Prostate Cancer Updates: Screening, Treatment and Survivorship

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THE University of Vermont CANCER CENTER

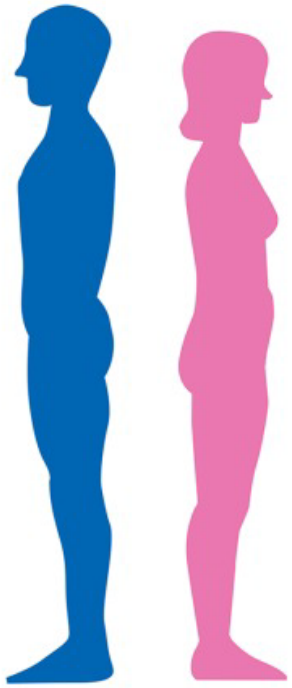
Outline

- **PSA Screening**
- **Treatment of Prostate Cancer**
- **Survivorship**

Epidemiology

Estimated New Cases

Males			Females		
Prostate	164,690	19%	Breast	266,120	30%
Lung & bronchus	121,680	14%	Lung & bronchus	112,350	13%
Colon & rectum	75,610	9%	Colon & rectum	64,640	7%
Urinary bladder	62,380	7%	Uterine corpus	63,230	7%
Melanoma of the skin	55,150	6%	Thyroid	40,900	5%
Kidney & renal pelvis	42,680	5%	Melanoma of the skin	36,120	4%
Non-Hodgkin lymphoma	41,730	5%	Non-Hodgkin lymphoma	32,950	4%
Oral cavity & pharynx	37,160	4%	Pancreas	26,240	3%
Leukemia	35,030	4%	Leukemia	25,270	3%
Liver & intrahepatic bile duct	30,610	4%	Kidney & renal pelvis	22,660	3%
All Sites	**856,370**	**100%**	**All Sites**	**878,980**	**100%**



PSA Screening

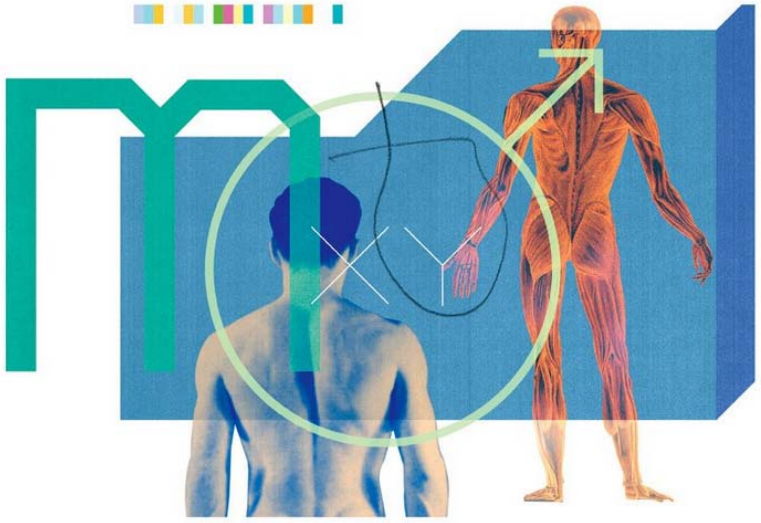
Why is PSA screening controversial? What's new?

PSA Screening

Pros	Cons
PSA screening may help you detect prostate cancer early.	Some prostate cancers are slow growing and never spread beyond the prostate gland.
Cancer is easier to treat and is more likely to be cured if it's diagnosed in the early stages of the disease.	Not all prostate cancers need treatment. Treatment for prostate cancer may have risks and side effects, including urinary incontinence, erectile dysfunction or bowel dysfunction.
PSA testing can be done with a simple, widely available blood test.	PSA tests aren't foolproof. It's possible for your PSA levels to be elevated when cancer isn't present, and to not be elevated when cancer is present.
For some men, knowing is better than not knowing. Having the test can provide you with a certain amount of reassurance — either that you probably don't have prostate cancer or that you do have it and can now have it treated.	A diagnosis of prostate cancer can provoke anxiety and confusion. Concern that the cancer may not be life-threatening can make decision-making complicated.
The number of deaths from prostate cancer has gone down since PSA testing became available.	PSA testing has lowered deaths, but the number may not be substantial enough to justify the cost and possibility of harm to the person undergoing the testing.

PSA Screening

New Study Offers Support for Prostate Testing



Stuart Bradford

By Roni Caryn Rabin

Sept. 4, 2017

89

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New study once again casts doubt on PSA screening

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PSA Screening

2009: 2 large screening studies were published

- European study: PSA test **reduced** prostate cancer deaths
- American study: PSA test **did not reduce** prostate cancer deaths

2012: US Preventative Task Force recommended **against** routine PSA screening for all men

2017: Publication of combined analysis of European + American study (238,000 men) with more results

- PSA test **reduced** prostate cancer deaths

2018: Publication of British study (400,000 men)

- Getting a **single** PSA test **did not reduce** prostate cancer deaths

PSA Screening

2018: US Preventative Task Force **recommends PSA screening**

- "For men aged 55 to 69 years, the decision to undergo periodic PSA-based screening for prostate cancer should be **an individual one** and should include **discussion of the potential benefits and harms** of screening with their clinician."

"Shared Decision Making"

PSA Screening

What is shared decision making?

Shared decision making is a key component of patient-centered health care. It is a process in which clinicians and patients work together to make decisions and select tests, treatments and care plans based on clinical evidence that balances risks and expected outcomes with patient preferences and values.

PSA Screening

When patients engage in shared decision making they…

- **learn about their health** and understand their health conditions
- **recognize that a decision needs to be made** and are informed about the options
- **understand the pros and cons** of different options
- **have the information and tools** needed to evaluate their options
- **are better prepared to talk** with their health care provider
- **collaborate with their health care team** to make a decision right for them
- **are more likely to follow through** on their decision

What Providers Say About the Value of Shared Decision Making

- *Patients are more knowledgeable and better prepared for dialogue*
- *Helps the patient understand what we are trying to do*
- *Builds a lasting and trusting relationship*
- *Both physicians and patients are very satisfied*

Source: Adapted from Shared Decision Making video produced by Lakeview Hospital and Stillwater Medical Group. © 2013. Used with permission

PSA Screening

What is our approach today? At UVM?

- Modern Approach to Prostate Cancer Screening (MAPS)
  - Grant supported collaboration led by Dr. Alison Landrey (primary care) and James Wallace (radiation oncology)
  - Shared decision making
  - Individual, risk adjusted, individualized approach that incorporates race, family history, and a baseline PSA to maximize the benefits of screening and minimize harms

Outline

- **PSA Screening**
- **Treatment of Prostate Cancer**
- **Survivorship**

Treatment of Prostate Cancer

How do we approach treating prostate cancer?

- It depends
- “Risk Group” + Patient Preferences

Treatment of Prostate Cancer

Gleason Score + PSA + Exam/Imaging Findings

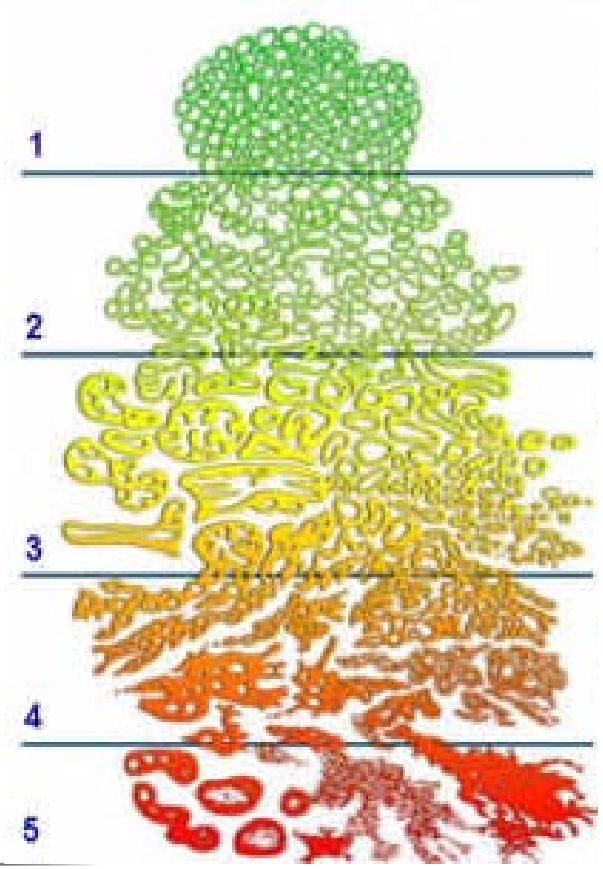

TABLE 53-3 National Cancer Center Network Prostate Cancer Risk Grouping

Relapse Risk	T Category	Grade	PSA (ng/mL)	Comments
Very low risk	T1a	GS ≤ 6	<10	Fewer than 3 biopsy cores positive, ≤ 50% cancer in each involved core, PSA density < 0.15 ng/mL/g
Low risk	T1-2a	GS = 2-6	<10	All three factors
Intermediate risk	T2b-2c	GS = 7	10-20	Any one of the three factors
High risk	T3a	GS = 8-10	> 20	Any one of the three factors
Very high risk	T3b-T4	Any	Any	
Metastatic	Any T	Any grade	Any PSA	N1M0 or NanyM1

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Treatment of Prostate Cancer

Low risk

- Active Surveillance or Treatment

Intermediate – High risk

- Surgery (radical prostatectomy)

- Radiation Therapy
  - Brachytherapy (seeds)
  - External Beam +/- Hormone Therapy

Metastatic

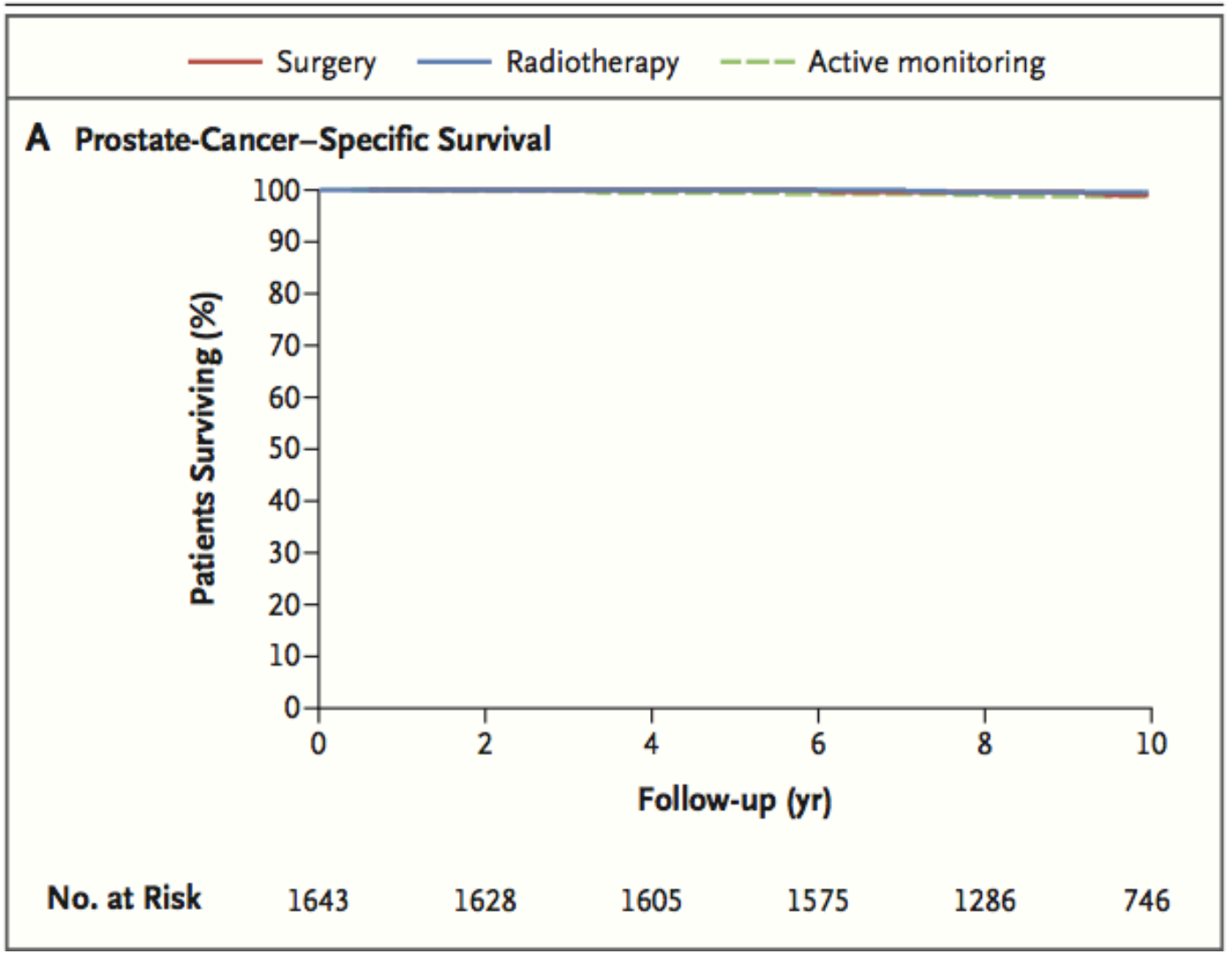
- Hormone Therapy, Chemotherapy, Radiation Therapy

Treatment of Prostate Cancer

For localized prostate cancer, treatment decisions based on cancer risk and shared decision making

- Incorporate patient preferences
  - Logistics, side effects
- Consultations with specialists to discuss the pros/cons of different treatments

Treatment of Prostate Cancer



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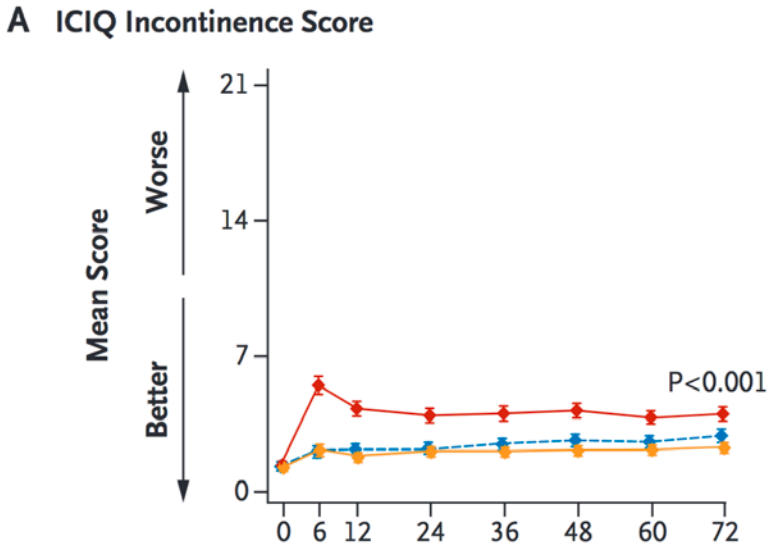
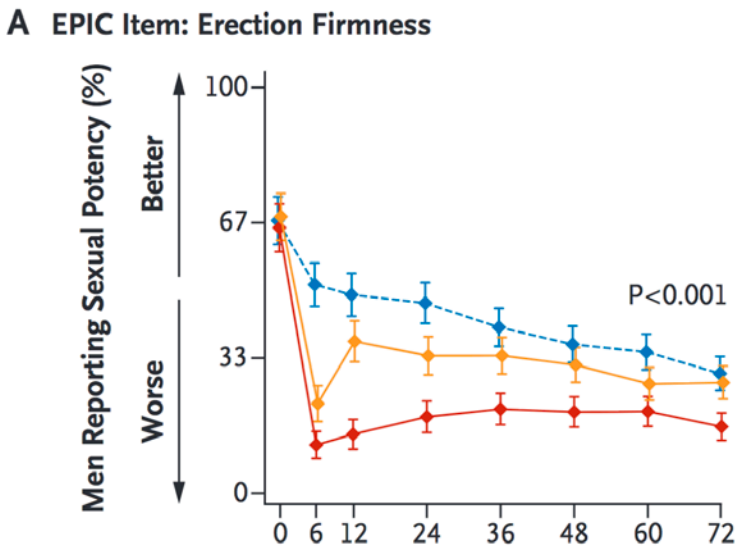
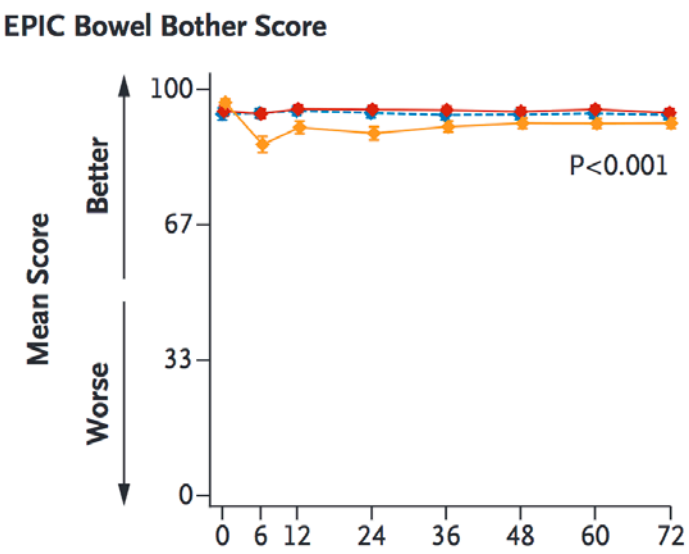
Treatment of Prostate Cancer







Treatment of Prostate Cancer

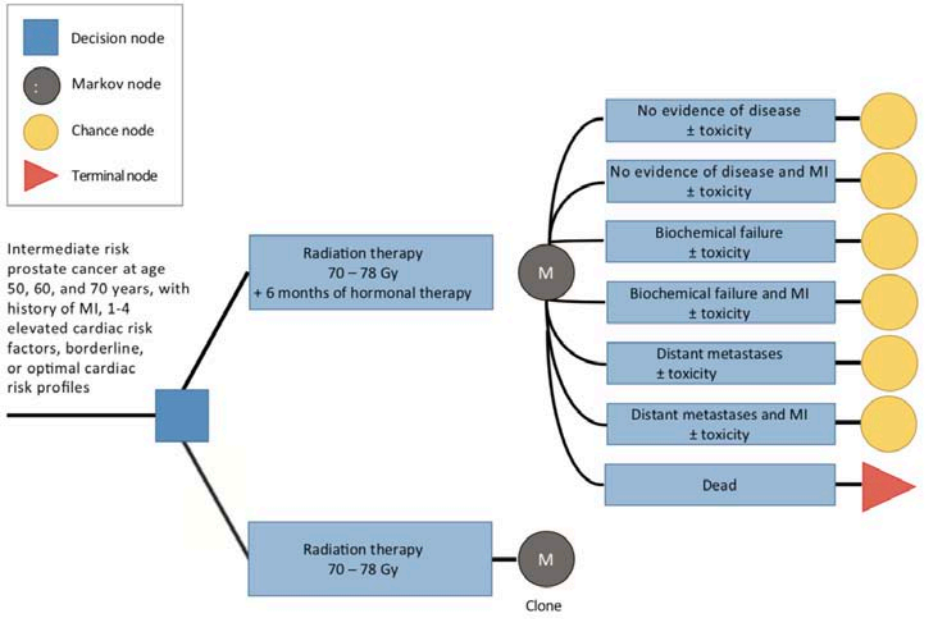
OXFORD

JNCI
Journal of the National Cancer Institute

ARTICLE

Weighing Risk of Cardiovascular Mortality Against Potential Benefit of Hormonal Therapy in Intermediate-Risk Prostate Cancer

Nataniel H. Lester-Coll, Skyler Johnson, William J. Magnuson, Samuel Z. Goldhaber, David J. Sher, Anthony V. D'Amico, James B. Yu



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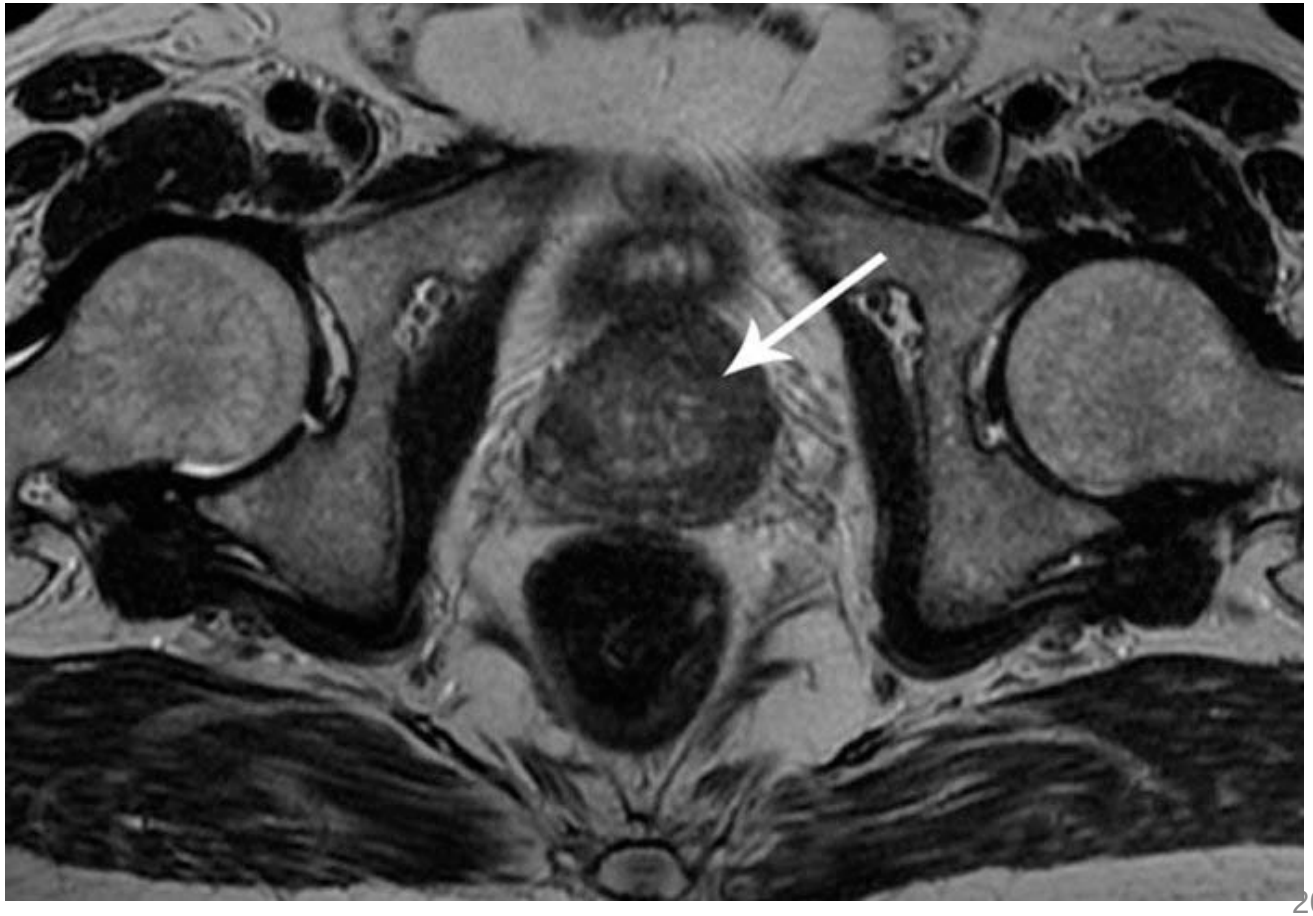
Treatment of Prostate Cancer

What's new? What's being done at UVM?

Low risk

- Genomic Prostate Score
- MRI



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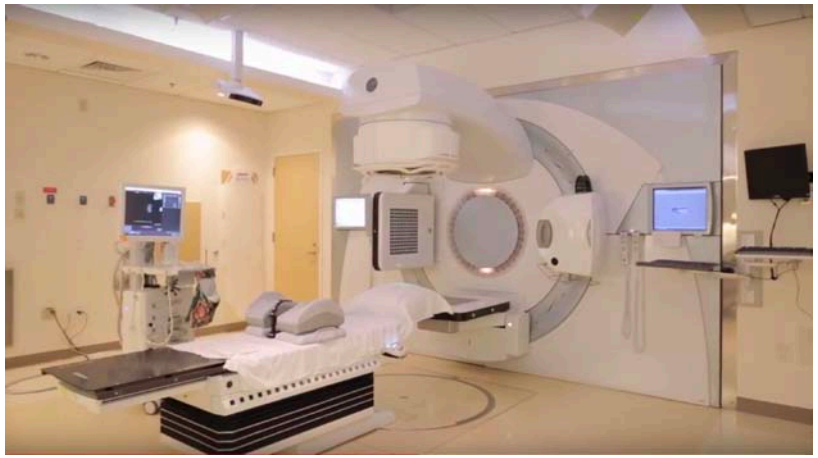
Treatment of Prostate Cancer

What's new? What's being done at UVM?

Intermediate – High risk

- Robotic surgery
- Image guided radiation therapy
- Shorter courses of radiation therapy



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Treatment of Prostate Cancer

Clinical Trials

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Intermediate-Risk Prostate Cancer

- **Radiosurgery (5 Treatments)**
- **Shorter Radiation (28 Treatments)**

Treatment of Prostate Cancer

What's new? What's being done at UVM?

Metastatic

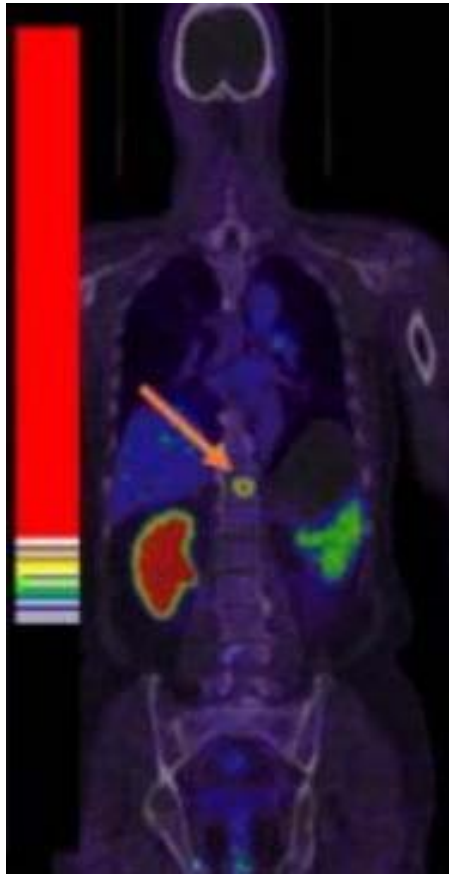
- Hormone therapy: Lupron, Abiretarone, Enzalutamide
- Chemotherapy: Docetaxel, Cabazitaxel
- Vaccine: Sipuleucel-T
- Radium 223

- Emerging: PARP Inhibitors, Immunotherapy

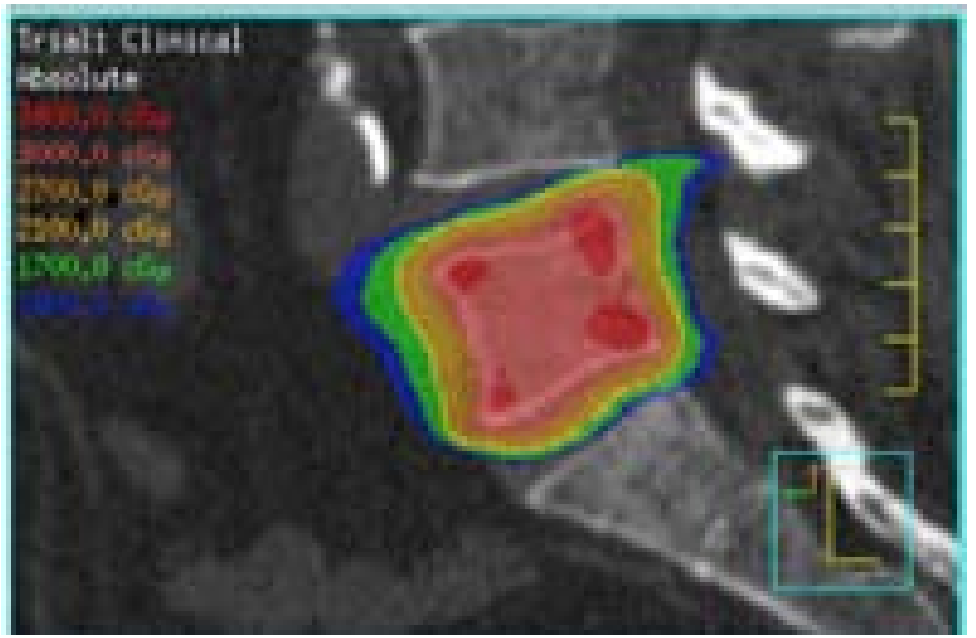
Treatment of Prostate Cancer

What's new? What's being done at UVM?

Metastatic



Advanced imaging: Axumin Scan



Radiosurgery

Treatment of Prostate Cancer

What if prostate cancer recurs after treatment?

Where did it recur?

In the “prostate bed” after surgery?

- Radiation therapy

In the prostate after radiation therapy?

- Cryoablation, surgery, brachytherapy

Treatment of Prostate Cancer

What if prostate cancer recurs after treatment?

Where did it recur?

In the lymph nodes after surgery or radiation therapy?

- Surgery or radiation therapy +/- hormone therapy

In the bones or elsewhere in the body

- Hormone/systemic therapies +/- radiation therapy

Outline

- **PSA Screening**
- **Treatment of Prostate Cancer**
- **Survivorship**

Guideline Summary

Prostate Cancer Survivorship Care Guidelines: American Society of Clinical Oncology Practice Guideline Endorsement

By Matthew J. Resnick, MD, Christina Lacchetti, MHSc, and David F. Penson, MD, MPH

Vanderbilt University Medical Center; Tennessee Valley Veterans Affairs Health Care System, Nashville, TN; and American Society of Clinical Oncology, Alexandria, VA

Survivorship

Health promotion

- Maintain a healthy weight by limiting consumption of high-calorie foods and beverages and promoting increased physical activity
- Diet rich in fruits vegetables and whole grains and low in saturated fat
- Calcium / Vitamin D
- Referral to dietitian for nutrition-related challenges (e.g, bowel problems that affect nutrient absorption)
- Limit alcohol consumption
- Avoid tobacco products

Survivorship

Surveillance for recurrence

- PSA every 6 to 12 months
- Yearly digital rectal exam

Survivorship

Screen for second cancers

- Follow screening guidelines
- Prostate cancer survivors who have undergone radiation therapy may have slightly higher risk of bladder and colorectal cancers

Survivorship

Bowel dysfunction

- Discuss and manage bowel function and symptoms (e.g, rectal bleeding)

Survivorship

Heart disease and diabetes

- Screening for heart disease risk factors, blood pressure monitoring, cholesterol, and glucose

Survivorship

Distress, Depression, and PSA Anxiety

- Assess for distress, depression, and anxiety over PSA tests
- Referrals for counselors when appropriate

Survivorship

Fracture risk, Osteoporosis

- Calculate a fracture risk score and prescribe osteoporosis treatment if risk is high

Survivorship

Sexual dysfunction and body image

- Discuss sexual function, monitor erectile dysfunction over time
- Refer patients with persistent sexual dysfunction to a urologist, sexual health specialist, or psychotherapist to review treatment and counseling options.

Survivorship

Urinary dysfunction

- Discuss urinary function (e.g, urinary stream, difficulty emptying the bladder) and incontinence
- Prescribe medications and refer for physical therapy / kegel exercises

Survivorship

Vasomotor symptoms (“hot flashes”)

- Consider medications for symptomatic patients

Survivorship

Survivorship at UVM

- 3 month survivorship visit, with detailed paperwork on:
  - Care team, including primary care, urology, radiation oncology, medical oncology
  - Diagnosis and treatment details (pathology, staging, dates, dose)
  - Genetic assessment / referral
  - Detailed list of potential late side effects
  - Follow up plan

Questions?

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