Cancer treatment delay statistics for six major types of cancer in the state of Missouri

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1. Background

- The Missouri Cancer Registry (MCR) collects population-based cancer incidence and first-course treatment data on Missouri residents diagnosed with reportable malignant neoplasms (192.650-192.657 RSMo).

- To monitor access to cancer treatment, the Missouri Comprehensive Cancer Control Program used the MCR data to measure cancer treatment delay.

2. Purpose

- To provide statistics on the delay of cancer treatment for Missourians diagnosed with six major types of cancer.

3a. Methods: Selection criteria

- Included cases:
  - Missouri resident at diagnosis,
  - Diagnosed 2010—2013,
  - Malignant (except Urinary Bladder includes *in situ*), and
  - One of the following types of cancer:
    - Urinary Bladder,
    - Melanoma of the Skin,
    - Colon,
    - Female Breast,
    - Cervix Uteri, or
    - Lung & Bronchus.

- Excluded cases:
  - Unknown treatment status according to "Rx Summ--Treatment Status";
  - Type of Reporting Source = nursing home, autopsy, or death certificate only;
  - Unknown Date 1st Course Treatment; or
  - Unknown month or day of diagnosis.

3b. Methods: Outcomes
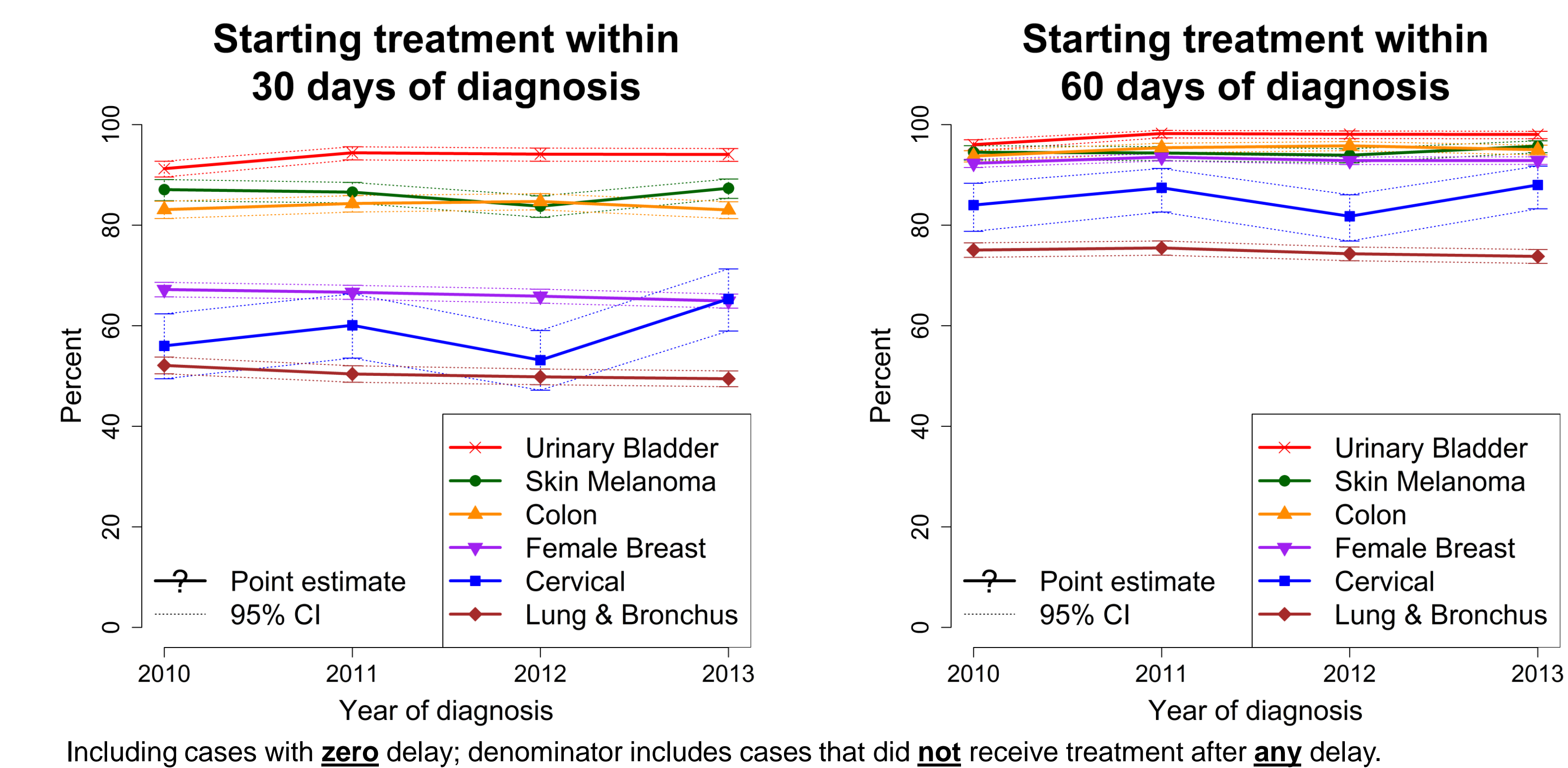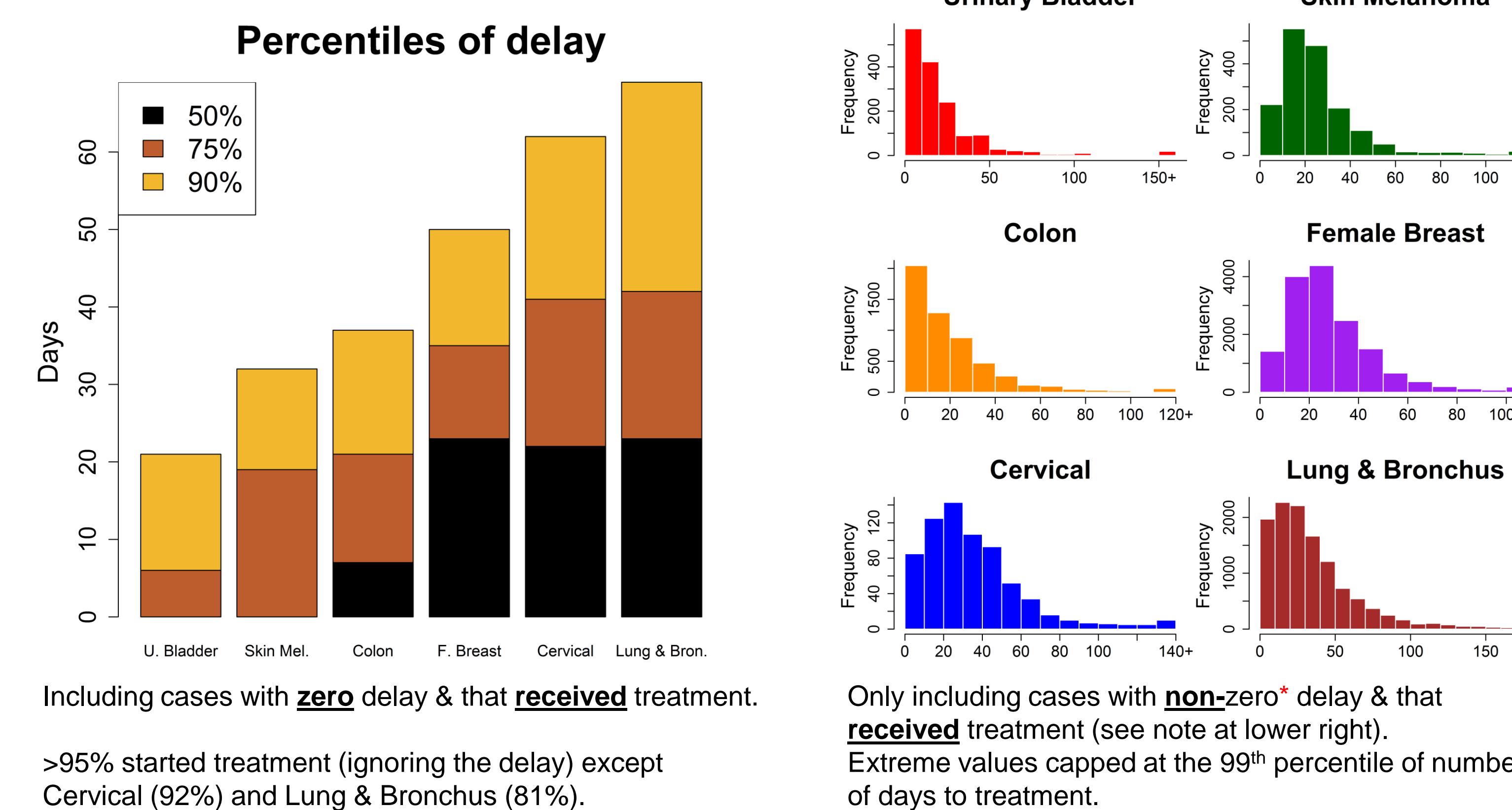
- Cases were classified as "treated" if:
  - "Rx Summ--Treatment Status" = treatment given; and
  - Date of 1st Course Treatment equal to at least one of:
    - The date of Surgery, Radiation, Systemic, Other, Chemo, Hormone, or BRM; and
  - Earliest of the treatment modalities was given (*i.e.,* Reason For No Surgery = "Surgery performed"), except Other-Experimental/Double Blind/Unproven was counted as "None".

- For the selected cases, the duration between diagnosis and start of treatment was summarized in terms of:
  - Percentiles of the duration and
  - Percent of cases treated within 30 & 60 days.

4. Results

- *Of those who started treatment*, generally >90% started within 60 days with the exception of Lung & Bronchus (in mid 80s).

- The distribution of the treatment delay varies greatly by the type of cancer.

- *Among all selected cases (including those not treated),* most started treatment within 60 days (see time series below).

- The proportion starting treatment within 30 & 60 days was relatively stable & high when analyzed by diagnosis year.

Percentiles of delay

Including cases with **zero** delay & that **received** treatment.

>95% started treatment (ignoring the delay) except Cervical (92%) and Lung & Bronchus (81%).

Only including cases with **non-**zero* delay & that **received** treatment (see note at lower right). Extreme values capped at the 99th percentile of number of days to treatment.

Starting treatment within 30 days of diagnosis

Including cases with **zero** delay; denominator includes cases that did **not** receive treatment after **any** delay.

Starting treatment within 60 days of diagnosis

5. Discussion

- This study provides population-based data on the delay to treatment for Missourians diagnosed with one of six types of cancer.

- Delays may play an important role in outcomes and indicate the ease/difficulty of accessing health care in Missouri.

- Future directions include looking at disparities in delay.

6. Contact

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* Percentages of treated cases with **zero** delay were:
 69% (Urinary Bladder), 59% (Skin Melanoma), 29% (Colon), 10% (Female Breast), 22% (Cervical), and 8% (Lung & Bronchus).