



COST TO SOCIETY AND FINANCIAL TOXICITY RELATED TO PERSONALIZED ONCOLOGY TREATMENT IN BULGARIA

Dimitrova M¹, Petrov M², Mitkova Z¹

1 Medical University-Sofia, Bulgaria; 2 Roche Bulgaria Ltd., Sofia, Bulgaria

Background

Societal costs and financial toxicity could be impacted by the adoption of regulation and value-based guidelines for shared-decision making (SDM) in clinical practice

Amid rising health expenditures and cost complexity patient-centric healthcare ecosystem requires delivering better and more accessible care at the right time for the right patient thus making Cost of illness (COI) to go beyond healthcare

Systems that do not recognize the wider value of treatments may delay patients access to innovations, missing opportunities to improve health and wider societal outcomes

Aim

The aim of the current study is to assess the cost to society of cancer therapy in Bulgaria and the possibilities for the implementation of the shared-decision making (SDM) concept

Methods & Materials

We conducted two step research.

We made a desktop analysis on the current strategic policy documents on regional/national level with focus on SDM recommendations in oncology along with online anonymous survey among Bulgarian oncologists, assessing their attitudes towards to SDM.

Second, we calculated societal costs related to targeted oncology treatment from the perspective of the Bulgarian healthcare system

Results: Desktop analysis

NICE defines SDM as joint process between HCP and patient Evidence-based decision on tests and therapies according to individual preferences and values



ESMO BC and NSCLC guidelines recommend SDM as an essential part of the treatment process



NICE has developed consensus statement on SDM in healthcare



Bulgaria currently lacks recommendations of SDM in clinical practice

Results: SDM survey among oncologists

SDM and therapeutic outcome

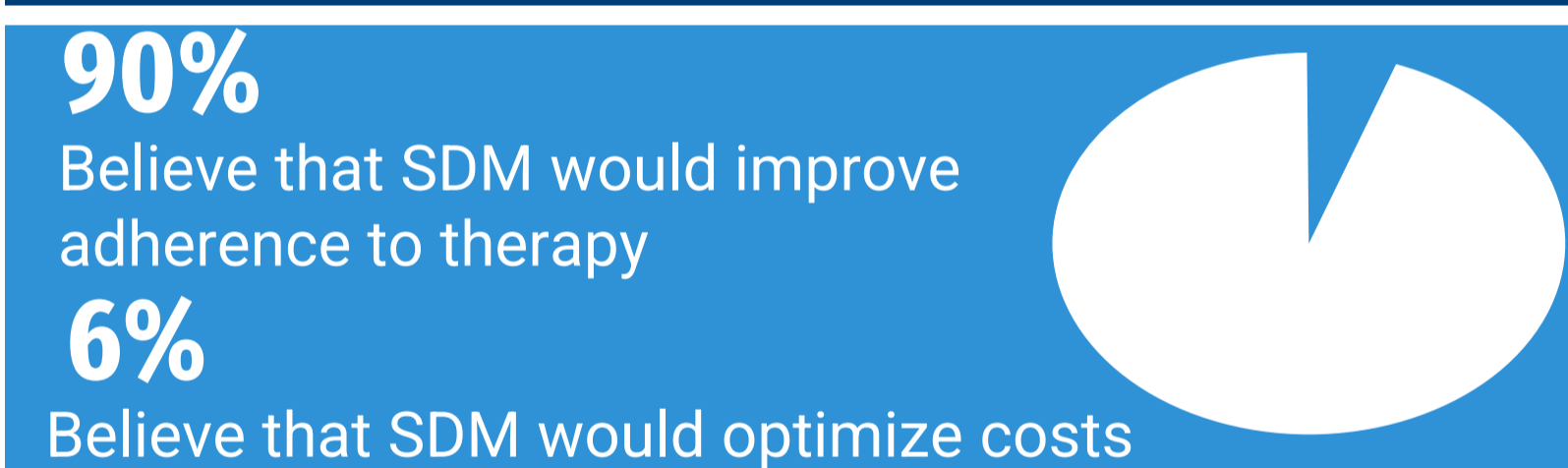
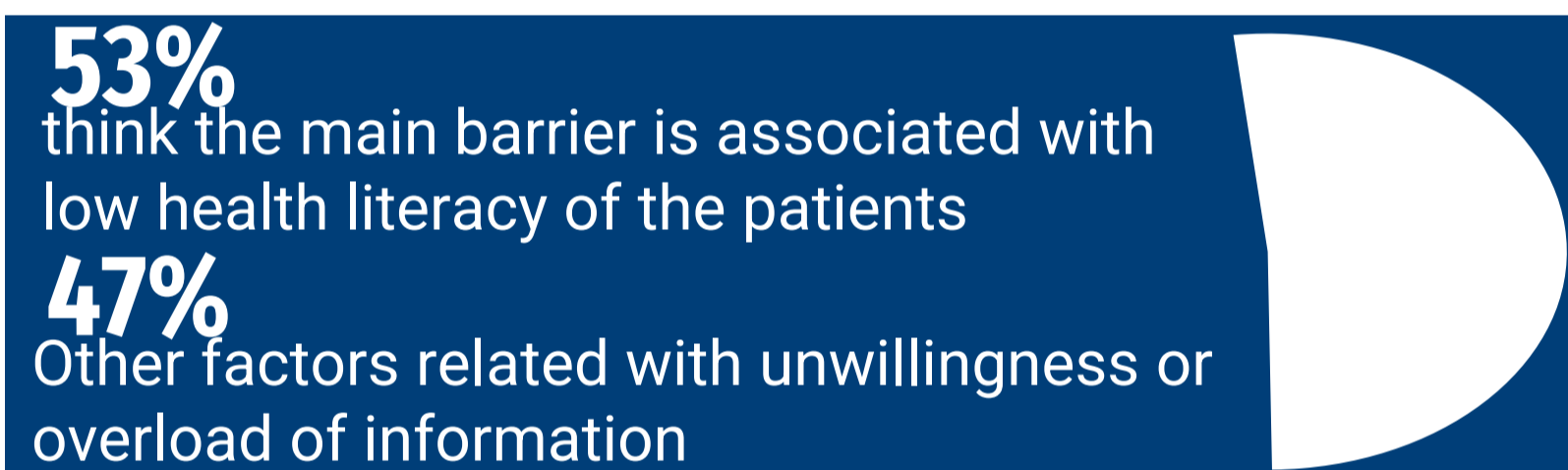
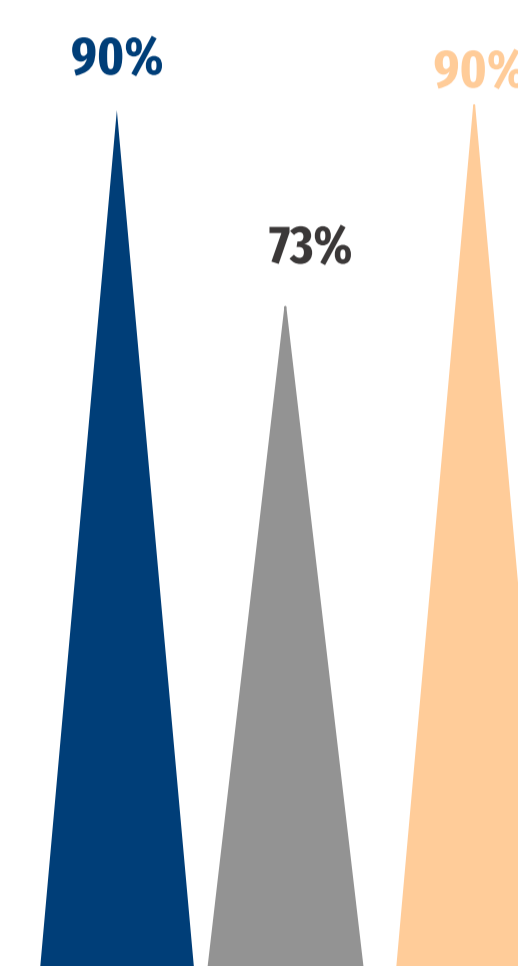
90% (14/15) of the interviewed think that SDM can change the therapeutic outcome

SDM in local guidelines

73% (11/15) think that SDM concept has to be implemented in the pharmaco-therapeutic guideline on medical oncology

Barriers for SDM implementation

90% (14/15) of the interviewed think that barriers for SDM implementation exist in Bulgaria

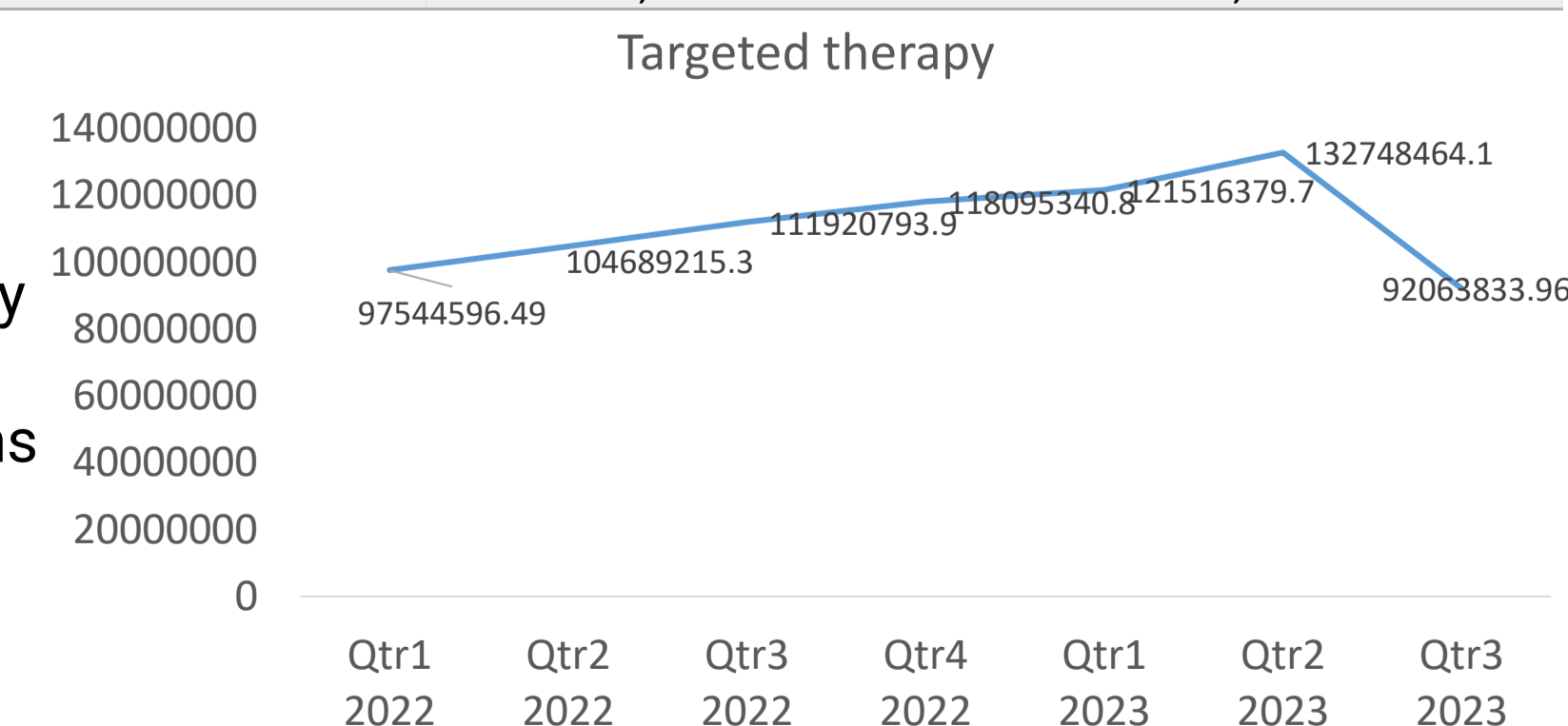


Results: COI study

| Biomarker type | price per package /BGN/ | wages for a package (in hours) | % of personal income (retirement) | Expected volume, 2024 | Expected costs, 2024 BGN |
|----------------|-------------------------|--------------------------------|-----------------------------------|-----------------------|--------------------------|
| KRASG12C | 360 | 37.42 | 53.37 | 200 | 72,000 |
| EGFR | 450 | 46.78 | 66.71 | 1,100 | 495,000 |
| PD-L1 | 330 | 34.31 | 48.92 | 4,100 | 1,353,000 |
| ROS1 | 100 | 10.40 | 14.82 | 240 | 24,000 |
| ALK | 270 | 28.07 | 40.03 | 1,100 | 363,000 |
| RET | 760 | 79.01 | 112.67 | 100 | 76,000 |
| NTRK | 760 | 79.01 | 112.67 | 200 | 152,000 |
| KRAS/ NRAS | 360 | 37.42 | 53.37 | 1,100 | 396,000 |
| BRCA | 800 | 83.17 | 118.60 | 2,100 | 1,680,000 |
| HRD | 2250 | 233.90 | 333.56 | 450 | 1,012,500 |
| MMR | 280 | 29.11 | 41.51 | 1,400 | 392,000 |
| MSI | 460 | 47.82 | 68.19 | 1,400 | 644,000 |
| BRAF | 480 | 49.90 | 71.16 | 350 | 168,000 |
| PIK3CA | 760 | 79.01 | 112.67 | 200 | 152,000 |
| HER 2 | 280 | 29.11 | 41.51 | 1,200 | 336,000 |

Societal costs related to targeted cancer therapy in Bulgaria account for almost 4 million euro/year are mostly attributed to diagnostics. They are required prior therapy initiation but currently are paid out-of-pocket or through patient-support programs

They are expected to rise in the next years due to increased access to targeted/immune therapies and the implementation of NGS/CGP



Conclusions

There is a need for integrated approach for the implementation of SDM within Bulgarian oncology and changes in respective regulations, allowing oncology diagnostics to be reimbursed, which could locally reduce societal costs and financial toxicity

01

Desktop policy analysis and survey among oncologists in Bulgaria

Cost analysis on the targeted oncology treatment from the perspective of the BG healthcare system including societal point of view

COI

02

- Current strategic policy documents on regional and national level with focus on SDM
- Online anonymous questionnaire to analyze the attitude and readiness of Bulgarian oncologists for SDM

References

1. NICE: Shared decision making. Available at: <https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-guidelines/shared-decision-making>
2. Gennari A et al. ESMO Clinical Practice Guideline for the diagnosis, staging and treatment of patients with metastatic breast cancer. Annals of oncology 2021.
3. Hendriks L.E. et al. Oncogene-addicted metastatic non-small-cell lung cancer: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. Annals of oncology 2023
4. Pharmacotherapeutic guideline on medical oncology. Available at: www.ncpr.bg