

Identifying and describing the population of women living with metastatic breast cancer in England

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Background

Advances in treatment have improved survival for women with metastatic breast cancer (MBC), increasing the number living with advanced disease. However, national cancer statistics in England report only stage IV disease at diagnosis, providing limited insight into the wider MBC population, including women with recurrent disease and those who develop metastases shortly after diagnosis.

Methods

- **Population-based retrospective cohort study** using linked national cancer registration, treatment and hospital data from England.
- Included **women and people recorded as female gender** in registration records and diagnosed with **primary invasive breast cancer** between 2001 and 2022.
- An **11-criterion algorithm** was used to identify evidence of MBC between 2018 and 2022, including:
 - Stage IV disease at diagnosis
 - Patterns of treatment consistent with metastatic/non-curative disease in national systemic anti-cancer therapy (SACT), radiotherapy, and Cancer Waiting Times datasets
 - Hospital coding for secondary malignancy or cancer-related palliative care

Headline Findings

More than 10,000 women
newly identified with MBC in 2022

Median age 61 years
at MBC identification

Over 50% living for 2+ years
following MBC identification

66,817 women met ≥ 1 criterion for MBC between 2018 and 2022.

30,769 were alive at the end of 2022.

10,486 were newly identified with MBC in 2022.

88,598 distinct occurrence of criteria; **65%** (43,178) met >1 criterion.

Most frequently met criteria of women identified:

- Hospital admission with secondary malignancy: **77%** (51,353)
- SACT with palliative intent: **51%** (34,093)

Overall survival from MBC identification, defined as the earliest date any criterion was met:

- **65%** at 1 year; **52%** at 2 years

A full explanation of the study methodology is available on the webpage accessible via the QR code:



Discussion

Linked national data identified a substantial population of women living with MBC, complementing routine cancer statistics to inform service planning and future research.

Given increasingly long survival times, one limitation is the potential omission of women whose disease was identified before 2018. Future research should refine and validate the algorithm alongside efforts to improve routine reporting of recurrence and progression.