

Breast cancer is the most frequent cancer among women in Europe, and it is expected that more than 355 000 new cases will be diagnosed in the EU in 2020 (see indicator “Cancer incidence and mortality” in Chapter 3). The main risk factors for breast cancer are age, genetic predisposition, estrogen replacement therapy, and lifestyle factors including obesity, physical inactivity, nutrition habits and alcohol consumption.

Since the 1980s, most European countries have adopted breast cancer screening programmes to improve early detection rates (OECD, 2013). The increasing number of countries that have set up population-based mammography screening programmes have contributed to increasing the share of women diagnosed at an early stage. Together with technological advances in treatment of breast cancer, these two factors have contributed to a significant reduction in mortality from breast cancer over the last decades. During the period 2010-14, about half of women diagnosed with breast cancer in EU countries were at an early stage, while 10% of women were diagnosed at an advanced stage (Figure 6.20).

In all European countries, the five-year net survival for women with breast cancer has improved in recent years, reflecting earlier detection from increased screening and overall improvement in the quality of cancer care (Allemani et al., 2018). For women diagnosed at an early or localised stage, the cumulative probability of surviving their cancer for at least five years after diagnosis is on average 96% in the EU. However, survival for women diagnosed at an advanced stage is still low at 38% (Figure 6.21).

For all stages of breast cancer combined, Western European countries have all attained a five-year net survival of at least 80%, but net survival is still lower in several Central and Eastern European countries, despite increases in recent years.

The COVID-19 pandemic severely disrupted breast cancer screening programmes and treatments in the first half of 2020. Many European countries reported delays in routine screening programmes because some mammography units were temporarily shut down or because many women avoided to go to their mammogram appointment for fear of being infected (EC, 2020). This may result in a greater proportion of women diagnosed at a more advanced stage. The quality of cancer care was also adversely affected during the COVID-19 pandemic by delays in access to treatment and postponement of follow-up (EC, 2020). This emphasises the need for continuous monitoring of survival to draw lessons from any adverse impact for the future.

In recent years, health care providers and patients in European countries have increasingly used patient-reported outcome measures (PROMs) to help inform difficult clinical decisions on breast cancer treatment based on each patient's own assessment of quality of life during or after treatment (OECD, 2019).

The rate of mortality from breast cancer in the EU as a whole is expected to be about 34 per 100 000 women in 2020, without taking into account any possible impact of COVID-19 (Figure 6.22).

### Definition and comparability

The stage at diagnosis for breast cancer is categorised according to the Tumour, Nodes, Metastasis (TNM) staging system (7<sup>th</sup> edition). In this analysis, “early or localised stages” refers to tumours without lymph node involvement or metastasis (T1-3, N0, M0), “intermediate stage” refers to tumours with lymph node involvement but no metastasis (T1-3, N1-3, M0), and “advanced stage” refers to large tumours with ulceration or involvement of the chest wall, and those that have metastasised to other organs (T4, any N, M0 or M1).

Five-year net survival is the cumulative probability that cancer patients survive their cancer for at least five years since diagnosis, after controlling for the risks of death from other causes and taking into account that competing risks of deaths are higher in the elderly. Cancer survival estimates are age-standardised with the International Cancer Survival Standard (ICSS) weights.

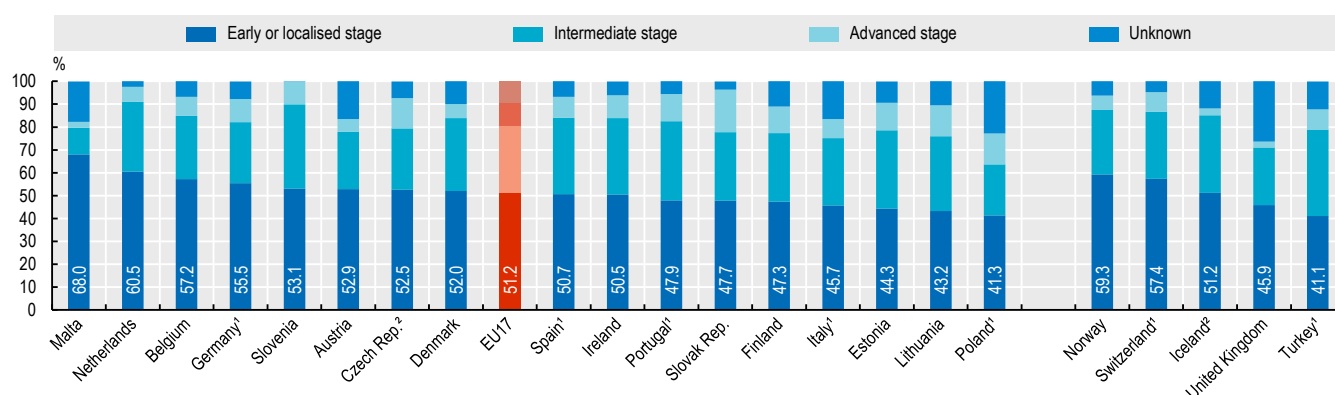
Cancer patient data were provided by national or regional cancer registries. Quality control, analysis of stage distribution and estimation of age-standardised five-year net survival were performed centrally as part of CONCORD, the global programme for the surveillance of cancer survival, led by the London School of Hygiene and Tropical Medicine (Allemani et al., 2018). International comparisons of net survival by stage are affected by coding practices and the completeness of data on stage, which differ widely between countries, so caution is needed in interpreting these data.

See indicator “Cancer incidence and mortality” in Chapter 3 for the sources and method underlying cancer mortality rates.

### References

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Figure 6.20. Breast cancer stage distribution, women diagnosed during 2010-14

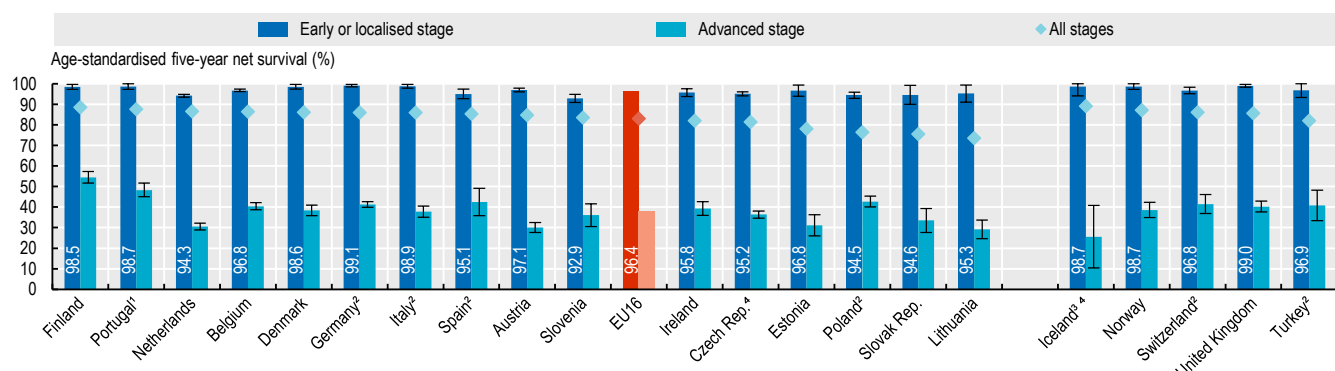


Note: The EU average is unweighted. 1. Coverage is less than 100% of the national population. 2. Data for 2004-09.

Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

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Figure 6.21. Breast cancer five-year net survival by stage at diagnosis, women diagnosed during 2010-14



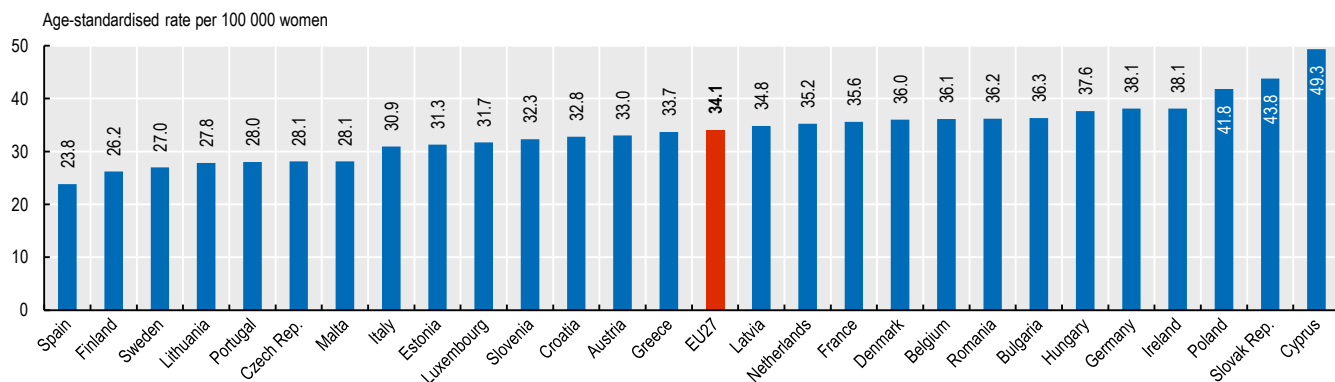
Note: The EU average is unweighted. H refers to 95% confidence intervals. 1. Coverage is less than 100% of the national population for stage-specific survival estimates.

2. Coverage is less than 100% of the national population. 3. Survival estimates for advanced stage are not age-standardised. 4. Data for 2004-09.

Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

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Figure 6.22. Breast cancer mortality rates, estimates for 2020



Note: The EU average is weighted.

Source: ECIS – European Cancer Information System 2020.

StatLink <https://stat.link/p4cg6v>



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