4os Encontros de Andrologia
Onco-Andrologia
Vigilância activa - Subutilização?

Jorge Fonseca

“There are more people making a living from prostate cancer than there are dying from it.”

“The current state of prostate cancer may not be good medicine but it sure is good business.”

Although these comments were first made almost 30 years ago, they undoubtedly would be equally applicable today.
Dr. Willet Whitmore noted the increasing use of radical prostatectomy for carcinoma of the prostate and recognized that many men were being subjected to the morbidity of surgery without necessarily deriving any benefit.

Published in final edited form as:
Can J Urol. 2008 February; 15(1): 3866–3871.

The Worldwide Epidemiology of Prostate Cancer: Perspectives from Autopsy Studies

Gabriel P. Haas, M.D.[1], **Nicolas Delongchamps, M.D.**[1], **Otis W. Brawley, M.D.**[3], **Ching Y. Wang, DVM, Ph.D.**[1], and **Gu**

[1]Department of Urology

[2]Department of Patholo

[3]Department of Epidem
Institute, Emory Rollins
Society, Atlanta, GA 30

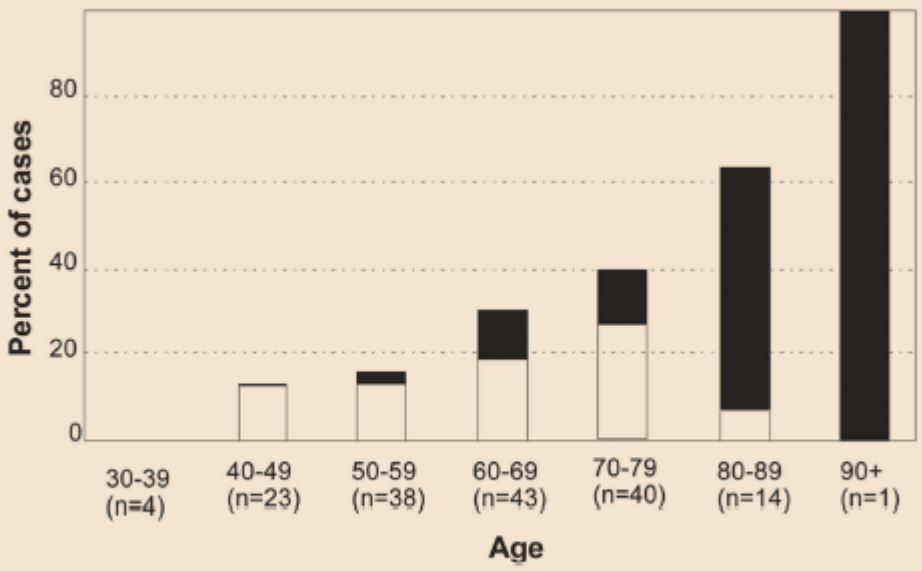


Fig. 2.
Prevalence of prostate cancer in autopsy cases with increasing age[34].

Published in final edited form as:
Can J Urol. 2008 February ; 15

The Worldwide Epic

from Autopsy Studi

Gabriel P. Haas, M.D.[1], **Nicola**
DVM, Ph.D.[1], and **Gustavo d**
[1]Department of Urology, SUNY
[2]Department of Pathology, SUN
[3]Department of Epidemiology, D
Institute, Emory Rollins School o
Society, Atlanta, GA 30329

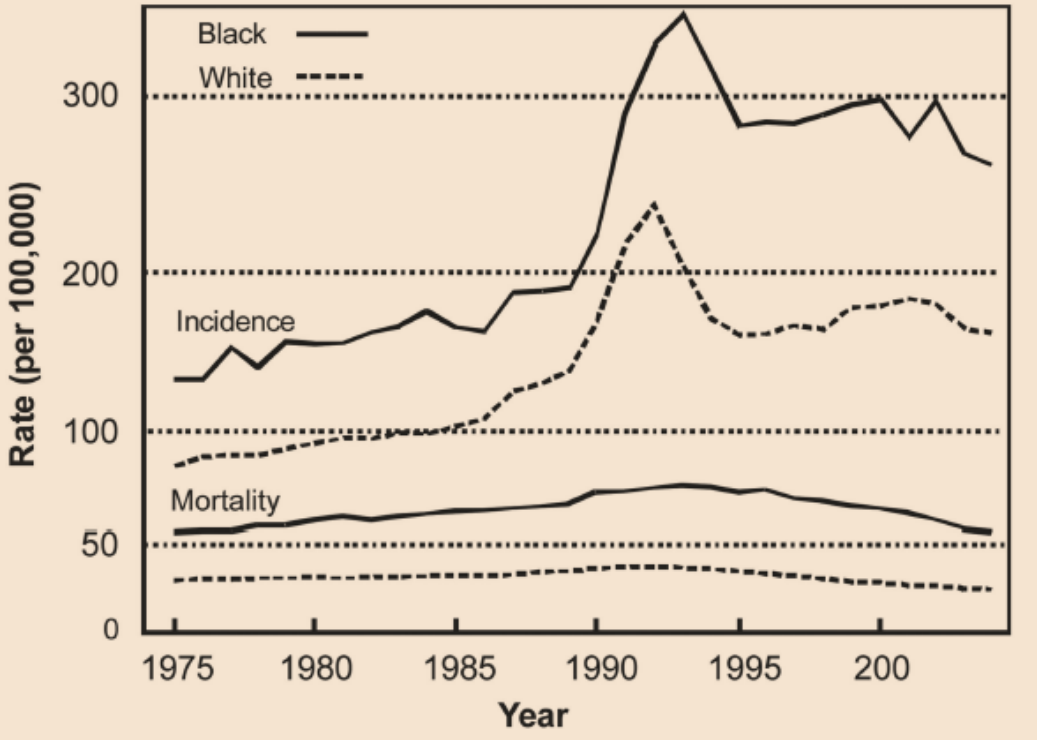


Fig. 1.
Age-adjusted total US incidence and mortality rates for prostate cancer, all ages.. 1995-2004.
Age-adjusted to the 2000 US Std Population

In the USA there were an estimated 217 730 new cases of prostate cancer and 32 050 deaths in 2010, which represented 28% of new cancer cases and 11% of all cancer deaths in men.

EUROPEAN JOURNAL OF CANCER 46 (2010) 765–781

ELSEVIER

available at www.sciencedirect.com

ScienceDirect

journal homepage: www.ejconline.com

Estimates of cancer incidence and mortality in Europe in 2008

J. Ferlay [a,*], *D.M. Parkin* [b], *E. Steliarova-Foucher* [a]

[a] In
[b] Cl

A R
Arti
Rec
Rec
Dec
Acc
Ava

Key
Can
Dea
Eur
Inci
Mor
Prec

Table 2 – Estimated numbers of cancer cases and deaths from cancer in Europe in 2008 (in thousands).

	Incidence			Mortality		
	Both sexes	Male	Female	Both sexes	Male	Female
Oral cavity and pharynx	91.9	68.1	23.8	41.7	32.9	8.8
Oesophagus	44.7	34.1	10.6	38.6	29.4	9.2
Stomach	149.2	89.4	59.8	116.6	69.1	47.5
Colon and rectum	435.6	231.4	204.2	212.1	110.5	101.6
Liver	60.2	39.2	21.0	60.1	38.4	21.7
Gallbladder	32.9	12.4	20.5	23.7	8.6	15.1
Pancreas	96.0	48.8	47.2	95.2	48.3	46.9
Larynx	40.4	36.6	3.8	21.1	19.4	1.7
Lung	390.9	291.3	99.6	342.1	255.3	86.8
Melanoma of skin	84.0	39.2	44.8	20.1	10.6	9.5
Breast			420.8			129.3
Cervix uteri			54.8			25.0
Corpus uteri			82.5			21.7
Ovary			66.7			41.9
Prostate		382.3			89.3	
Testis		18.3			1.7	
Kidney	88.4	56.0	32.4	39.3	24.8	14.5
Bladder	139.5	109.7	29.8	51.3	38.7	12.6
Brain, nervous system	61.5	33.3	28.2	43.1	23.2	19.9

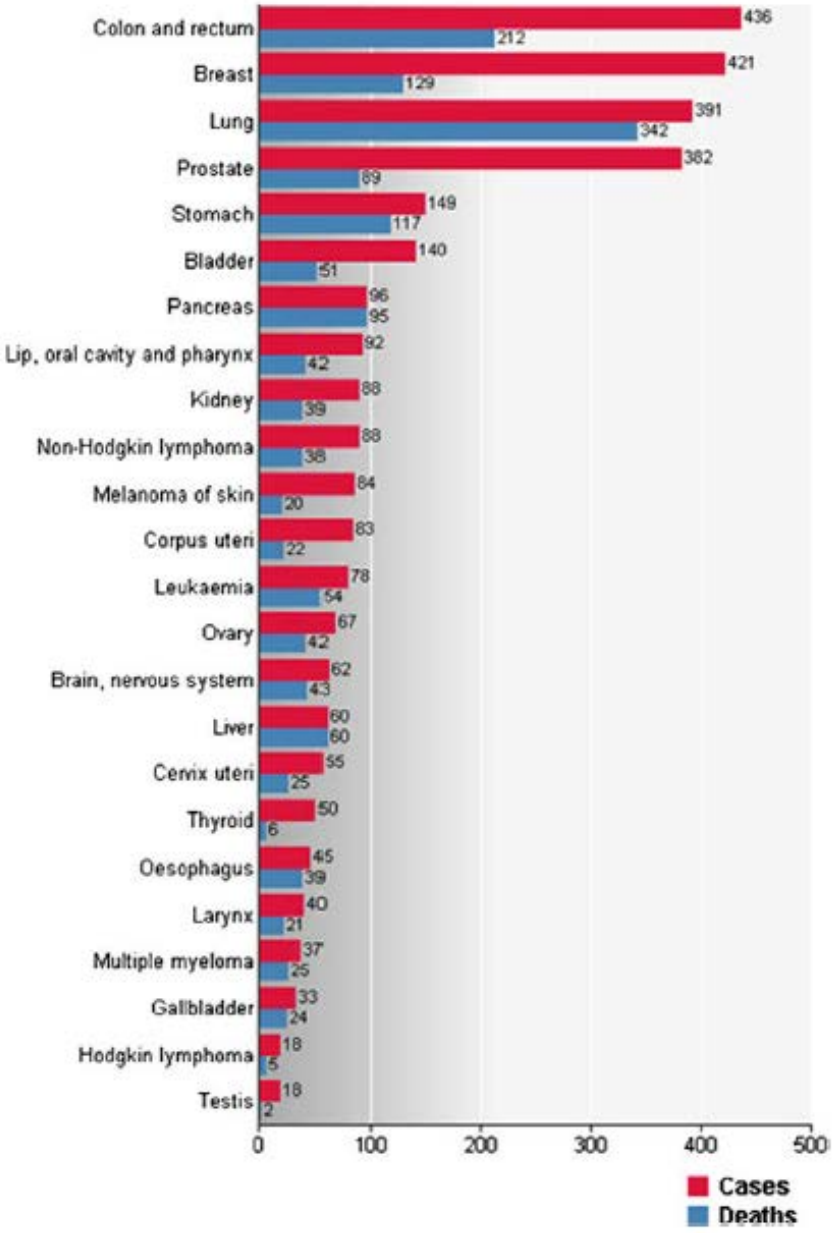
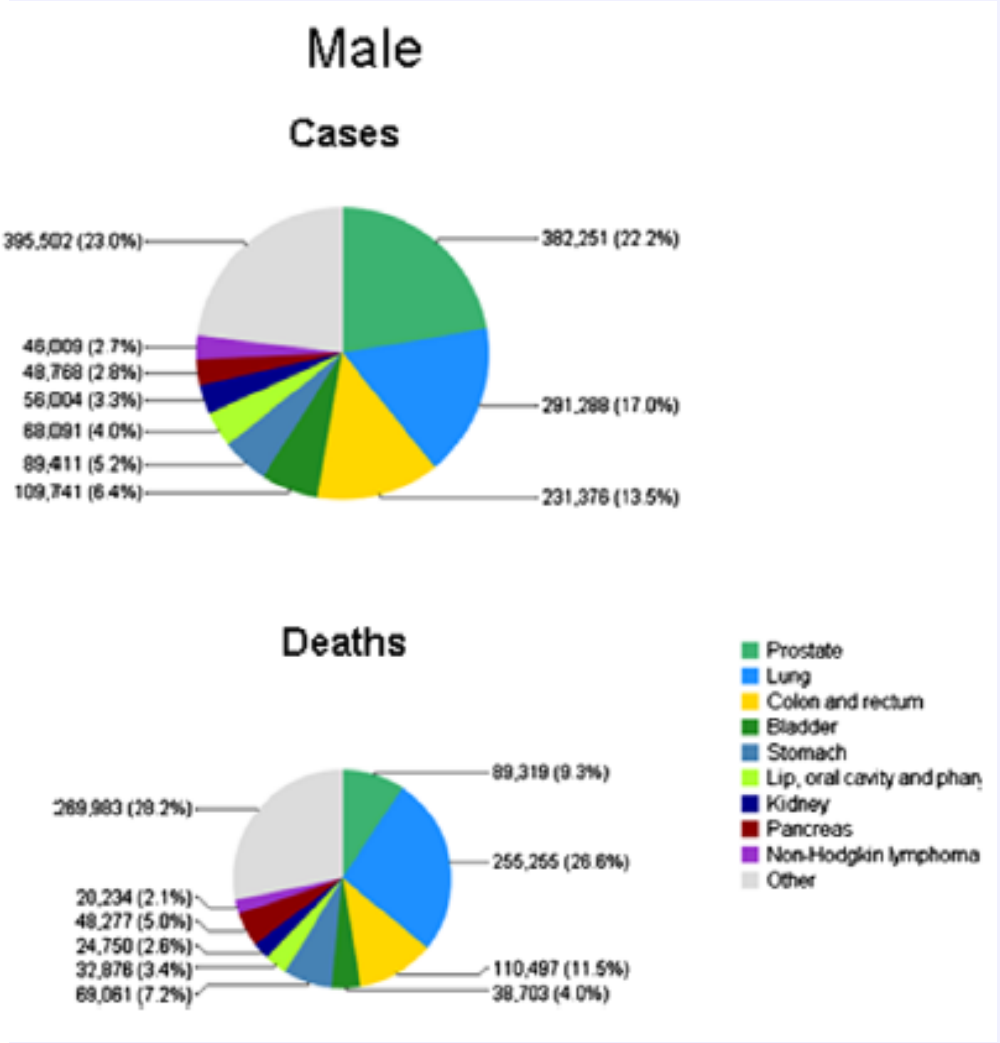


Fig. 2 – Estimated numbers of cancer cases and cancer deaths in the 40 European countries (in thousands).



European Association of Urology

Platinum Priority – Prostate Cancer

Editorial by James W.F. Catto on pp. 16–18 of this issue

Trends in Mortality From Urologic Cancers in Europe, 1970–2008

Cristina Bosetti [a,*], *P*
Carlo La Vecchia [a,b], *I*

[a] *Dipartimento di Epidemiologia, I*
[b] *Dipartimento di Medicina del La*
[c] *Unité d'epidémiologie du cancer*
Universitaire Vaudois et Universit

Article info

Article history:
Accepted March 25, 2011
Published online ahead of print on April 5, 2011

Keywords:
Bladder cancer
Europe
Kidney
Mortality
Prostate
Testis
Trends

Background: In recent decades, there have been substantial changes in mortality from urologic cancers in Europe.
Objective: To provide updated information, we analyzed trends in mortality from cancer of the prostate, testis, bladder, and kidney in Europe from 1970 to 2008.
Design, setting, and participants: We derived data for 33 European countries from the World Health Organization database.
Measurements: We computed world-standardized mortality rates and used join-point regression to identify significant changes in trends.
Results and limitations: Mortality from prostate cancer has leveled off since the 1990 s in countries of western and northern Europe, particularly over the last few years while it was still rising in Bulgaria, Romania, and Russia. In the European Union (EU), it reached a peak in 1995 at 15.0 per 100 000 men and declined to 12.5 per 100 000 in 2006. Mortality from testicular cancer has steadily declined in most countries in western and northern Europe since the 1970 s. The declines were 0.75 in 1980 to 0.32 per 100 000 men in 2006, with stronger declines up to the late 1990 s and an apparent leveling off in rates thereafter. Over the last 15 years

European Association of Urology

Platinum Priority – Prostate Cancer

Editorial by James W.F. Catto on pp. 16–18 of this issue

Trends in Mortality From Urologic Cancers in Europe, 1970–2008

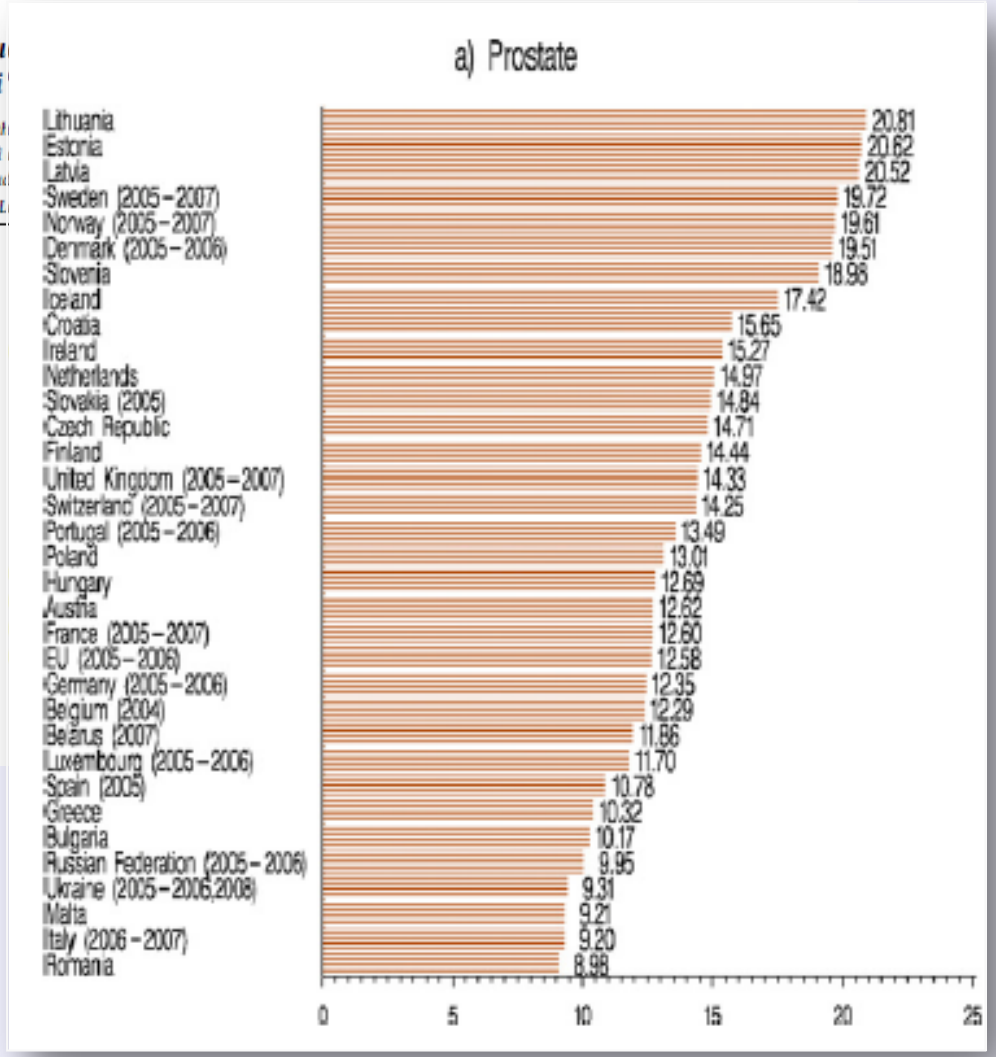
Cristina Bosetti[a,*], *Paola Bertu*
Carlo La Vecchia[a,b], *Fabio Levi*[

[a] *Dipartimento di Epidemiologia, Istituto di Ricerch*
[b] *Dipartimento di Medicina del Lavoro, Universit*
[c] *Unité d'epidémiologie du cancer et Registres Vau*
Universitaire Vaudois et Université de Lausanne, L

Article info

Article history:
Accepted March 25, 2011
Published online ahead of print on April 5, 2011

Keywords:
Bladder cancer
Europe
Kidney
Mortality
Prostate
Testis
Trends



European Association of Urology

Platinum Priority – Prostate Cancer

Editorial by James W.F. Catto on pp. 16–18 of this issue

Trends in Mortality From Urologic Cancers in Europe, 1970–2008

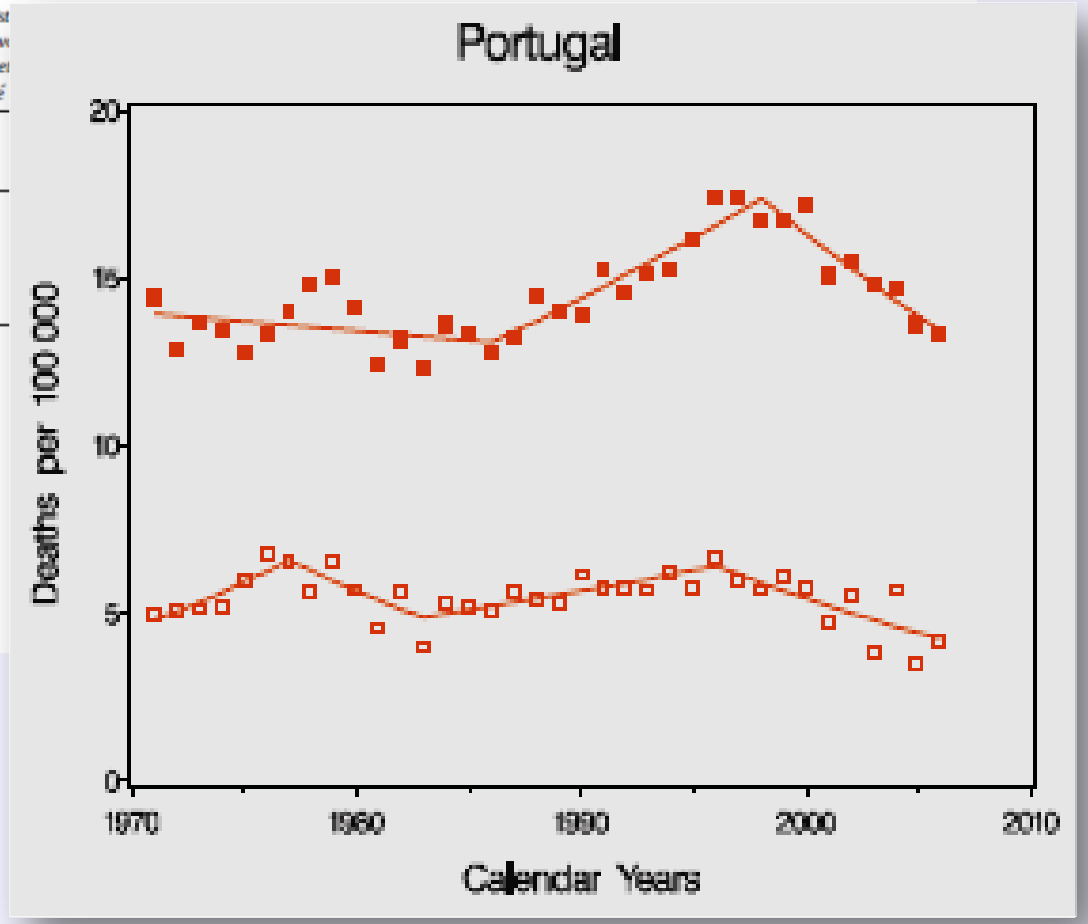
Cristina Bosetti[a,*], *Paola Bertuccio*[a,b], *Liliane Chatenoud*[a], *Eva Negri*[a], *Carlo La Vecchia*[a,b], *Fabio Levi*[c]

[a] *Dipartimento di Epidemiologia, Ist*
[b] *Dipartimento di Medicina del Lav*
[c] *Unité d'epidémiologie du cancer et*
Universitaire Vaudois et Université

Article info

Article history:
Accepted March 25, 2011
Published online ahead of print on April 5, 2011

Keywords:
Bladder cancer
Europe
Kidney
Mortality
Prostate
Testis
Trends



The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Mortality Results from a Randomized Prostate-Cancer Screening Trial

Gerald L. Andriole, M.D., E. David Crawford, M.D., Robert
Saundra S. Buys, M.D., David Chia
Mona N. Fouad, M.D.

CONCLUSIONS

After 7 to 10 years of follow-up, the rate of death from prostate cancer was very low and did not differ significantly between the two study groups. (ClinicalTrials.gov number, NCT00002540.)

Th
Ap
Dr.

of screening with prostate-specific–antigen (PSA) testing and digital rectal examination on the rate of death from prostate cancer is unknown. This is the first report from the Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Screening and Prostate-Cancer Mortality in a Randomized European Study

Fritz H. Schröder, M.D., Jonas Hugosson, M.D., Monique J. Roobol, Ph.D., Teuvo L.J. Tammela, M.D., Stefano Ciatto, M.D., Vera Nelen, M.D., Maciej Kwiatkowski, M.D., Marcos Lujan, M.D., Hans Lilja, M.D.,

CONCLUSIONS

PSA-based screening reduced the rate of death from prostate cancer by 20% but was associated with a high risk of overdiagnosis. (Current Controlled Trials number, ISRCTN49127736.)

The authors' affil
Appendix. Addre
Dr. Schröder at the Erasmus Medical Center, P.O. Box 2040, Rotterdam 3000 CA, the Netherlands, or at secr.schroder@erasmusmc.nl.

*Members of the European Randomized Study of Screening for Prostate Cancer (ERSPC) are listed in the Appendix.

This article (10.1056/NEJMoa0810084) was published at NEJM.org on March 18, 2009.

N Engl J Med 2009;360:1320-8.

Cancer was initiated in the early 1990s to evaluate the effect of screening with prostate-specific–antigen (PSA) testing on death rates from prostate cancer.

METHODS

We identified 182,000 men between the ages of 50 and 74 years through registries in seven European countries for inclusion in our study. The men were randomly assigned to a group that was offered PSA screening at an average of once every 4 years or to a control group that did not receive such screening. The predefined core age group for this study included 162,243 men between the ages of 55 and 69 years. The primary outcome was the rate of death from prostate cancer. Mortality follow-up was identical for the two study groups and ended on December 31, 2006.

DOI: 10.1093/jnci/djr500
Advance Access publication on January 6, 2012.

ARTICLE

Prostate Cancer Screening in the Randomized Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial: Mortality Results after 13 Years of Follow-up

Gerald L. Andriole, E. David Crawford, Robert L. Grubb III, Saundra S. Buys, David Chia, Timothy R. Church, Mona N. Fouad, Claudine Isaacs, Paul A. Kvale, Douglas J. Reding, Joel L. Weissfeld, Lance A. Yokochi, Barbara O'Brien, Lawrence R. Ragard, Jonathan D. Clapp, Joshua M. Rathmell, Thomas L. Riley, Ann W. Hsing, Grant Izmirlian, Paul F. Pinsky, Barnett S. Kramer, Anthony B. Miller, John K. Gohagan, Philip C. Prorok; for the PLCO Project Team

Manuscript received March 17, 2011; revised November 8, 2011; accepted November 9, 2011.

Correspondence to: Philip C. Prorok, PhD, Biometry Research Group, Division of Cancer Prevention, National Cancer Institute, 6130 Executive Blvd, Ste 3132, Bethesda, MD 20892-7354 (e-mail: prorokp@mail.nih.gov).

Background The prostate component of the Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Scree
dertaken to determine whether there is a reduction in prostate cancer mort
prostate-specific antigen (PSA) testing and digital rectal examin
has been reported previously. We report exten

Methods A total of 76 685 me
July

control
for the number
with respect to prostate can-
trial PSA testing. All statistical tests

were followed to 10 years and 57% to 13 years. At 13 years, 4250
in prostate cancer in the intervention arm compared with 3815 in the control
rates for prostate cancer in the intervention and control arms were 108.4 and 97.1
on-years, respectively, resulting in a relative increase of 12% in the intervention arm (RR = 1.12,
CI = 1.07 to 1.17). After 13 years of follow-up, the cumulative mortality rates from prostate cancer in the intervention and control arms were 3.7 and 3.4 deaths per 10 000 person-years, respectively, resulting in a non-statistically significant difference between the two arms (RR = 1.09, 95% CI = 0.87 to 1.36). No statistically significant interactions with respect to prostate cancer mortality were observed between trial arm and age ($P_{interaction}$ = .81), pretrial PSA testing ($P_{interaction}$ = .52), and comorbidity ($P_{interaction}$ = .68).

Conclusions After 13 years of follow-up, there was no evidence of a mortality benefit for organized annual screening in the PLCO trial compared with opportunistic screening, which forms part of usual care, and there was no apparent interaction with age, baseline comorbidity, or pretrial PSA testing.

J Natl Cancer Inst 2012;104:125–132

After 13 years of follow-up, there was no evidence of a mortality benefit for organized annual screening in the PLCO trial compared with opportunistic screening, which forms part of usual care, and there was no apparent interaction with age, baseline comorbidity, or pretrial PSA testing.

J Natl Cancer Inst 2012;104:125–132

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 MARCH 15, 2012 VOL. 366 NO. 11

Prostate-Cancer Mortality at 11 Years of Follow-up

Fritz H. Schröder, M.D., Jonas Hugosson, M.D., Monique J. Roobol, Ph.D., Teuvo L.J. Tammel
Stefano Ciatto, M.D., Vera Nelen, M.D., Maciej Kwiatkowski, M.D., Marcos Lui
Marco Zappa, Ph.D., Louis J. Denis, M.D., Franz Recker, M.D.
Chris H. Bangma, M.D., Gunnar Aus, M.D.
Theodorus van der Kwast, M.D.
Andreas Hub

CONCLUSIONS

Analyses after 2 additional years of follow-up consolidated our previous finding that PSA-based screening significantly reduced mortality from prostate cancer but did not affect all-cause mortality. (Current Controlled Trials number, ISRCTN49127736.)

...gen (PSA) testing on ...g results. We updated prostate- ...domized Study of Screening for Prostate ...of follow-up

The authors' affiliations are listed in the Appendix. Address reprint requests to Dr. Schröder at the Department of Urology, Erasmus University Medical Center, NH-...

Mortality results from the Göteborg randomised population-based prostate-cancer screening trial

Jonas Hugosson, Sigrid Carlsson, Gunnar Aus, Svante Bergdahl, Ali Khatami, Pär Lodding, Carl-Gustaf Pihl, Johan Stranne, Erik Holmberg, Hans Lilja

Summary

Background Prostate cancer is one of the leading causes of death from malignant disease among men in the developed world. One strategy to decrease the risk of death from this disease is screening with prostate-specific antigen (PSA); however, the extent of benefit and harm with such screening is under continuous debate.

Methods In December, 1994, 20000 men born between 1930 and 1944, randomly sampled from the population register, were randomised by computer in a 1:1 ratio to either a screening group invited for PSA testing every 2 years (n=10000) or to a control group not invited (n=10000). Men in the screening group were invited up to the upper age limit (median 69, range 67–71 years) and only men with raised PSA concentrations were offered additional tests such as digital rectal examination and prostate biopsies. The primary endpoint was prostate-cancer specific mortality, analysed according to the intention-to-screen principle. The study is ongoing, with men who have not reached the upper age limit invited for PSA testing. This is the first planned report on cumulative prostate-cancer incidence and mortality calculated up to Dec 31, 2008. This study is registered as an International Standard Randomised Controlled Trial ISRCTN54449243.

Findings In each group, 48 men were excluded from the analysis because of death or emigration before the randomisation date, or prevalent prostate cancer. In men randomised to screening, 7578 (76%) of 9952 attended at least once. During a median follow-up of 14 years, 1138 men in the screening group and 718 in the control group were diagnosed with prostate cancer, resulting in a cumulative prostate-cancer incidence of 12·7% in the screening group and 8·2% in the control group (hazard ratio 1·64; 95% CI 1·50–1·80; p<0·0001). The absolute cumulative risk reduction of death from prostate cancer at 14 years was 0·40% (95% CI 0·17–0·64), from 0·90% in the control group to 0·50% in the screening group. The rate ratio for death from prostate cancer was 0·56 (95% CI 0·39–0·82; p=0·002) in the screening compared with the control group. The rate ratio of death from prostate cancer for attendees compared with the control group was 0·44 (95% CI 0·28–0·68; p=0·0002). Overall, 293 (95% CI 177–799) men needed to be invited for screening and 12 to be diagnosed to prevent one prostate cancer death.

Interpretation This study shows that prostate cancer mortality was reduced almost by half over 14 years. However, the risk of over-diagnosis is substantial and the number needed to treat is at least as high as in breast-cancer screening programmes. The benefit of prostate-cancer screening compares favourably to other cancer screening programs.

Funding The Swedish Cancer Society, the Swedish Research Council, and the National Cancer Institute.

Lancet Oncol 2010; 11: 725–32

Published Online
July 1, 2010
DOI:10.1016/S1470-2045(10)70146-7

See Reflection and Reaction page 702

Department of Urology (Prof J Hugosson MD, S Carlsson MD, G Aus MD, S Bergdahl MD, A Khatami MD, P Lodding MD, J Stranne MD), and Oncology (E Holmberg PhD), Institute of Clinical Sciences, Sahlgrenska Academy at University of Göteborg, Sweden; Department of Pathology, Institute of Biomedicine, Sahlgrenska Academy at University of Göteborg, Sweden (C G Pihl MD); Department of Laboratory Medicine, Lund University, University Hospital, Malmö, Sweden (Prof H Lilja MD); and Department of Clinical Laboratories, Urology, and Genitourinary Oncology (H Lilja), Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Correspondence to:
Prof Jonas Hugosson, Institute of Clinical Sciences, Department of Urology, Sahlgrenska University Hospital, Bruna stråket 11 B, 413 45 Göteborg, Sweden

Introduction

The European Randomised Study of Screening for PSA-based prostate-cancer screening can reduce prostate-

Mortality results from the Göteborg randomised population-based prostate-cancer screening trial

Jonas Hugosson, Sigrid Carlsson, Gunnar Aus, Svante Bergdahl, Ali Khatami, Pär Lodding, Carl-Gustaf Pihl, Johan Stranne, Erik H Hans Lilja

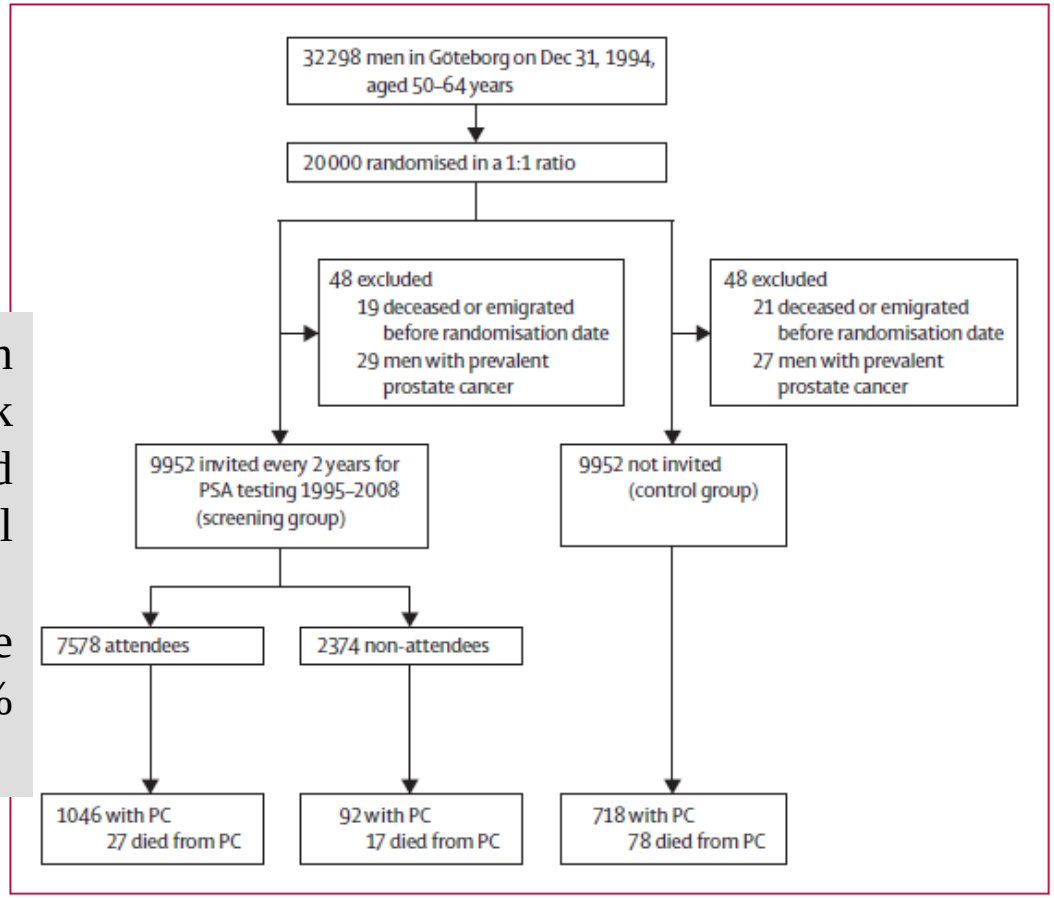
Summary

Background Prostate cancer is one of the leading causes of death from malignant disease among men in world. One strategy to decrease the risk of death from this disease is screening with prostate-specific ; however, the extent of benefit and harm with such screening is under continuous debate.

Methods In December, 1994, 20 000 men born between 1930 and 1944, randomly sampled from t register, were randomised by computer in a 1:1 ratio to either a screening group invited for PSA testin (n=10 000) or to a control group not invited (n=10 000). Men in the screening group were invited up to limit (median 69, range 67–71 years) and only men with raised PSA concentrations were offered additi as digital rectal examination and prostate biopsies. The primary endpoint was prostate-cancer spe

This trial showed a greater reduction in mortality, with an overall relative risk reduction of 44% in all men randomised to screening, compared with the control group, after 14 years.

This figure increased to 56% in the subgroup of screening attendees and 77% in men aged < 60 years.



Time Trends and Local Variation in Primary Treatment of Localized Prostate Cancer

Matthew R. Cooperberg, Jeanette M. Broering, and Peter R. Carroll

A B S T R A C T

Purpose
In the absence of high-level evidence or clinical guidelines supporting any given active treatment approach over another for localized prostate cancer, clinician and patient preferences may lead to substantial variation in treatment use.

Methods
Data were analyzed from 36 clinical sites that contributed data to the Cancer of the Prostate Strategic Urologic Research Endeavor (CaPSURE) registry. Distribution of primary treatment use was measured over time. Prostate cancer risk was assessed using the D'Amico risk groups and the Cancer of the Prostate Risk Assessment (CAPRA) score. Descriptive analyses were performed, and a hierarchical model was constructed that controlled for year of diagnosis, cancer risk variables, and other patient factors to estimate the proportion of variation in primary treatment selection explicable by practice site.

Results
Among 11,892 men analyzed, 6.8% elected surveillance, 49.9% prostatectomy, 11.6% external-beam radiation, 13.3% brachytherapy, 4.0% cryoablation, and 14.4% androgen deprivation monotherapy. Prostate cancer risk drives treatment selection, but the data suggest both overtreatment of low-risk disease and undertreatment of high-risk disease. The former trend appears to be improving over time, while the latter is worsening. Treatment varies with age, comorbidity, and socioeconomic status. [illegible] cancer to help guide treatment decision making.

J Clin Oncol 28:1117-1123. © 2010 by American Society of Clinical Oncology

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Quality of Life and Satisfaction with Outcome among Prostate-Cancer Survivors

Martin G. Sanda, M.D., Rodney L. Dunn, M.S., Jeff Michalski, M.D., Howard M. Sandler, M.D., Laurel Northouse, R.N., Ph.D., Larry Hembroff, Ph.D., Xihong Lin, Ph.D., Thomas K. Greenfield, Ph.D., Mark S. Litwin, M.D., M.P.H., Christopher S. Saigal, M.D., M.P.H., Arul Mahadevan, M.D., Eric Klein, M.D., Adam Kibel, M.D., Louis L. Pisters, M.D., Deborah Kuban, M.D., Irving Kaplan, M.D., David Wood, M.D., Jay Ciezki, M.D., Nikhil Shah, D.

CONCLUSIONS

Each prostate-cancer treatment was associated with a distinct pattern of change in quality-of-life domains related to urinary, sexual, bowel, and hormonal function. These changes influenced satisfaction with treatment outcomes among patients and their spouses or partners.

(D.H., N.S., J.T.W.), School of Medicine, and School of Nursing (L.N.), University of Michigan, Ann Arbor; the Departments of Radiation Oncology (J.M.) and Urology (A.K.), Washington University, St. Louis; the Office for Survey Research, Institute for Public Policy and Social Research, Michigan State University, East Lansing (L.H.); Alcohol Research Group, Public Health Institute, Emeryville, CA (T.K.G.); the Departments of Urology (M.S.L., C.S.S.) and Health Services (M.S.L.), UCLA Center for Health Sciences, Los Angeles; the Departments of Radiation

...outcomes reported by 1201 patients and 625 spouses or partners at multiple centers before and after radical prostatectomy, brachytherapy, or external-beam radiotherapy. We evaluated factors that were associated with changes in quality of life within study groups and determined the effects on satisfaction with the treatment outcome.

RESULTS

Adjuvant hormone therapy was associated with worse outcomes across multiple quality-of-life domains among patients receiving brachytherapy or radiotherapy. Patients in the brachytherapy group reported having long-lasting urinary irritation, bowel and sexual symptoms, and transient problems with vitality or hormonal func-

REVIEW | Annals of Internal Medicine

Screening for Prostate Cancer: A Review of the Evidence for the U.S. Preventive Services Task Force

Roger Chou, MD; Jennifer M. Croswell, MD, MPH; Tracy Dana, MLS; Christina Bougatsos, BS; Ian Blazina, MPH; Rongwei Fu, PhD; Ken Gleitsmann, MD, MPH; Helen C. Koenig, MD, MPH; Clarence Lam, MD, MPH; Ashley Maltz, MD, MPH; J. Bruin Rugge, MD, MPH; and Kenneth Lin, MD

Background: Screening can detect prostate cancer at earlier, asymptomatic stages, when treatments might be more effective.

Purpose: To update the 2002 and 2008 U.S. Preventive Services Task Force evidence reviews on screening and treatments for prostate cancer.

Data Sources: MEDLINE (2002 to July 2011) and the Cochrane Library Database (through second quarter of 2011).

Study Selection: Randomized trials of prostate-specific antigen–based screening, randomized trials and cohort studies of prostatectomy or radiation therapy versus watchful waiting, and large ob-

positive results. Serious infections or urine retention occurred after 0.5% to 1.0% of prostate biopsies. There were 3 randomized trials and 23 cohort studies of treatments. One good-quality trial found that prostatectomy for localized prostate cancer decreased risk for prostate cancer–specific mortality compared with watchful waiting through 13 years of follow-up (relative risk, 0.62 [CI, 0.44 to 0.87]; absolute risk reduction, 6.1%). Benefits seemed to be limited to men younger than 65 years. Treating approximately 3 men with prostatectomy or 7 men with radiation therapy instead of watchful waiting would each result in 1 additional case of erectile dysfunction. Treating approximately 5 men with prostatectomy would result in 1 additional case of urinary incontinence. Prostatectomy was associated with perioperative death (about 0.5%) and cardiovascular events (0.6% to 3%), and radiation therapy was

Conclusion: Prostate-specific antigen–based screening results in small or no reduction in prostate cancer–specific mortality and is associated with harms related to subsequent evaluation and treatments, some of which may be unnecessary.

For author affiliations, see end of text.

This article was published at www.annals.org on 7 October 2011.

REVIEW | Annals of Internal Medicine

Screening for Prostate Cancer: A Review of the Evidence for the U.S. Preventive Services Task Force

Roger Chou, MD; Jennifer M. Croswell, MD, MPH; Tracy Dana, MLS; Christina Bougatsos, BS; Ian Blazina, MPH; Rongwei Fu, PhD; Ken Gleitsmann, MD, MPH; Helen C. Koenig, MD, MPH; Clarence Lam, MD, MPH; Ashley Maltz, MD, MPH; J. Bruin Rugge, MD, MPH; and Kenneth Lin, MD

Background: Screening can detect prostate cancer at earlier, ... ized trials and 23 cohort studies of treatments. One good-quality ... after 0.5% to 1.0% of prostate biopsies. There were 3 random-

This article was published at www.annals.org on 7 October 2011.

Editorial Comment: In October 2011 the U.S. Preventive Services Task Force issued a draft of their recommendation on prostate specific antigen (PSA) screening. The panel concluded that "there is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits" and discouraged use of the test by issuing a grade D ruling. On careful scrutiny of this article by Chou et al, which formed the basis for the panel recommendation, it is difficult to understand how an impartial group of experts could reach such a dogmatic decision. Their conclusion is based on a pooled meta-analysis of 5 randomized trials, including 3 which they concluded were poor. The flaws in the PLCO (Prostate, Lung, Colorectal and Ovarian) Cancer Screening Trial, which had complete followup out to only 7 years, were overlooked,[1] and the post hoc reanalysis in healthy men was ignored.[2] In the ERSPC (European Randomized Study of Screening for Prostate Cancer) the number needed to treat of 48 to save 1 life at 9 years was used rather than the Göteborg trial, where the number needed to treat at 14 years fell to 12.[3]

The panel does not mention that screening and aggressive treatment are not recommended in men with a life expectancy of less than 10 years. The side effects of screening (discomfort, worry and infections), along with concern about over diagnosis and overtreatment with impotence, incontinence and rectal injury, were enumerated without mention of the burden of suffering and pain associated with progression of prostate cancer, metastases and death from the disease. Also the panel failed to reconcile their conclusions with the observed benefits over the past 20 years: 1) the presence of metastases to bone at diagnosis has fallen from 1 out of 5 (20%) in 1990 to 1 out of 25 (4%) today; 2) prostate cancer deaths have fallen 40% within the last 15 years; and 3) using the Catalona calculation, "if you apply the age adjusted death rate of 39 per 100,000 in 1990 to the year 2007, if there had been no PSA testing nor improvement in treatment there would have been 59,000 deaths in 2007. Instead there were 35,000, a reduction of 24,000." If screening does not save lives, why were there so many fewer deaths in 2007?

The U.S. Preventive Services Task Force is a panel of primary care physicians and epidemiologists whose composition is designed to eliminate bias, and thus neither urologists nor experts in prostate cancer were on the panel. However, are primary care physicians unbiased? After all, are they not the individuals who constantly complain about the burden of having an informed discussion with patients when they have so little time to address other matters? Are they also not the ones who are concerned that if they fail to obtain a PSA, or misinterpret it, they are liable for damages if a delayed diagnosis is made? Was the panel impartial? Is that why their decision was unfair? To understand what is fair, read the next comment.

Patrick C. Walsh, M.D.

EUROPEAN UROLOGY 61 (2012) 851–856

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Letters to the Editor NOT referring to a recent journal article

Comment on the US Preventive Services Task Force's Draft Recommendation on Screening for Prostate Cancer

follow-up durations are short relative to the natural history of PCa. For several reasons, even 10 yr of follow-up after randomisation is too short to draw conclusions about

Maciej Kwiatkowski[a,*]
Laurence Klotz[b]
Jonas Hugosson[c]
Franz Recker[a]

[a]*Department of Urology, Kantonsspital Aarau, Aarau, Switzerland*
[b]*Division of Urology, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, Canada*
[c]*Department of Urology, Institute of Clinical Sciences, Sahlgrenska Academy at University of Göteborg, Göteborg, Sweden*

*Corresponding author. Kantonsspital Aarau AG, Urologische Klinik, Tellstrasse, Aarau, CH-5001, Switzerland
Tel. +41 62 838 47 47; Fax: +41 62 838 4753.
E-mail address: maciej.kwiatkowski@ksa.ch (M. Kwiatkowski).

January 16, 2012
Published online ahead of print on January 24, 2012

doi:10.1016/j.eururo.2012.01.023

EUROPEAN UROLOGY 61 (2012) 851–856

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Letters to the Editor NOT referring to a recent journal article

revealed dramatic improvement in screening efficacy.

The USPSTF recommendation relied heavily on the PLCO trial results. PLCO was a very flawed trial compared to ERSPC. There are many reasons for this. The initially published assumptions for the power calculations [10] were not fulfilled: 37 000 men in each group would have been necessary to document a 27% mortality reduction in

EUROPEAN UROLOGY 61 (2012) 851–856

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Letters to the Editor NOT referring to a recent journal article

are not included in the analysis.

A key component of the USPSTF decision relates to the risk of overtreatment of indolent PCa. Active surveillance has been increasingly embraced as a solution to the problem of overtreatment. More than 3000 patients managed prospectively by active surveillance have been reported in the published literature [25], and this approach is becoming increasingly adopted throughout the Western world. This means that aggressive treatment can be restricted to those patients with intermediate- and high-risk PCa, and the number needed to treat is likely to fall even further.

EUROPEAN UROLOGY 61 (2012) 851–856

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Letters to the Editor NOT referring to a recent journal article

the United States. According to the most recent data available, 90% of men with low-risk PCa receive radical therapy [26]. The USPSTF position on overtreatment is valid. However, this recommendation reflects the US situation and should not be interpreted as applying to PSA screening in constituencies for which active surveillance for low-risk

EUROPEAN UROLOGY 61 (2012) 851–856

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Letters to the Editor NOT referring to a recent journal article

term data (ie, the Göteborg study) document mortality reduction of 50% and a number needed to treat as low as seven. Overtreatment can be reduced by active surveillance. The USPSTF has "thrown the baby out with the bathwater." PSA, used intelligently (as suggested by Schroder [27]), has the potential to reduce PCa mortality at an acceptable cost.

European Association of Urology

Guidelines

2012 edition

8.1.1.2 Active surveillance (AS)

Active surveillance is also known as 'active monitoring'. It is the new term for the conservative management of PCa. Introduced in the past decade, it includes an active decision not to treat the patient immediately. Instead, the patient is followed up under close surveillance and treated at pre-defined thresholds that classify progression (i.e. short PSA doubling time and deteriorating histopathological factors on repeat biopsy). The treatment options are intended to be curative.

eau
European Association of Urology

Annals of Internal Medicine | CONFERENCE

National Institutes of Health State-of-the-Science Conference: Role of Active Surveillance in the Management of Men With Localized Prostate Cancer

Patricia A. Ganz, MD; John M. Barry, MD; Wylie Burke, MD, PhD; Nananda F. Col, MD, MPP, MPH; Phaedra S. Corso, PhD, MPA; Everett Dodson; M. Elizabeth Hammond, MD; Barry A. Kogan, MD; Charles F. Lynch, MD, PhD, MS; Lee Newcomer, MD, MHA; Eric J. [illegible] Viswanath, PhD; and Hunter Wessells, MD*

The National Cancer Institute, the Centers for Disease Control and Prevention, and the NIH Office of Medical Applications of Research convened a State-of-the-Science Conference on 5 to 7 December 2011 to assess the available scientific evidence about active surveillance for men with localized prostate cancer. The conference, which addressed 5 key questions, was informed by a formal evidence

panel[illegible] basis [illegible] under[illegible] Quali[illegible] releva[illegible] session[illegible] during[illegible] session[illegible] remain[illegible] statem[illegible] policy [illegible]

The statement reflect[illegible] knowledge available at the time the [illegible] Thus, it provides a "snapshot in time" of the state of knowledge on the conference topic. When reading the statement, keep in mind that new knowledge is inevitably accumulating through medical research. The following statement is an abridged ver-

report [illegible] Research and Quality, [illegible] put from attendees.

symptomatic tumors were usually high-grade and advanced and were often fatal. Other tumors were found incidentally at the time of surgery for benign enlargement of the prostate. These were often low-grade and localized.

After the introduction of PSA screening in 1987, there was a spike in the rate of prostate cancer cases detected, followed by a persistent elevation over the pre–PSA testing era but no increase in prostate cancer deaths. Other 20-year follow-up studies indicate that only 5% of these men die of prostate cancer.

All of these trends led to the need to modify the approach to diagnosis and treatment of prostate cancer. Today, most cases of prostate cancer are diagnosed by exam-

is a disease-management strategy that delays curative treatment until it is warranted on the basis of defined indicators of disease progression. In contrast, watchful waiting is a strategy that forgoes curative treatment and initiates intervention only when symptoms occur.

The 3 components of a given observational management strategy are eligibility criteria, follow-up protocols to monitor disease progression, and indicators for treatment. The evidence report identified 16 studies that meet the definition of active surveillance and another 13 that followed patients who did not receive treatment and were followed for symptom progression (watchful waiting).

The most widely accepted criterion for active surveil-

modifying the anxiety-provoking term "cancer" for this condition should be strongly considered. Treatment of low-risk prostate cancer with radical prostatectomy or radiation therapy leads to side effects, such as impotence and incontinence, in a substantial number of patients. Active surveillance has emerged as a viable option that should be offered to patients with low-risk prostate cancer. More than 100 000 men per year who receive a diagnosis of prostate cancer in the United States are candidates for this approach. However, many unanswered questions about active surveillance strategies and prostate cancer require further research and clarification. These include improvements in the accuracy and consistency of pathologic diagnosis of prostate cancer, consensus on which men are the most appropriate candidates for active surveillance, the optimal protocol for active surveillance and the potential for individualizing the approach on the basis of clinical and patient factors, optimal ways to communicate the option of active surveillance to patients, methods to assist patient decision making, reasons for accepting or rejecting active surveillance as a treatment strategy, and short- and long-term outcomes of active surveillance.

Well-designed studies to address these questions and others raised in this statement represent an important health research priority. Qualitative, observational, and interventional research designs are needed. Because of the lance should be offered participation in multicenter research studies that incorporate community settings and partners.

From University of California, Los Angeles, Schools of Medicine and Public Health and Jonsson Comprehensive Cancer Center, Los Angeles, California; Oregon Health & Science University, Portland, Oregon; University of Washington and University of Washington School of Medicine, Seattle, Washington; University of New England, Biddeford, Maine; Shared Decision Making Resources, Georgetown, Maine; University of Georgia, Athens, Georgia; Lombardi Comprehensive Cancer Center and Georgetown University Hospital, Washington, DC; Intermountain Healthcare, University of Utah School of Medicine, and Amirsys, Salt Lake City, Utah; Albany Medical College and Urological Institute of Northeastern New York, Albany, New York; The University of Iowa, Iowa City, Iowa; United Healthcare, Minneapolis, Minnesota; The Johns Hopkins University School of Medicine and The Sidney Kimmel Comprehensive Cancer Center, Lutherville, Maryland; Wake Forest School of Medicine, Winston-Salem, North Carolina; and Harvard School of Public Health and Dana-Farber Cancer Institute, Boston, Massachusetts.

Potential Conflicts of Interest: Disclosures can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M12-0147.

Requests for Single Reprints: Reprints are available from the NIH Consensus Development Program Web site (www.consensus.nih.gov) and in print through the NIH Consensus Development Program Information Center (888-644-2667).

EUROPEAN UROLOGY 58 (2010) 831–835

available at www.sciencedirect.com
journal homepage: www.europeanurology.com

European Association of Urology

Platinum Priority – Prostate Cancer

Editorial by Peter Albertsen on pp. 836–837 of this issue

Careful Selection and Close Monitoring of Low-Risk Prostate Cancer Patients on Active Surveillance Minimizes the Need for Treatment

*Mark S. Soloway *, Cynthia T. Soloway, Ahmed Eldefrawy, Kristell Acosta, Bruce Kava, Murugesan Manoharan*

Department of Urology, Miller School of Medicine, University of Miami, Miami, Florida, USA

Article info

Article history:
Accepted August 12, 2010
Published online ahead of print on August 20, 2010

Keywords:
Prostate cancer
Active surveillance
Sexual function

minimum, moderate (≤16) erectile dysfunction.

Conclusions: If guidelines for AS are narrowly defined to include only patients with Gleason 6, tumor volume ≤20% in one or two biopsy cores, and PSA levels ≤10, few patients are likely to require treatment. Progression-free survival of those treated is likely to be equivalent to patients with similar clinical findings treated at diagnosis.

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JULY 19, 2012 VOL. 367 NO. 3

Radical Prostatectomy versus Observation for Localized Prostate Cancer

Timothy J. Wilt, M.D., M.P.H., Michael K. Brawer, M.D., Karen M. Jones, M.S., Michael J. Barry, M.D., William J. Aronson, M.D., Steven Fox, M.D., M.P.H., Jeffrey R. Gingrich, M.D., John T. Wei, M.D., Patricia Gilhooly, M.D., B. Mayer Grob, M.D., Imad Nsouli, M.D., Padmini Iyer, M.D., Ruben Cartagena, M.D., Glenn Snider, M.D., Claus Roehrborn, M.D., Ph.D., Roohollah Sharifi, M.D., William Blank, M.D., Parikshit Pandya, M.D., Gerald L. Andriole, M.D., Daniel Culkin, M.D., and Thomas Wheeler, M.D., for the Prostate Cancer Intervention versus Observation Trial (PIVOT) Study Group

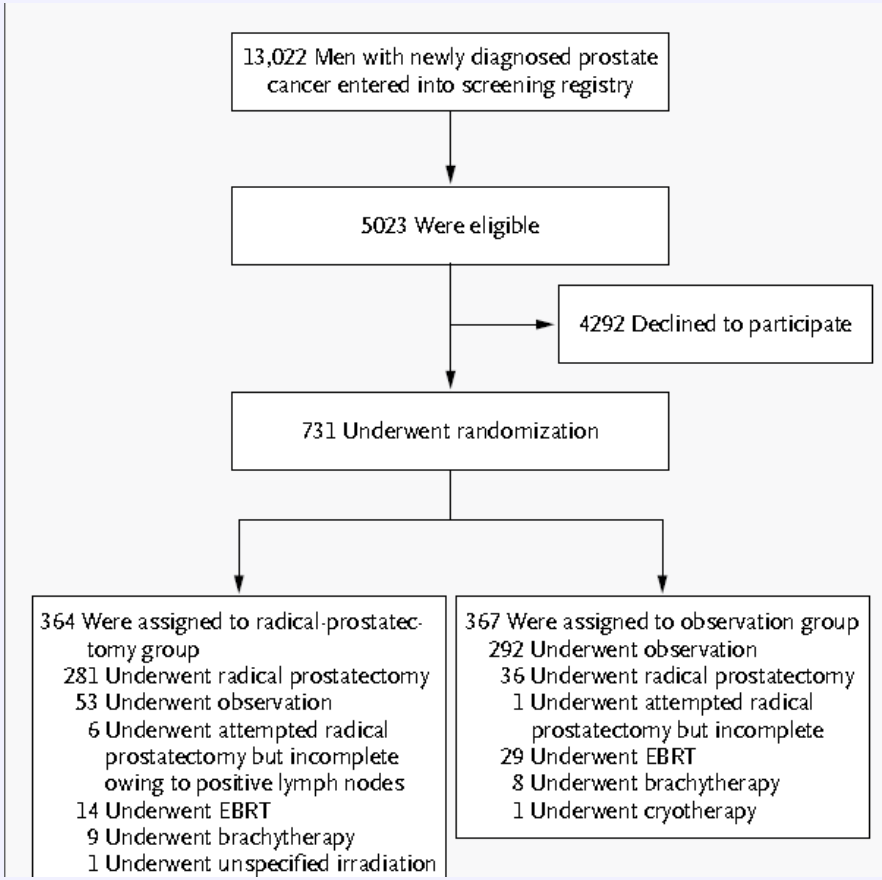
CONCLUSIONS

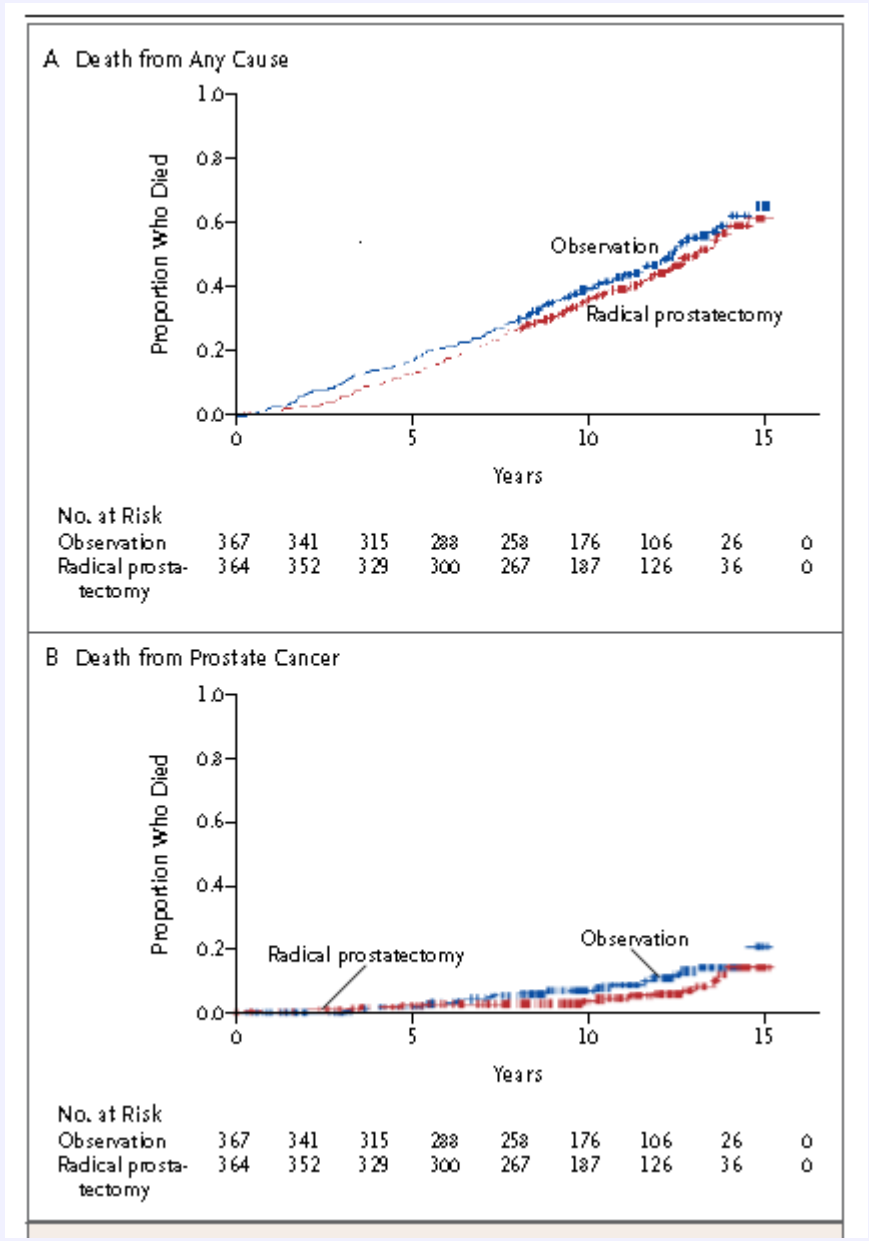
Among men with localized prostate cancer detected during the early era of PSA testing, radical prostatectomy did not significantly reduce all-cause or prostate-cancer mortality, as compared with observation, through at least 12 years of follow-up. Absolute differences were less than 3 percentage points. (Funded by the Department of Veterans Affairs Cooperative Studies Program and others; PIVOT ClinicalTrials .gov number, NCT00007644.)

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JULY 19, 2012 VOL. 367 NO. 3

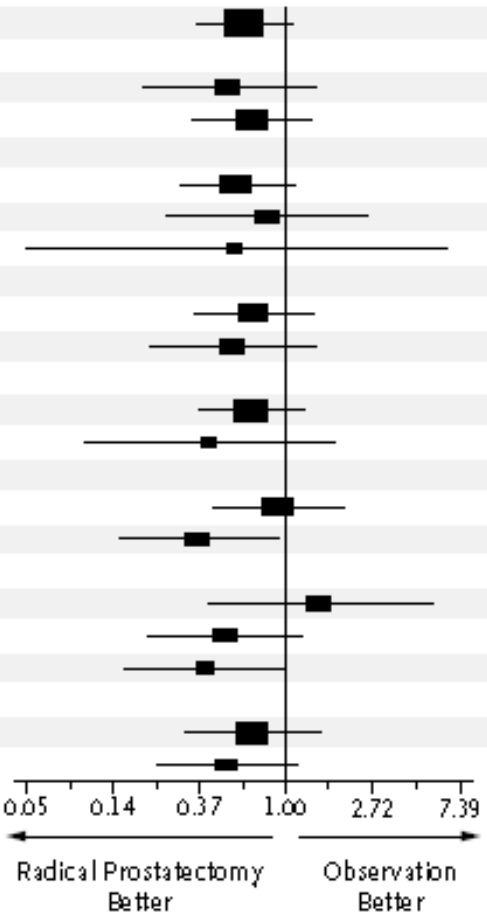
Radical Prostatectomy versus Observation for Localized Prostate Cancer





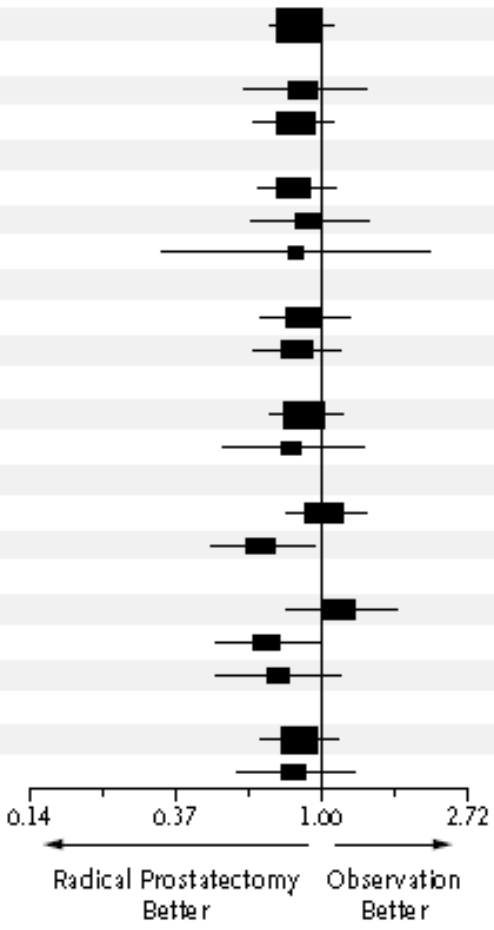
B Death from Prostate Cancer

Subgroup	Observation	Radical Prostatectomy	Hazard Ratio (95% CI)	P Value for Interaction
	no. of events/total no.			
Overall	31/367	21/364	0.63 (0.36–1.09)	
Age				0.63
<65 yr	12/131	6/122	0.52 (0.20–1.39)	
≥65 yr	19/236	15/242	0.68 (0.34–1.33)	
Race				0.76
White	22/220	15/232	0.57 (0.30–1.10)	
Black	7/121	5/111	0.80 (0.25–2.54)	
Other	2/26	1/21	0.56 (0.05–6.17)	
Charlson score				0.63
0	19/220	14/224	0.69 (0.34–1.37)	
≥1	12/147	7/140	0.54 (0.21–1.38)	
Performance score				0.57
0	25/310	18/312	0.67 (0.37–1.23)	
1–4	6/57	3/52	0.41 (0.10–1.71)	
PSA				0.11
≤10	15/241	14/238	0.92 (0.44–1.91)	
>10	16/125	7/126	0.36 (0.15–0.89)	
Risk				0.11
Low	4/148	6/148	1.48 (0.42–5.24)	
Intermediate	13/120	6/129	0.50 (0.21–1.21)	
High	14/80	7/77	0.40 (0.16–1.00)	
Gleason score				0.57
<7	15/261	11/254	0.68 (0.31–1.49)	
≥7	15/86	10/98	0.51 (0.23–1.14)	



A Death from Any Cause

Subgroup	Observation	Radical Prostatectomy	Hazard Ratio (95% CI)	P Value for Interaction
	no. of events/total no.			
Overall	183/367	171/364	0.88 (0.71–1.08)	
Age				0.85
<65 yr	50/131	43/122	0.89 (0.59–1.34)	
≥65 yr	133/236	128/242	0.84 (0.63–1.08)	
Race				0.81
White	119/220	117/232	0.84 (0.65–1.08)	
Black	53/121	46/111	0.93 (0.62–1.38)	
Other	11/26	8/21	0.85 (0.34–2.11)	
Charlson score				0.79
0	86/220	82/224	0.90 (0.66–1.21)	
≥1	97/147	89/140	0.84 (0.63–1.13)	
Performance score				0.66
0	146/310	139/312	0.89 (0.71–1.13)	
1–4	37/57	32/52	0.82 (0.51–1.31)	
PSA				0.04
≤10	101/241	110/238	1.03 (0.79–1.35)	
>10	77/125	61/126	0.67 (0.48–0.94)	
Risk				0.07
Low	54/148	62/148	1.15 (0.80–1.66)	
Intermediate	70/120	59/129	0.69 (0.49–0.98)	
High	49/80	42/77	0.74 (0.49–1.13)	
Gleason score				0.87
<7	125/261	113/254	0.86 (0.67–1.12)	
≥7	47/86	50/98	0.84 (0.56–1.25)	



Original Article

Active Surveillance for Prostate Cancer Compared With Immediate Treatment

An Economic Analysis

Kirk A. Keegan, MD[1]; Marc A. Dall'Era, MD[2,3]; Blythe Durbin-Johnson, PhD[4]; and Christopher P. Evans, MD[2,3]

BACKGROUND: The costs associated with a contemporary active surveillance strategy compared with immediate treatment for prostate cancer are not well characterized. The purpose of this study is to elucidate the health care costs of an active surveillance paradigm for prostate cancer. **METHODS:** A theoretical cohort of 120,000 men selecting active surveillance for prostate cancer was created. The number of men remaining on active surveillance and those exiting to each of 5 treatments over 5 years were simulated in a Markov model. Estimated total costs after 5 years of active surveillance with subsequent delayed treatment were compared with immediate treatment. Sensitivity analyses were performed to test the effect of various surveillance strategies and attrition rates. Additional analyses to include 10 years of follow-up were performed. **RESULTS:** The average simulated cost of treatment for 120,000 men initiating active surveillance with 5 years of follow-up and subsequent delayed treatment resulted in per patient cost savings of $16,042 (95% confidence interval [CI], $16,039-$16,046) relative to initial curative treatment. This represents a $1.9 billion dollar savings to the cohort. The strict costs of active surveillance exceeded those of brachytherapy in the ninth year of follow-up. A yearly biopsy within the active surveillance cohort increased costs by 22%, compared with every other year biopsy. At 10 years of follow-up, active surveillance still resulted in a cost benefit; however, the savings were reduced by 38% to $9944 (95% CI, $9941-$9948) per patient relative to initial treatment. **CONCLUSIONS:** These data demonstrate that active surveillance represents a considerable cost savings over immediate treatment for prostate cancer in a theoretical cohort after 5 and 10 years of follow-up.
***Cancer* 2012;118:3512-8.**

Original Article

Active Surveillance for Prostate Cancer Compared With Immediate Treatment

An Economic Analysis

Kirk A. Keegan, MD[1]; Marc A. Dall'Era, MD[2,3]; Blythe Durbin-Johnson, PhD[4]; and Christopher P. Evans, MD[2,3]

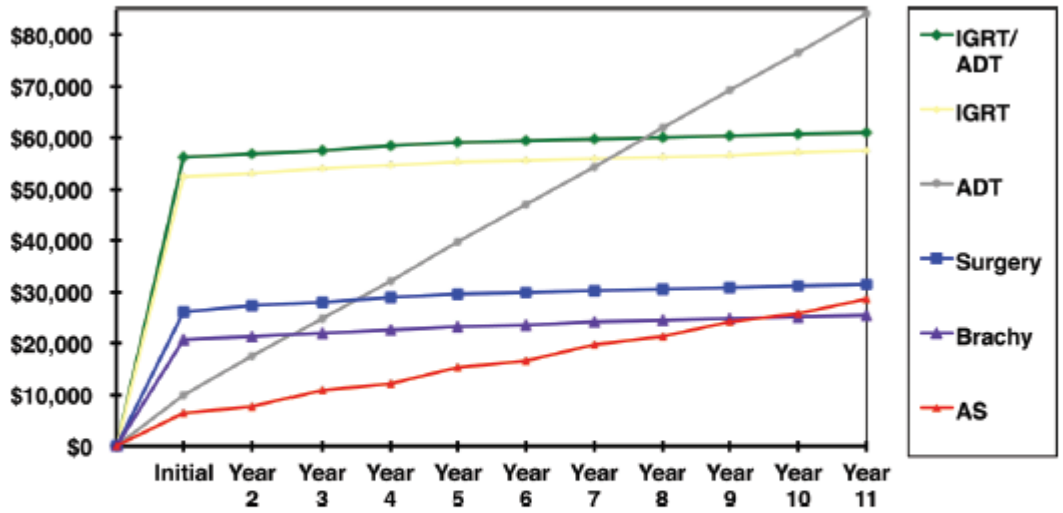


Figure 1. Costs of primary treatment and active surveillance (AS) are shown, with follow-up costs at every other year biopsy. ADT, androgen deprivation therapy; Brachy, brachytherapy; IGRT, image-guided radiotherapy.

By Tomas Philipson, Michael Eber, Darius N. Lakdawalla, Mitra Corral, Rena Conti, and Dana P. Goldman

An Analysis Of Whether Higher Health Care Spending In The United States Versus Europe Is 'Worth It' In The Case Of Cancer

DOI: 10.1377/hlthaff.2011.1298
HEALTH AFFAIRS 31,
NO. 4 (2012): 667–675

ABSTRACT The United States spends more on health care than other developed countries, but some argue that US patients do not derive sufficient benefit from this extra spending. We studied whether higher US cancer care costs, compared with those of ten European countries, were "worth it" by looking at the survival differences for cancer patients in these countries compared to the relative costs of cancer care. We found that US cancer patients experienced greater survival gains than their European counterparts; even after considering higher US costs, this investment generated $598 billion of additional value for US patients who were diagnosed with cancer between 1983 and 1999. The value of that additional survival gain was highest for prostate cancer patients ($627 billion) and breast cancer patients ($173 billion). These findings do not appear to have been driven solely by earlier diagnosis. Our study suggests that the higher-cost US system of cancer care delivery may be worth it, although further research is required to determine what specific tools or treatments are driving improved cancer survival in the United States.

Tomas Philipson (t-philipson@uchicago.edu) is the Daniel Levin Chair in Public Policy at the Irving B. Harris Graduate School of Public Policy Studies, University of Chicago, in Illinois.

Michael Eber is a senior analyst at Precision Health Economics, in Los Angeles, California.

Darius N. Lakdawalla is director of research at the Leonard D. Schaeffer Center for Health Policy and Economics at the University of Southern California (USC) and an associate professor at the university's Price School of Public Policy, in Los Angeles.

Mitra Corral is an associate director of health services in the US Medical Group at Bristol-Myers Squibb, in Princeton, New Jersey.

BJUI
BJU INTERNATIONAL

Sexual function with localized prostate cancer: active surveillance vs radical therapy

Roderick C.N. van den Bergh*†, Ida J. Korfage†, Monique J. Roobol*, Chris H. Bangma*, Harry J. de Koning†, Ewout W. Steyerberg† and Marie-Louise Essink-Bot†

*Departments of *Urology and †Public Health, Erasmus University Medical Centre, Rotterdam, and ‡Department of Social Medicine, Academic Medical Centre, Amsterdam, The Netherlands*

Accepted for publication 7 October 2011

Study Type – Outcomes (cohort sample)
Level of Evidence 2b

What's known on the subject? and What does the study add?
The study compares the sexual function of men
chose active surveillance

OBJECTIVE

To our knowledge, this is the first study to primarily focus on the sexual function of men on AS and to compare it with men who received radical therapy. Thong *et al.* [24] studied the health-related QoL and symptom

...rait Anxiety
...neral anxiety measure.
...exual function was compared between groups, and determinants were analysed in

...mbined Tx group
...active as a result of erectile
...nction.
• A total of 44–51% of men in the AS group, 96% of men in the RP group, 73–76% of men in the RT group and 84–85% of men in the combined Tx group who were sexually active had problems getting or keeping an erection.

...o erectile
...ose on AS. If sexually
...his was less often associated with problems getting or keeping an erection for those on AS.
• The study was non-randomized; the latest advances in RP and RT might impact results.

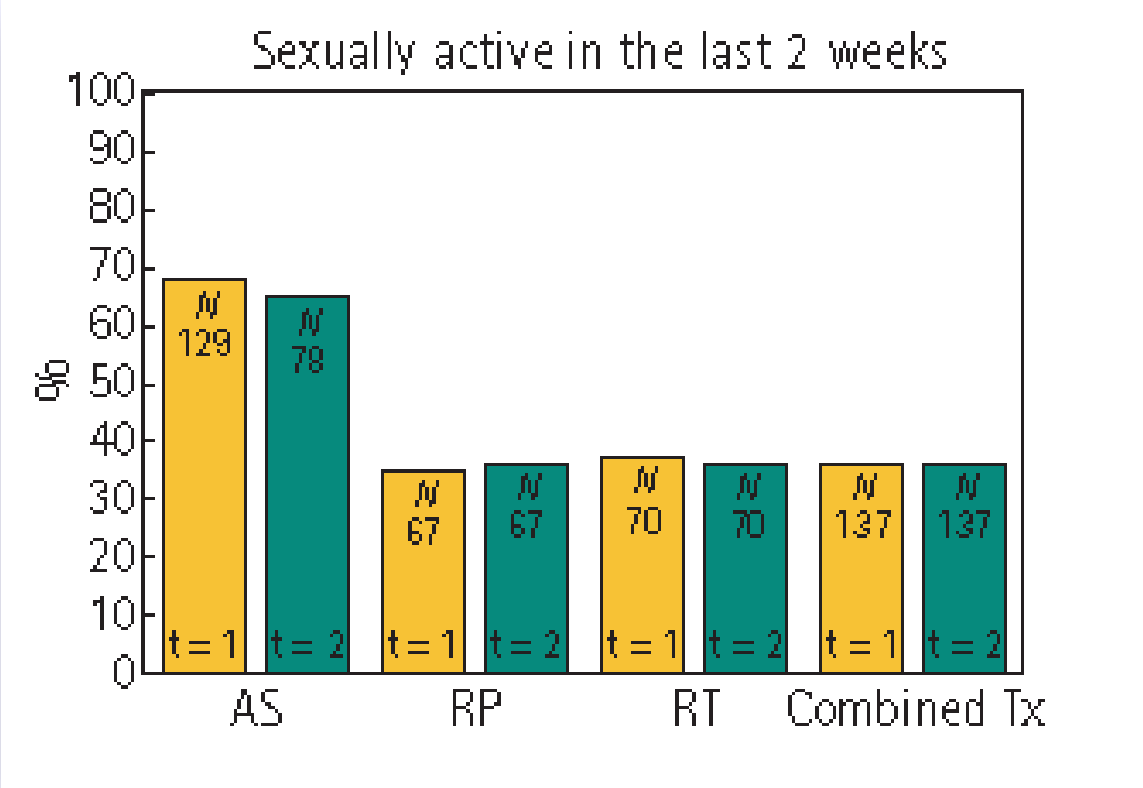
KEYWORDS

active surveillance, prostate cancer, quality of life, radical prostatectomy, radiation therapy, sexual function

BJUI

BJU INTERNATIONAL

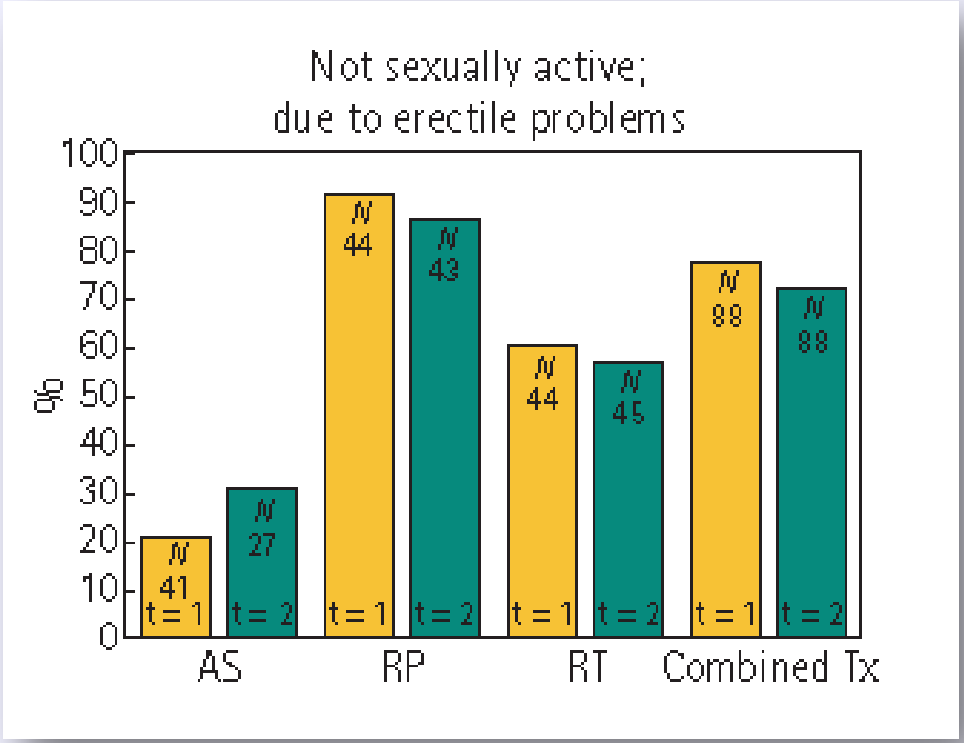
Sexual function with localized prostate cancer: active surveillance vs radical therapy



BJUI

BJU INTERNATIONAL

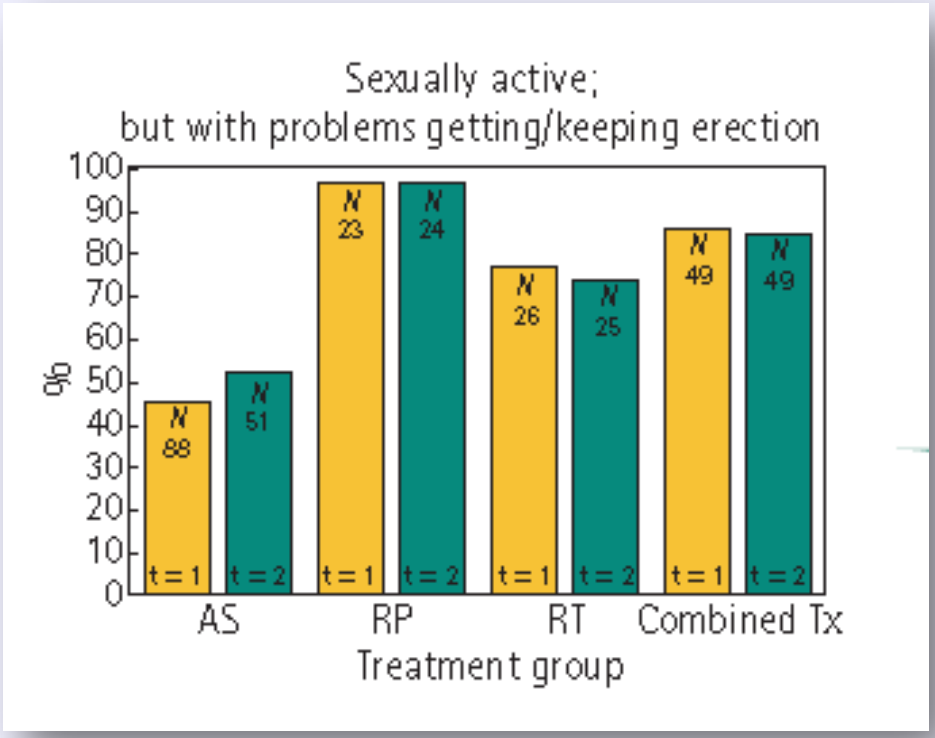
Sexual function with localized prostate cancer: active surveillance vs radical therapy



BJUI

BJU INTERNATIONAL

Sexual function with localized prostate cancer: active surveillance vs radical therapy



BJUI

Sexual function with localized prostate cancer: active surveillance vs radical therapy

CONCLUSIONS

- Men with localized PCa on AS were more often sexually active than similar men who received radical therapy, especially RP. If not sexually active, this was less often attributable to erectile dysfunction for those on AS. If sexually active, this was less often associated with problems getting or keeping an erection for those on AS.
- The study was non-randomized; the latest advances in RP and RT might impact results.

DOI:10.1093/jncimonographs/lgs034

You're Kidding...I Have Cancer? A Patient's Perspective on Coping With Prostate Cancer and Why Active Surveillance Was Not Chosen

David A. Lipton

Correspondence to: David A. Lipton, MA, JD, Catholic University of America School of Law, 3600 John McCormack Rd., NE, Washington, DC 20064 (e-mail: lipton@law.edu).

J Natl Cancer Inst Monogr 2012;45:140–142

I teach. In fact, I t… a discussion

should not.

Statistics do not necessarily control treatment decisions for prostate cancer. Gut perceptions also play an important role. If active surveillance is to become a more prevalently adopted treatment, it well may be that the medical profession will have to discover how to influence that gut perception.

…se of addi-
…hat there is
…ween active
…he need to
…ive surveil-
…uld not be
…have it, the
…l. The dis-
…a companion
…a compelling choice

…ment.
…y of my robotic
… physicians with whom I sought to

…at I Learned From Engaging In a Treatment Selection Process

What is it that might be gleaned from an analysis of a decision-making process for responding to a diagnosis of prostate cancer when that process was conducted arguably by a relatively

VOLUME 30 · NUMBER 25 · SEPTEMBER 1 2012

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Multidisciplinary Care and Pursuit of Active Surveillance in Low-Risk Prostate Cancer

Ayal A. Aizer, Jonathan J. Paly, Anthony L. Zietman, Paul L. Nguyen, Clair J. Beard, Sandhya K. Rao, Irving D. Kaplan, Andrzej Niemierko, Michelle S. Hirsch, Chin-Lee Wu, Aria F. Olumi, M. Dror Michaelson, Anthony V. D'Amico, and Jason A. Efstathiou

Ayal A. Aizer, Harvard Radiation Oncology Program; Jonathan J. Paly, Anthony L. Zietman, Sandhya K. Rao, Andrzej Niemierko, Chin-Lee Wu, Aria F. Olumi, M. Dror Michaelson, Jason A. Efstathiou, Massachusetts General Hospital; Paul L. Nguyen, Michelle S. Hirsch, Anthony V. D'Amico, Brigham and Women's Hospital; Paul L. Nguyen, Anthony V. D'Amico, Dana-Farber Cancer Institute; Irving D. Kaplan, Beth Israel Deaconess Medical Center, Boston, MA.

Submitted March 5, 2012; accepted May 30, 2012; published online ahead of print at www.jco.org on July 30, 2012.

Supported by the Department of Radiation Oncology at Massachusetts General Hospital.

Authors' disclosures of potential conflicts of interest and author contributions are found at the end of this article.

Corresponding author: Ayal Aizer, MD, MHS, Harvard Radiation Oncology Program, Massachusetts General Hospital, Department of Radiation Oncology, 100 Blossom St, Cox 3, Boston, MA 02114; e-mail: aaizer@partners.org.

ABSTRACT

Purpose
Multidisciplinary clinics offer a unique approach to the management of patients with cancer. Yet, limited data exist to show that such clinics affect management. The purpose of this study was to determine whether consultation at a multidisciplinary clinic is associated with selection of active surveillance in patients with low-risk prostate cancer.

Patients and Methods
The study comprised 701 men with low-risk prostate cancer managed at three tertiary care centers in Boston, MA in 2009. Patients either obtained consultation at a multidisciplinary prostate cancer clinic, at which they were seen by a combination of urologic, radiation, and medical oncologists in a concurrent setting, or they were seen by individual practitioners in sequential settings. The primary outcome was selection of active surveillance.

Results
Crude rates of selection of active surveillance in patients seen at a multidisciplinary clinic were double that of patients seen by individual practitioners (43% *v* 22%), whereas the proportion of men treated with prostatectomy or radiation decreased by approximately 30% ($P < .001$). On multivariate logistic regression, older age (odds ratio [OR], 1.09; 95% CI, 1.05 to 1.12; $P < .001$), unmarried status (OR, 1.66; 95% CI, 1.01 to 2.72; $P = .04$), increased Charlson comorbidity index (OR, 1.37; 95% CI, 1.06 to 1.77; $P = .02$), fewer positive cores (OR, 0.92; 95% CI, 0.90 to 0.94; $P < .001$), and consultation at a multidisciplinary clinic (OR, 2.15; 95% CI, 1.13 to 4.10; $P = .02$) were significantly associated with pursuit of active surveillance.

Conclusion
Multidisciplinary care is associated with increased selection of active surveillance in men with low-risk prostate cancer. This finding may have an important clinical, social, and economic impact.

J Clin Oncol 30:3071-3076. © 2012 by American Society of Clinical Oncology

VOLUME 30 · NUMBER 25 · SEPTEMBER 1 2012

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Multidisciplinary Care and Pursuit of Active Surveillance in Low-Risk Prostate Cancer

Approximately 70% of patients with prostate cancer have low-risk disease (ie, Gleason score, ≤ 6; pretreatment prostate-specific antigen [PSA], ≤ 10 ng/mL; clinical stage, T1c or T2a), and such patients have the most favorable prognosis.[4] Current trends in practice patterns suggest that approximately 91% to 95% of low-risk patients in the United States receive definitive therapy; only 5% to 9% undergo active surveillance.[5,6] No prospective trials of patients with low-risk prostate cancer support the notion that

VOLUME 30 · NUMBER 25 · SEPTEMBER 1 2012

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Multidisciplinary Care and Pursuit of Active Surveillance in Low-Risk Prostate Cancer

Results

Crude rates of selection of active surveillance in patients seen at a multidisciplinary clinic were double that of patients seen by individual practitioners (43% *v* 22%), whereas the proportion of men treated with prostatectomy or radiation decreased by approximately 30% ($P < .001$). On multivariate logistic regression, older age (odds ratio [OR], 1.09; 95% CI, 1.05 to 1.12; $P < .001$), unmarried status (OR, 1.66; 95% CI, 1.01 to 2.72; $P = .04$), increased Charlson comorbidity index (OR, 1.37; 95% CI, 1.06 to 1.77; $P = .02$), fewer positive cores (OR, 0.92; 95% CI, 0.90 to 0.94; $P < .001$), and consultation at a multidisciplinary clinic (OR, 2.15; 95% CI, 1.13 to 4.10; $P = .02$) were significantly associated with pursuit of active surveillance.

Conclusion

Multidisciplinary care is associated with increased selection of active surveillance in men with low-risk prostate cancer. This finding may have an important clinical, social, and economic impact.

VOLUME 30 · NUMBER 25 · SEPTEMBER 1 2012

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Multidisciplinary consultation with urologic, radiation, and medical oncologists increases the likelihood that patients receive a balanced perspective on the risks and benefits of all available options.[17] Such a model of care may afford patients the opportunity to make informed decisions that are more consistent with their goals of care. One may speculate that physician claims of efficacy and morbidity are at lower risk of exaggeration under these immediately audited conditions. If multiple physicians agree on active surveillance and support one another in the recommendation then the patient's understandable concerns about the lack of immediate treatment for their cancer may be reassuringly allayed.

Presenting Treatment Options to Men with Clinically Localized Prostate Cancer: The Acceptability of Active Surveillance/ Monitoring

Jenny L. Donovan

Correspondence to: Jenny L. Donovan, PhD, School of Social and Community Medicine, University of Bristol, Canynge Hall, 39 Whatley Road, Bristol BS8 2PS, UK (e-mail: jenny.donovan@bristol.ac.uk).

Presenting treatment options to men with localized prostate cancer is difficult because of the lack of definitive evidence and the range of treatment options available. Active surveillance and monitoring programs are now a recognized treatment option for men with low-risk localized prostate cancer, but many patients are not fully aware of the details of such programs, and most still opt for immediate radical (surgery or radiotherapy) treatment. The provision of high-quality information with decision aids has been shown to increase the acceptability of active surveillance/monitoring programs. This chapter outlines techniques for providing high-quality information about active surveillance/monitoring, based on the findings of a randomized controlled trial of treatments for localized prostate cancer. The ProtecT (Prostate testing for cancer and Treatment) trial has randomized over 1500 men between active monitoring, radical surgery, and radical radiotherapy by ensuring that information was tailored to men's existing knowledge and views. Care was taken with the content, order, and enthusiasm of the presentation of treatments by recruitment staff, and clinicians and other health professionals were supported to feel comfortable with being open about the uncertainties in the evidence and helped to rephrase terminology likely to be misinterpreted by patients. These techniques of information provision should be added to the use of decision aids to enable patients diagnosed with clinically localized prostate cancer in routine practice to reach well-informed and reasoned decisions about their treatment, including full consideration of active surveillance and monitoring programs.

J Natl Cancer Inst Monogr 2012;45:191–196

Focal therapy has been investigated as a potential alternative to active surveillance in the management of low-risk prostate cancer.

Focal therapy aims targets the cancer rather than the prostate in an attempt to preserve tissue and function.

Focal Therapy for Localized Prostate Cancer: A Phase I/II Trial

H. U. Ahmed,*,† A. Freeman, A. Kirkham, M. Sahu, R. Scott, C. Allen,‡
J. Van der Meulen and M. Emberton§

From the Division of Surgery and Interventional Science, University College London (HUA, RS, ME), Department of Urology (HUA, ME), Department of Histopathology (AF) and Department of Imaging (AK, CA), University College London Hospitals NHS Foundation Trust, Clinical Effectiveness Unit, Royal College of Surgeons of England (DV, ME), and Health Services Research Unit, London School of Hygiene and Tropical Medicine (JM), London, United Kingdom

MRI = magnetic resonance imaging
PSA = prostate specific antigen
SPC = suprapubic catheter
TPM = template prostate mapping
TRUS = transrectal ultrasound

Submitted for publication August 30, 2010.
Study received ethics committee approval.
Endorsed by the Cancer Research United Kingdom Clinical Trials Awards and Advisory Committee/Feasibility Studies Committee, and approved by the National Cancer Research Network.

For another article on a related topic see page 1484.

Purpose: Men with localized prostate cancer currently face a number of treatment options that treat the entire prostate. These can cause significant sexual and urinary side effects. Focal therapy offers a novel strategy that targets the cancer rather than the prostate in an attempt to preserve tissue and function.

Materials and Methods: A prospective, ethics committee approved trial was conducted to determine the side effects of focal therapy using high intensity focused ultrasound. Multiparametric magnetic resonance imaging (T2-weighted, dynamic contrast enhanced, diffusion-weighted) and template transperineal prostate mapping biopsies were used to identify unilateral disease. Genitourinary side effects and quality of life outcomes were assessed using validated questionnaires. Posttreatment biopsies were performed at 6 months and followup was completed to 12 months.

Results: A total of 20 men underwent high intensity focused ultrasound hemiablation. Mean age was 60.4 years (SD 5.4, range 50 to 70) with mean prostate specific antigen 7.3 ng/ml (SD 2.8, range 3.4 to 11.8). Of the men 25% had low risk and 75% had intermediate risk cancer. Return of erections sufficient for penetrative sex occurred in 95% of men (19 of 20). In addition, 90% of men (18 of 20) were pad-free, leak-free continent while 95% were pad-free. Mean prostate specific antigen decreased 80% to 1.5 ng/ml (SD 1.3) at 12 months. Of the men 89% (17 of 19, 1 refused biopsy) had no histological evidence of any cancer, and none had histological evidence of high volume or Gleason 7 or greater cancer in the treated lobe. In addition, 89% of men achieved the trifecta status of pad-free, leak-free continence, erections sufficient for intercourse and cancer control at 12 months.

Conclusions: Our results appear sufficiently promising to support the further evaluation of focal therapy as a strategy to decrease some of the harms and costs associated with standard whole gland treatments.

Prostate cancer is associated with treatment options that remain controversial.[1] Whole gland therapy using surgery or radiotherapy is associated with well documented morbidity including urinary incontinence (5% to 20%), erectile dysfunction (30% to 60%) and bowel toxicity (5% to 10%). Active surveillance provides a rational choice for some individuals with

0022-5347/11/1851-1246/0
THE JOURNAL OF UROLOGY®

Vol. 185, 1246-1255, April 2011
Printed in U.S.A.
DOI:10.1016/j.juro.2010.11.079

Is cure possible?
Is cure necessary?
Is cure possible only when it is not necessary?

The most favorable results in the treatment of the localized prostate cancer are in patients with low-grade and low-volume disease, many of whom may not have suffered from clinical disease progression in their lifetime.

However, cure is necessary in many patients because carcinoma of the prostate remains the second leading cause of cancer death in men.

We need to identify patients most likely to benefit from therapy and to improve the treatment options for those with aggressive or advanced tumors.

Unidade de Próstata

A vigilância ativa é, em muitos casos, a melhor opção para assegurar a qualidade de vida dos doentes diagnosticados com cancro da próstata.

A Unidade de Próstata do Centro Clínico Champalimaud está organizada numa equipa multidisciplinar que avalia personalizadamente cada doente e define o plano terapêutico mais adequado entre as múltiplas opções de tratamento apropriadas a cada situação clínica.
Esta equipa de especialistas em cancro da próstata inclui urologistas, oncologistas médicos, radioterapeutas, radiologistas, especialistas em medicina nuclear, patologistas, geneticistas, nutricionistas, enfermeiros, psico-oncologistas e especialistas em cuidados paliativos que abordam a complexidade da doença nos seus diversos estádios de forma a oferecer conselho, diagnóstico, tratamento e reabilitação adequados.
O cancro da próstata é o tumor maligno mais frequente e a terceira causa de morte por cancro no homem. Em Portugal estimam-se 5000 novos doentes e 1880 mortes por ano. Este tumor tem frequentemente um crescimento indolente, não comprometendo a vida ou a qualidade de vida dos doentes.

A equipa da Unidade de Próstata:

Dr. Jorge Fonseca (Urologia)
Dr. Nuno Gil (Oncologia médica)
Dr. Jorge Rebola (Urologia)
Prof. Carlo Greco (Radioterapia)
Dr. Nuno Pimentel (Radioterapia)
Dr. Luís Rosa (Radiologia)
Dra. Inês Santiago (Radiologia)
Prof. Durval Costa (Medicina nuclear)
Dra. Carla Oliveira (Medicina nuclear)
Prof. António Lopez Beltran (Patologia)
Dra. Anna Colomer (Patologia)
Dra. Luzia Travado (Psico-oncologia)
Dr. Sérgio Castedo (Genética)
Dr. Nuno Vau (Oncologia médica)