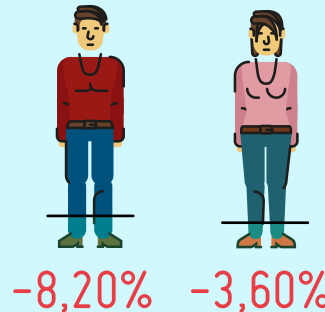


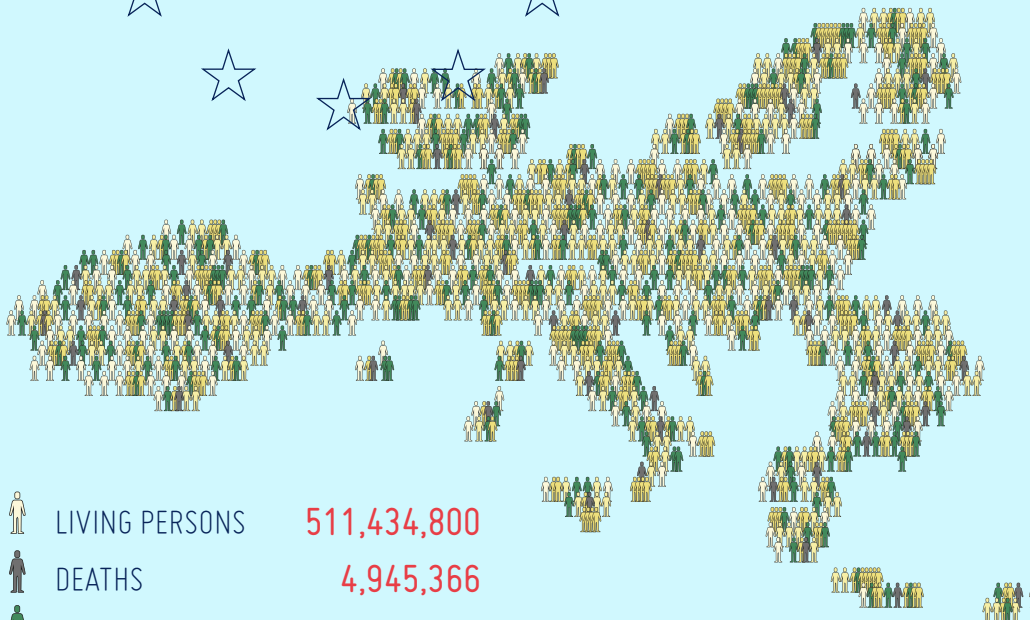
CANCER BIOMARKERS

IN THE ERA OF PERSONALISED MEDICINES



Compared to 2012, cancer mortality rates have decreased both for men and women¹.


1: Ann Oncol (2017)
28 (5): 1117-1123



However, the number of people dying from cancer has increased by 3% since 2012, due to population growth and ageing. Approximately 1.4 million people in the European Union will die from cancer this year².

2: Ann Oncol (2017)
28 (5): 1117-1123



	LIVING PERSONS	511,434,800
	DEATHS	4,945,366
	DEATHS BY CANCER	1,306,561

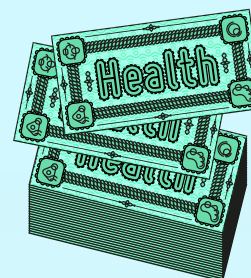


INVALID DIAGNOSIS

☐ ER/PR
☐ HER-2/NEU
☐ BRCA
☒ EGFR
☐ CD20

VALID TREATMENT





We need better ways to ensure sustainable healthcare systems, identify the people who may benefit from effective cancer treatment, and avoid treatment-related toxicity.



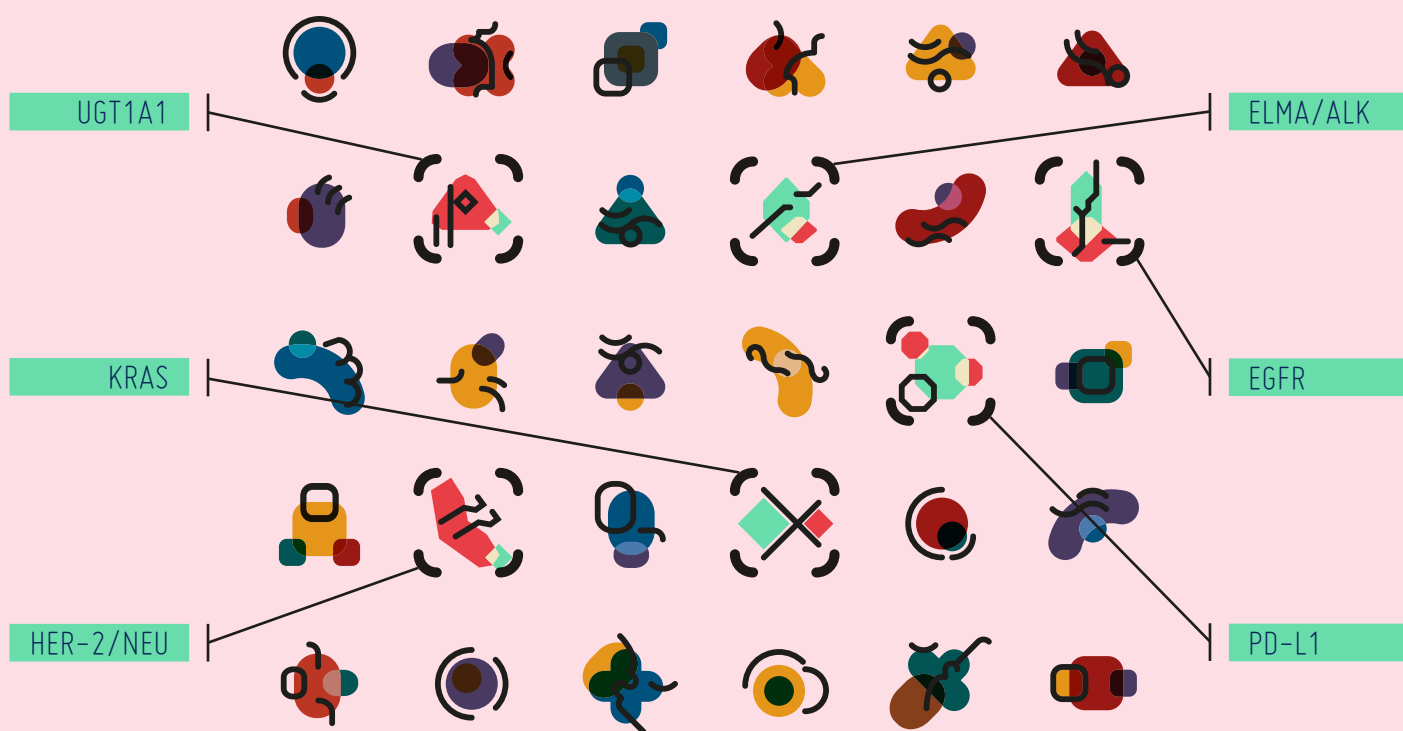
VALID DIAGNOSIS

☐ UGT1A1
☐ BRAS
☐ CD30
☒ GIST C-KIT
☐ PDGFR

INVALID TREATMENT



One of the ways this can be accomplished is with personalised medicine, and cancer biomarkers. Personalised cancer medicine is a targeted approach to the prevention, diagnosis and treatment of cancer based on an individual's specific profile.



WHAT ARE BIOMARKERS

Cancer biomarkers are molecules that are usually produced by cancer cells and that can be detected in bodily fluids or tissues. Cancer biomarkers can identify people who have cancer or who are at risk of getting cancer. Cancer biomarkers can also help select or predict those people who are likely to derive therapeutic benefit from specific drugs.

In fact, biomarkers are essentially to identify the Achilles' Heel in the tumour that doctors can target with specific drugs.

For example, the EGFR biomarker in lung cancer is a DNA mutation that indicates which people are more likely to benefit from targeted therapies. Biomarkers can also be used to monitor remission.

In short: biomarkers are essential for personalized medicine. They can help the right person get the right treatment at the right time³.

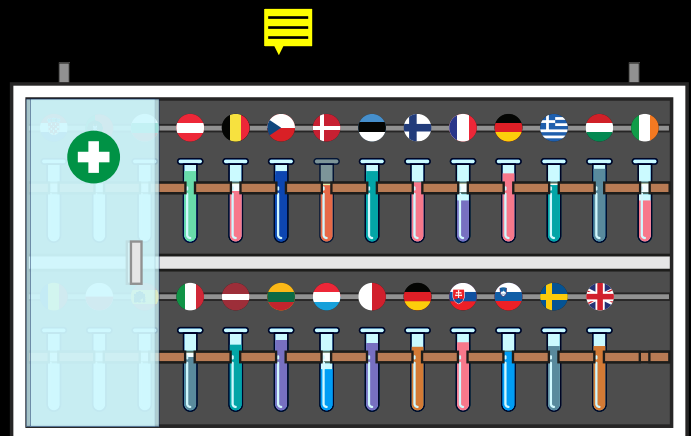
3: (Chantelot et al. Realising the potential of personalised medicines in Europe. September 2014. EuropaBio White paper)

WHAT IS THE STATE OF CANCER BIOMARKERS IN EUROPE



Only 23% of European doctors felt that their patients were always fully informed about biomarker testing⁴.

4: Oncologist. 2016 Mar;21(3): 292-300



23%

Biomarker testing is already available for many types of cancer. However, their authorised use and reimbursement varies by country.

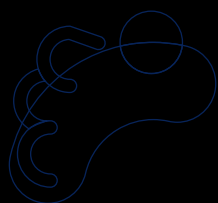
For example, RAS biomarker testing is reimbursed at varying rates in 21 of the 28 EU member states.

Also, the time it can take to get the results varies from a few days to an entire month, depending on the country and the type of biomarker.





BIOMARKERS IN EUROPE CONCLUSION



European Cancer Patient Coalition is calling for:

- Increased access and decreased waiting times for high quality biomarker testing to make personalised healthcare more of a reality across Europe.
- Awareness campaigns that increase biomarker literacy by increasing patients' understanding of where they need to go to access biomarker testing.
- Progress towards a harmonised and more efficient regulatory framework, which could increase access to and potentially reduce the costs of biomarker testing.