Racial Disparities in Cancer Incidence, Staging, and Survival among the Oldest Old in the United States

Jessica L. Krok-Schoen, PhD

The James

THE OHIO STATE UNIVERSITY
COMPREHENSIVE CANCER CENTER

Acknowledgements

Coauthors

- James L. Fisher, PhD
- Ryan D. Baltic, MPH
- Electra D. Paskett, PhD

Funding Sources

- This work was supported by NCI grant P30CA016058

Background

- Cancer is predominately a disease of the elderly
  - Over half of all newly cancer diagnoses
  - Almost three quarters of cancer deaths
- The oldest old is the fastest growing segment of the U.S. population
  - Racial minority populations are also increasing
- Increased life expectancy and advances in cancer screening have resulted in an increasing number of cancer diagnoses in the oldest old

Objective

- To examine white and black differences in cancer incidence rates, stage at diagnosis, and survival probabilities among the oldest old using data from the SEER Program of the National Cancer Institute

Methods

- 18 SEER registries
- White and black adults aged 85 years and older
- Invasive colorectal, lung and bronchus, breast (women only), and prostate cancer

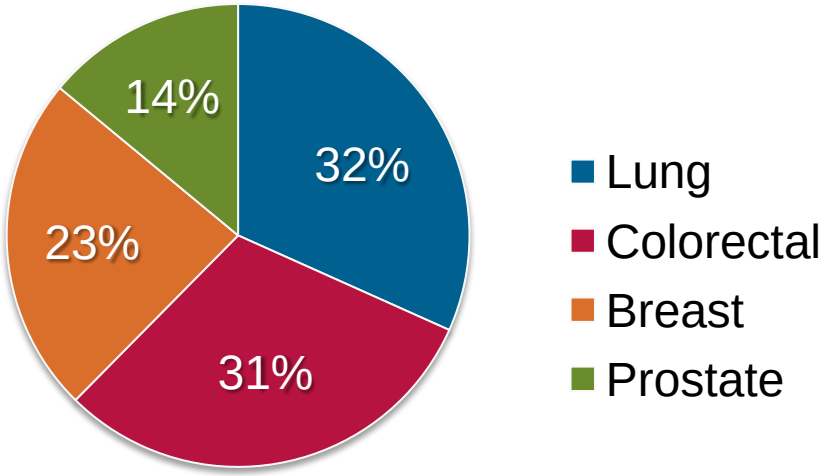
<u>Years examined</u>

- Cancer incidence and stage at diagnosis: 2008-2012 and 1973-2012
- 5-year survival probability: 2005-2011

Results

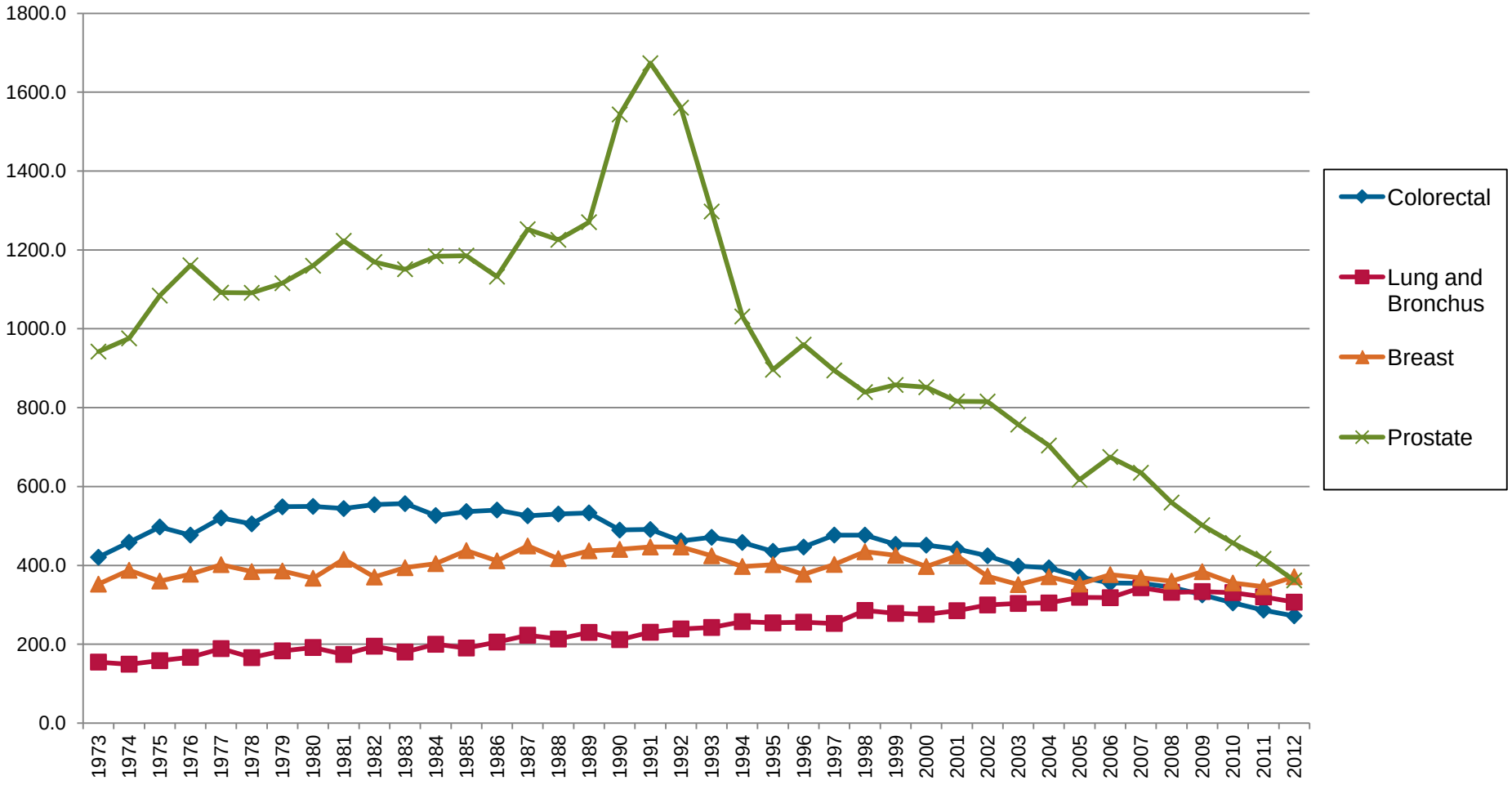
- 148,383 men and women aged 85 years or older with invasive cancer diagnosed during 2008 to 2012

- Of the 148,383 adults with cancer, 68,675 were from the four sites of interest:



- 63,331 (92.2%) white, 5,344 (7.8%) black

Incidence trends of colorectal, lung and bronchus, breast, and prostate cancer among the oldest old age group, 1973-2012



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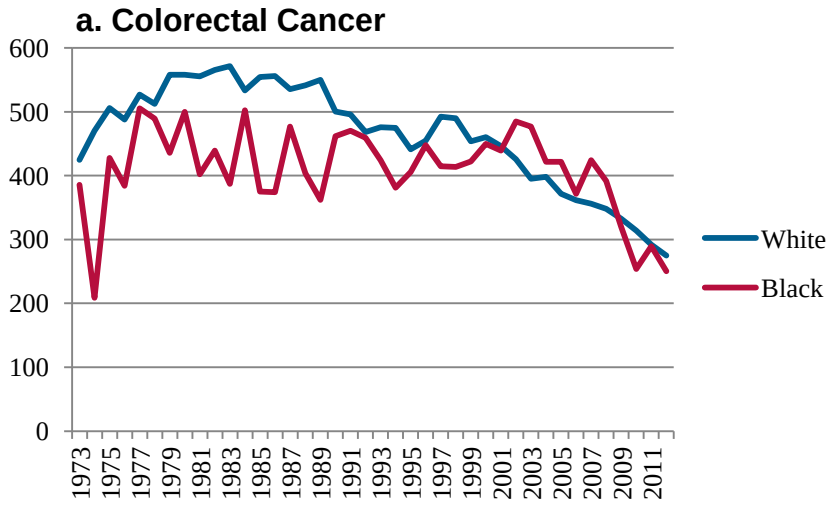
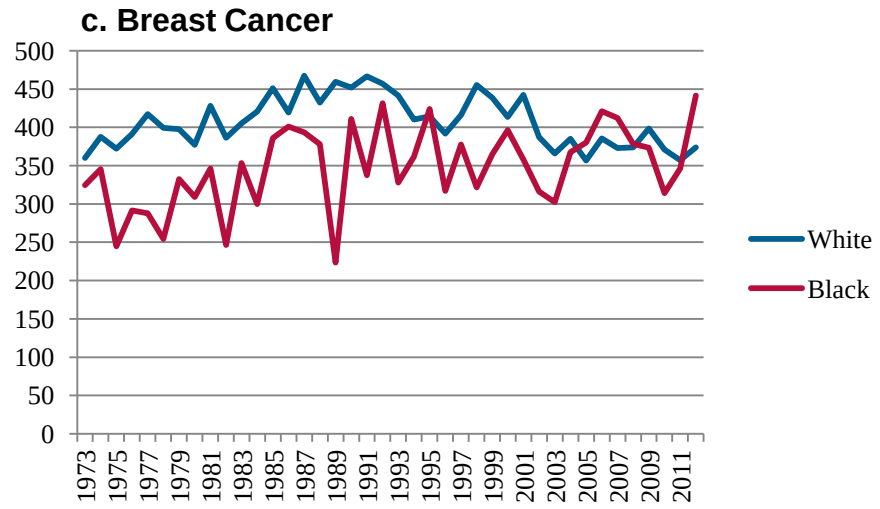
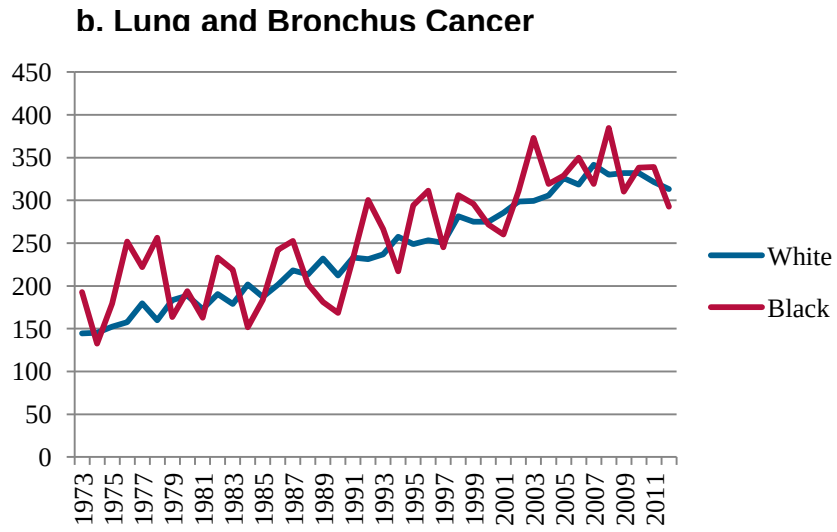
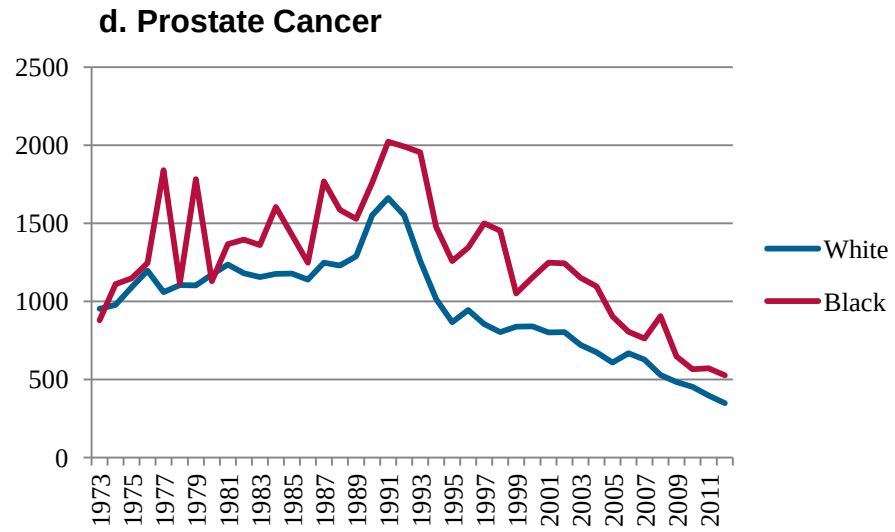
Incidence trends of colorectal, lung and bronchus, breast, and prostate cancer among white and black adults aged 85 years and older, 1973-2012



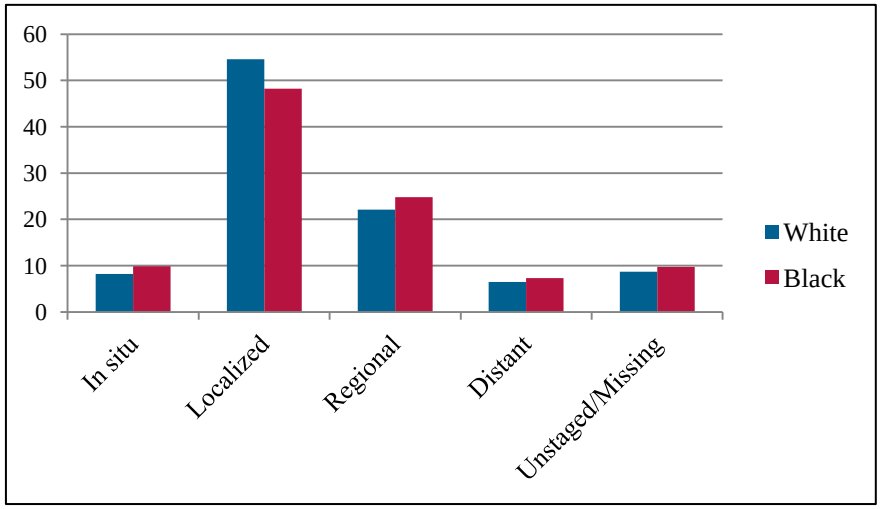




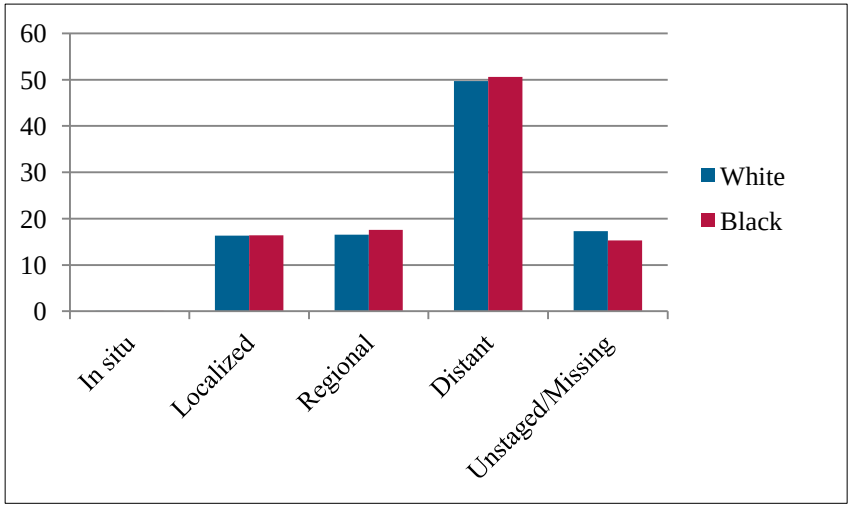


Cancer staging among white and black adults aged 85 years and older, diagnosed 2008-2012

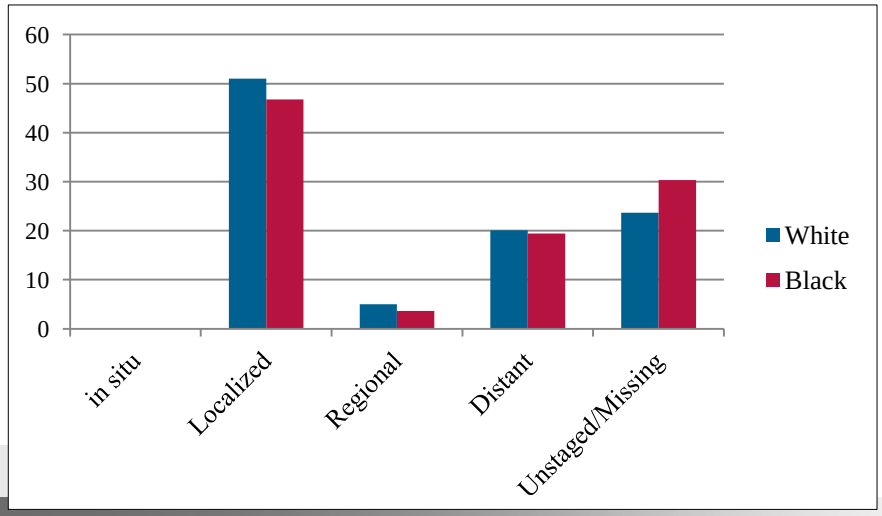
a. Colorectal Cancer



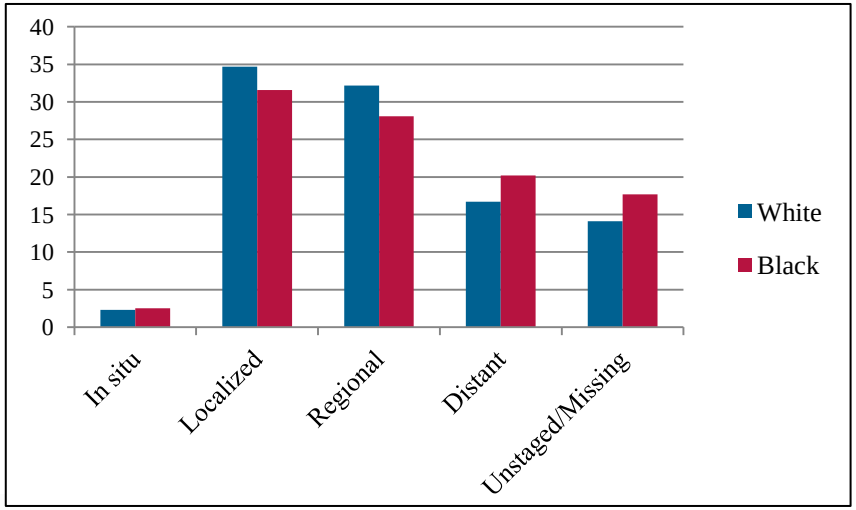
c. Breast Cancer



b. Lung and Bronchus Cancer



d. Prostate Cancer



Five-year relative survival probability for selected invasive cancers by stage at diagnosis, among white and black adults aged 85 years and older and diagnosed 2005-2011

	White % (95% CI)	**Black** % (95% CI)
Colorectal		
Localized	83.0 (79.6-85.9)	67.8 (57.3-76.2)
Regional	60.7 (57.6-63.5)	51.8 (41.2-61.5)
Distant	4.5 (3.3-5.9)	2.4 (0.7-6.0)
Unstaged/Missing	9.0 (6.8-11.5)	9.7 (4.4-17.4)
Lung and Bronchus		
Localized	35.1 (31.2-39.0)	11.6 (4.4-22.5)
Regional	12.2 (9.8-14.7)	3.2 (0.8-8.8)
Distant	2.1 (1.6-2.7)	1.1 (0.3-3.5)
Unstaged/Missing	2.4 (1.5-3.6)	1.4 (0.1-6.8)
Breast		
Localized	100.0 (100.0)	80.0 (67.7-88.0)
Regional	65.8 (61.5-69.7)	45.3 (34.1-55.8)
Distant	17.7 (13.6-22.2)	5.4 (0.5-20.1)
Unstaged/Missing	25.0 (19.8-30.5)	30.7 (13.8-49.4)
Prostate		
Localized	100.0 (100.0)	99.6 (66.1-100.0)
Regional	70.2 (54.6-81.3)	68.3 (34.0-87.4)
Distant	16.5 (13.3-20.1)	13.1 (7.0-21.2)
Unstaged/Missing	44.8 (38.9-50.6)	39.6 (26.4-52.4)

Discussion

- Results demonstrate continued racial disparities in cancer incidence, staging, and survival among the fastest growing portion of the U.S. population
- Screening is crucial, however, the question remains if it is beneficial for men and women aged 85+
- A growing consensus stresses the importance of considering the individual's particular combination of functional status, personal preferences and goals, comorbidities, and life expectancy regarding screening recommendations

Discussion

- Invasive lung and bronchus cancer incidence increased over time among this population with slight decreases from 2010-2012
  - 85+ were part of a generation that had the highest smoking rates

- Black adults aged 85+ may face a number of barriers to cancer screening and treatment

Conclusion

- This study found white-black differences in cancer incidence rates, stage at diagnosis, and survival probabilities among the oldest old using SEER data

- Better ways to reduce racial disparities in cancer prevention and treatment among this population are urgently needed
  - Need for geriatric oncology
  - Need for recruitment into clinical trials

Thank you!