
Ze Cong1 and Xiangyang Ye2
1Health Economics & Outcomes Research, GRAIL, LLC, a subsidiary of Illumina, Inc., Menlo Park, CA, USA; 2University of Utah, Salt Lake City, UT, USA

BACKGROUND

- Despite advancements in cancer screenings, diagnoses, and treatments, cancer remains one of the leading causes of death in the United States (US).
- More than 70% of diagnosed cancers do not have a United States Preventive Services Task Force (USPSTF) guideline-recommended screening paradigm, often leading to later diagnoses when cancers have metastasized.

OBJECTIVES

- To estimate the most recent real-world incidence and prevalence rates of cancer by type and proportion of patients diagnosed at late stage among commercially insured enrollees in the US.

RESULTS

Table 1: Demographics, Incidence, and Prevalence of Cancers for 2019 and 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall enrollees, N</td>
<td>2,551,797</td>
<td>2,375,037</td>
</tr>
<tr>
<td>Cancer na/ve enrollees, N</td>
<td>2,511,715</td>
<td>2,332,152</td>
</tr>
<tr>
<td>Incident cancer cases, N (%)</td>
<td>18,128 (0.72)</td>
<td>17,188 (0.74)</td>
</tr>
<tr>
<td>Prevalent cancer cases, N (%)</td>
<td>56,149 (2.20)</td>
<td>60,166 (2.53)</td>
</tr>
</tbody>
</table>

- More than 70% of diagnosed cancers do not have a United States Preventive Services Task Force (USPSTF) guideline-recommended screening paradigm, often leading to later diagnoses when cancers have metastasized.

CONCLUSIONS

- The burden of cancer in terms of incidence and prevalence rates remains high among commercially insured enrollees in the US.
- Cancers without common screenings are more likely to be diagnosed at a later stage.
- Earlier cancer detection could enable more efficient treatments and improve outcomes.

REFERENCES


ACKNOWLEDGMENTS

The authors would like to thank the editorial teams at JCO and Current Oncology. This work was supported by a grant from GRAIL, LLC, a subsidiary of Illumina, Inc.*

DISCLOSURES

ZC is an employee of GRAIL, LLC, a subsidiary of Illumina, Inc.* XY received research funding from GRAIL, LLC, a subsidiary of Illumina, Inc.* YR received research funding from GRAIL, LLC, a subsidiary of Illumina, Inc.* HPS received research funding from GRAIL, LLC, a subsidiary of Illumina, Inc.*

METHODS

- A retrospective analysis was conducted using MarketScan® Treatment Pathways including enrollees from 2014-2020 (Figure 4).
- MarketScan® databases offer one of the largest convenience samples available in proprietary US databases, and captures the continuum of care with administrative claims from privately insured Americans.

CONCLUSIONS

- The burden of cancer in terms of incidence and prevalence rates remains high among commercially insured enrollees in the US.
- Cancers without common screenings are more likely to be diagnosed at a later stage.
- Earlier cancer detection could enable more efficient treatments and improve outcomes.

DATA AVAILABILITY

2014-2020

Outcomes assessment: 2019-2020

No cancer claims for 36 months

12 outpatient claims (CD 2) in prevalent claims of cancer

12 outpatient claims (CD 2) in prevalent claims of cancer

Incident cancer

Prevalent cancer

Figure 4: Study Schema