

LATE-STAGE CANCER DIAGNOSIS AND SYSTEMIC ANTICANCER THERAPY IN ENGLAND SINCE 2018



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Summary

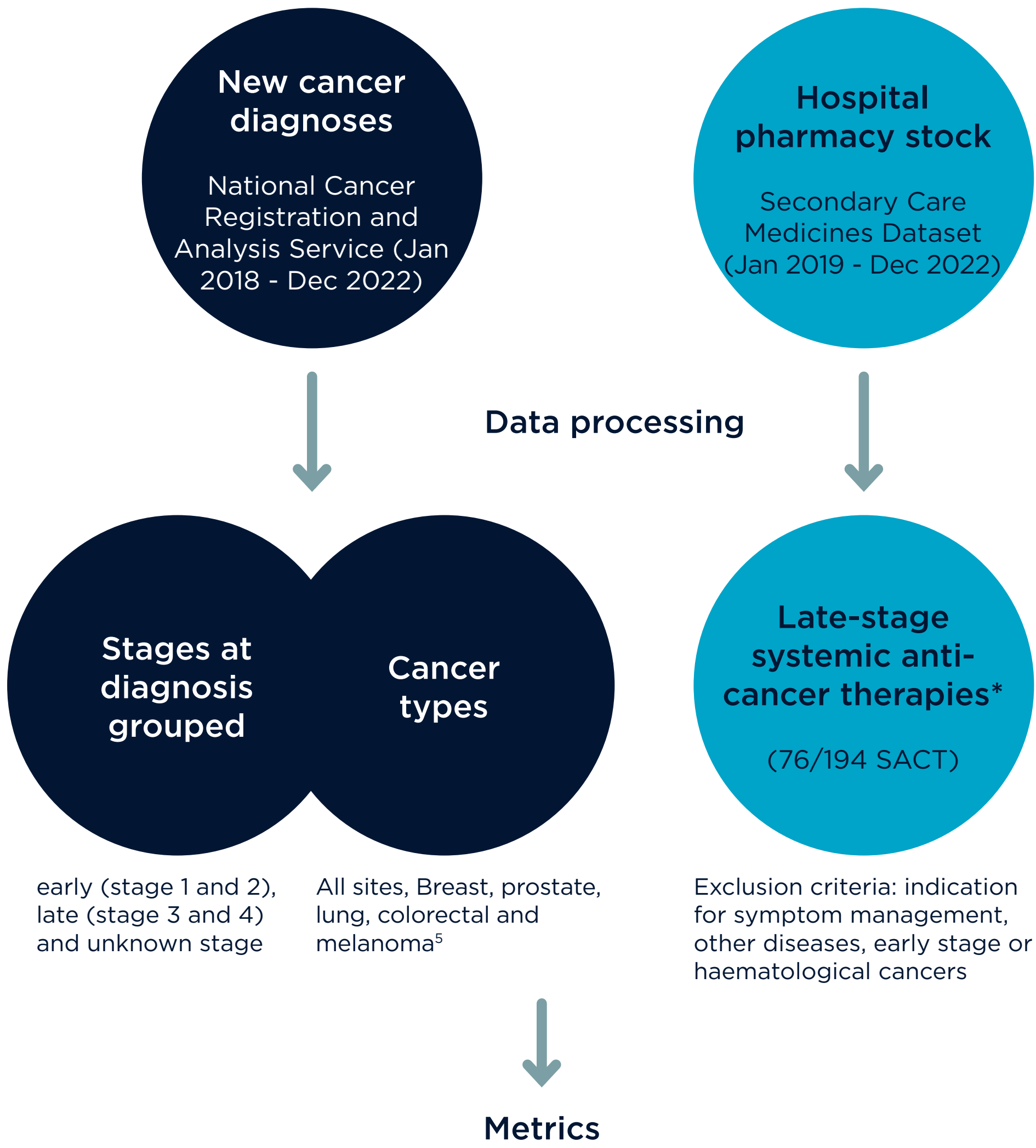
- + During the pandemic’s first year, England saw a significant drop in new diagnoses of several cancers.
- + Incidence rates have mostly have mostly returned to pre-pandemic levels without the expected increases in late-stage diagnoses, except for prostate cancer.
- + Post-pandemic, systemic anticancer medicine dispensation rose, potentially due to the evolving treatment landscape and clinical practice changes.

Background

- The stage of cancer at diagnosis plays a pivotal role in both treatment options and outcomes. Late-stage cancers frequently rely more on systemic anticancer treatments such as chemotherapy. Therefore, a change in prescribing patterns for late-stage treatments could provide an early signal for variations in late-stage at diagnosis incidence rates.
- Delays in cancer diagnosis and treatment during the Covid-19 pandemic has led to concerns that there may be an increase in late-stage cancer diagnoses as a result.
- We aimed to use nationwide cancer registry and medicines dispensing data sources to describe the trends in incidence rates for five common cancers in the UK—breast, prostate, lung, bowel, and melanoma skin cancer—¹ and usage of systemic anticancer treatments in England.

Methods

Descriptive study using linked open access sources in England



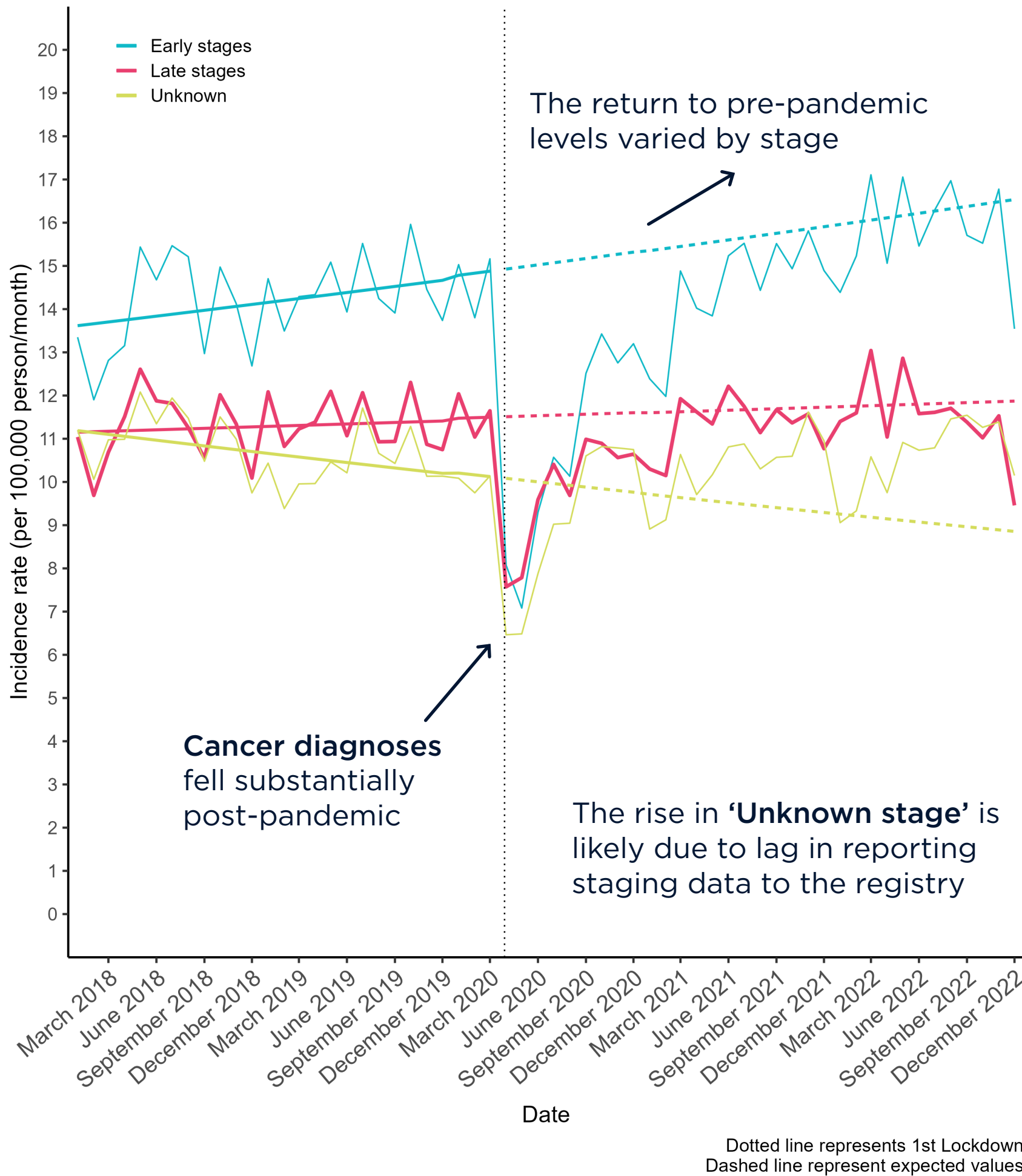
- *Unit of analysis* = *prescription items*, defined by the total quantity of medicine.
- Rates of new cancer diagnoses and SACT prescriptions (total quantity) per 100,000 person/month and 100 person/month were estimated accordingly.
- **Percentage Change from 2019** = $\left(\frac{\text{Rate} \times 100}{\text{Mean Rate of 2019}} \right) - 100\%$

*Late-stage SACT were identified based on clinical judgement and referring to the British National formulary (BNF, editions 84 and 85) and Electronic Medicines Compendium (EMC) indications for medications

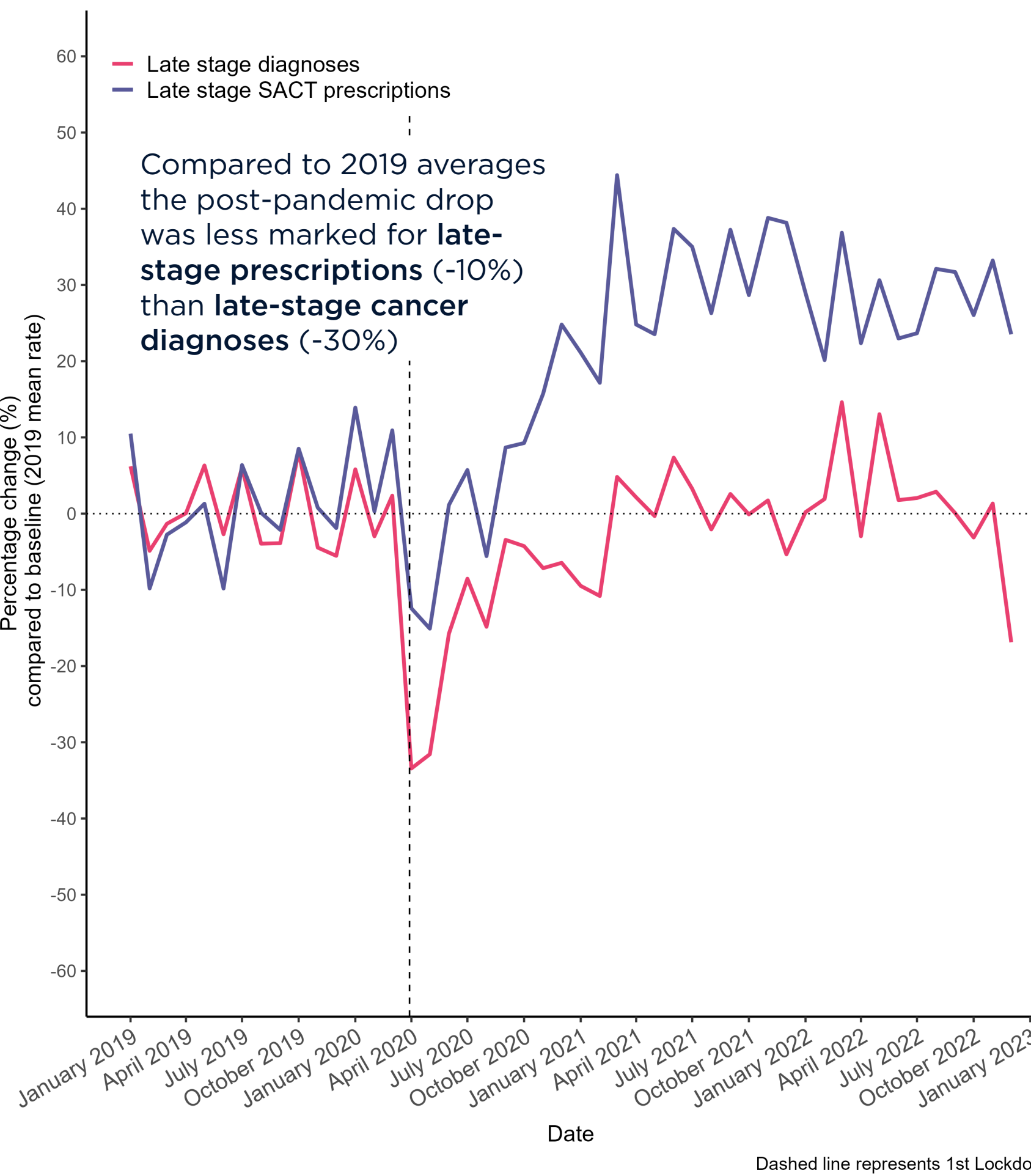
References

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2. NHS. Clinical guide for the management of noncoronavirus patients requiring acute treatment: Cancer [Internet]. 2020 [cited 2023 Oct 8]. Available from: https://eastmidlandscanceralliance.nhs.uk/images/Documents/Covid-19_2020/Clinical_guide_for_the_management_of_non-coronavirus_patients_requiring_acute_treatment_.pdf. Withdrawn Sept 2023: COVID-19 rapid guideline: delivery of systemic anticancer treatments | Guidance | NICE
3. Clark JJ, Dwyer D, Pinwill N, Clark P, Johnson P, Hackshaw A. *The effect of clinical decision making for initiation of systemic anticancer treatments in response to the COVID-19 pandemic in England: a retrospective analysis*. The Lancet Oncology. 2021 Jan 1;22(1):66–73.

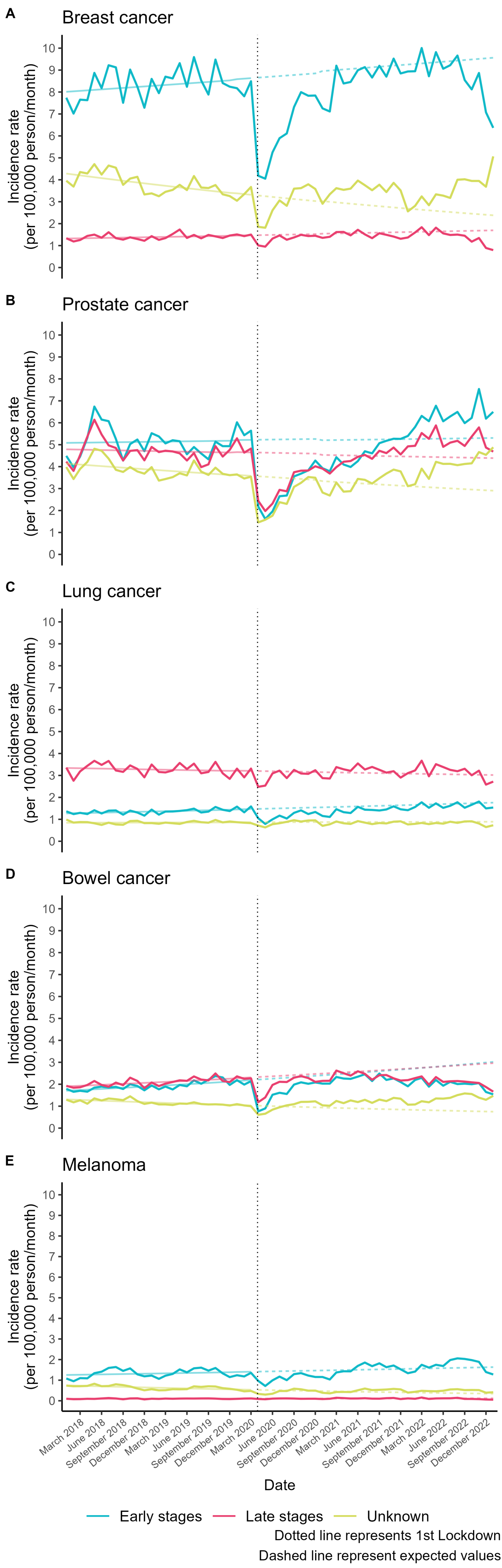
All cancer diagnoses fell during the early stages of the pandemic (late stage by ~1/3, and early stage by ~1/2)



The total quantity of SACT dispensed has increased substantially after the pandemic



The pandemic’s impact on new cancer diagnoses in England differed across various cancers



Conclusions

- During the pandemic, cancer diagnoses dipped but later resumed their pre-pandemic trajectory.
- As of December 2022, stage at diagnosis has not changed for most cancers, with prostate cancer being a notable exception.
- Increased post-pandemic utilisation of systemic anticancer treatments may be due to treatment landscape shifts, clinical practice ² changes, and and more patients progressing through to advanced stages. Previous studies align with these trends³.



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