# IMPACT OF INTERNATIONAL REFERENCE PRICING(IRP) ON MEDICINES REIMBURSEMENT PRICES IN BOSNIA AND HERZEGOVINA

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## **OBJECTIVES**

Since 2017 Bosnia and Herzegovina (B&H) introduced medicines price control through international reference pricing (IRP) and setting maximal allowed wholesaler prices (MWP). These prices are maximal allowed for marketing registered prescription medicines and marketing authorization holders are mandated to submit price for approval in March each year. Referent countries are Slovenia, Croatia and Serbia (primary basket), and alternatively Bulgaria and Italy, in case prices for medical product is not available in primary basket country. MWP is calculated as average price in three of basket countries and published in June each year. In case three prices are not available, average of two can be used or in case only one price is available or not available at all, it is requested to submit pharmacoeconomic study in order to justify proposed price which is a subject of approval.

Calculated and approved price is obligatory for all market players (distributors, pharmacies, health insurance funds) and has intention to control pharmaceutical expenditure.

Introduced price control mechanism is expected to decrease medicines prices in Bosnia and Herzegovina.

Objective of this research was to analyze IRP effects on reimbursement (RB) prices in B&H.

#### **METHODS**

We have compared MWP and reimbursement list prices in 5-year period: 2017-2021 for 10 most prescribed cardiovascular medicines (CVM) in B&H. Only packages which covers one-month treatment are analyzed and prices are presented in EUR (1 BAM = 1,9558 EUR).

### RESULTS

Top 10 cardiovascular medicines present 8% of total pharmaceutical market in B&H in 2020 and eight of them are fully reimbursed (Table 1.)

According to reimbursement system in Federation of Bosnia and Herzegovina, Federal Ministry of Health setting reimbursement list A which includes INN, dose and price which is reimbursed 100%, while ten cantons should adopt this list on their territory.

For the majority of medicines IRP impacted RB price in the first two years of implementation. The highest price decrease was for valsartan and rosuvastatine. Some products had lower RB price than MWP and were not affected such as enalapril (Graph 1.)

## CONCLUSION

IRP had impact on price decrease for top 10 cardiovascular medicines in B&H, especially in a first two years of implementation. From the third year after IRP implementation, there were no significant effects of IRP on RB price decrease for this group of medicines.

It is questionable how this approach to control pharmaceutical expenditure will be effective in long term, and if the price pressure will have negative impact on potential drug shortages and market withdrawal, especially in current circumstances of economic crisis.

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ATC	INN	EUR	REIMBURSEMENT STATUS
C09BA03	Lisinopril, HCTZ	4.564.981	100%
C09BA02	Enalapril, HCTZ	3.641.364	100%
C07AB07	Bisoprolol	3.339.838	100%
C10AA07	Rosuvastatin	3.312.168	50%
C08CA01	Amlodipine	2.702.806	100%
C10AA05	Atorvastatine	2.613.879	50%
C08CA13	Lercanidipine	2.560.825	100%
C09DA03	Valsartanm HCTZ	2.560.812	100%
C09AA02	Enalapril	2.371.921	100%
C09AA05	Ramipril	2.185.890	100%
	TOTAL	29.854.484	

**TABLE 1.** Top 10 CV medicines by value in 2020 and its reimbursement status

