

Inequalities in access to personalized cancer care in Europe



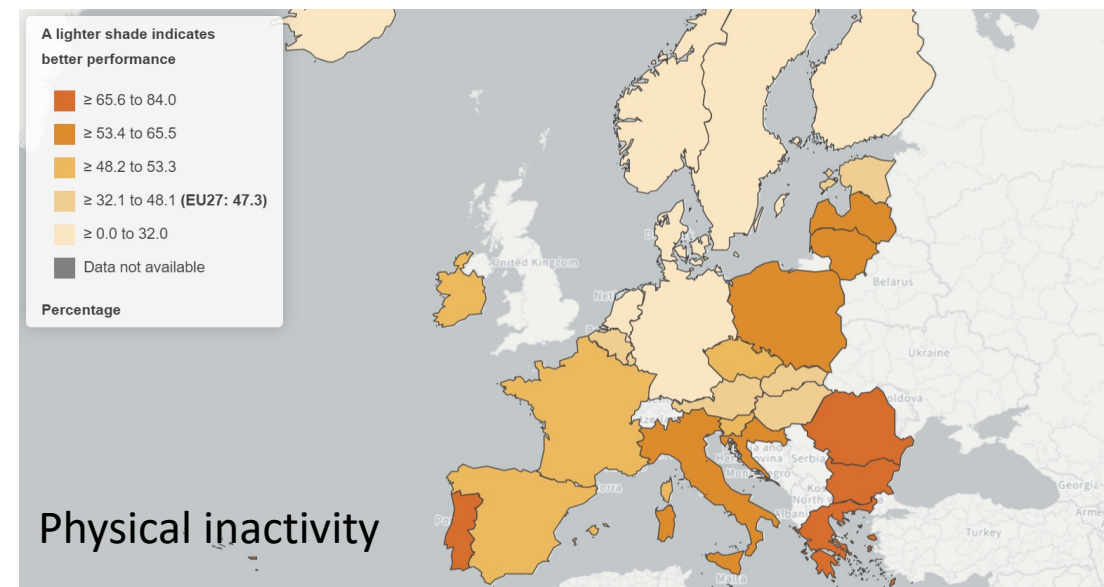
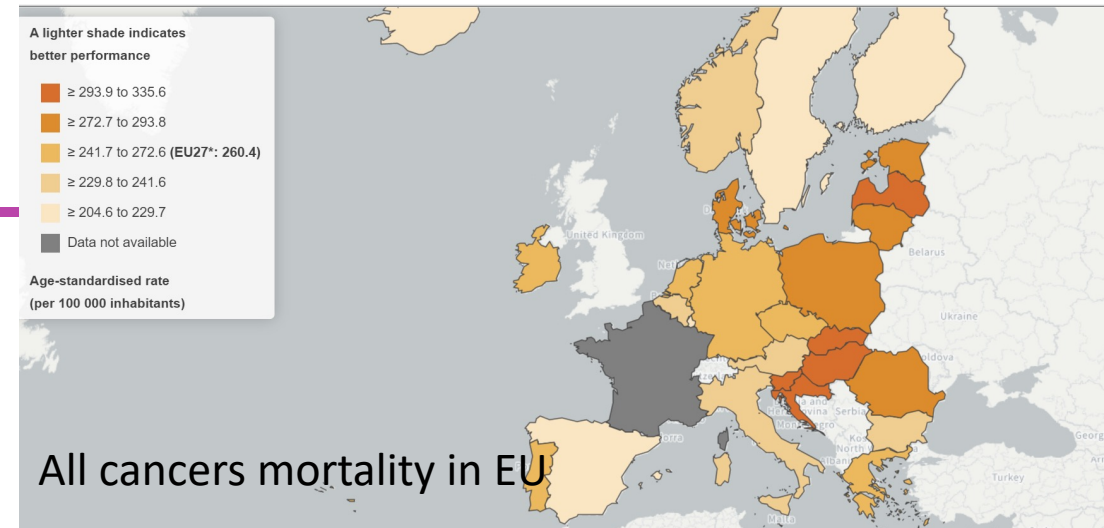
On Equality
in Beating
Cancer

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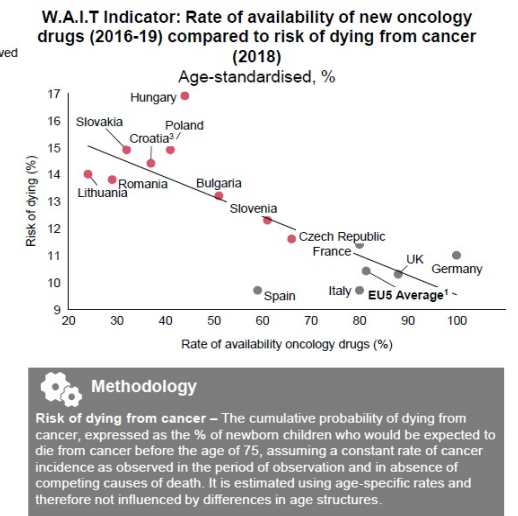
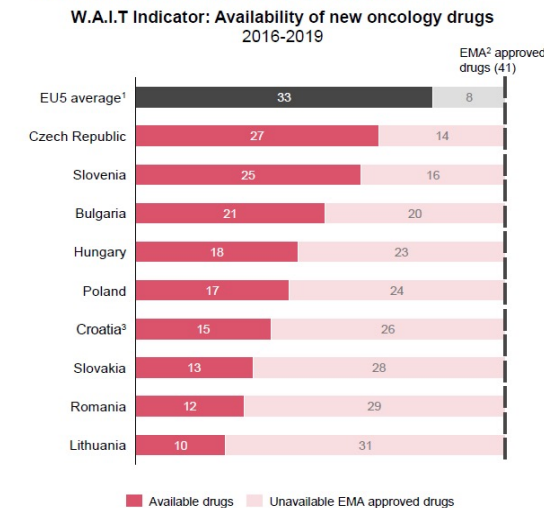
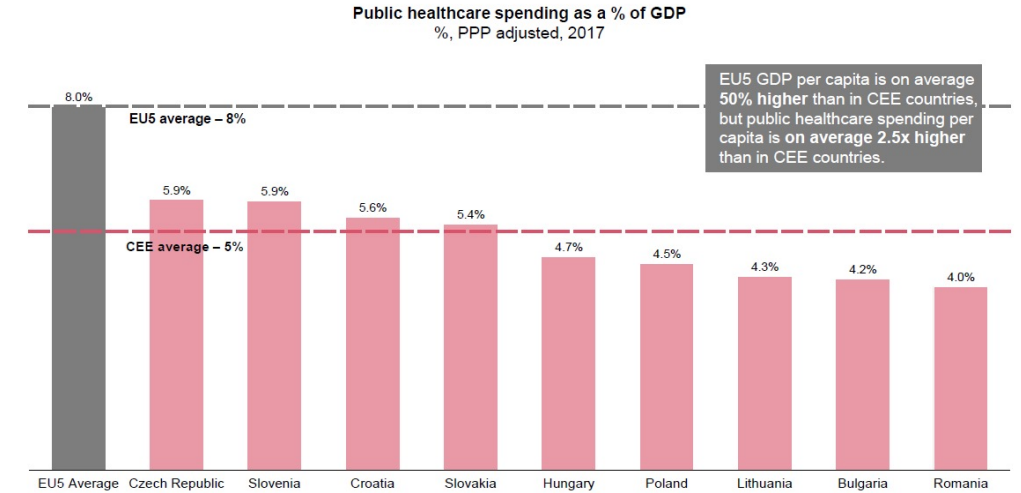
Cancer inequalities

- Central and Eastern European (CEE) countries including Baltic countries not only share common cancer risk and behavior factors (air pollution, extensive smoking, alcohol consumption, low physical activity, unhealthy food), but also similar health economy with quite low investments in oncology.
- Lower spending on healthcare in CEE are directly related to poorer health outcomes, when compared to the EU5.



Health economics

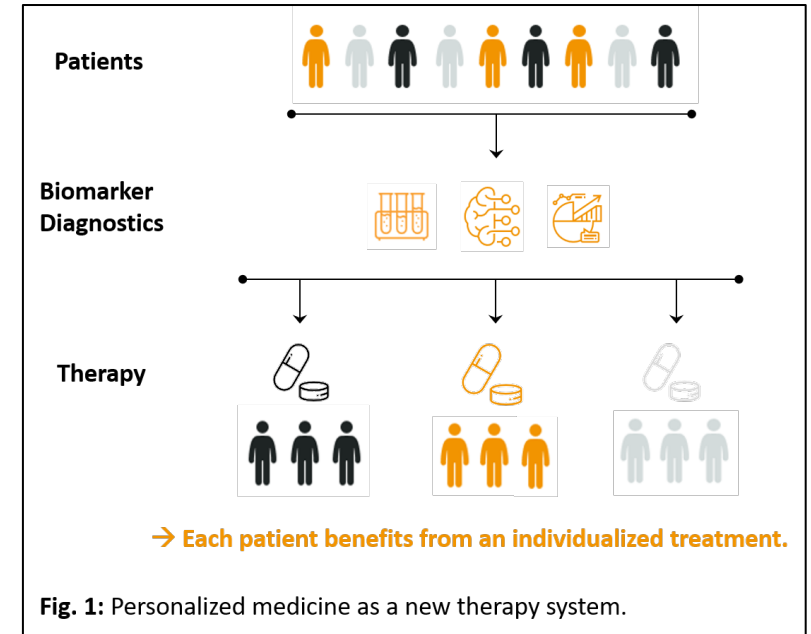
- In CEE countries, public spending on healthcare are in 3% lower than the EU5 average percentage of GDP;
- Accordingly, the countries have poorer health outcomes, including life expectancy, amenable mortality rates, cancer survival rates;
- Lithuania has poor 5-year survival for ovarian, breast, cervical, pancreatic, renal, lung, esophageal cancer (Allemani et al. 2018, Lancet, CONCORD-3 study). Aggregated cancer mortality rate is above EU average.



Personalized oncology

Personalized oncology (PO) markedly improved cancer survival measures by increasing clinical responses, reducing number of adverse events, improving patients well-being, but additional investments are needed into PO infrastructure.

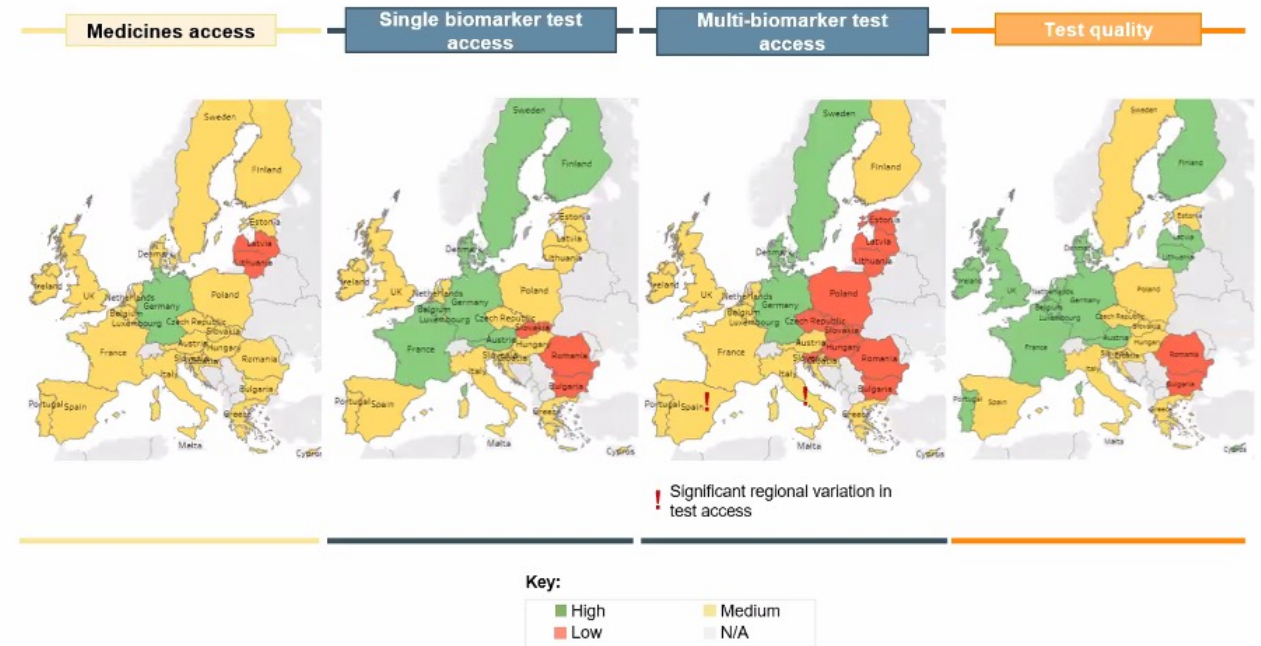
- **Improved patient outcomes:** 5-year survival for stage III-IV melanoma increased from 5% in 2010 to 52% in 2020;
- **Socioeconomic benefit:** Personalized oncology reduce the length of hospital stays from the average week to 3-4 days;
- **Cost efficiency:** for EGFR testing France invested 11 M Eur into infrastructure that generated almost 500 M Eur savings due to proper patient selection.



Personalized oncology is the right cancer treatment given to the right person at the right time determined by the use of biomarkers.

Access to personalized oncology in EU

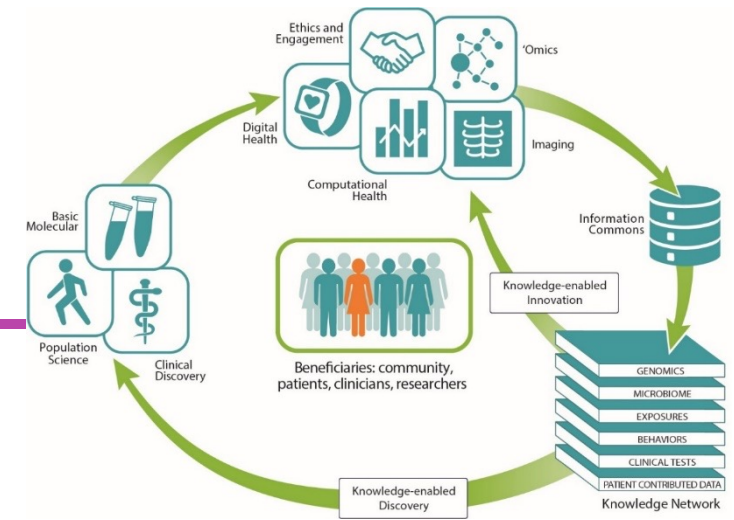
- In 2020 66 PO drugs targeting 25 cancer driving alterations were approved by FDA and/or EMA.
- The access to modern cancer treatment is unequal across EU:
 - In 2016 about 5000 patients in EU were denied access to personalized melanoma therapy (BRAF-targeted drugs):
 - 30% of patients in Western Europe;
 - 60% of patients in Central Europe;
 - 90% of patients in Eastern European (Gill et al., 2020)



<https://www.efpia.eu/media/589727/unlocking-the-potential-of-precision-medicine-in-europe.pdf>

EBCP: Mainstream equality action in areas addressed by Europe's Beating Cancer Plan such as screening and high-quality cancer care.

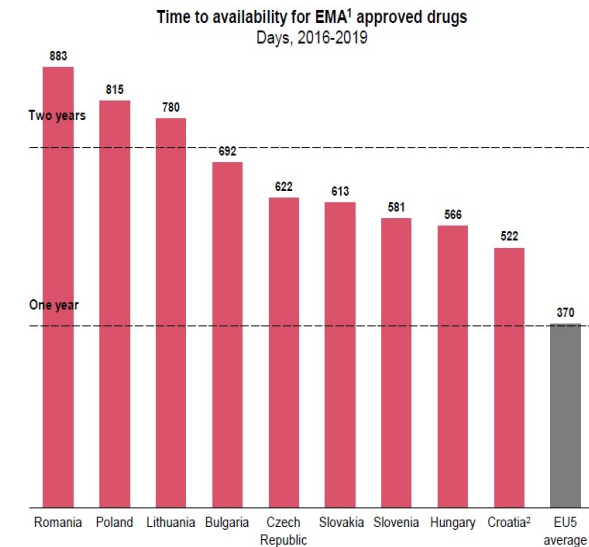
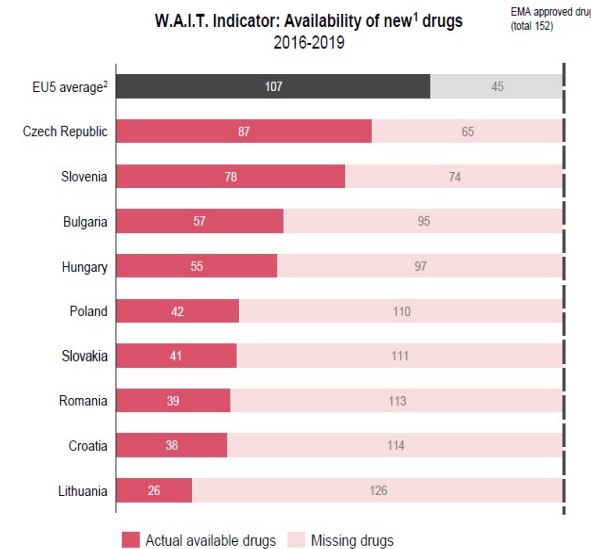
Personalized oncology infrastructure



➤ About 30% of new drugs authorized by EMA were available in CEE countries in 2016-2019 and it took an extra 304 days on average for a drug to be made available in CEE than in the EU5 (PwC Strategy 2021)

➤ **Key barriers** to wider PO access in CEE:

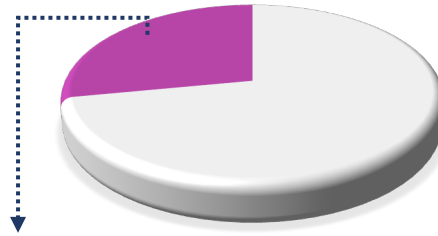
- Lack of testing (NGS) infrastructure in the clinic;
- Legal regulation and test reimbursement issues, PO value assesment and understanding;
- Safe data collection and sharing, digitalization of health services;
- Stakeholder awareness and education.



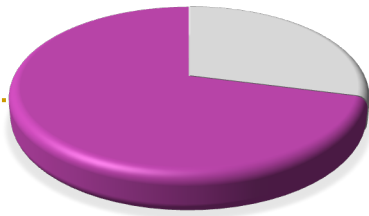
<https://www.efpia.eu/media/602945/pwc-strategy-report-increasing-healthcare-investment-in-cee-countries.pdf>

Solutions: Stakeholder engagement

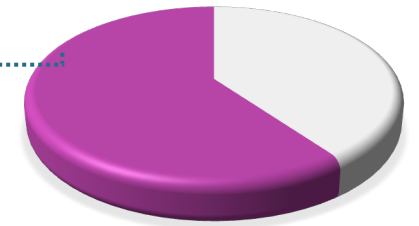
Questionnaire performed by POLA:
>1500 cancer patients from LT



21% Knowledge on „personalized“,
„precision“ medicine



71% Knowledge on „targeted“,
„biological“ therapy



60% Knowledge on „genetic“,
„genomic“ testing



Solutions: Stakeholder collaboration

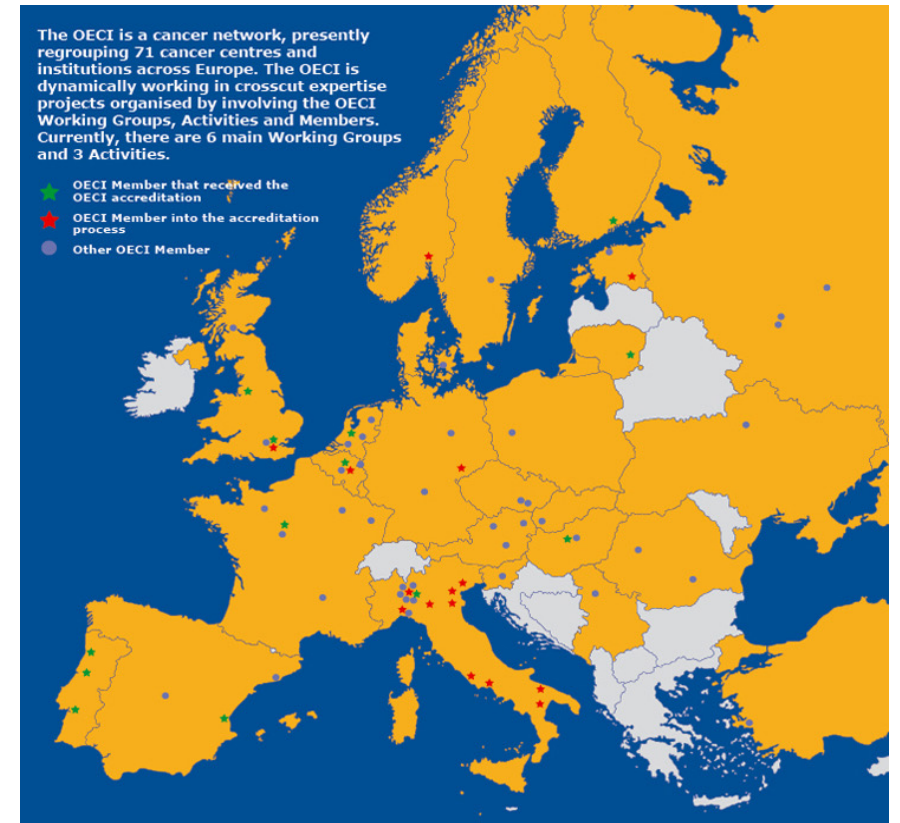


- **Green corridor for oncology patient** – primary oncology case manager education and (2020-2022);
- **Lithuanian National biobank project** – infrastructure development and membership in BMRI-ERIC; Preparation of legislations related to quality management, sample provision, data protection (2019-2023);
- Participation in **EU 1+ Million Genomes Project** – PO testing infrastructure, 1570 national WGS (“Next generation Lithuania” under the The Recovery and Resilience Facility);
- **National PO initiative:** an open label, prospective, non-randomized Pan-Tumor Multi-Drug Study of targeted anti-cancer treatment based on comprehensive genomic profiling (The Drug Rediscovery Protocol (DRUP Trial), ClinicalTrials.gov Identifier: NCT02925234).



Solutions: European collaboration

- Assistance in OECI accreditation by adopting gradually increasing requirements for CEE countries;
- Mandatory inclusion of participants from CEE countries in personalized oncology clinical trials to improve early access to innovative treatment in CEE;
- Equal regulatory environment for the approval of medicines across the Europe;
- EU granting of Cancer beating plan-related projects with adjusted funding rate for CEE countries (50% co-funding is not acceptable);
- No one should be left behind!



<https://www.oci.eu/accreditation/>

EBCP: Creation of 'National Comprehensive Cancer Centre(s)' in all Member States and EU network by 2025



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Thank you for your attention!



National Cancer Institute of Lithuania express solidarity with Ukraine and makes every effort to provide all possible support for cancer patients from Ukraine.