

CHANGES IN PRESCRIBING OF SYSTEMIC ANTI-CANCER THERAPIES IN ENGLAND: A NATIONWIDE ANALYSIS OF COMMUNITY AND HOSPITAL MEDICINES UTILISATION

Selle Arocha L¹, Beattie A¹, Mitchell G¹, Robinson D¹, Bray BD¹ (ben.bray@lcp.uk.com), Pearson-Stuttard J¹

¹ Health Analytics, Lane Clark & Peacock LLP, London, UK

Summary

- ✦ We studied two national medicines datasets to investigate prescribing trends in England with high degree of granularity and included ~1.1 billion prescription items.
- ✦ By cancer type, average prescription rates were the highest for medicines with an inferred indication of breast cancer (24.5 per 100 persons/month).
- ✦ When studied by mechanism of action, antibody-drug conjugates are now the fastest growing segment of SACTs (219%), albeit from a low base.

Background

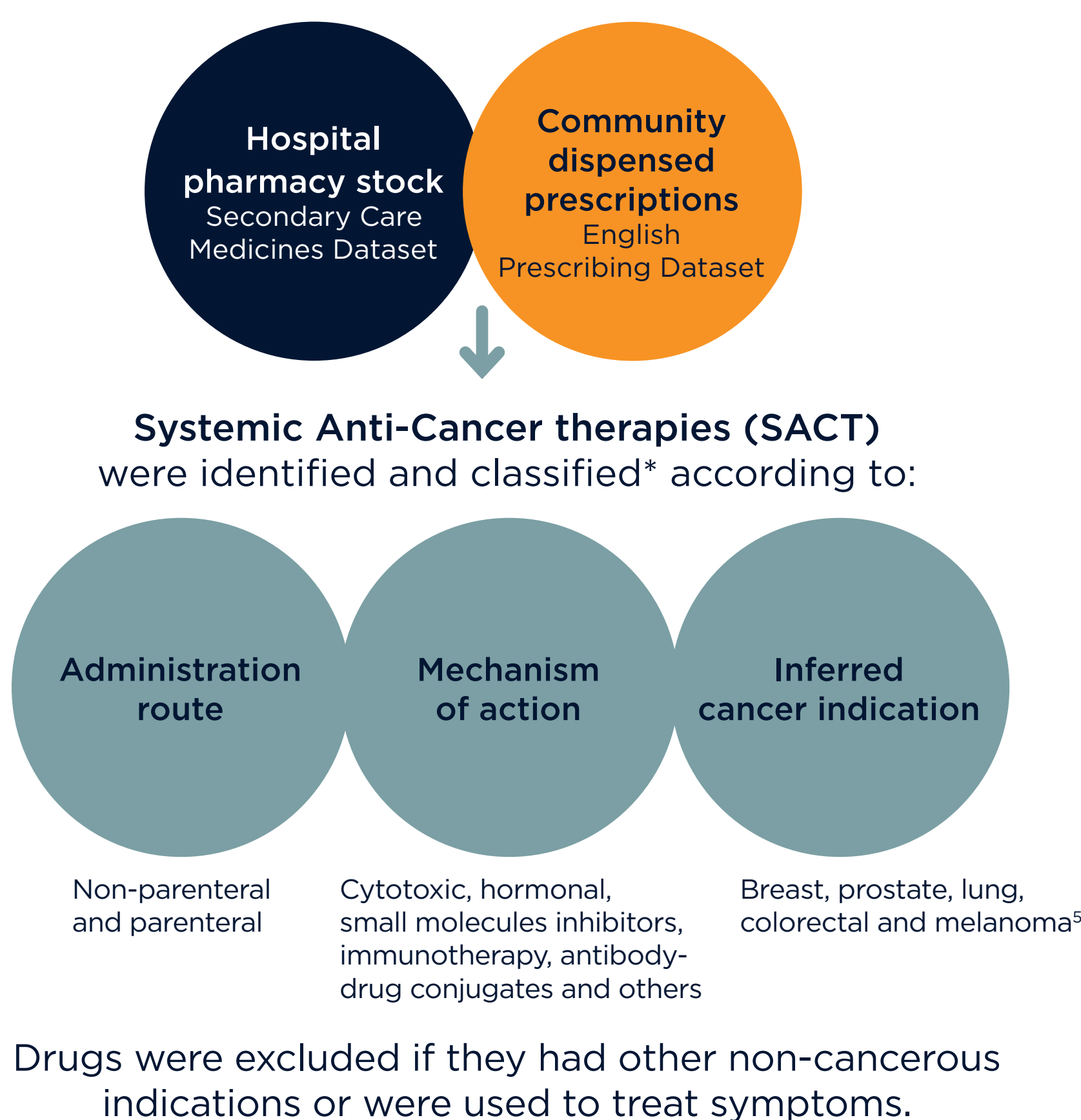
- Cancer is the second leading global cause of death, accounting for nearly 1 in 6 deaths in 2020. In the UK, 1 in 2 people are estimated to develop cancer², costing £7.6 billion annually³.
- Oncology is one of the fastest moving areas of pharmaceutical R&D, with 89 new oncology therapies receiving both EU and US marketing authorisation from 2010-2019⁴.
- The five most common cancers in the UK account for over 55% of all new cancer cases⁵. Their systemic therapies vary significantly.
- In light of the ever-changing landscape of systemic cancer treatment, now further complicated by the COVID-19 disruptions—from delayed diagnoses to altered treatment protocols⁶⁻⁸—scrutinising prescribing trends is vital to grasp its current complexities.

Objectives

- To describe the changes in the utilisation of systemic anticancer therapies in England between 2019 and 2022.
- To understand how trends in prescribing vary depending on prescription setting, types of cancer, type of anti-cancer therapy, and administration route.

Methods

England open-access data sources (Jan 2019-Dec 2022)

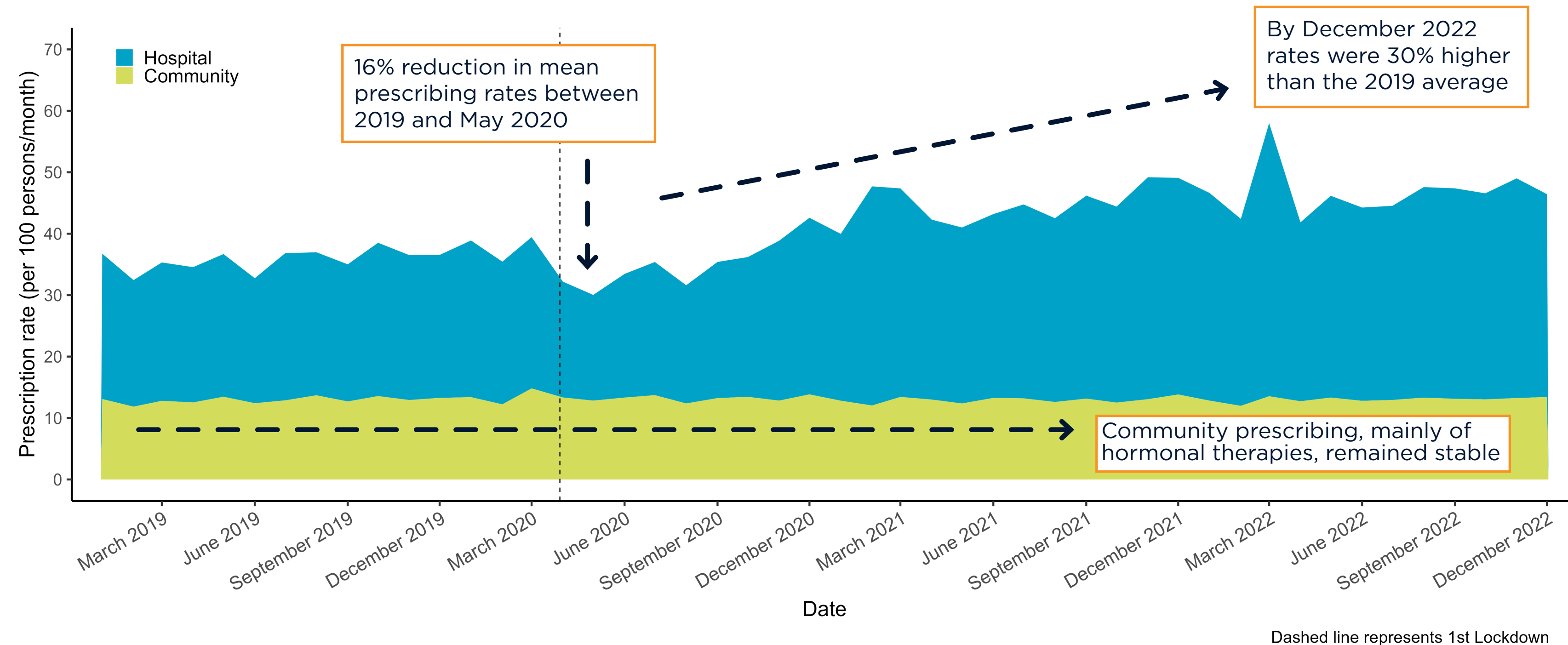


Metrics

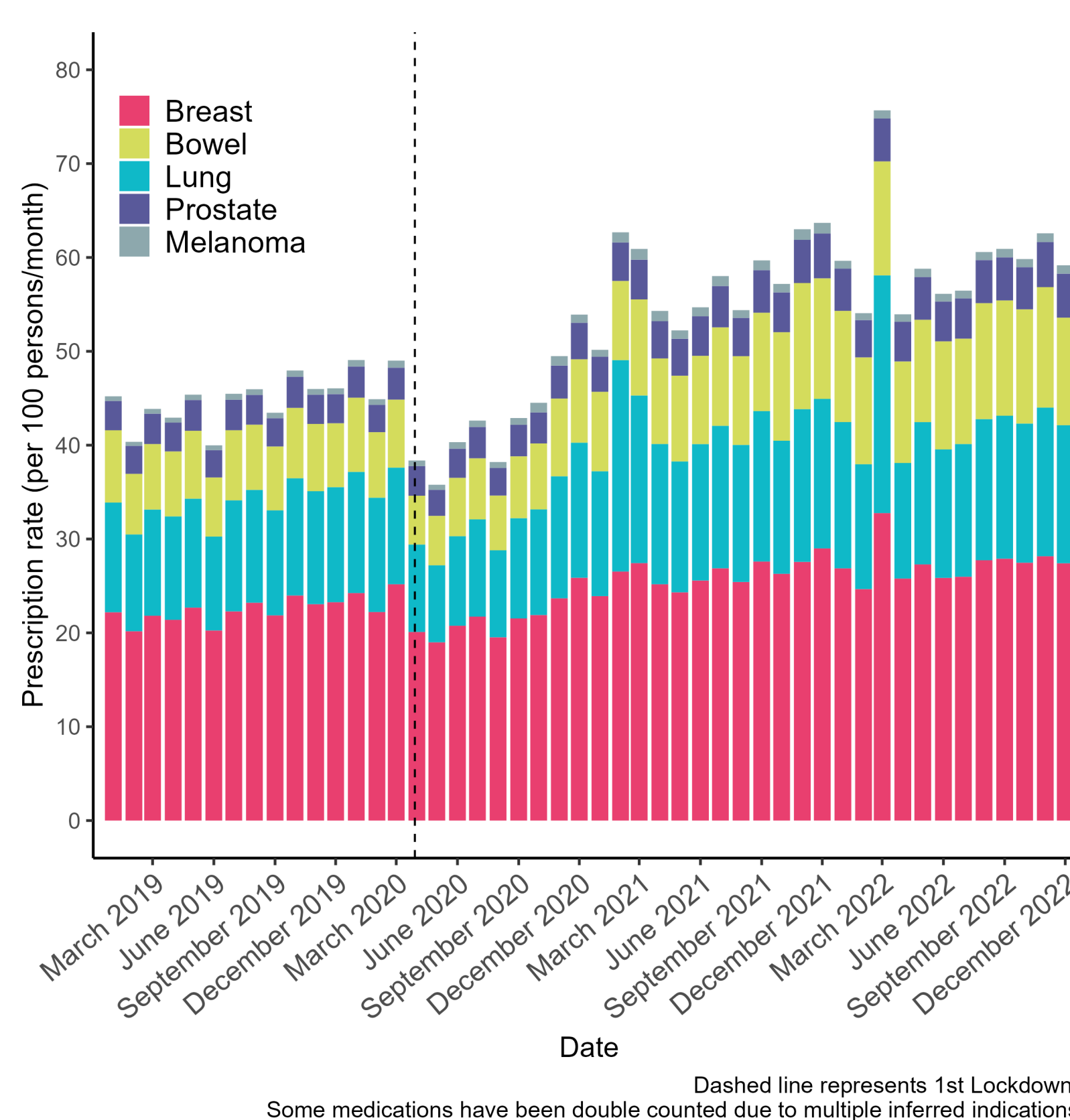
- Unit of analysis = prescription items**, defined by total quantity of medicine. ~1.1 billion prescription items identified during the studied period.
- Utilisation patterns and trends were described as population adjusted rates (total quantity per 100 persons/month).
- Percentage Change from 2019** = $\left(\frac{\text{Rate} \times 100}{\text{Mean Rate of 2019}} \right) - 100\%$

*Based on clinical judgement and referring to the British National formulary (BNF, editions 84 and 85) and Electronic Medicines Compendium (EMC) indications for medications

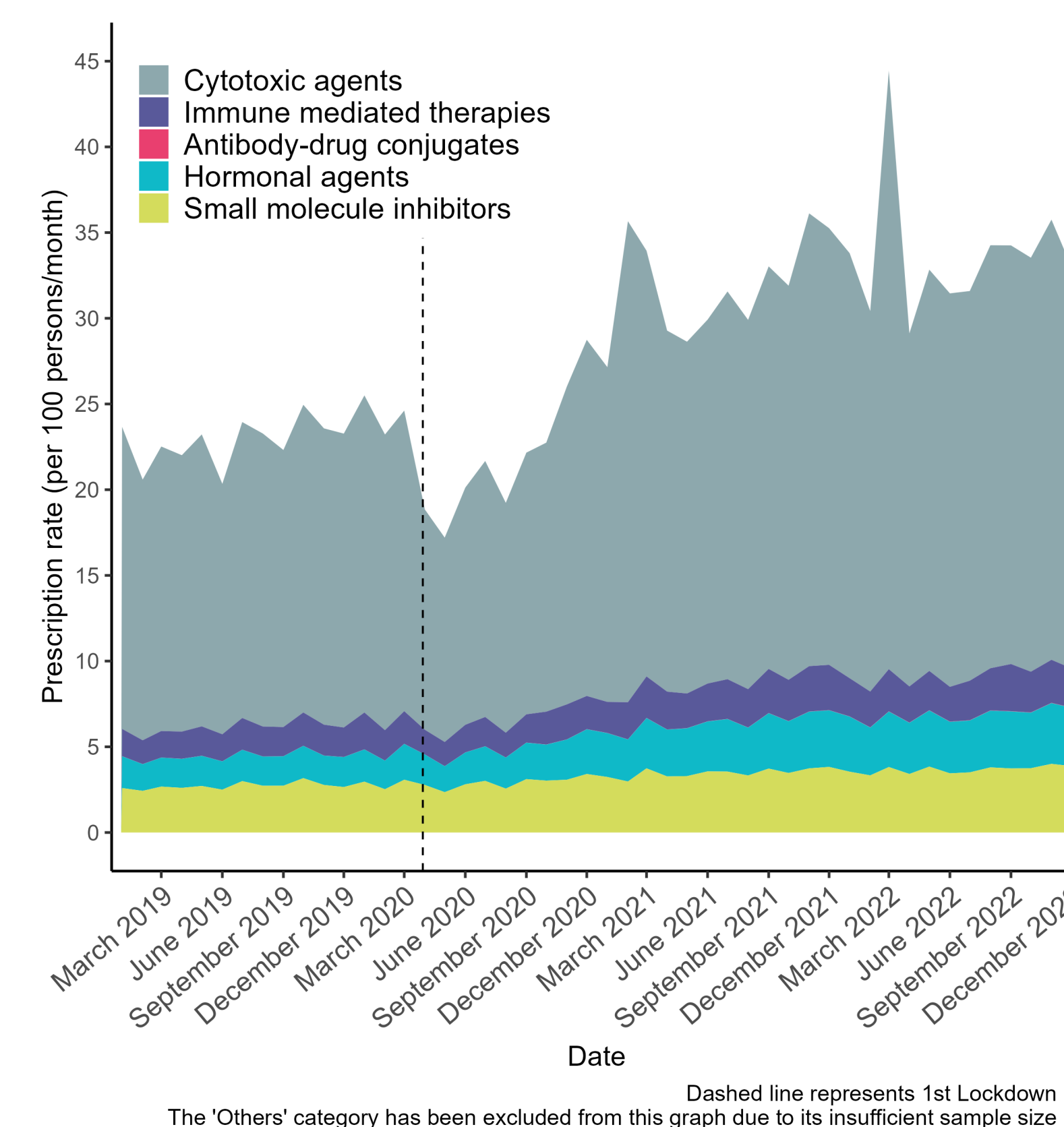
Hospital-based trends drove the observed changes in SACT prescribing after the pandemic



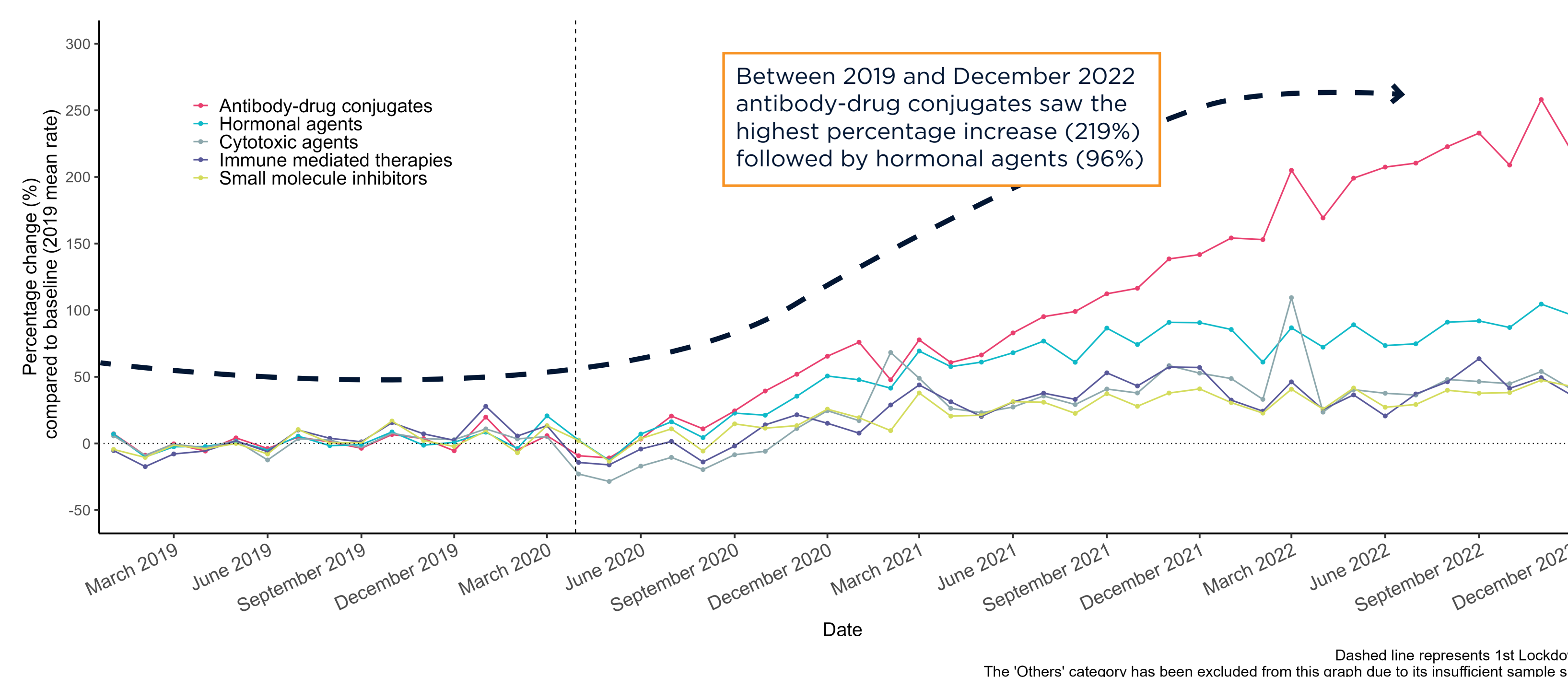
Breast cancer is the leading inferred indication for systemic therapies



Cytotoxic agents remained the most prescribed in hospitals



Antibody-drug conjugates are the fastest growing segment according to mechanism of action in English hospitals when comparing to 2019 average



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