

UNM Cancer Center

PSA Testing

Over-Treatment?

*PCSANM Conference
November 5, 2016*

*Thomas M. Schroeder, MD
Associate Professor
Radiation Oncology
University of New Mexico*

Epidemic of overtreatment of prostate cancer must stop

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Epidemic HEALTH

"One of the most honest and informative and truly insightful books on prostate cancer any individual will ever read—should be required reading by patients and health care professionals."
—MARK MOYAD, MD, Jenkins-Pokempner Director of Preventive and Alternative Medicine, University of Michigan Medical Center.

Invasion of the Prostate Snatchers

AN ESSENTIAL GUIDE TO MANAGING PROSTATE CANCER FOR PATIENTS AND THEIR FAMILIES

"You should read this book before you make any decision." —Ira Flatow, NPR, Science Friday

Ralph H. Blum
Mark Scholz, MD

Dr's Surgeon Explains

October 28, 2016 1:58 pm



Why: Prostate Cancer Lead to Overtreat

Well-suited to Engage Patients in Share



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Prostate Cancer: 3 Ways to Avoid Overtreat

The right screening approach for you

'I HAD MY PROSTATE REMOVED': Ben Stiller reveals his secret cancer battle

The Zoolander star was diagnosed two years ago, aged 48, and is now clear

BY ELAINE MCCAHLIL | 4th October 2016, 5:59 pm



Over-treatment of Prostate Cancer

Anthony H. Horan, M.D.



OUTLINE

- **Definitions**
- **Statistics**
- **Findings from Screening Studies**
- **Findings from Treatment Studies**
- **Conclusions**



DEFINITIONS

- **Overtreatment:** The treatment of clinically insignificant disease, that is, minor or indolent illnesses that do not require aggressive or invasive therapy.
- **Overdiagnosis:** Diagnosis of a disease or medical condition more frequently than it is actually present.
- **For-Profit Medicine:** Medicine practiced for monetary profit
- **Socialized Medicine:** The provision of medical and hospital care for all by means of public funds

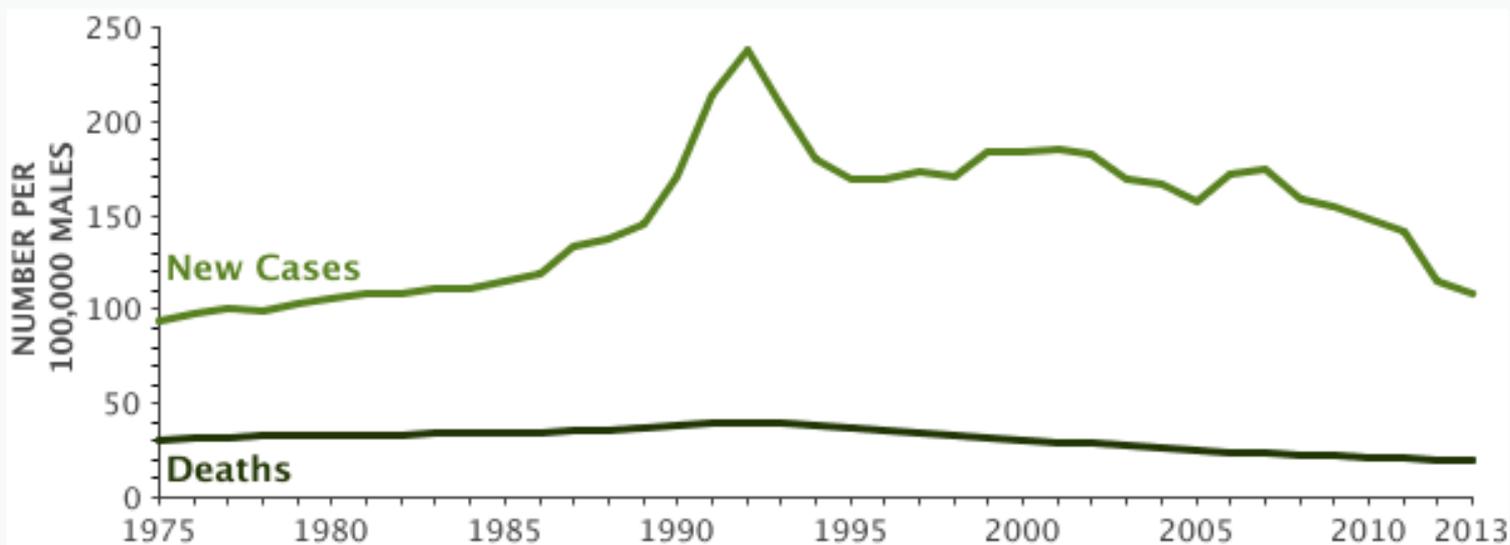


Basics of Prostate Cancer

Epidemiology/Statistics

New Cases, Deaths and 5-Year Relative Survival

SEER 9 Incidence & U.S. Mortality 1975–2013, All Races, Males. Rates are Age-Adjusted.



Year	1975	1980	1985	1990	1995	2000	2004	2008
5-Year Relative Survival	66.0%	70.2%	75.0%	88.5%	95.7%	98.8%	99.7%	99.1%



Screening for Prostate Cancer

- **Purpose of a screening test**

- Improve overall survival (health professional answer), Find cancer early (patient answer)

- **Standard prostate screening test**

- PSA and digital rectal exam, well maybe not the digital rectal exam

The discussion about screening should take place at age 50 for men who are at average risk of prostate cancer and are expected to live at least 10 more years.

Men who choose to be tested who have a PSA of less than 2.5 ng/ml, may only need to be retested every 2 years.

Screening should be done yearly for men whose PSA level is 2.5 ng/ml or higher.

- **The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of prostate cancer screening in men younger than age 75 years.**

Grade: **I statement.**

- **The USPSTF recommends against screening for prostate cancer in men age 75 years or older.**

Grade: **D recommendation.**



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Finding prostate cancer may not improve health or help a man live longer.

Screening may not improve your health or help you live longer if you have cancer that has already spread to the area outside of the prostate or to other places in your body.

Some cancers never cause symptoms or become life-threatening, but if found by a screening test, the cancer may be treated. It is not known if treatment of these cancers would help you live longer than if no treatment were given, and treatments for cancer, such as surgery and radiation, can have serious side effects.

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- **The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of prostate cancer screening in men younger than age 75 years.**
Grade: [I statement](#).
- **The USPSTF recommends against screening for prostate cancer in men age 75 years or older.**
Grade: [D recommendation](#).

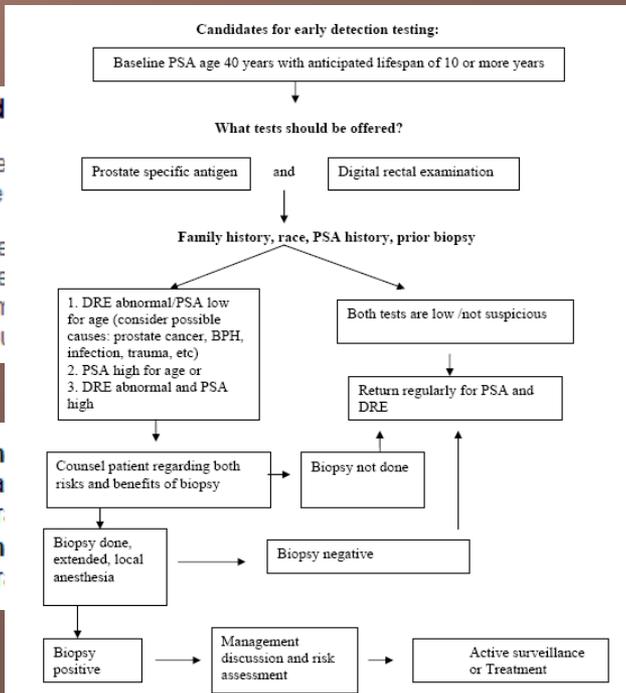


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Prostate Cancer: Screening

Release Date: May 2012

Recommendation Summary

Population	Recommendation	Grade (What's This?)
Men, Screening with PSA	The U.S. Preventive Services Task Force (USPSTF) recommends against prostate-specific antigen (PSA)-based screening for prostate cancer.	D

[Read Full Recommendation Statement](#)
PDF Version (PDF Help)

[View archived versions of this recommendation](#)

prostate cancer and are
ted every 2 years.



Screening for Prostate Cancer

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Candidates for early detection testing:

Baseline P

American Cancer Society recommendations for prostate cancer early detection

- Age 50 for men who are at average risk of prostate cancer and are expected to live at least 10 more years.
- Age 45 for men at high risk of developing prostate cancer. This includes African Americans and men who have a first-degree relative (father, brother, or son) diagnosed with prostate cancer at an early age (younger than age 65).
- Age 40 for men at even higher risk (those with more than one first-degree relative who had prostate cancer at an early age).
 - Men who choose to be tested who have a PSA of less than 2.5 ng/mL may only need to be retested every 2 years.
 - Screening should be done yearly for men whose PSA level is 2.5 ng/mL or higher.

state cancer and are every 2 years.

1. DRE abnormal/ for age (consider 1 causes: prostate ca infection, trauma,
2. PSA high for ag
3. DRE abnormal high

Counsel patient rege risks and benefits of

Biopsy done, extended, local anesthesia

Biopsy positive

assessment

[View archived versions of this recommendation](#)

Find

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American Cancer Society recommendations for prostate cancer

early



American
Urological
Association

EARLY DETECTION OF PROSTATE CANCER: AUA GUIDELINE

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Guideline Statement 3: For men ages 55 to 69 years the Panel recognizes that the decision to undergo PSA screening involves weighing the benefits of preventing prostate cancer mortality in 1 man for every 1,000 men screened over a decade against the known potential harms associated with screening and treatment. For this reason, the Panel strongly recommends shared decision-making for men age 55 to 69 years that are considering PSA screening, and proceeding based on a man's values and preferences. (*Standard*; Evidence Strength Grade B)

- Screening should be done yearly for men whose PSA level is 2.5 ng/mL or higher.



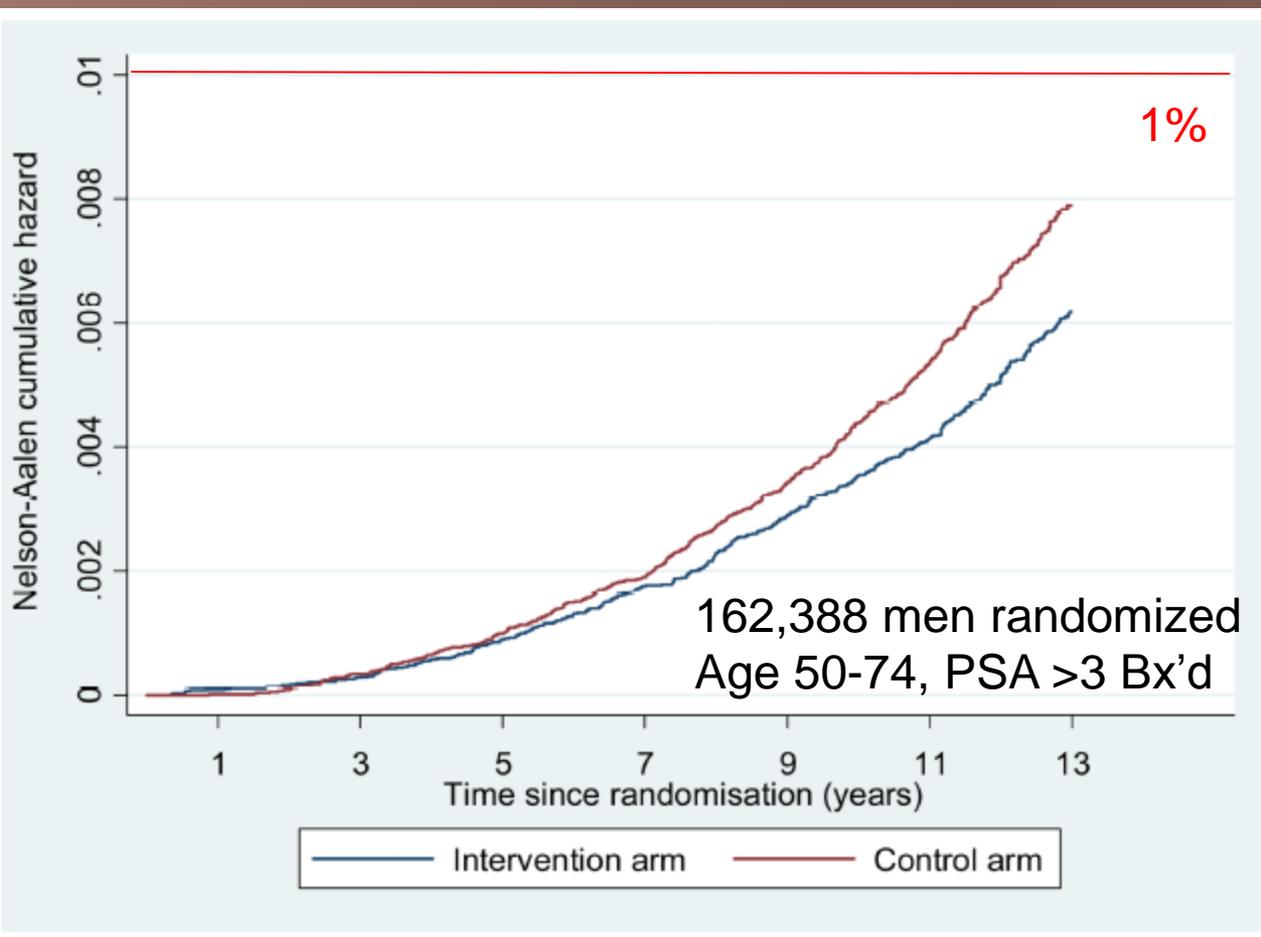
Screening Studies

ERPCS

Lancet. 2014 December 6; 384(9959): 2027–2035. doi:10.1016/S0140-6736(14)60525-0.

The European Randomized Study of Screening for Prostate Cancer – Prostate Cancer Mortality at 13 Years of Follow-up

Fritz H. Schröder¹, Jonas Hugosson², Monique J. Roobol¹, Teuvo L.J. Tammela³,





Screening Studies

PLCO

Cancer Epidemiol. 2012 December ; 36(6): e401–e406. doi:10.1016/j.canep.2012.08.008.

Prostate cancer specific survival in the Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial

Paul F. Pinsky^{a,*}, Amanda Black^b, Howard L. Parnes^a, Robert Grubb^c, E. David Crawford^d, Anthony Miller^e, Douglas Reding^f, and Gerald Andriole^c

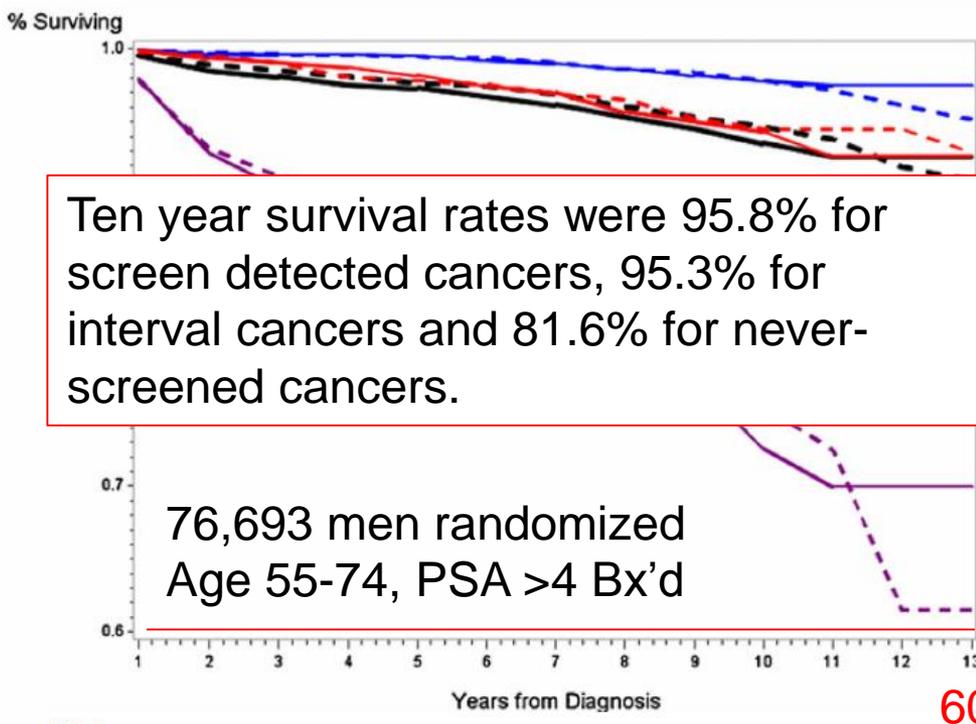


Fig 1.

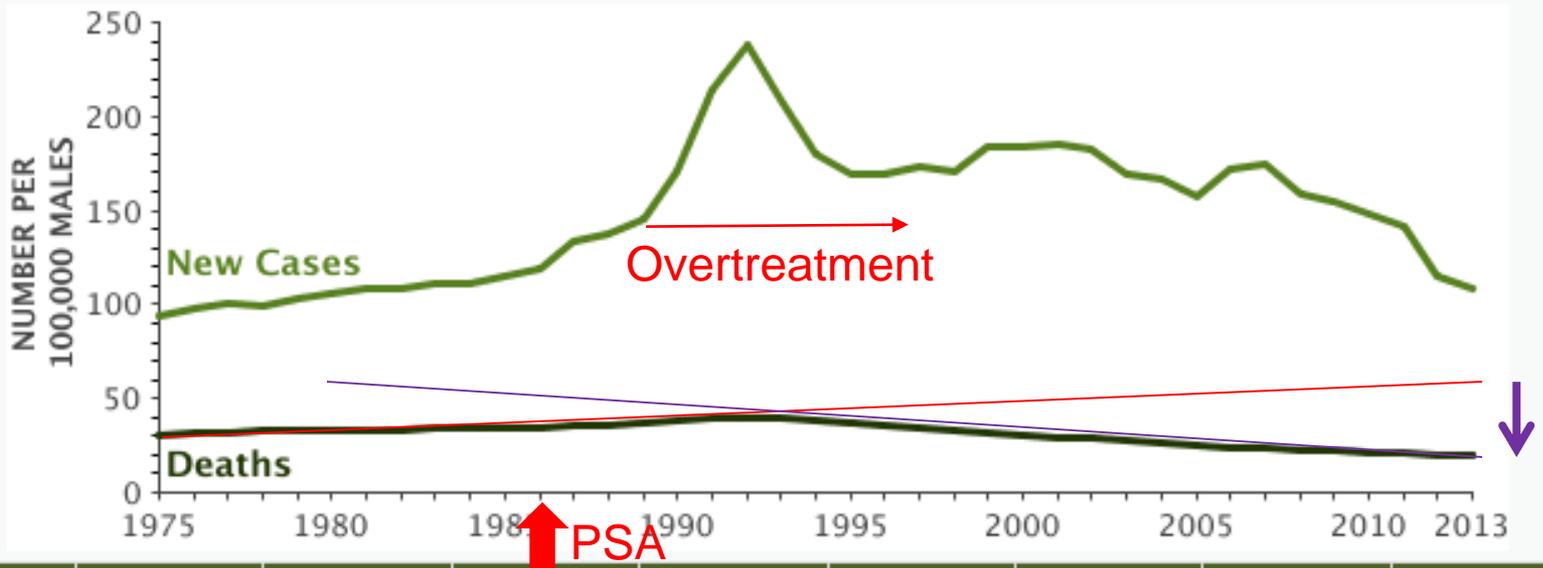
Prostate cancer specific survival rates by arm and Gleason category. Solid lines are control arm cases, dotted line intervention arm cases. Black curves are for all cases, blue curves Gleason 2–6 cases, red curves Gleason 7 cases, and purple curves Gleason 8–10 cases. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of the article.)



Screening for Prostate Cancer

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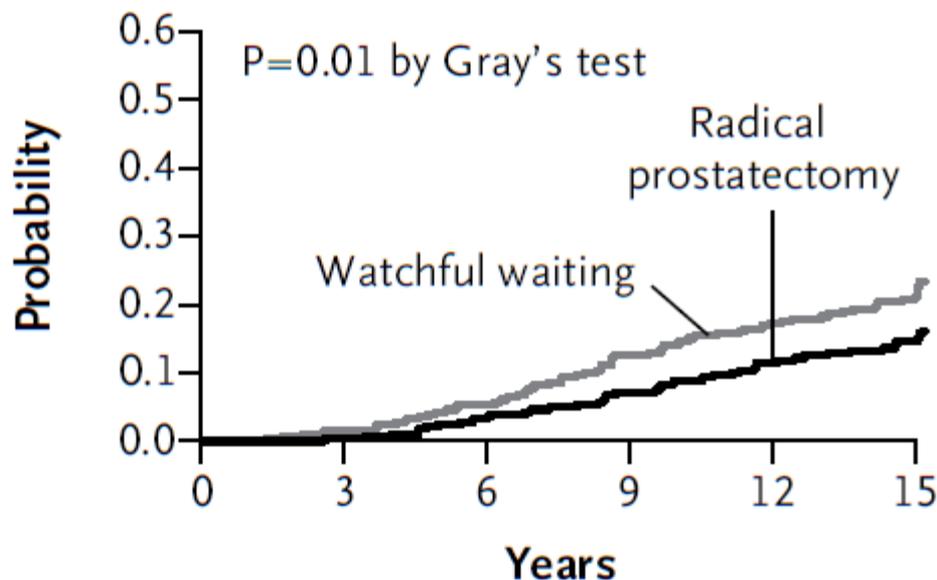
Treatment Studies

The NEW ENGLAND JOURNAL of MEDICINE

Radical Prostatectomy versus Watchful Waiting in Early Prostate Cancer

Anna Bill-Axelsson, M.D., Ph.D., Lars Holmberg, M.D., Ph.D.,

B Death from Prostate Cancer, Total Cohort



No. at Risk

Radical prostatectomy	347	339	311	271	214	109
Watchful waiting	348	334	306	251	192	96



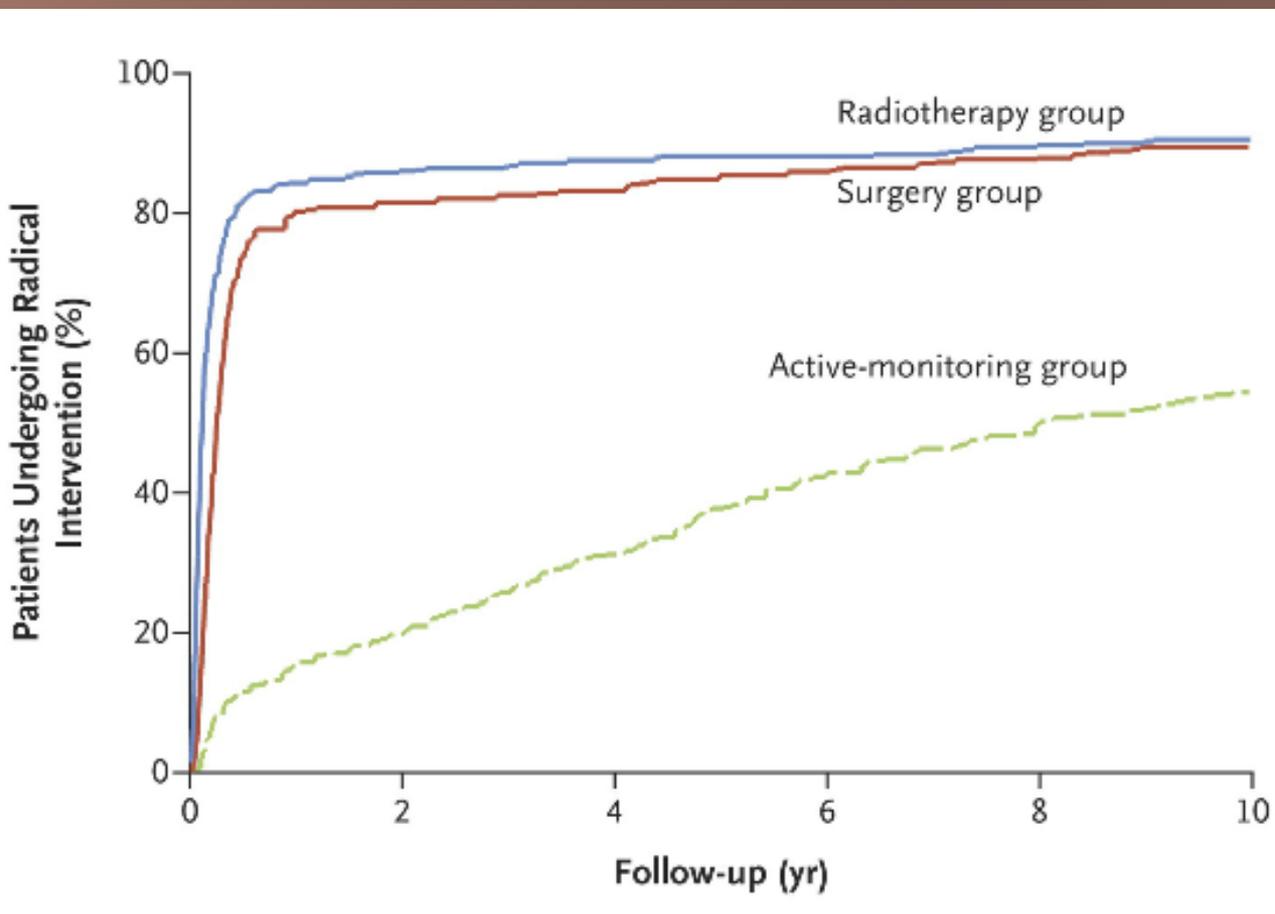
Treatment Studies



The NEW ENGLAND
JOURNAL of MEDICINE

10-Year Outcomes after Monitoring, Surgery, or Radiotherapy
for Localized Prostate Cancer

Freddie C. Hamdy, F.R.C.S.(Urol), F.Med.Sci., Jenny L. Donovan, Ph.D., F.Med.Sci., J. Athene Lane, Ph.D., Malcolm Mason,

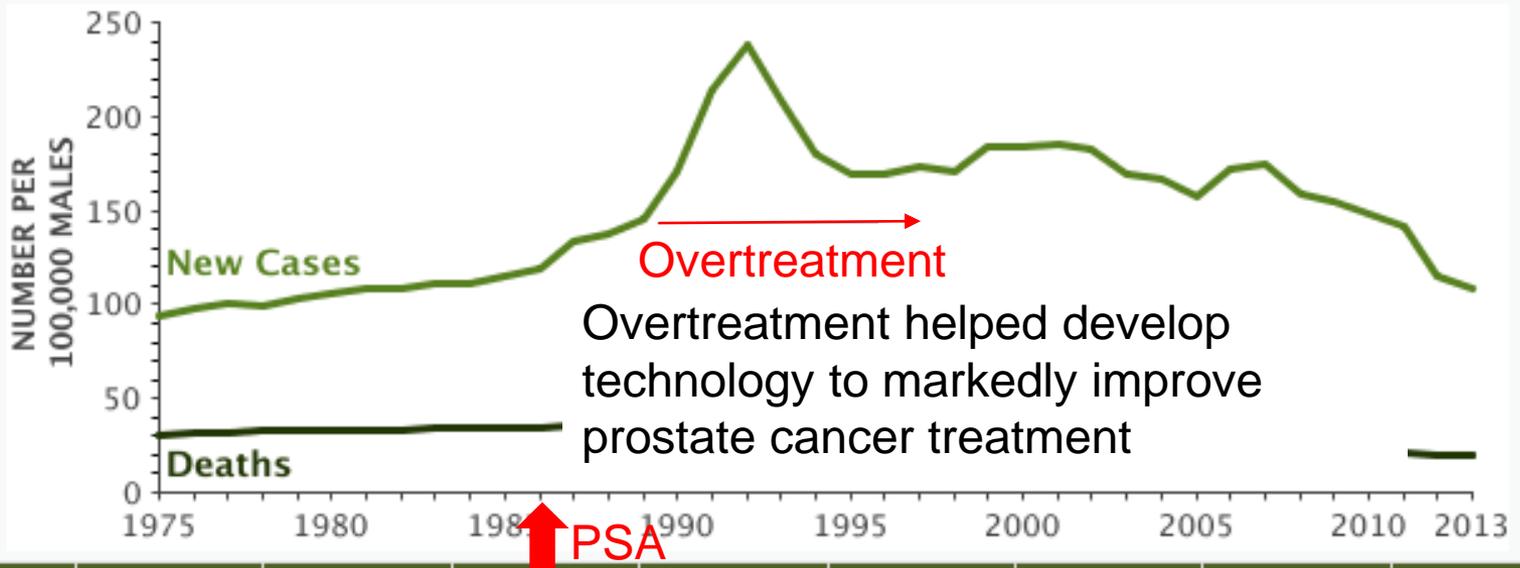




Discussion

New Cases, Deaths and 5-Year Relative Survival

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Conclusion

- **Over-treatment:** Still exists as doctors and patients over-estimate survival, but getting better as surveillance gains acceptance.
- **PSA Screening:** Shows a benefit, but only a small benefit, don't fear surveillance
- **Solution:** Screen, but a diagnosis does not mean you need treatment!



Questions?