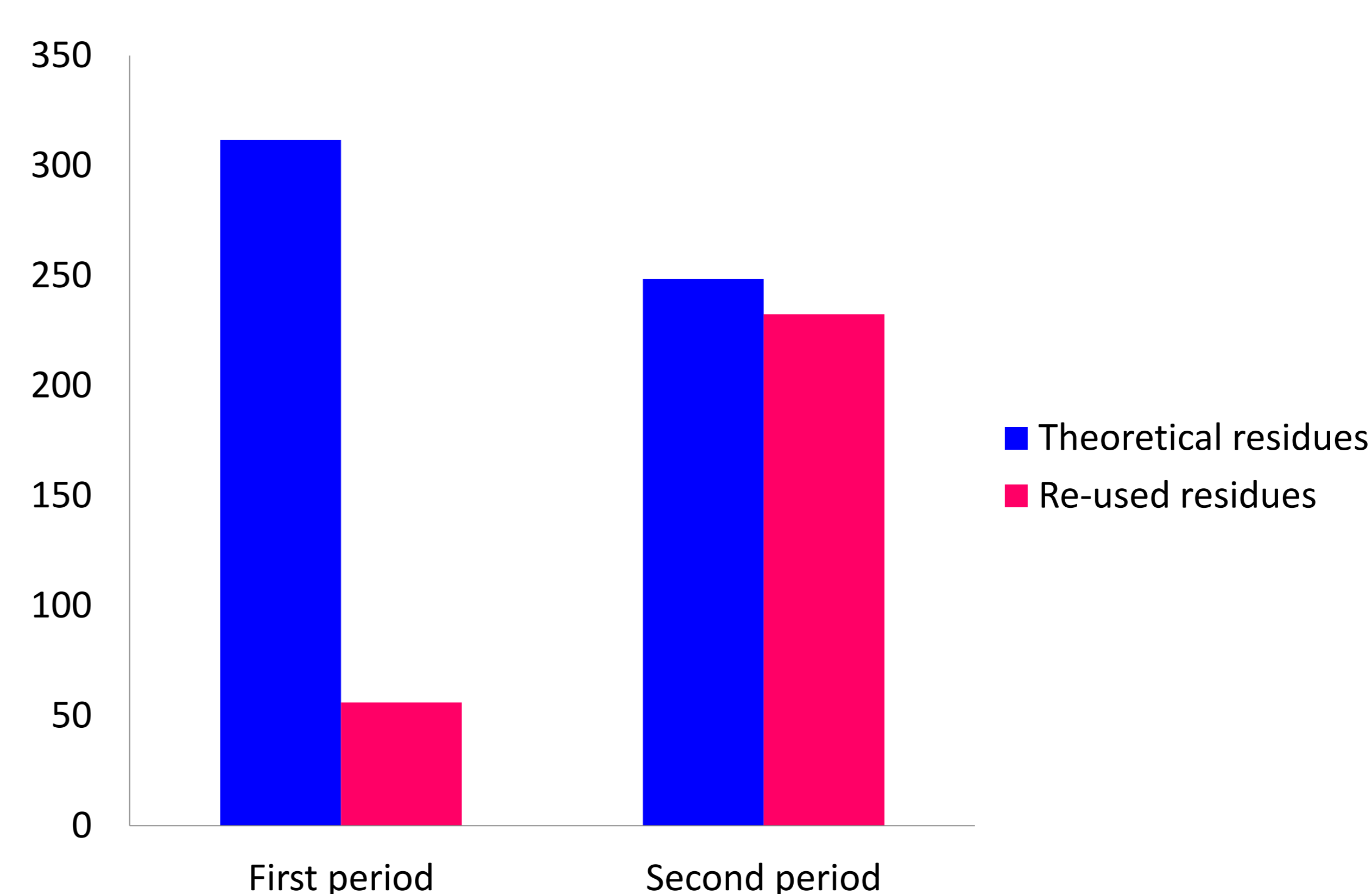
## MATERIAL AND METHODS

From the individual preparation files, different parameters were recorded: number of patients and prescription lines, mean dose, theoretical residues, % of residues re-use, value of the residues re-used. Two periods were evaluated:



## RESULTS

	First period	Second period
Nº of patients	34	36
Prescription lines	584	452
Mean dose (mg)	2.10	2.10



## CONCLUSION

An extended stability limit for bortezomib as compared to this recommended by the manufacturer should lead to an improvement of manufacturing processes and significant costs savings. The re-use of residues is real strategy to contain costs.