

BUDGET IMPACT OF TRASTUZUMAB BIOSIMILARS FOR THE TREATMENT OF BREAST CANCER AND GASTRIC CANCER IN GREECE

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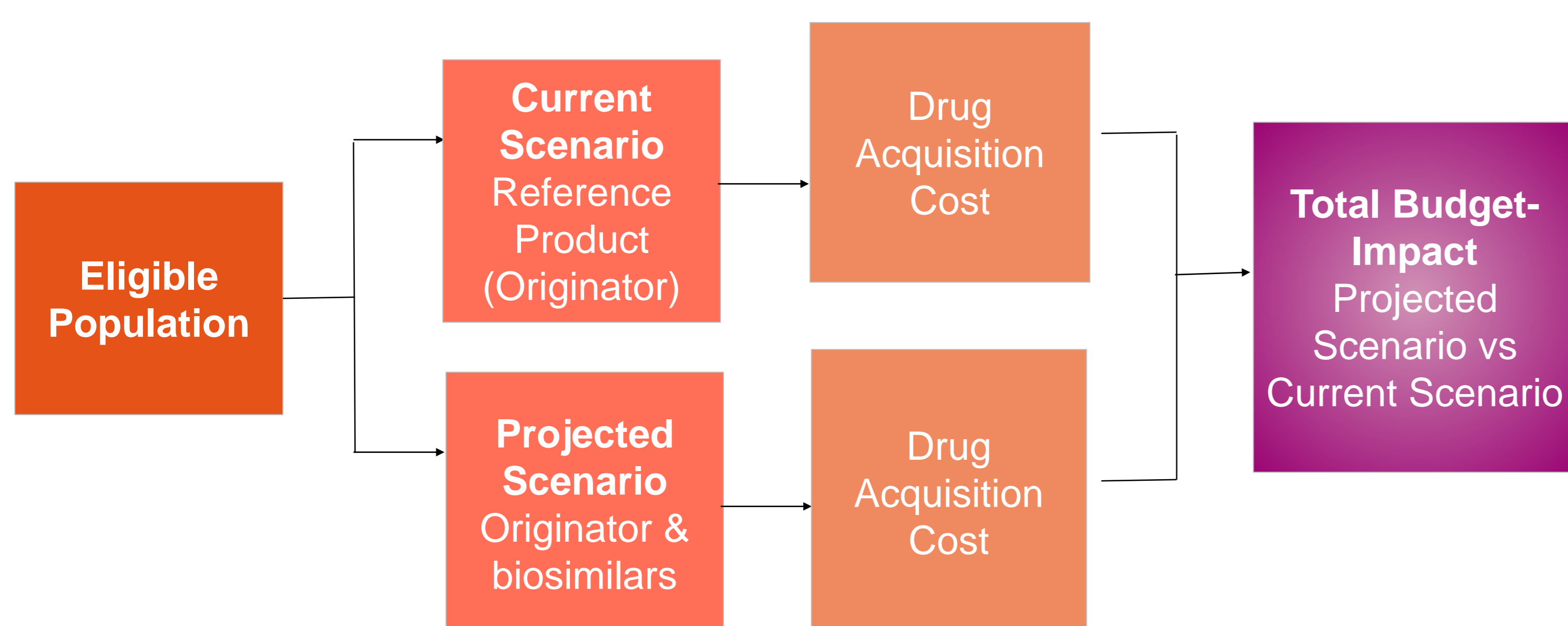
BACKGROUND

- Trastuzumab is indicated for the treatment of adult patients with HER2+ early breast cancer (EBC), HER2+ metastatic breast cancer (MBC) and HER2+ metastatic gastric cancer (MGC).
- Trastuzumab biosimilars are only available in intravenous (IV) formulations. Currently, there are three trastuzumab biosimilars priced in Greece.
- The aim of the study was to assess the financial impact of IV trastuzumab biosimilars in HER2+ patients with EBC, MBC and MGC in the current trastuzumab market from payer perspective in Greece (EOPYY).

METHODS

- A traditional budget-impact model with a 5-year time-horizon (2019-2023) was developed using Microsoft Excel.
- A scenario where the Reference Product is reimbursed for the indicated populations (World Without) is compared with a scenario where biosimilars are also funded (World With).

Figure 1: Model schematic



Comparators

- The analysis included trastuzumab reference product (Herceptin® IV) and all relevant available IV biosimilars (Herzuma®, Ontruzant®, Kanjinti®).

Population

- Epidemiological data were obtained from literature and were validated by a local clinical expert. The target population of the analysis consisted of incident (new) HER2+ patients eligible to receive biologics.

Market Share

- Market share predictions used in this model were provided by Vianex S.A. based on market research. Biosimilars' projected market shares ranged from 50% in the first model year to 85% in the fifth model year.

Costs

- Following a payer perspective, only direct costs relating to drug acquisition were considered (€, 2019). Drug cost data were obtained from the National Price Bulletin, applying the mandatory price discounts (Hospital price -5%).

Scenario analysis

- A scenario analysis, where rebates and clawbacks were applied on the reimbursed prices, was also undertaken.

Table 1: Trastuzumab Drug Acquisition Cost

Trade Name	Units per pack	mg per unit	Price per unit (Ex-factory)
HERZUMA PD.C.S.INF 150MG/VIAL BTx1 VIAL	1	150	386,61 €
ONTRUZANT® PD.C.S.INF 150MG/VIAL BTx1 VIAL	1	150	471,40 €
HERCEPTIN PD.C.SO.IN 150 MG/VIAL BTx1VIAL(GLASS)	1	150	471,41 €
KANJINTI PD.C.S.INF 150MG/VIAL BTx1 VIAL	1	150	459,88 €

Source: Price Bulletin February 2019

RESULTS

- In the base case, total budget saving estimates ranged from €370,730 in 2019 to €613,091 in 2023, following the introduction of biosimilars. Almost 84% of the total costs concerned treatment for EBC, 13% MGC and only 3% MBC.

Figure 2: Estimated number of patients per treatment

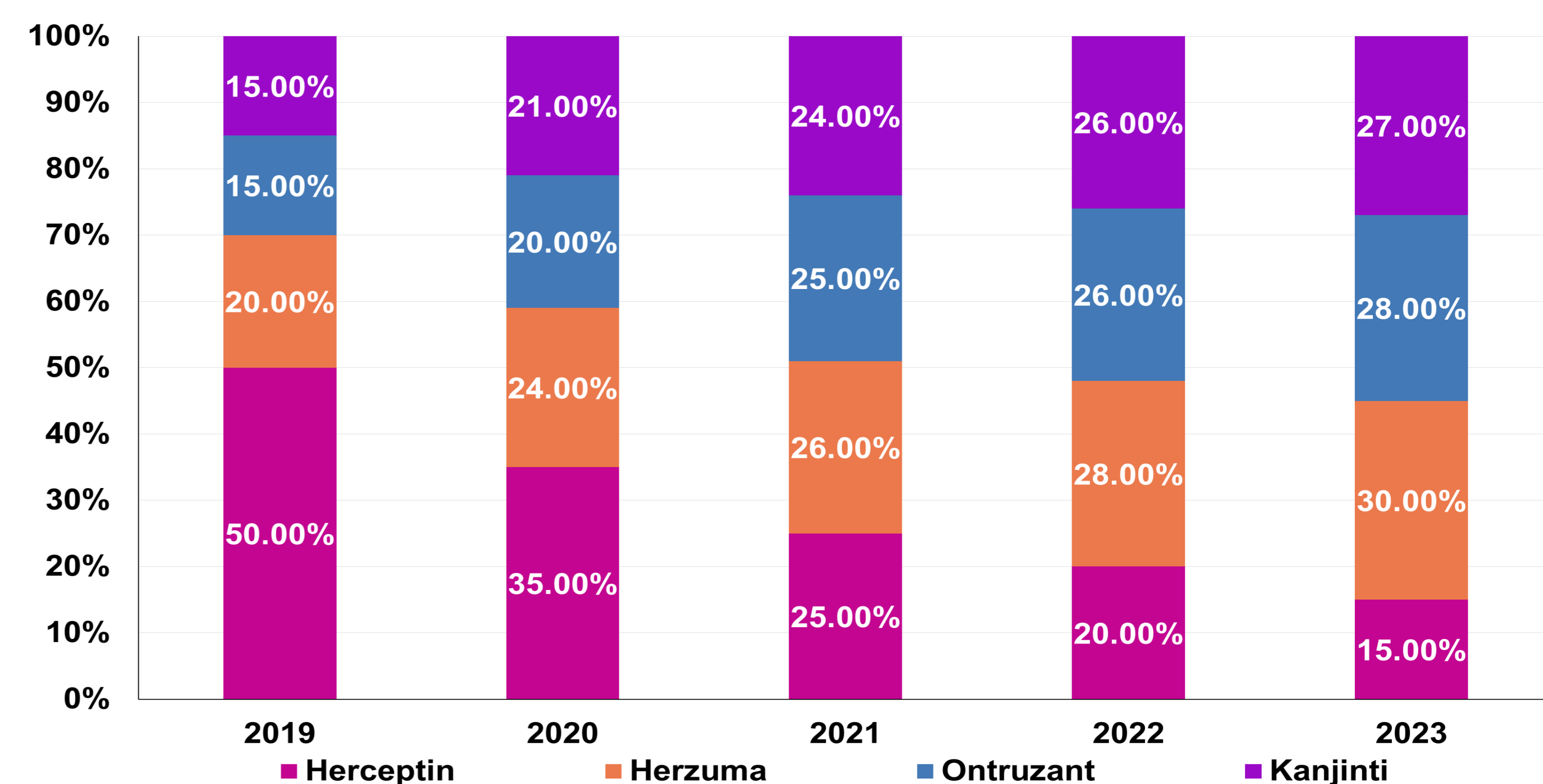
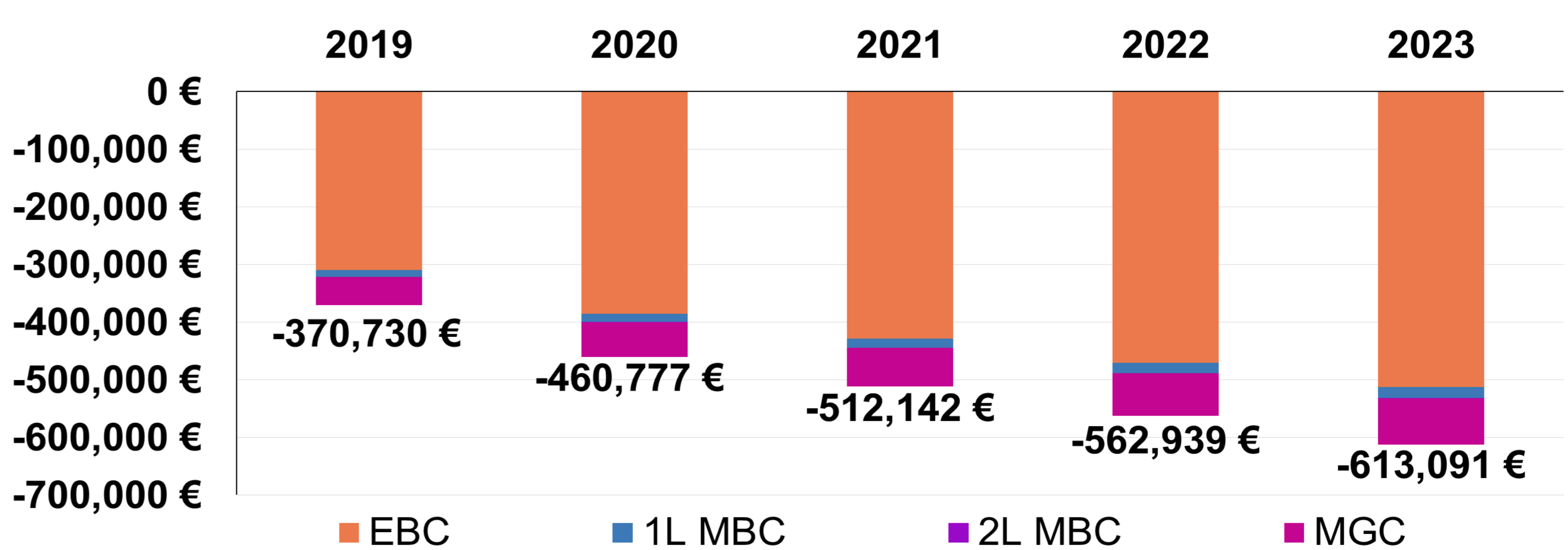
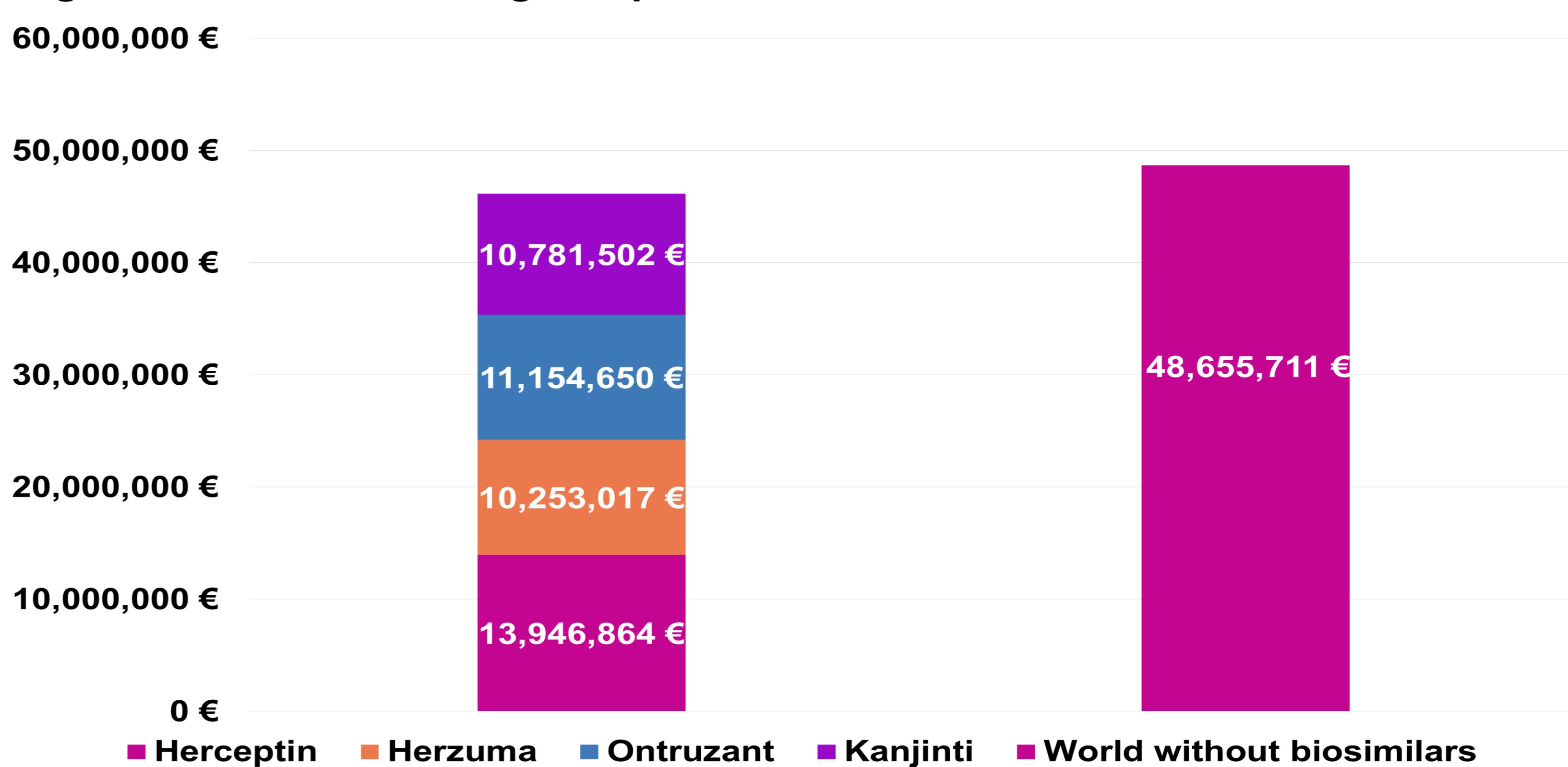


Figure 3: Absolute budget impact



- Among the total of 500 patients estimated to be on treatment, 85% (425 patients) was predicted to receive biosimilars, leading to cost-savings of €2,519,679 over 5 years-period (€48,655,712 vs €46,136,033).

Figure 4: Cumulative budget-impact



- Total cost per patient decreased by €1,350 over five years. Per patient per year savings ranged from €803 (2019) to €1,227 (2023).
- The model yielded average annual cost-savings of 5.18% (3.97% to 6.06%) compared to the current treatment scenario.
- When rebates and clawbacks were also accounted for, the relative budget impact resulted in cost savings of 9.01%.

- Increased use of trastuzumab IV biosimilars for the treatment of HER2+ patients with EBC, MBC and MGC could lead to considerable savings for the Greek public payer (EOPYY).
- Induction of trastuzumab IV biosimilars to the positive list is expected to lead to cost savings of €370,730 in the first model-year to €613,091 in the fifth model-year.
- Scenario analysis confirmed the robustness of model results, yielding greater cost-savings when rebates and clawbacks were considered.
- The introduction of trastuzumab IV biosimilars would provide budgetary savings for the Greek public payer (EOPYY) and increase patient access to biological medicines. These savings might be extended by the introduction of further competitive market dynamics (IQVIA Report, Sep 2018).