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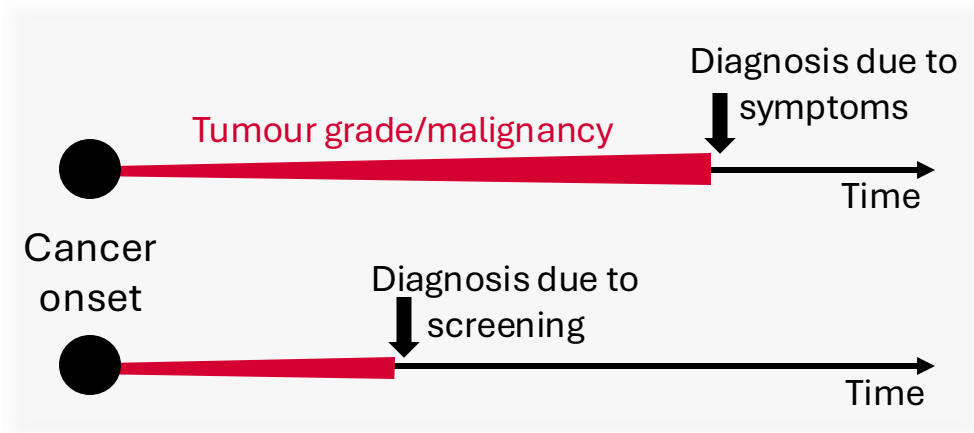
**Screening is critical for oncological patients' care:**  
**Global challenges and local opportunities**

*Simon Castillo, MSc, PhD*

*Research and Innovation Strategy Symposium  
The University of Edinburgh  
2<sup>nd</sup> December 2024*

# Screening programs and patient survival

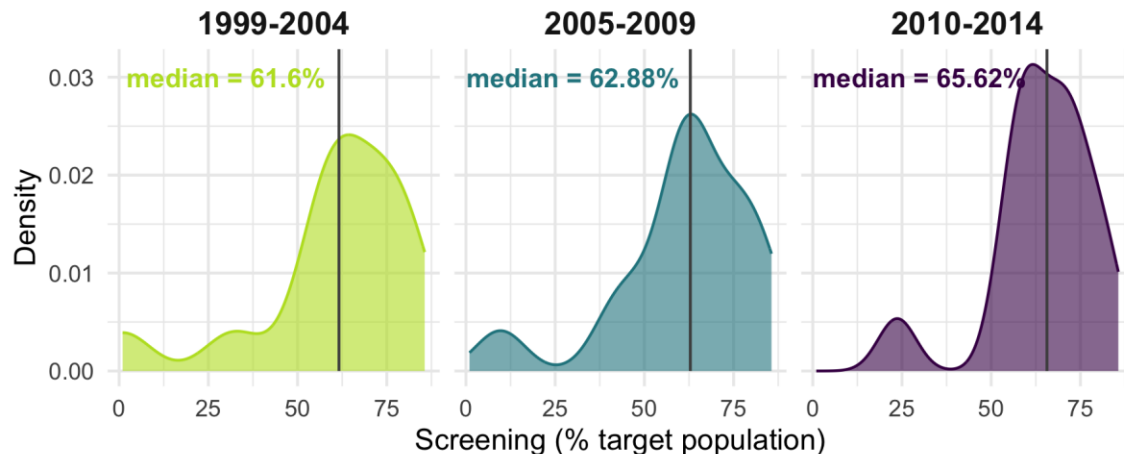
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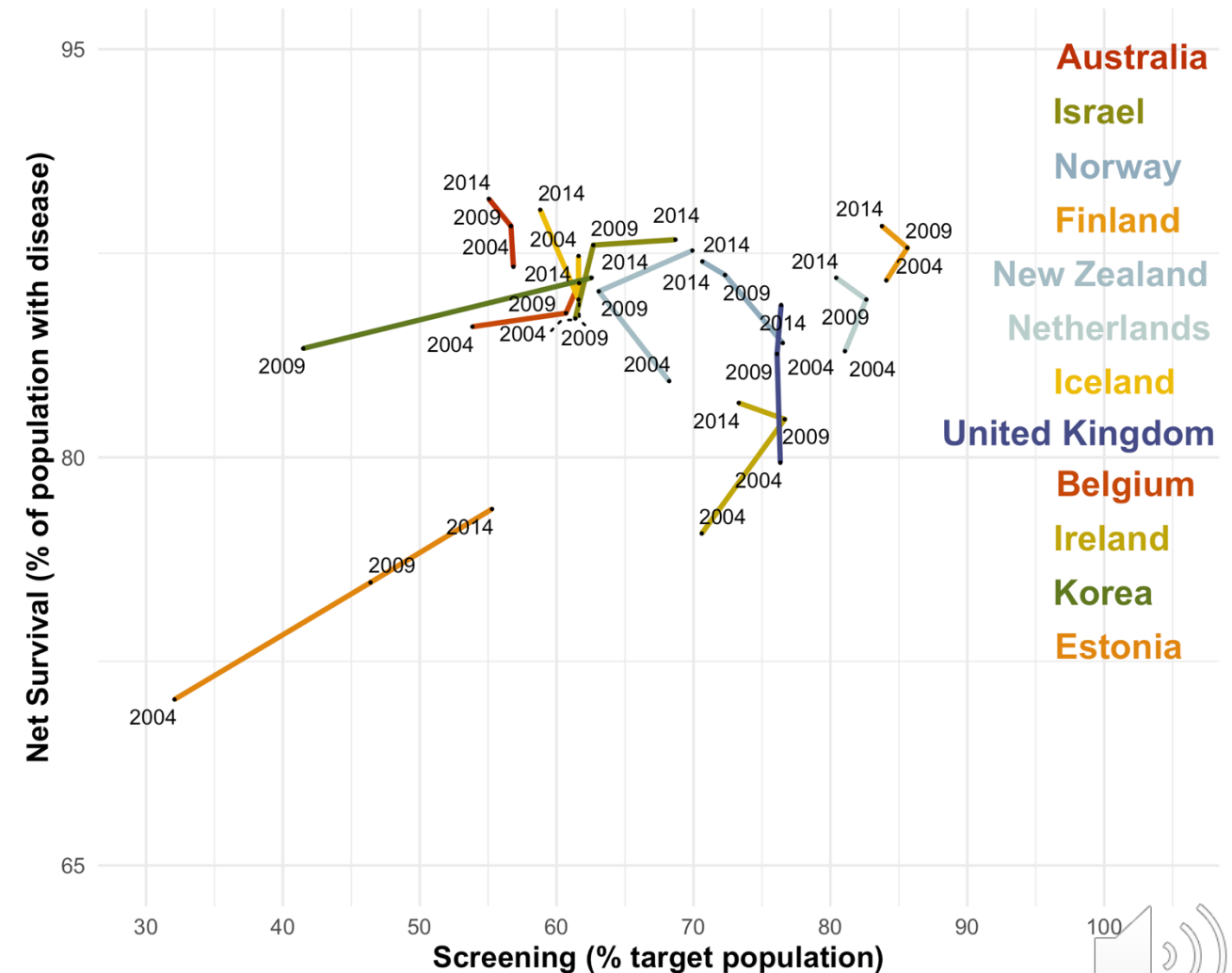
## Screening of malignant neoplasms of the breast

Target population: Female, 50-69 years old. Source: OECD (<https://data-explorer.oecd.org/>).



C

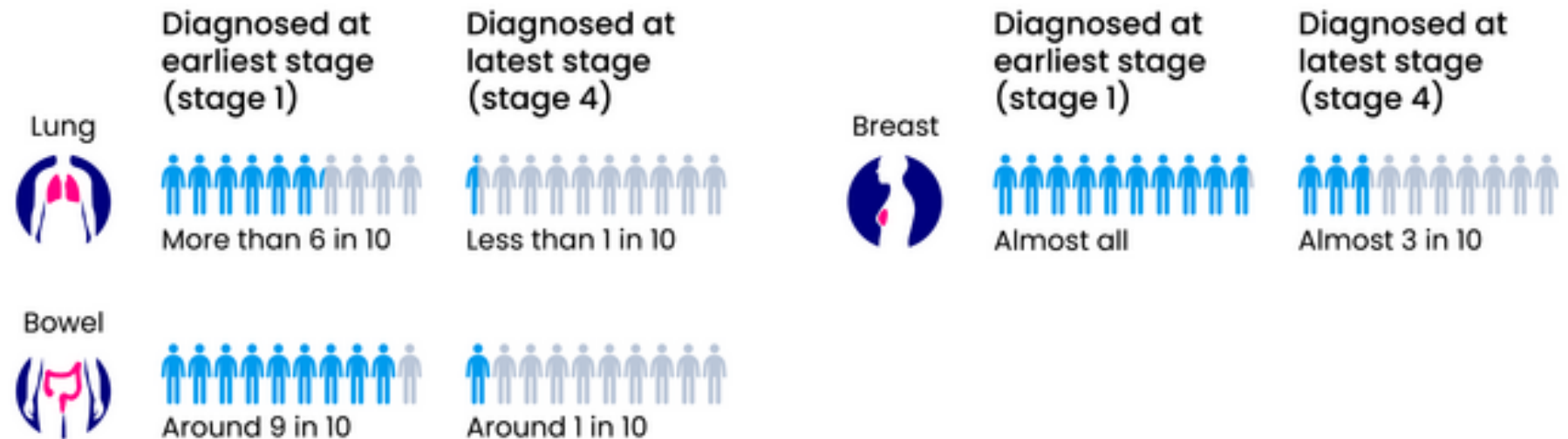
## Screening and patient's survival over time for breast neoplasms



**Earliest  
detection,  
highest  
survival**

## Cancer survival by stage at diagnosis in England

Proportion of people surviving their cancer for five years or more



Data is age-standardised net survival for adults (aged 15 to 99 years) in England in 2016–2020 followed up to 2021, for lung, bowel and breast cancer. Breast cancer data is for females only. Source: Cancer survival in England, NHS Digital 2023.



Together we are  
beating cancer

Source: Cancer Research UK “Why is early cancer diagnosis important?” (Accessed 02-11-2024)



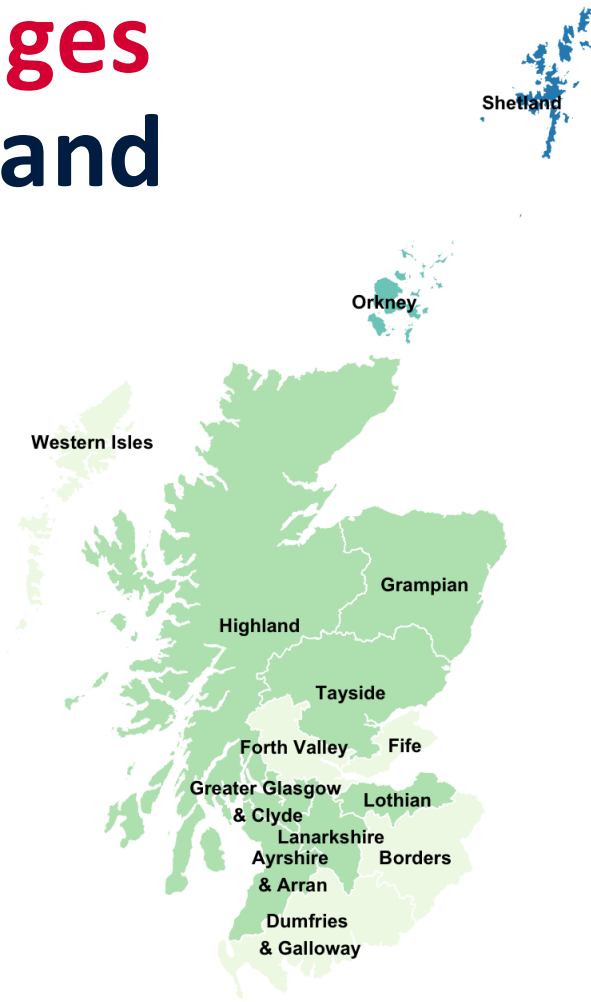
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# Breast cancer mortality in Scotland

World age-standardised mortality rate (WASR) per 100,000 person-years at risk for period 2016-2020 across all cancer types by Health Board.



# Challenges in Scotland

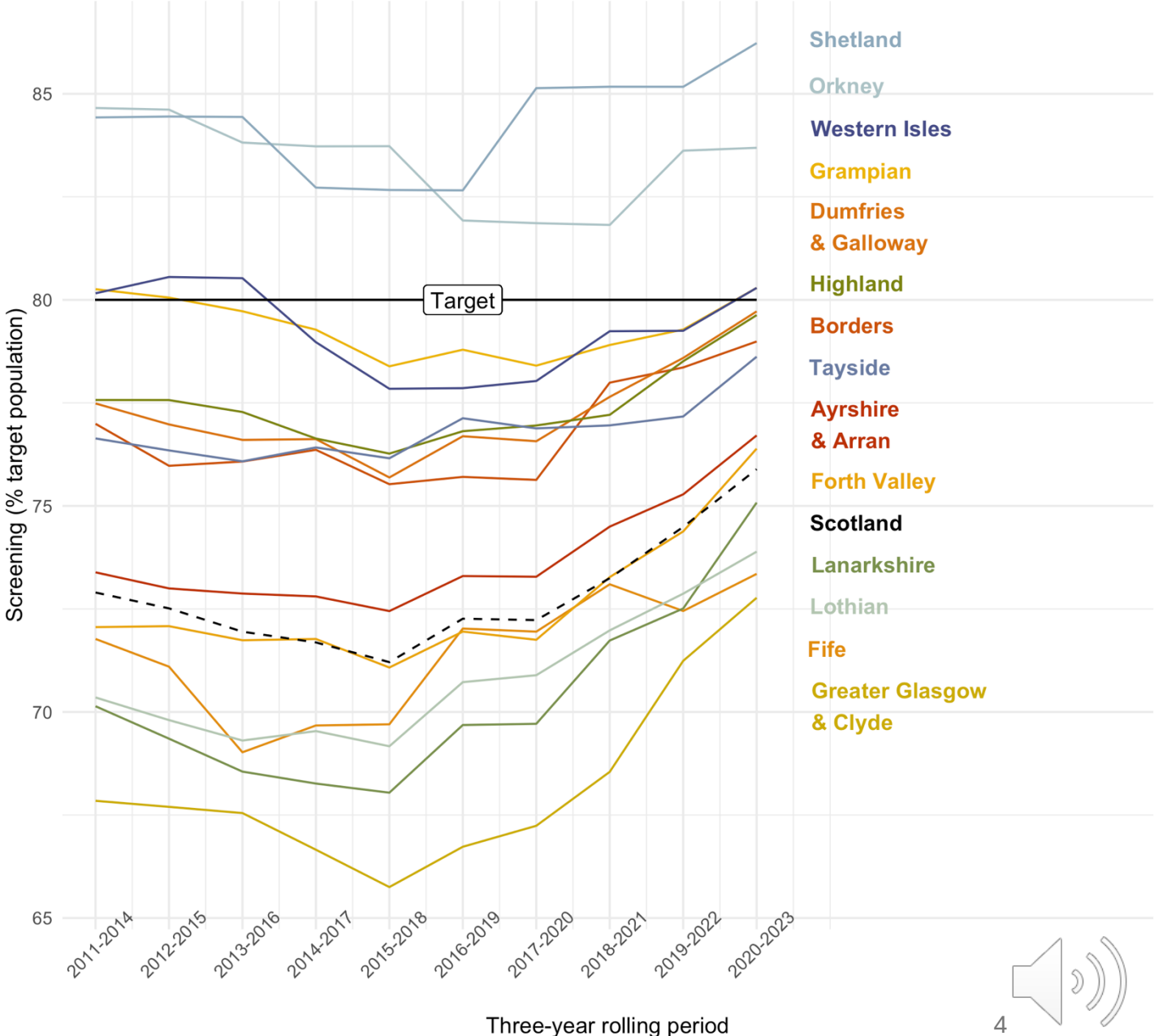


Source: Public Health Scotland (<https://www.opendata.nhs.scot/>).

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# Screening of malignant neoplasms of the breast

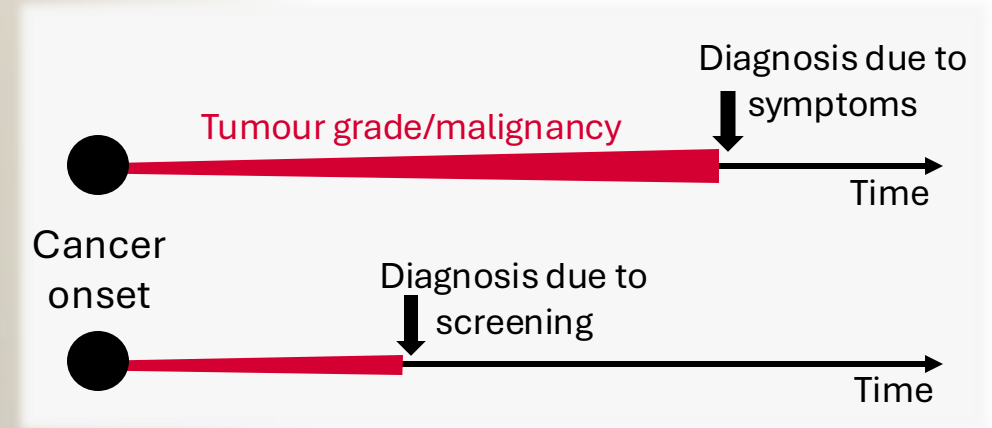
Health Board screening over three-year rolling period.  
Target population: Female, 50-70 years old.



Source: Public Health Scotland (<https://publichealthscotland.scot/>)

# Opportunities in Scotland

*From the University of Edinburgh*



## Social determinants of health

**Women from more deprived areas were less likely to attend breast screening:**  
64.2% in most deprived areas compared with 82.8% in least deprived areas. (Public Health Scotland, 2024).

www.nature.com/ejhg

ESHG

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Two founder variants account for over 90% of pathogenic BRCA alleles in the Orkney and Shetland Isles in Scotland

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