

***Inequalities in access to cancer care and socioeconomic impact.
What can we do about it?***

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- Inequalities in treatment accessibility, between and within countries
- Inequalities in SocioEconomic Impact between and within countries
- Policy recommendations
- Research recommendations

OEI can assist in setting the agenda.



Cancer Pulse - Countries overview - European Cancer Organisation



The screenshot shows the European Cancer Pulse website interface. At the top left is the 'european cancer ORGANISATION' logo. The navigation bar includes 'ABOUT', 'MEMBERS', 'PATIENTS', 'COMMUNITY 365', a search icon, and a 'SECURE AREA' button. Social media icons for X, Facebook, LinkedIn, and YouTube are also present. Below the navigation bar are links for 'National cancer inequalities', 'Social inequalities', 'Submit new data', and 'Sources'. The main content area features a map of Europe with the text 'Click on a country to track cancer inequalities'. To the right of the map is the 'European Cancer Pulse TRACKING INEQUALITIES IN CANCER' logo. Below this is a 'Comparison' tab with three buttons: 'National cancer inequalities', 'Social inequalities', and 'Submit New Data'. On the left side, there is a 'Hide' button and a text box titled 'European Cancer Pulse' that reads: 'Featuring more than 170 data measurements, the European Cancer Pulse allows you to quickly and easily discover cancer care disparities in 50 countries. The tool will continue to evolve, with even more data, so visit the site often.'



Overview Comparison

National cancer inequalities ^

- Cancer burden
- Cancer prevention
- Cancer screening and early detection
- Cancer diagnosis
- Cancer treatment and care
- Cancer survivorship and quality of life
- Cancer workforce
- Patient access to care
- Cancer research
- Health literacy
- Cancer spending and policy initiatives
- Cancer policy indexes

Social inequalities >

Submit New Data

Overview Comparison

National cancer inequalities ^

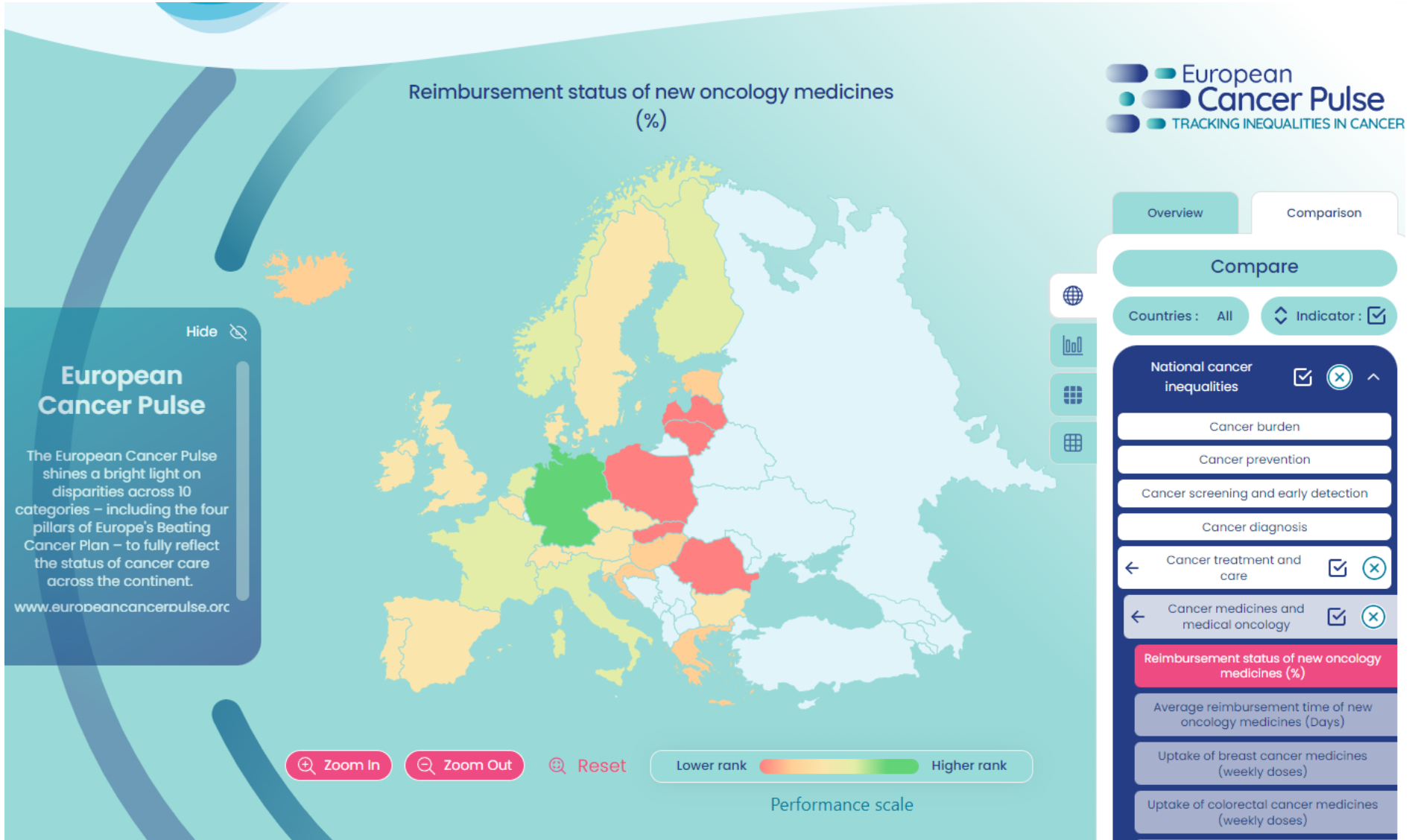
- Cancer burden
- Cancer prevention
- Cancer screening and early detection
- Cancer diagnosis
- Cancer treatment and care** ←
- Cancer medicines and medical oncology
- Cancer surgery
- Radiation therapy
- Cancer care facilities
- Cancer survivorship and quality of life
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Overview Comparison

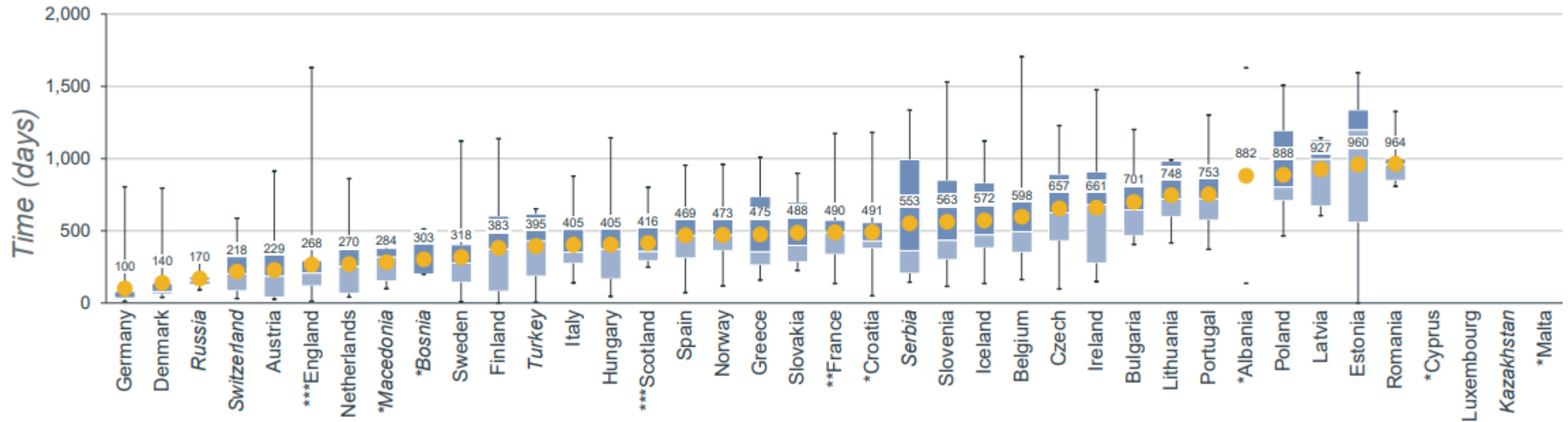
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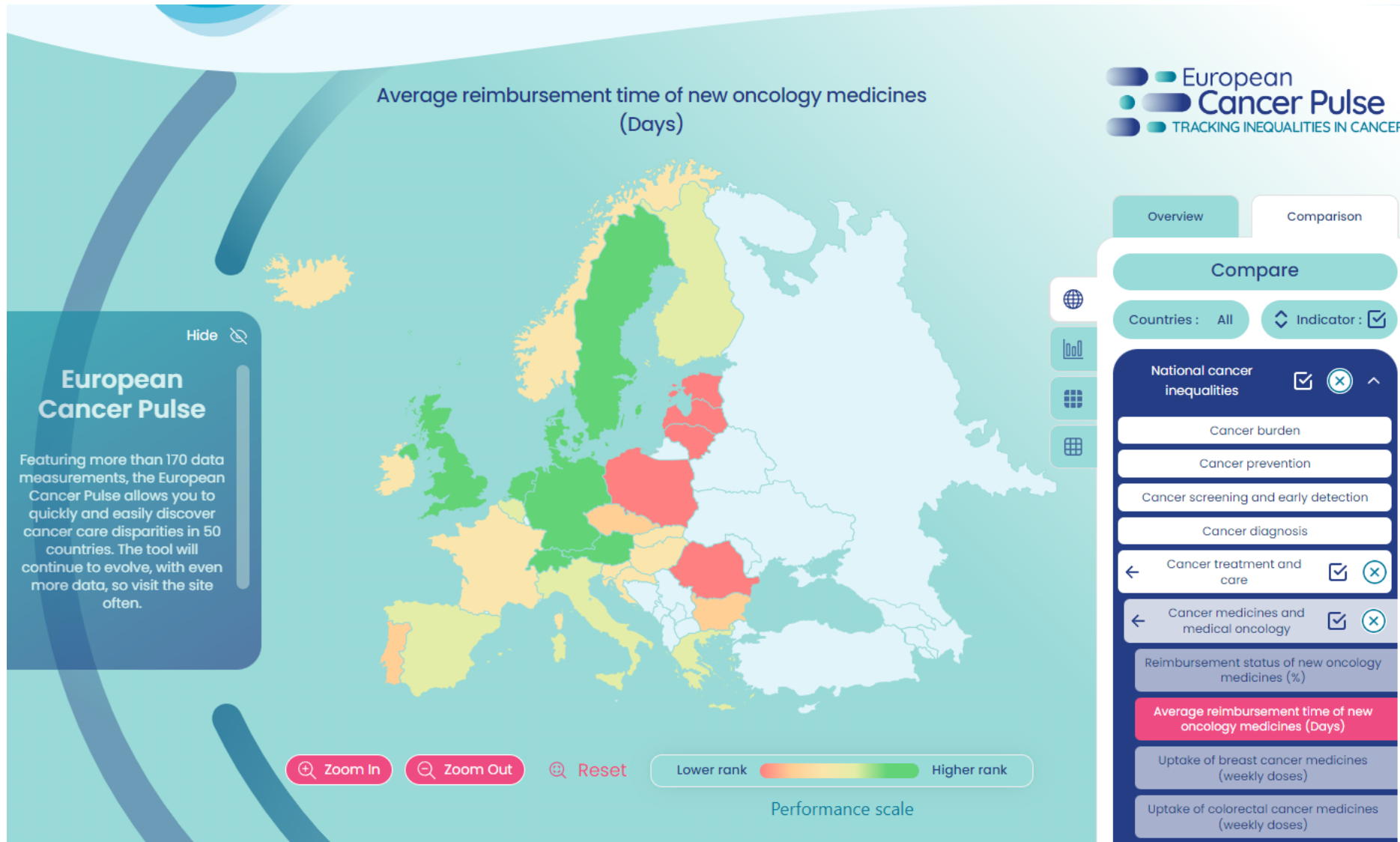


Time to access -from EMA authorization to coverage decision- varies considerably across EU countries

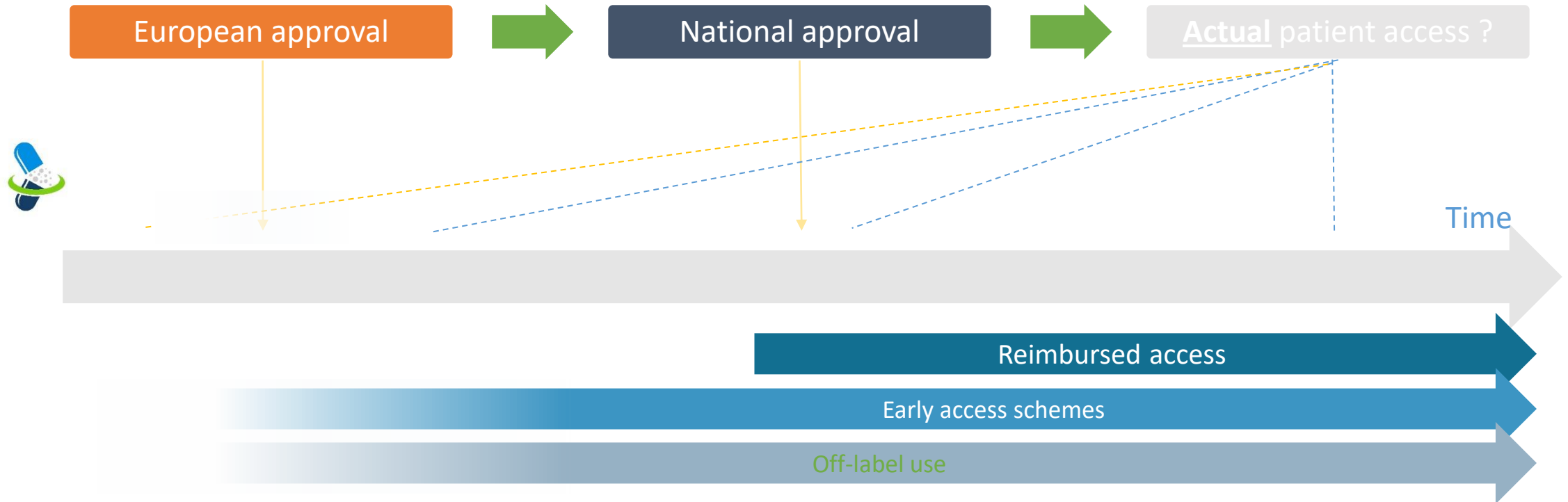


Days between **EMA marketing authorization** and the date that medicines gain access to the **reimbursement list** in European countries.





Time to actual patient access is again different



Actual patient access to innovative cancer medicines in 6 European countries

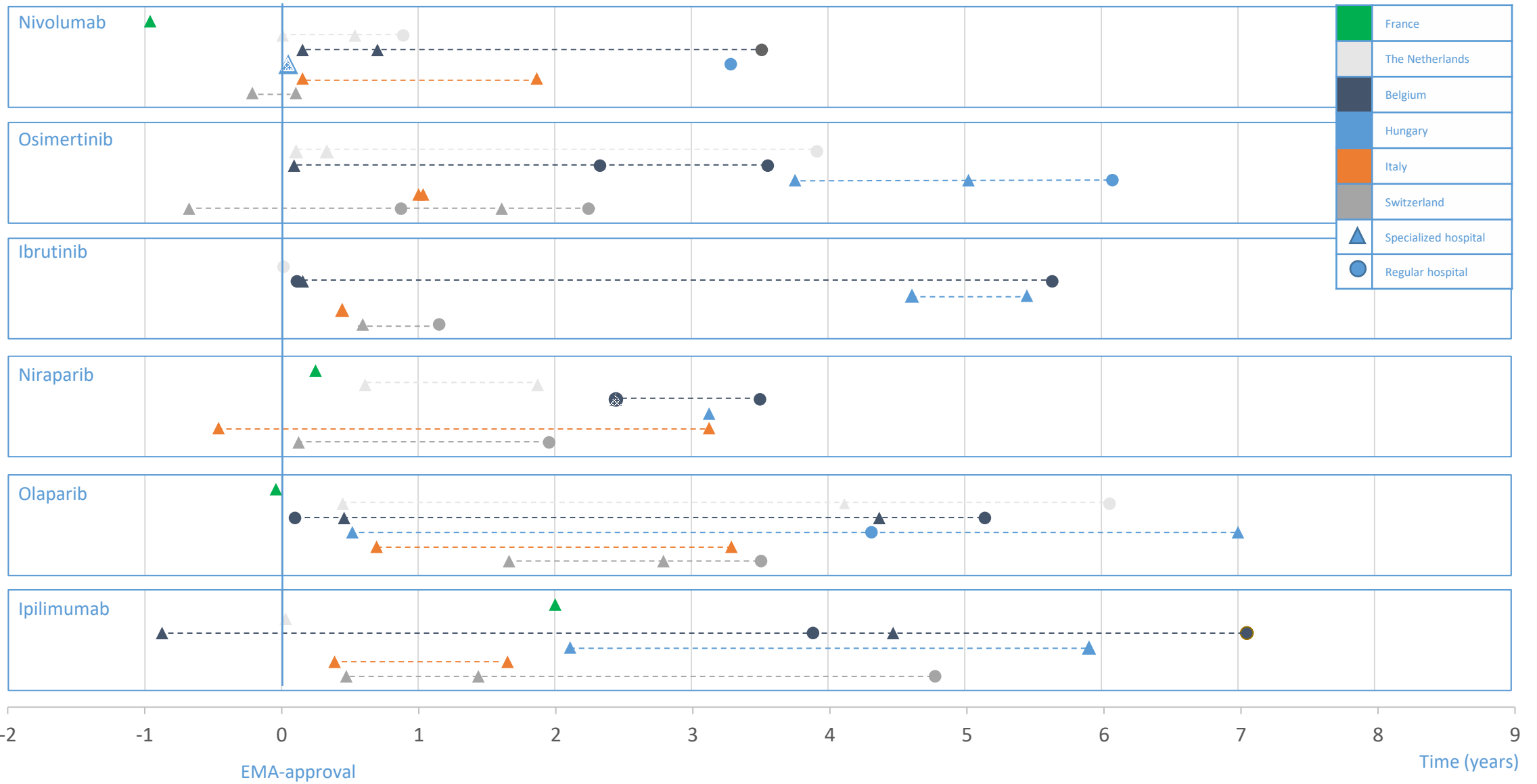
Objective

To assess differences in the time to actual access to innovative cancer medicines and their indications from a patient perspective on hospital level per country.

Methods

- **Survey & semi structured interviews** with 19 hospital pharmacists from 6 countries
- **6 selected medicines:** Olaparib, Niraparib, Ipilimumab, Osimeritinib, Nivolumab, and Ibritunib
- **Collected data points:**
 - EMA authorization date, coverage decision date, time to first patient access (per indication), context of first access





Context of first accessibility of the medicines

Countries/ Medicines	Belgium				Hungary			Italy		Switzerland					Netherlands			
	SP	SP	GEN	GEN	SP	SP	GEN	SP	SP	SP	SP	GEN	GEN	GEN	SP	SP	GEN	
Type of hospitals																		
Olaparib	Dark Blue	Red	Light Blue	Light Blue	Light Blue	Dark Blue	Light Blue	Light Blue	Yellow	Light Blue	Light Blue	Light Blue	Light Blue	Yellow	Yellow	Light Blue	Light Blue	Dark Blue
Niraparib	Red	Red	Light Blue	Red	Light Blue	Red	Red	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Dark Blue	Red	Dark Blue	Dark Blue	Red	
Nivolumab	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Dark Blue	Yellow	Light Blue	Dark Blue	Light Blue	Light Blue	Light Blue	Red	Light Blue	Light Blue	Light Blue	Light Blue	
Ipilimumab	Light Blue	Light Blue	Dark Blue	Light Blue	Dark Blue	Dark Blue	Red	Dark Blue	Light Blue	Light Blue	Light Blue	Dark Blue	Dark Blue	Light Blue	Light Blue	Red	Red	
Osimertinib	Dark Blue	Red	Dark Blue	Light Blue	Dark Blue	Dark Blue	Dark Blue	Light Blue	Yellow	Light Blue	Dark Blue	Light Blue	Dark Blue	Light Blue	Yellow	Light Blue	Dark Blue	
Ibrutinib	Light Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	NA	Yellow	Red	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Dark Blue	

SP	Specialized hospital
GEN	General hospital
Light Blue	First Access through early access program
Dark Blue	First Access through national reimbursement
Yellow	First Access through off-label use
Red	No access
Light Grey	No context was given
Dark Grey	NA None of the indications of this medicine is treated in this hospital



Accessibility to selected medicines and its indications.

Country	CH	CH	CH	CH	CH	IT	IT	HU	HU	HU	BE	BE	BE	BE	NL	NL	NL	FR
Type of hospital	GEN	SP	SP	GEN	GEN	SP	SP	SP	SP	GEN	GEN	SP	GEN	SP	GEN	SP	SP	SP
Olaparib																		
Accessibility																		
+ Breast cancer																		
+ Ovarian cancer																		
+ Adenocarcinoma of the pancreas																		
+ Prostate cancer																		
Niraparib																		
Accessibility																		
+ Ovarian cancer																		
Nivolumab																		
Accessibility																		
+ Melanoma																		
+ Melanoma (in combination with ipilimumab)																		
+ Non-small cell lung cancer																		
+ Renal carcinoma																		
+ Renal carcinoma (in combination ipilimumab)																		
+ Head and neck squamous cell carcinoma																		
Ipilimumab																		
Accessibility																		
+ Melanoma																		
+ Melanoma (in combination with Nivolumab)																		
+ Renal carcinoma (in combination Nivolumab)																		
Osimertinib																		
Accessibility																		
+ Non-small cell lung cancer																		
Ibrutinib																		
Accessibility																		
+ Mantle cell lymphoma																		
+ Chronic lymphocytic leukaemia (CLL)																		
+ Chronic lymphocytic leukaemia (CLL) (combo bendamustine and rituximab)																		
+ Chronic lymphocytic leukaemia (CLL) (combo obinutuzumab or rituximab)																		
+ Waldenström's macroglobulinaemia (combo rituximab)																		

GEN	General hospital		Medicines is accessible
SP	Specialized hospital		Medicine is not accessible
	None of the indications of this medicine is treated in this hospital		No context

Large heterogeneity in patient access between and within countries

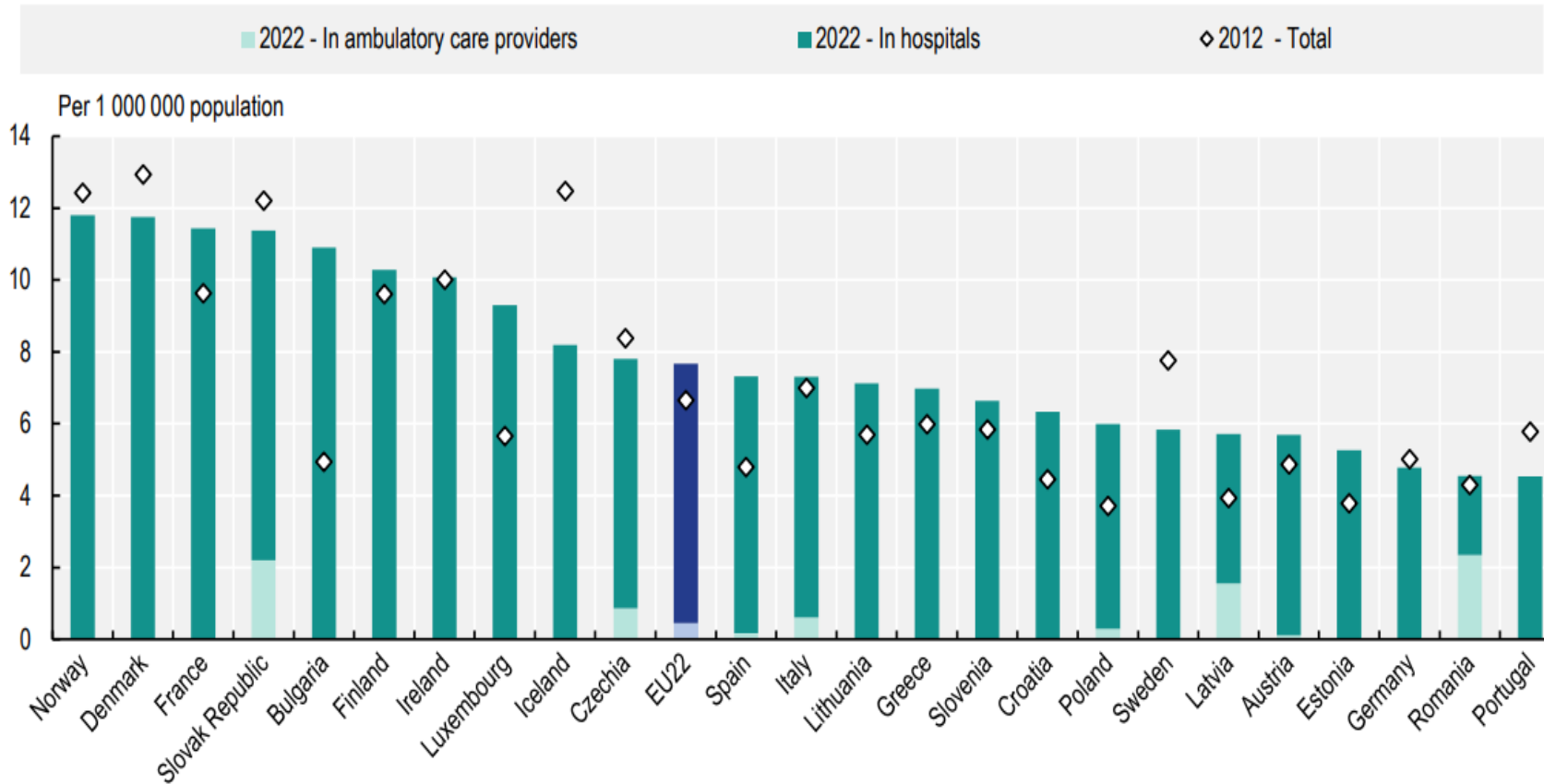
- EMA -> patient access: avg. time of **2.1 years** (range: -0.9 – 7.1 years)
- National reimbursement -> patient access: **-0.5 years** (range: -6.8 – 6.2 years)
- Existence of early access programs and off-label use within a country facilitates patient access.
- **Specialized hospitals were more likely to provide patient access prior to a national reimbursement decision than general hospitals.**



Recommendations to improve equity in access across Europe

- **Shorten the timeline from EMA approval to reimbursed access**
 - Mandatory submission deadline in all EU countries for the industry.
 - Specific pricing reimbursement policies to meet the EU directive of 180 days until decision
- **Bridge the gap to reimbursed access to crucial medicines for patients in high medical need**
 - Harmonize EAPs across Europe if recommended by professional societies
 - Development of a national platforms for physicians to facilitate referrals to EAPs
 - Cancer centers more aware of innovations?
- **Stimulate collaboration between different stakeholders**
 - Information sharing regarding coverage and pricing decisions between National Health Authorities (NHA).
- **Invest in Advocacy with patients, professionals and institutions and develop lobby instruments.**
 - Foster early dialogues between the NHA, industry, patients and professionals (early HTA)

But also diagnostic and therapeutic infrastructure (depending on GDP and care-expenditure)



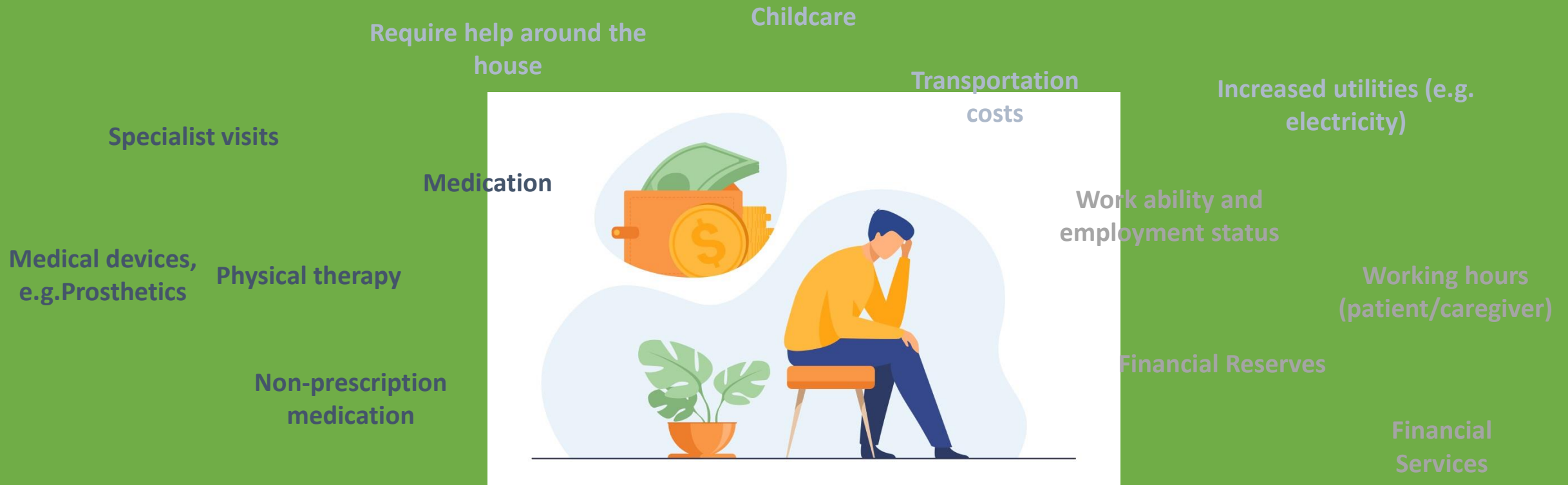
Notes: Data refer to the nearest available year. Radiation therapy equipment includes linear accelerators, Cobalt-60 units, Caesium-137 therapy units, low to orthovoltage X-ray units, high-dose and low-dose rate brachytherapy units and conventional brachytherapy units.

Source: OECD Health Statistics 2023, <https://doi.org/10.1787/health-data-en>.



What are socio-economic consequences of a cancer diagnosis?

“Financial toxicity”



SEC-study: A Survey with 2507 patients in 14 EU countries

Objectives

1. To **explore the socio-economic consequences** for patients resulting from cancer diagnosis in Europe
2. To identify **patient groups** that may be **vulnerable** from financial toxicity

Survey (Sep 2021 – Sep 2022):

Financial Index of Toxicity (FIT) score: 0-100

Validated Canadian instrument



Financial
stress



Financial
strain



Productivity loss

Additional questions

- Coping behavior
- Employment changes & income loss
- Added expenses
- Access to financial measures & services
- Health-related quality of life (EQ-5D)

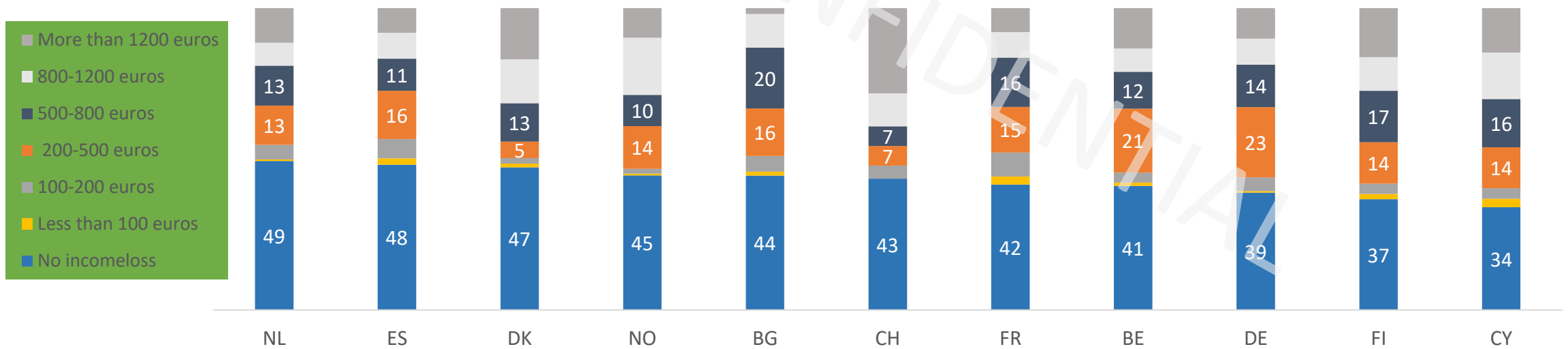
Statistical analysis

1. Descriptive analysis to explore the SEC-consequences per country
2. Regression models to identify vulnerable populations

Monthly income loss

Have you suffered a loss of income because of your diagnosis?

Income loss and its severity (%), total N=2226



N _{countries}	393	478	165	183	154	46	226	90	198	117	176
Median gross monthly income**	2739	1708	4057	4279	442	5625	2369	3092	2891	2958	1477

*Not adapted to PPP

** Median monthly earnings in 2018 (Eurostat)

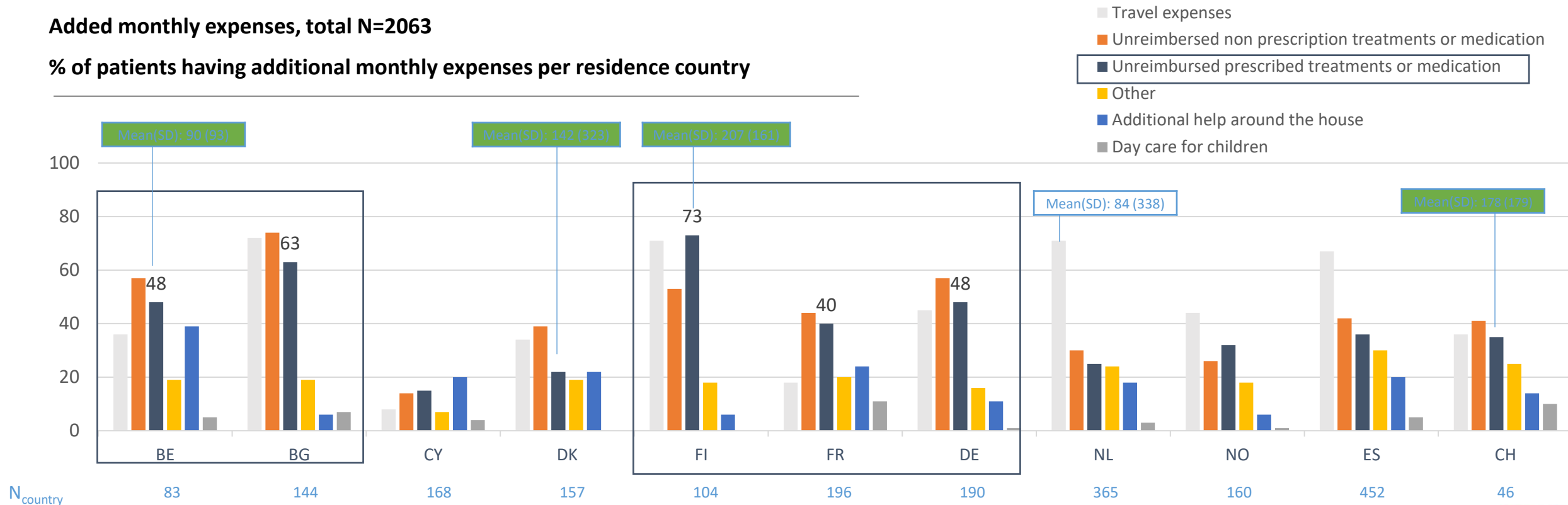


Added monthly expenses*

Due to your cancer diagnosis, did you face any additional expenses related to your treatment?

Added monthly expenses, total N=2063

% of patients having additional monthly expenses per residence country



*Double counting

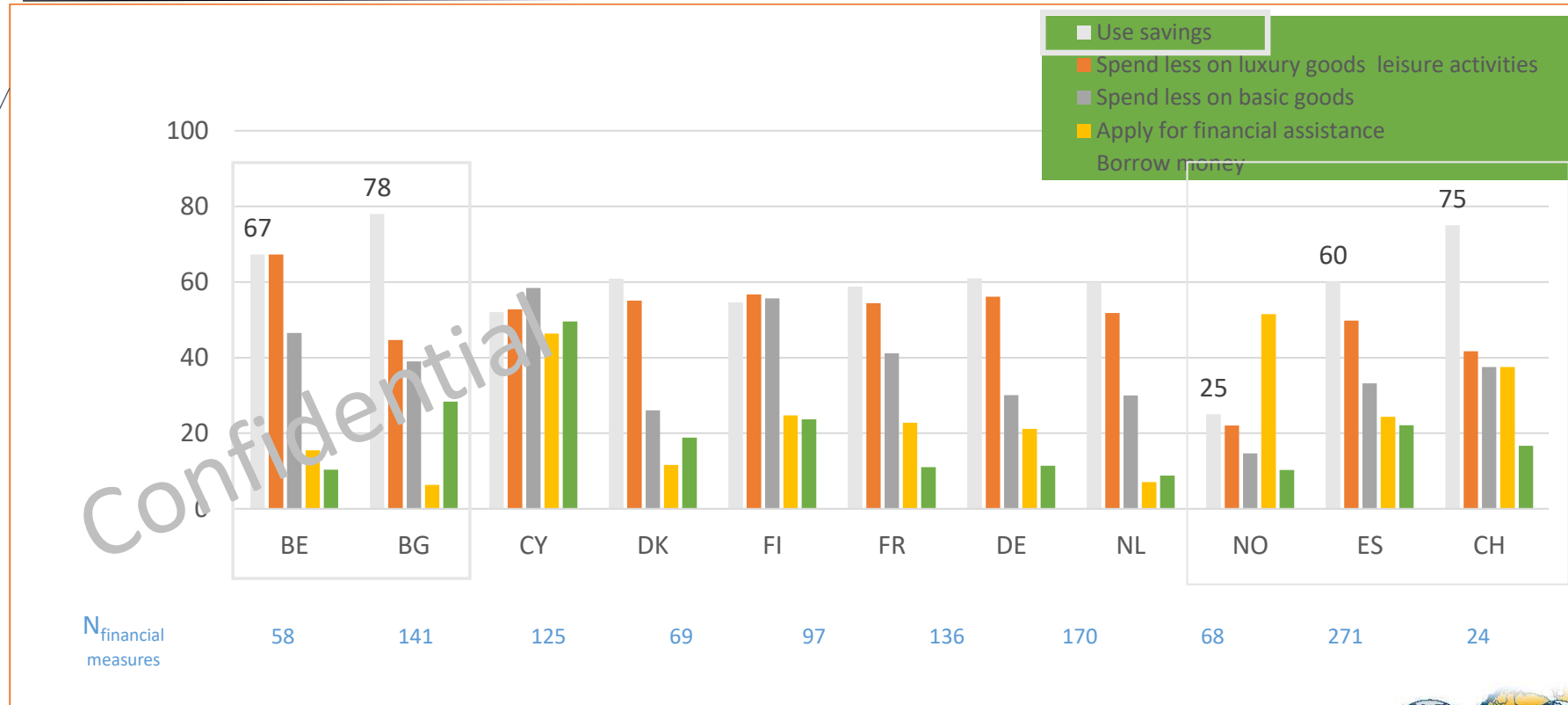
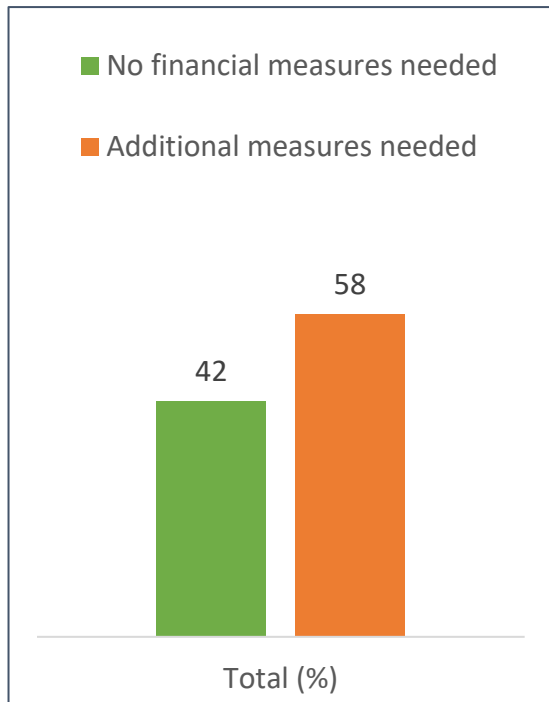


External & internal financing measures*

Since my diagnosis, I had to _____ to pay for treatment related expenses.

Total N=2226

% of patients taking external & internal measures per residence country, N=1282



*Double counting



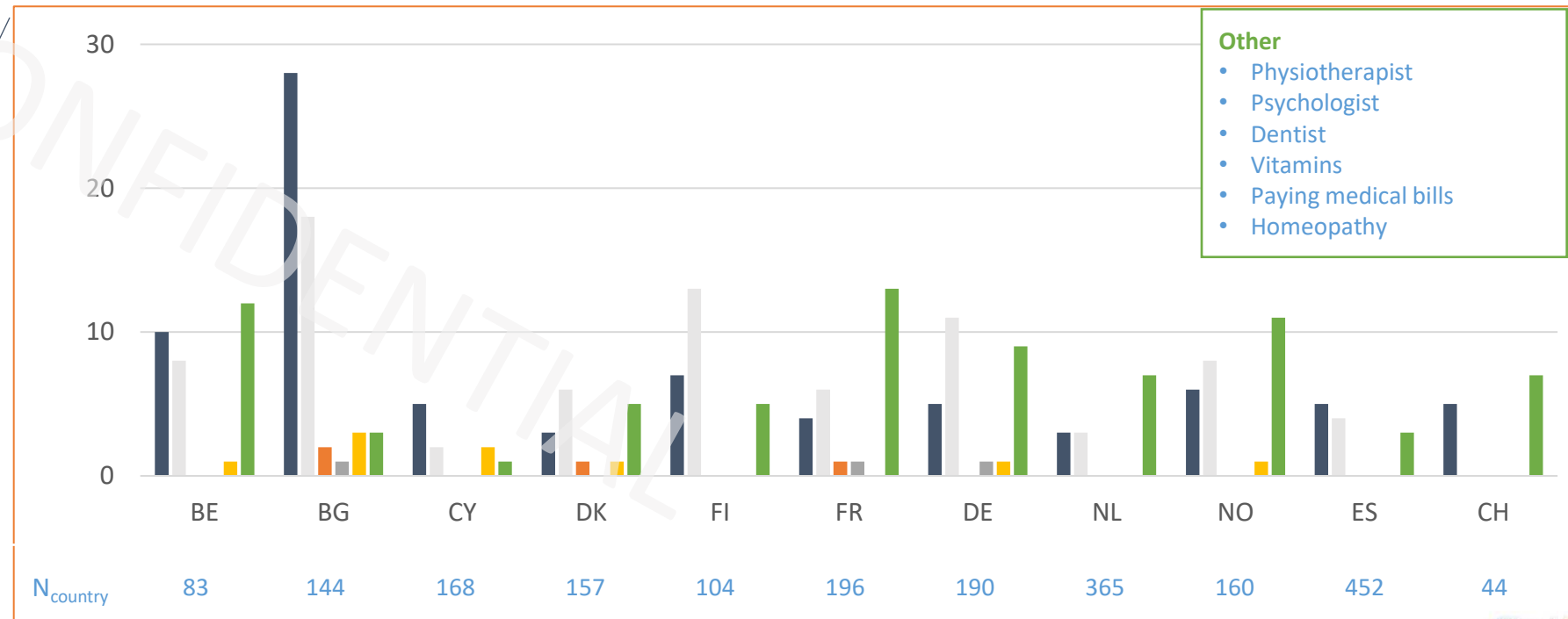
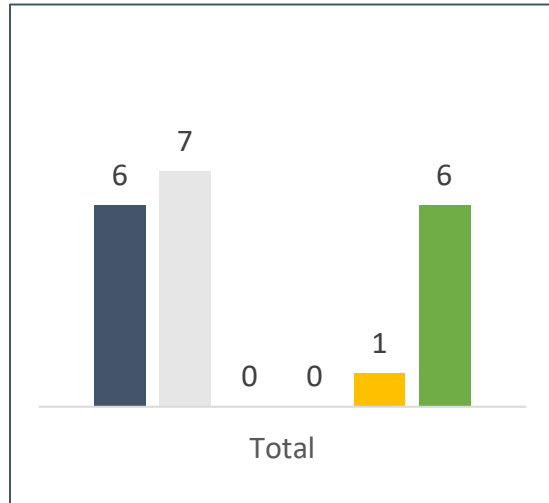
Maladaptive coping behavior*

Since my diagnosis, I have delayed or avoided _____ due to its related expenses.

Total N=2115

% of patients delaying or avoiding medical services per residence country

- Medical visits
- Buying medication
- Chemotherapy
- Radiotherapy
- Surgery
- Other



*Double counting

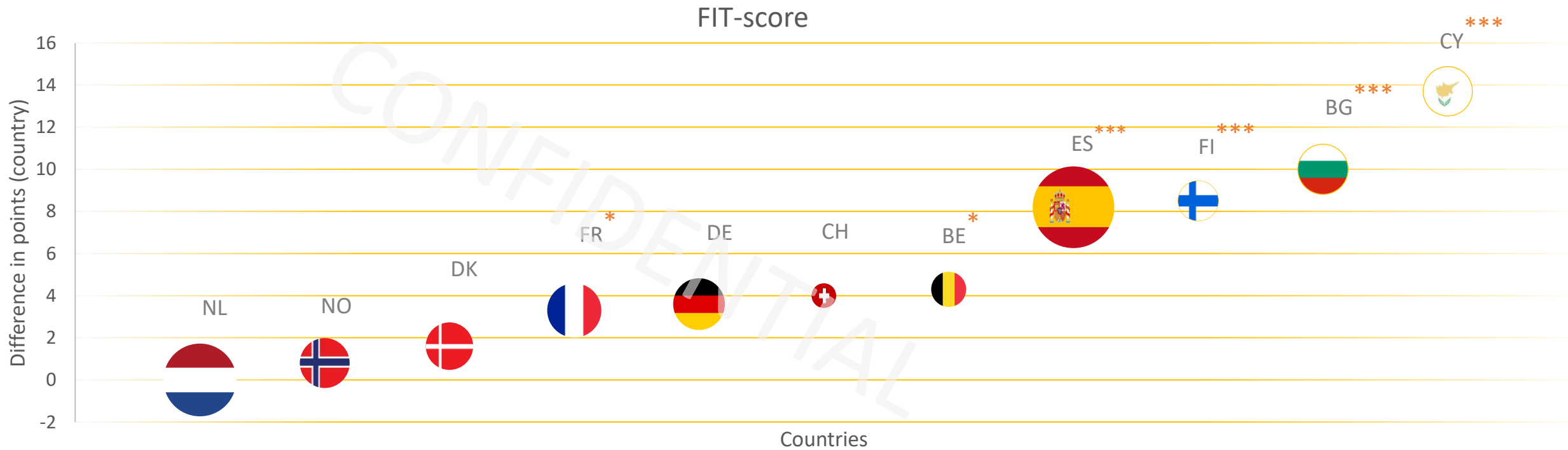


Regression:

Total Financial Index of Toxicity

Scale: 0 (best) – 100 (worst)

Total score as the sum of all questions (9) and all subscales (3)



* Statistical significant difference observed with NL



OEI setting the agenda?



THE LANCET
Oncology

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The socioeconomic impact of cancer on patients and their relatives: Organisation of European Cancer Institutes task force consensus recommendations on conceptual framework, taxonomy, and research directions

Prof Michael Schlander, MD PhD  *  • Prof Wim van Harten, PhD MD  † • Prof Valesca P Retèl, PhD • Phu Duy Pham, MSc • Julie M Vancoppenolle, MSc • Jasper Ubels, MSc • et al. [Show all authors](#) • [Show footnotes](#)

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Summary



Reducing SEI impact and inequities

- Providers cannot change the Socio Economic Status, but can be aware of differences en different SEI and guide patients towards services.
- Develop interventions/guidance to identify subgroups at risk and to counsel them to minimize SEI
- OEI: (assist in) Lobby towards Governments and EU to raise awareness, adapt regulations (EU memorandum?) and to sponsor research.



Inequalities in access to cancer care and socioeconomic impact.

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