Health Disparities in Cancer Survival

5-year net survival for Lung Cancer by gender

Q OBJECTIVE: To explore gender-based survival outcomes in lung cancer using 5-year net survival data from NHS England (2016–2020).

The goal of this project was to identify potential disparities between male and female patients and uncover any public health implications behind the numbers using real-world data to support insight-driven decision making.

CHART:

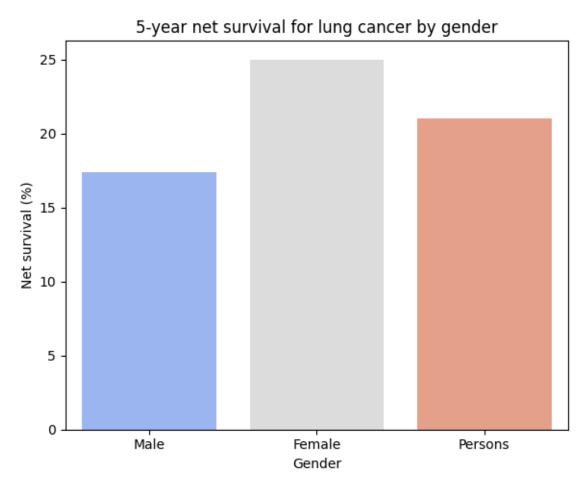


Figure 1: 5-Year Net Survival for Lung Cancer by Gender (2016-2020), age-standardised. Data from NHS England.

INSIGHT: The 5-year net survival for lung cancer was:

• Male: 17.4%

• Female: 25%

• Persons (combined): 21%

Female patients had slightly higher survival than male patients, which may be influenced by:

- Differences in smoking history and lifestyle factors
- Earlier diagnosis rates among females
- Biological response to treatment

Survival was slightly higher in females compared to males. While the combined "Persons" group gives an overview of population-level survival, it can mask differences between subgroups, particularly when data is only reported in binary gender terms.

This underlines the need for nuanced, disaggregated data in health reporting and for inclusive approaches that recognise the diversity of gender identities in public health strategies.

DATA SOURCE: National Cancer Survival Statistics, NHS England https://digital.nhs.uk/data-and-

information/publications/statistical/cancer-survival-in-england/cancers-diagnosed-2016-to-2020-followed-up-to-2021#chapter-index]

Years analysed: 2016-2020

Focused metric: 5-year net survival, age standardised

SKILLS USED:

- Data filtering & cleaning (Google Colab + pandas)
- Basic descriptive statistics
- Visualisation (matplotlib + seaborn)
- Interpretation of health disparities
- Storytelling with data