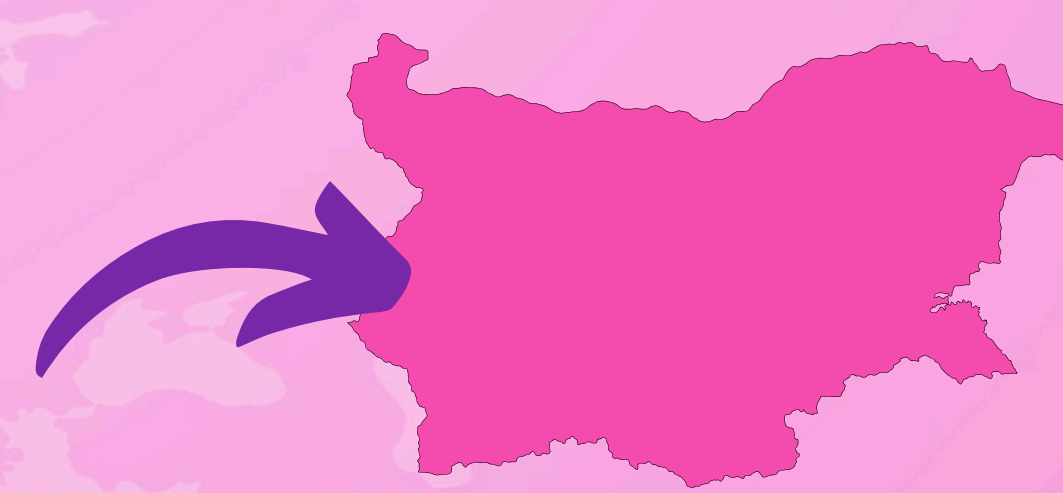


SOCIETAL AND ECONOMIC IMPACT OF TARGETED THERAPY FOR BREAST CANCER IN BULGARIA

*A. Tineva¹, G. Slavchev¹, I. Yankova¹,
V. Todorova¹, A. Dacheva¹,
S. Djambazov¹*

¹HTA Ltd, Sofia, Bulgaria



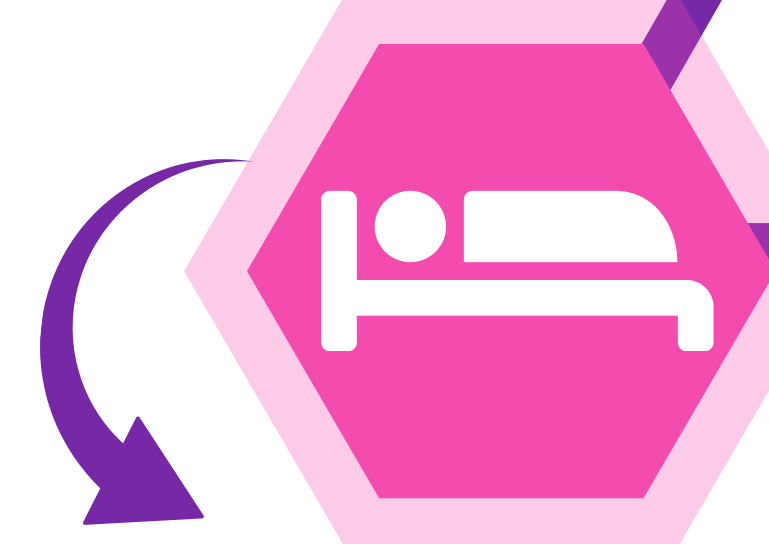
PROGRESSION-FREE

+ 141%
TARGETED THERAPY
PATIENTS
2021–2023

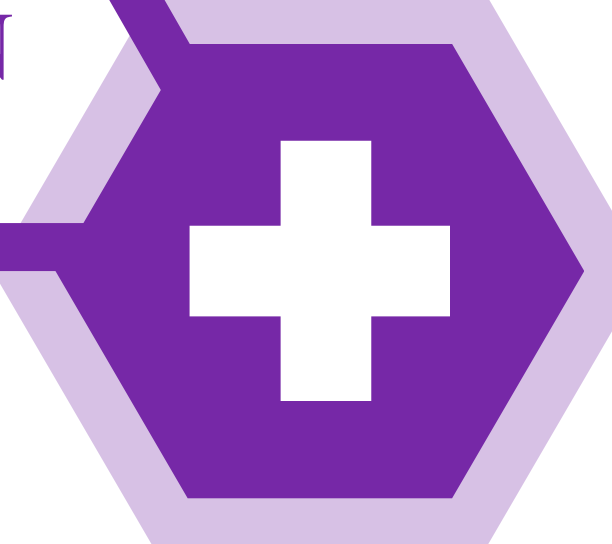
1,360
PATIENTS IN
2023

3.5%

ANNUAL
DISCOUNT RATE
+
LIFETIME HORIZON



PROGRESSED DISEASE



DEATH

INTRODUCTION:

While targeted therapies have significantly improved outcomes for patients with early and advanced breast cancer, their broader societal and economic impact in Bulgaria has not been sufficiently quantified. This analysis aimed to estimate the health and economic benefits of targeted therapies for breast cancer patients in Bulgaria, focusing on working-age individuals.

RESULTS:

Based on improved survival and quality of life, the economic contribution to Bulgaria's gross domestic product (GDP) was estimated for the working-age treated population. The average QALY gain per patient was 9.43 in early-stage disease and 2.93 in advanced-stage disease. Applied to the working-age cohort, the total added GDP contribution was estimated at EUR 40,902,560.

HEALTH AND ECONOMIC OUTCOMES



GDP CONTRIBUTION:
€40.9 MILLION



EARLY: +9.43 QALY
ADVANCED: +2.93 QALY

METHODS:

A partitioned survival model with three health states, a 3.5% annual discount rate, and a lifetime horizon was developed to estimate health gains expressed in quality-adjusted life years (QALYs) for patients treated in stages II–III (early) and stage IV (advanced) breast cancer. The model is transferable and adaptable to countries with similar data availability. According to data from the National Health Insurance Fund (NHIF), the number of patients receiving targeted therapies increased by 141% between 2021 and 2023, reaching 1,360 individuals in 2023.

CONCLUSIONS:

These findings demonstrate that targeted therapies offer not only substantial clinical benefits but also meaningful economic value to society. Ensuring timely access to personalized treatments should remain a national priority—not only to improve patient outcomes but also to support long-term societal and economic sustainability.

