

Bilateral price comparison of 50 particularly cost-intensive drugs – What is the impact of different reimbursement rules?

Evelyn Walter^a, Matthäus Traunfellner^a, Franz Meyer^a

^aIPF Institute for Pharmaeconomic Research, Vienna, Austria

Objectives

With health-expenditure of 12.1% of GDP, Austria is well above the European average, regardless, the share of pharmaceutical expenditure (13%) is below average. In Austria, there are intensive price regulations inside and outside the reimbursement regulations, which force drug prices downward. In addition, various forms of price models (PMs) are in place. The purpose of the present price-comparison is to focus on 50 medicines that account for comparatively high expenditure for Austrian public payers. A bilateral drug price-comparison is carried out versus Germany.

Methods

47 medicinal products (191 SKUs; Stock Keeping Units) were compared at manufacturing and reimbursement price-level. Price data were derived from IQVIA, the Austrian list of products ("Warenverzeichnis") and the LAUER-TAXE® Online 4.0. In case that no uniform pack-sizes and/or dosage were available, German prices were recalculated. Weighted and unweighted averages prices were determined for a variety of product groups: total products, identical products, products PMs in place in Austria, products with discount-agreements in Germany, GREEN BOX products (freely prescribable), YELLOW BOX products (prescribable with approval), NO-BOX products (only reimbursable with individual approval), oncology products (ATC L01+02), products without PMs and without discount-agreements.

Table 1: List of the 50 top-selling drugs

1 AIMOVIG	11 EVRYSID	21 KALYDECO	31 REVLIMID	41 VENCLYXTO
2 BIKTARVY	12 FORXIGA	22 LIXIANA	32 RINVOQ	42 VYNDAQEL
3 COSENTYX	13 FOSTER	23 LYNPARZA	33 ROACTEMRA	43 XARELTO
4 DUPIXENT	14 HUMIRA	24 OFEV	34 SIMPONI	44 XGEVA
5 ELIQUIS	15 IBRANCE	25 OLUMIANT	35 SKYRIZI	45 XOLAIR
6 ENBREL	16 IMBRUVICA	26 OPSUMIT	36 STELARA	46 XTANDI
7 ENTRESTO	17 IMNOVID	27 PRADAXA	37 TAGRISSO	47 ZYTIGA
8 ENTYVIO	18 JAKAVI	28 PRALUENT	38 TALTZ	
9 EPCLUSA	19 JARDIANCE	29 PROLIA	39 TECFIDERA	
10 ERLEADA	20 KAFTRIO	30 REPATHA	40 TREMFYA	

Source: IQVIA DPMÖ

Data-set

The following data were used for the evaluation:

- 47 out of 50 pharmaceuticals were included in the analysis. The following were excluded: Compensan, Synjardy and Trajenta, which are not available on the German market.
- 176 out of 191 SKUs were used for the evaluations. The following were excluded: SKUs of drugs not available in Germany (12), 2 SKUs were not commercially available in Austria, and negative sales were reported for 1 SKU.
- Drug prices as of Nov. 2022 from the following data source were used.
 - Austrian manufacturer prices (MP) were sourced from IQVIA and verified with the Austrian pharmaceutical index Nov. 2022.
 - Austrian health insurance prices (reimbursement price [RP]) were sourced from the Austrian pharmaceutical index Nov. 2022
 - German MP were sourced from IQVIA and verified with LAUER-TAXE® Online 4.0
 - German health insurance prices (costs of the GKV) have been calculated.
- If no uniform pack sizes and/or dosage were available, the German prices were recalculated. For this purpose, the size or dosage exhibits the smallest difference was used. This was necessary for 34 SKUs.

Method

The price comparison implement the following approach:

- The price comparison is made per pack/SKU and calculates the average value weighted by sales for the following product groups:
 - Total packs/SKUs [47 products with 176 SKUs]
 - Identical products [47 products with 142 SKUs]
 - Products with pricing model [31 products with 88 SKUs]
 - Products with discount agreement in Germany [18 products with 103 SKUs]
 - Products without pricing model (PM) [30 products with 88 SKUs]
 - Products GREEN BOX [6 products with 15 SKUs]
 - Products YELLOW BOX RE1 [36 products with 99 SKUs]
 - Products YELLOW BOX RE2 [4 products with 12 SKUs]
 - Products NO BOX (1 x RED BOX) [17 products with 50 SKUs]
 - Oncology products (ATC L01 + 02) [10 products with 38 SKUs]
 - Products without a pricing model (AT) and without a discount agreement (GER) [18 products with 45 SKUs]
- The price differences are shown for MPs and RPs in € and purchasing-parity-power € (PPP-€).
- P-values were calculated.

Austrian Reimbursement Code:

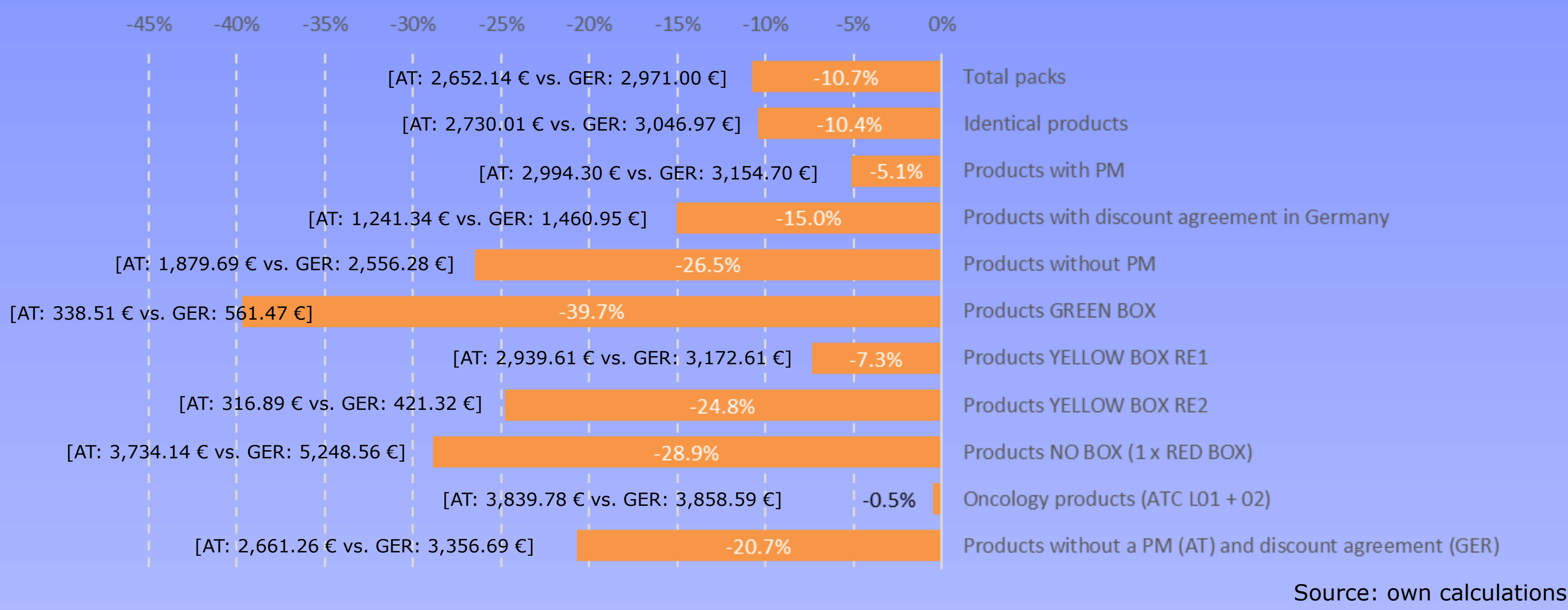
- GREEN BOX:** Pharmaceutical products contained in the green box are automatically reimbursed.
- YELLOW BOX:** The yellow box contains pharmaceuticals with an additional therapeutic benefit that are not part of the green box due to medical and/or economic reasons. Pharmaceuticals in this box can be divided into two groups: The "light" yellow box (RE2) and the "dark" yellow box (RE1).
- RE2: ex-post approval by the head physicians of the respective health insurance fund.
- RE1: ex-ante approval by the head physicians of the respective health insurance fund.
- RED BOX:** Products have currently applied for reimbursement and are awaiting the decision.
- NO BOX:** Products not eligible for general reimbursement by the social health insurance.

Results

Overall, **manufacturing prices** are 10.7% lower than in Germany [-13.5% in PPP-€].

- The weighted-average manufacturing-price of the products without PMs [AT: -26.5%; p-value 0.049], GREEN BOX products [AT:-39,7%; p-value 0.014] and NO BOX products [AT:-28.9; p-value 0.009] show a significant price difference.
- Of the individual prices of the 176 SKUs on a MP basis, 124 prices (70.5%) are lower in Austria than in Germany.
- Based on this calculations -161.5 million € reduced expenses were quantified. Products without PM or discount-agreement generate real lower expenses of 58.2 million €.
- There is a PM agreement for 50% of products [88 SKUs].

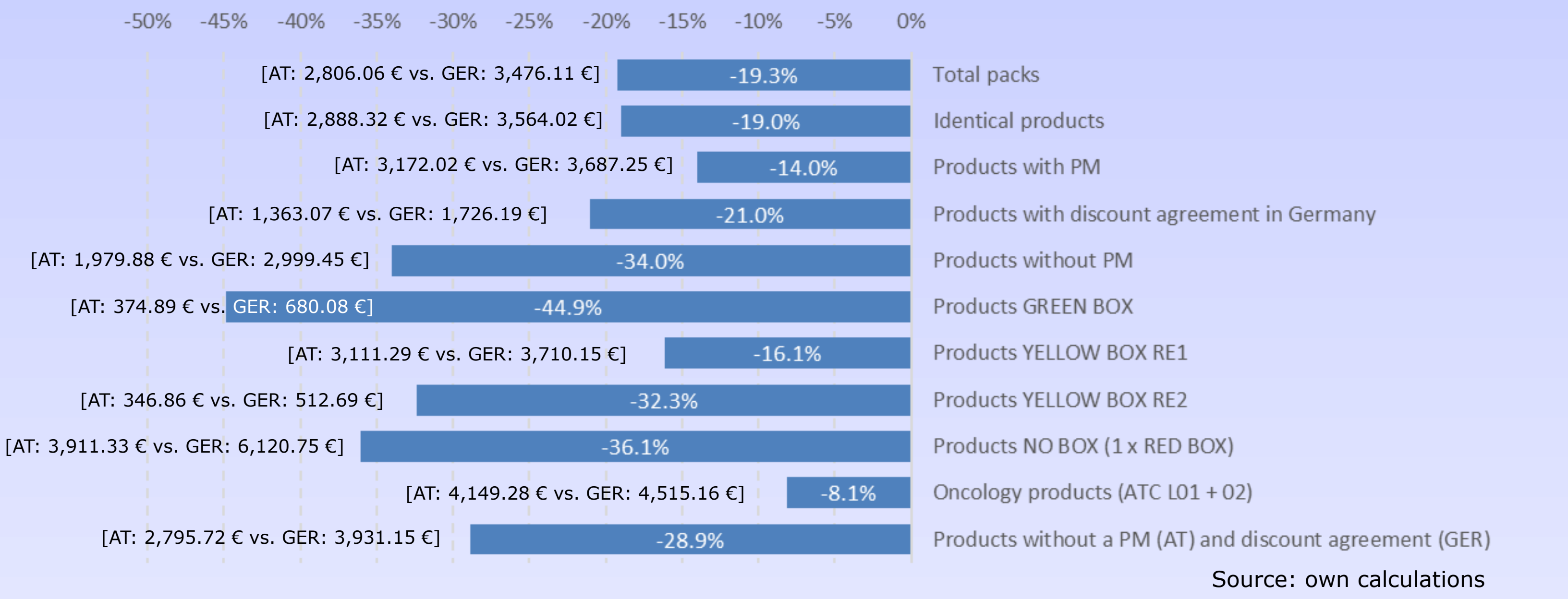
Figure 1: Price difference based on weighted-average manufacturing-price



At the **reimbursement-price level**, the differences increase to -19.3% [-22,1% in PPP-€].

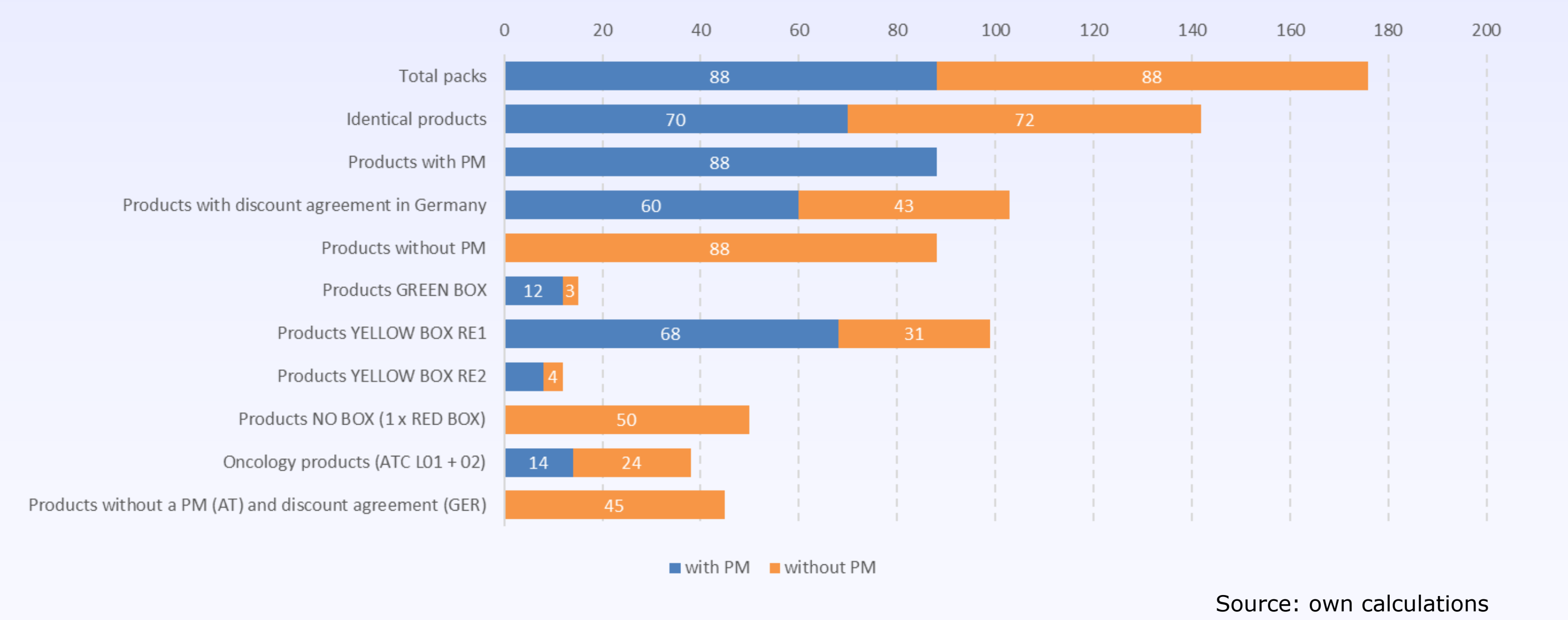
- The weighted average price of the products without a pricing model [AT:-34.0%; p-value 0.008], the products in the GREEN BOX [AT:-44.9%; p-value 0.005] and the NO Box products [AT:-36.1%; p-value 0.000] shows significantly different results.
- Of the individual prices of the 176 SKUs on a RP basis, 143 prices (81.3%) in Austria are lower than those in Germany.
- Based on this calculations -360.7 million € reduced expenses were quantified.

Figure 2: Price difference based on weighted-average reimbursement-price



For 50% or 88 SKUs, there is a PM agreement. In the YELLOW Box RE1, it affects 68.7% or 68 SKUs. In the oncology product group, a PM was agreed in 36.8% of all cases (14 SKUs).

Figure 3: PM agreements among the product groups



Conclusion

Despite comparable socio-economic indicators the Austrian drug prices of the cost intensive drugs are lower compared to Germany. The price-comparison is based on list prices, repayments due to PMs are not considered.

References

- IQVIA Data DPMÖ (Nov. 2022)
- Austrian pharmaceutical index (Warenverzeichnis) Nov. 2022
- LAUER-TAXE® Online 4.0



CONTACT:
Dr. Evelyn Walter
IPF Institute for Pharmaeconomic Research
Wolfengasse 4/7
1010 Vienna, Austria
Phone: +43-1-5132007-13
Fax: +43-1-5132007-15
Email: e.walter@ipf-ac.at
Web: www.ipf-ac.at