

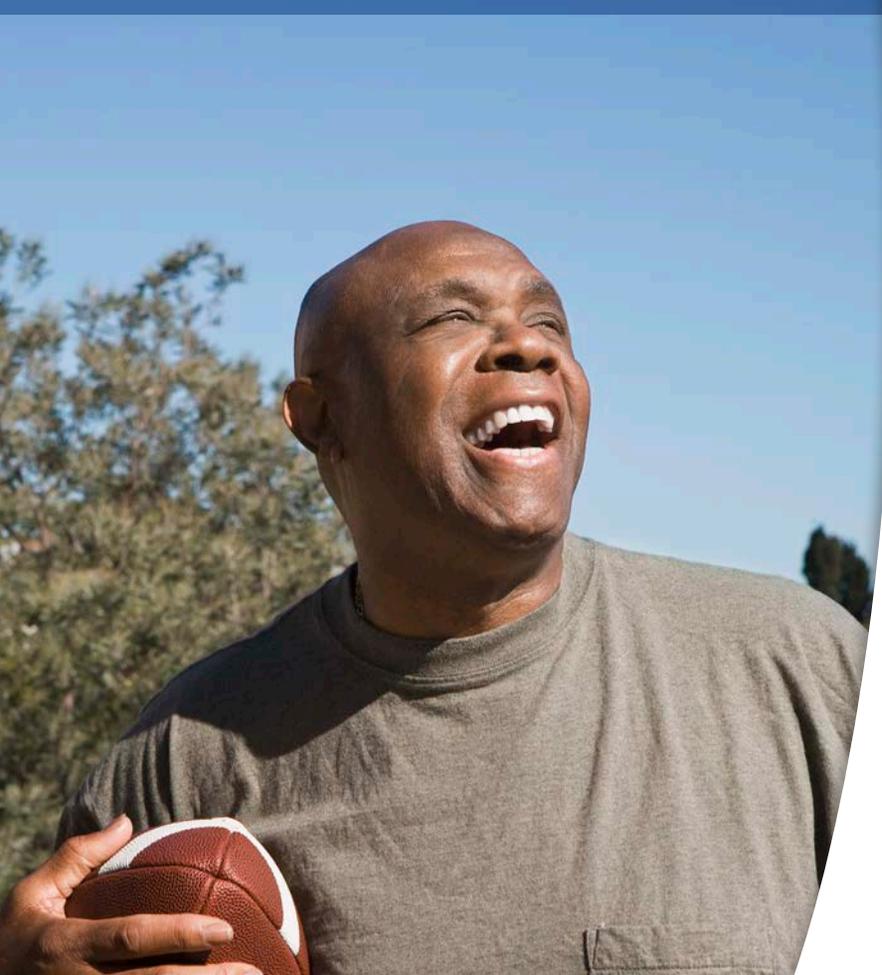
Understanding Your Options for Prostate Cancer Treatment



Patient Information

Today, men receive lots of information about prostate cancer. You've probably read or heard about how doctors test for and treat prostate cancer. But sorting through this maze of information can be tough.

This brochure gives simple and straight-forward facts about prostate cancer. Hopefully, this information will make you and your loved ones feel more comfortable as you choose what's best for you.



Prostate cancer can be treated

Since more men are getting tested for prostate cancer, doctors are finding it earlier when it is easier to cure.

Doctors have also improved how prostate cancer is treated, so the chance for a cure is much better for patients today than just 20 years ago. More good news...

In the United States, more than

2 MILLION
men who have been diagnosed with prostate cancer
ARE LIVING TODAY.¹

You are
not alone

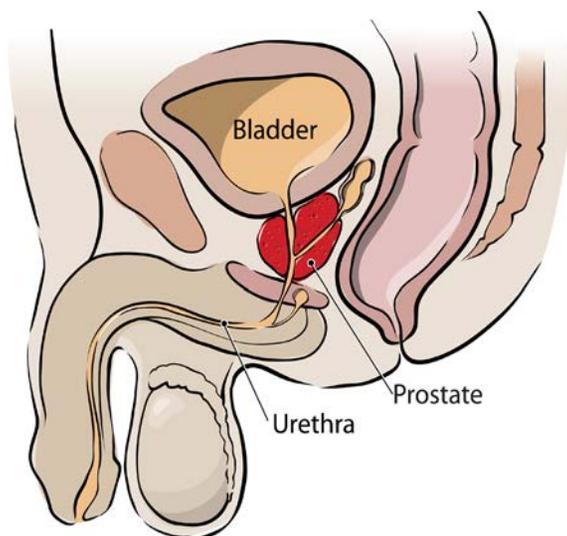


1 in 6
men have prostate
cancer in their lifetime²



of prostate cancer cases
are found before it spreads
outside the prostate³





What does the prostate do?

The prostate adds the fluid to carry sperm. It is a male sex gland. The urethra (urine tube) runs through the middle of the prostate. It is located near the bladder and rectum.

What is prostate cancer?

When abnormal cells grow out of control in the prostate, it is called prostate cancer.

Tests to Find Prostate Cancer

Digital rectal exam (DRE)

DRE is a physical exam; your doctor uses a gloved finger to feel for hard or lumpy areas on your prostate gland.

PSA blood test

PSA (prostate specific antigen) test is a simple blood test to look for signs of prostate cancer. If your PSA level is high for your age or goes up a lot compared to your last PSA test, your doctor may order a biopsy to see if the increase is because of cancer or other reasons.

Biopsy

Biopsy is the only way to diagnose prostate cancer. Your doctor will use a thin needle to remove many small tissue samples from your prostate. These tissue samples will be studied under a microscope for signs of cancer cells.

If cancer is found, your doctor can tell you if it has spread outside the prostate and if the cancer is slow-growing or aggressive (fast-growing).

Monitoring tests

Regular PSA blood tests, and biopsies as needed, are also used after treatment to see if the cancer has returned. The frequency of follow-up testing will depend on many factors, including treatment selected. Because the PSA level tends to go up and down after radiation, more PSA tests may be needed to know for sure if the cancer has returned.

Learn about ALL your options

The word “cancer” can make anyone feel out of control and overwhelmed. It is normal to feel this way. Hopefully, learning about ALL of the ways prostate cancer can be treated can help you feel more in control again.

When the cancer has not spread outside the prostate, it can be treated in a few different ways. Take time to learn about all of the options. How you choose to treat your prostate cancer will affect your life after the treatment.

Talk to your doctor about how your overall health and lab results can affect your treatment choice. Ask about the benefits as well as short- and long-term side effects of each treatment, and talk about what’s important to you. The right treatment is the one that is right for YOU.

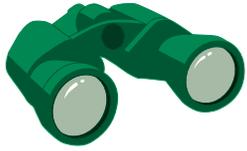
And remember, it’s always a good idea to get a second opinion.



Questions to ask your doctor

1. Is my cancer only in the prostate or also outside of it? Is it slow- or fast-growing?
2. What are all the ways prostate cancer can be treated?
3. What is the chance of a cure?
4. What are the pros and cons of each treatment?
5. How long will the treatment and recovery take?
6. Will the side effects happen to me soon, or much later? Will they get better or worse with time?
7. How soon can I control my bladder?
8. How soon will I be able to have sex again?
9. What can doctors do if my prostate cancer returns or spreads?
10. How much experience do you have with these treatments?





Active Surveillance (Watchful Waiting)

What it means to you

Active Surveillance means you will live with your prostate cancer, and be tested regularly to see if it becomes worse.

How it's done

You will have a rectal exam and PSA blood test every 3-6 months, and a biopsy once a year. For each biopsy, your doctor will insert a thin needle into your prostate to remove about 12 tissue samples for testing.

Pros

- Usually a good choice for patients who expect to live less than 10 years and/or patients with slow-growing prostate cancer
- No down-time except for doctor visits for regular biopsies and PSA tests
- Avoid possible side effects of surgery, radiation or other treatments
- If treatment is needed in the future, medical advances may make treatment more tolerable/appealing

Cons

- More likely to die within 10 years from prostate cancer compared to being treated with surgery⁴
- May miss the chance to treat the cancer before it spreads outside the prostate
- Close monitoring is needed, including regular biopsies which can result in increased chance of erectile dysfunction⁵
- If treatment is needed in the future, you may be at an age when it's more difficult to tolerate.
- More than 40% of prostate cancer can be undergraded (thought to be slow-growing when it is actually fast-growing)⁶



Surgery (Prostatectomy)

What it means to you

The prostate and cancer cells will be removed by a surgeon. Test results will let your doctors know how much cancer you had, and if it was all removed.

How it's done

- Robotic-assisted surgery (minimally invasive with a few small incisions/cuts; often nerve-sparing to save your sexual potency for normal erection)
- Traditional laparoscopic surgery (minimally invasive with a few small incisions)
- Traditional open surgery (with a large incision)

Pros

- Best chance for a cure for localized prostate cancer^{4,7,8}
- Short treatment
- Most patients get their sexual potency back within 1 year^{9,10*}
- Most patients can control their urine again within 1-3 months^{9,10*}
- If the cancer returns, several back-up treatments are still an option

Cons

- Short term changes in sexual potency and bladder control are possible, but normally recover over time⁹⁻¹¹
- A small chance of having major complications¹²
- Hospital stay required (length of stay depends on the type of surgery chosen)*
- Catheter in place 1-2 weeks

*Results from robotic-assisted surgery for most patients. Traditional open surgery leads to longer recovery time.

da Vinci® Surgery: Possible benefits

If surgery is recommended to treat prostate cancer, ask about minimally invasive da Vinci Surgery. da Vinci Surgery offers the following potential benefits compared to open surgery:

- Better cancer control¹³⁻¹⁶
- Faster return of erectile (sexual) function^{9,10}
- Better chance for return of bladder control (urinary continence)^{9,10,16}
- Less blood loss^{9,10,12,13,16-19}
- Less need for a blood transfusion^{10,12,13,16-18,20}
- Less pain¹⁸
- Lower risk of complications^{12,13,16,17,20}
- Lower risk of wound infection^{12,13}
- Shorter hospital stay^{9,10,13,16,17,21}
- Fewer days with catheter⁹
- Faster recovery¹⁹ and return to normal activities²¹

How is da Vinci Surgery performed?

- Typically a few small incisions (about the diameter of a pencil) are needed.
- Your surgeon controls the highly precise instruments attached to robotic arms during the entire operation.
- Your surgeon can clearly see the tissues and nerves in 3D-HD with up to 10x magnification.
- Your surgeon can reach tissues from many angles to remove the prostate and cancer cells precisely.
- Your surgeon can carefully work around the nerves that control erections when indicated.



Patient Story



Dr. James Porter – a surgeon who became a patient

As a urologist, I see so many men coming into my office with prostate cancer. It was a huge shock when I found out I had it myself. It's a much different situation being the patient as opposed to being the doctor.

With radiation, I knew I would be treated, but there was a big question mark. When we take someone to surgery who's had a biopsy, we often see a lot more cancer in the prostate than we would have predicted. So, I knew only surgery could give me the final word. That was important for me.

The decision then was which type of surgery. When I looked at the outcomes of my patients, it was a no-brainer. My da Vinci surgery was a success. The catheter was out in seven days. I was back to my work in two weeks. Now I am cancer-free.

Worried About Surgery?

Talking to a few patients who had surgery 6 months or a year ago can help to ease feelings of anxiety. They can share what happened to them during and after their treatment for the short- AND long-term.

When choosing surgery for prostate cancer, 4 out of 5 patients²² now choose da Vinci Surgery, a minimally invasive robotic-assisted surgery.



Radiation

What it means to you

A radiation oncologist will try to kill the cancer cells using high-dose radiation, but will not remove the prostate.

How it's done

- Brachytherapy (radioactive seeds placed inside the prostate)
- External radiation, including:
 - IMRT (intensity-modulated radiation therapy)
 - IGRT (image-guided radiation therapy)
 - Other types of external beam radiation (EBRT)

Pros

- Good chance for a cure for appropriate patients
- No hospital stay
- May have few, if any restrictions to your activities after treatment
- May be used after surgery if cancer has spread outside of the prostate

Cons

- More likely to die within 10 years from prostate cancer with radiation compared to surgery^{4,8}
- Increased fatigue²³ during long treatment – usually 2 months (up to 40 separate treatment sessions)
- Urinary and bowel problems could last for years, and sexual potency tends to get worse over time^{11,24,25**}
- Your prostate can move during treatment and cause radiation to hit other nearby tissues/organs and you are more likely to have another cancer^{26,27}
- Very difficult to treat if the prostate cancer returns

**Almost 50% of patients become and stay impotent 8 years after IMRT²⁰



Other Treatments

What it means to you

There are other less common treatments that may be right for your particular situation. These treatments may be recommended if you cannot have surgery or radiation, or if the cancer is advanced (worse). The doctors will try to treat the cancer, but the prostate will not be removed.

How it's done

- Hormone therapy (often used with radiation)
- Cryotherapy (uses a procedure to freeze tissues; often as a secondary treatment)
- Chemotherapy (uses drugs)

Pros

- Could be a choice for patients who cannot have surgery or radiation
- May help to manage cancers that have spread beyond the prostate

Cons

- Much more likely to die within 10 years from prostate cancer with hormone therapy compared to surgery or radiation⁸
- May have weakened bones, vomiting, diarrhea, hair loss, impotence, or leaking from the bladder or rectum²⁸⁻³⁰

Get a second opinion

Trying to choose the right treatment can be difficult. That's why it is very helpful to get a second opinion from another doctor or specialist. Ask a doctor at a different practice or hospital, if possible. This will not and should not upset your doctor. After all, it's your health and your body.

Treatment Period

1 Year Later

10 Years Later

Active Surveillance



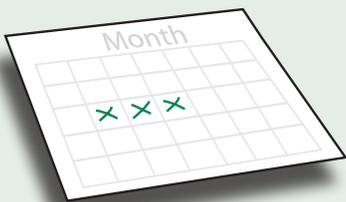
Indefinite

Patients get tested regularly by their doctors to find out if the cancer is getting worse. If signs of the cancer getting worse are found, doctors may repeat the tests and/or recommend beginning other treatments.

Patients continue to have monitoring tests such as PSA, DRE and biopsies. This testing can go on for the rest of the patient's life.

Patients are more likely to die within 10 years from prostate cancer compared to being treated with surgery.⁴

Surgery



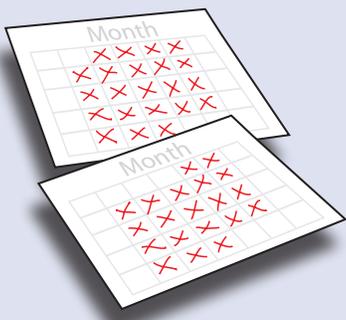
1-3 Days

of hospital stay for most patients; usually return to work or normal activities in 2-3 weeks.^{9,10,13,19,21}

Most patients recover their sexual and urinary functions within 1 year after surgery.^{9,10}

The chance of living 10+ years is the highest with surgery.^{4,8}

Radiation



2 Months

of daily visits to a radiation center for most patients (e.g. IMRT: 5 days a week for a total of 40 visits); usually able to work during the treatment but may have increased fatigue.

Many patients begin to have sexual, urinary, and/or bowel problems 1 year after radiation.^{11,24,25}

Patients are more likely to die within 10 years from prostate cancer than patients treated with surgery.^{4,8}

More patients are likely to get another cancer within 10 years.^{26,27}

Understand risks of treatment

Always ask your doctor about all treatment options, including their risks and benefits. Understanding the risks of each treatment can help you to make the best decision for your situation. There are no guarantees of outcome with any treatment. All treatments involve the risk of major complications.

While clinical studies support the effectiveness of the *da Vinci* Surgical System when used in minimally invasive surgery, individual results may vary. Surgery with the *da Vinci* Surgical System may not be appropriate for everyone; it may not be applicable to your condition. Only your doctor can determine whether *da Vinci* Surgery is appropriate for you.



References

1. CDC. Cancer survivors – United States, 2007. MMWR 2011;60(09):269-272.
2. <http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-key-statistics>
3. Prostate-specific Antigen Best Practice Statement 2009 Update. American Urological Association Education and Research, Inc. 2009; p14.
4. Merglen A, Schmidlin F, Fioretta G, Verkooijen HM, Rapiti E, Zanetti R, Miralbell R, Bouchardy C. Short- and long-term mortality with localized prostate cancer. Arch Intern Med. 2007 Oct 8;167(18):1944-50
5. Helfand, B. T., Glaser, A. P., Rimar, K., Zargaroff, S., Hedges, J., McGuire, B. B., Catalona, W. J. and McVary, K. T. Prostate cancer diagnosis is associated with an increased risk of erectile dysfunction after prostate biopsy. BJU International. Epub 2012 May 28. doi: 10.1111/j.1464-410X.2012.11268.x
6. Barqawi AB, Turcanu R, Gamito EJ, Lucia SM, O'Donnell CI, Crawford ED, La Rosa DD, La Rosa FG. The value of second-opinion pathology diagnoses on prostate biopsies from patients referred for management of prostate cancer. Int J Clin Exp Pathol. 2011 Jun 20;4(5):468-75.
7. American Urological Association. Guideline for the Management of Clinically Localized Prostate Cancer: 2007 Update. Reviewed and validity confirmed 2011.
8. Cooperberg, MR, Vickers, AJ, Broering, JM, Carroll, PR. and the CaPSURE (Cancer of the Prostate Strategic Urologic Research Endeavor) Investigators. Comparative risk-adjusted mortality outcomes after primary surgery, radiotherapy, or androgen-deprivation therapy for localized prostate cancer. Cancer. 2010 Nov 15;116(22):5226–5234. doi: 10.1002/cncr.25456
9. Rocco B, Matei DV, Melegari S, Ospina JC, Mazzoleni F, Errico G, Mastropasqua M, Santoro L, Detti S, de Cobelli O. Robotic vs open prostatectomy in a laparoscopically naive centre: a matchedpair analysis. BJU Int. 2009 Oct;104(7):991-5. Epub 2009 May 5.
10. Ficarra V, Novara G, Fracalanza S, D'Elia C, Secco S, Iafrate M, Cavalleri S, Artibani W. A prospective, non-randomized trial comparing robot-assisted laparoscopic and retropubic radical prostatectomy in one European institution. BJU Int. 2009 Aug;104(4):534-9. Epub 2009 Mar 5.
11. Sanda MG, Dunn RL, Michalski J, et al. Quality of life and satisfaction with outcome among prostate-cancer survivors. N Engl J Med. 2008 Mar 20;358(12):1250-61.
12. Carlsson S, Nilsson AE, Schumacher MC, et al. Surgery-related complications in 1253 robot-assisted and 485 open retropubic radical prostatectomies at the Karolinska University Hospital, Sweden. Urology. 2010 May;75(5):1092-7.
13. Tewari A, Sooriakumaran P, Bloch DA, Seshadri-Kreaden U, Hebert AE, Wiklund P. Positive surgical margin and perioperative complication rates of primary surgical treatments for prostate cancer: a systematic review and meta-analysis comparing retropubic, laparoscopic, and robotic prostatectomy. Eur Urol. 2012 Jul;62(1):1-15. Epub 2012 Feb 24.
14. Weerakoon M, Sengupta S, Sethi K, Ischia J, Webb DR. Predictors of positive surgical margins at open and robot-assisted laparoscopic radical prostatectomy: a single surgeon series. J Robotic Surg. 2011 doi:10.1007/s11701-011-0313-4.
15. Coronato EE, Harmon JD, Ginsberg PC, Harkaway RC, Singh K, Braitman L, Sloane BB, Jaffe JS. A multiinstitutional comparison of radical retropubic prostatectomy, radical perineal prostatectomy, and robot-assisted laparoscopic prostatectomy for treatment of localized prostate cancer. J Robotic Surg. 2009 3:175-178.

16. Health Information and Quality Authority (HIQA), reporting to the Minister of Health-Ireland. Health technology assessment of robot-assisted surgery in selected surgical procedures, 21 September 2011.
17. Ho C, Tsakonas E, Tran K, Cimon K, Severn M, Mierzwinski-Urban M, Corcos J, Pautler S. Robot-Assisted Surgery Compared with Open Surgery and Laparoscopic Surgery: Clinical Effectiveness and Economic Analyses [Internet]. Ottawa: Canadian Agency for Drugs and Technologies in Health (CADTH); 2011 (Technology report no. 137).
18. Menon M, Tewari A, Baize B, Guillonneau B, Vallancien G. Prospective comparison of radical retropubic prostatectomy and robot-assisted anatomic prostatectomy: the Vattikuti Urology Institute experience. *Urology*. 2002 Nov;60(5):864-8.
19. Miller J, Smith A, Kouba E, Wallen E, Pruthi RS. Prospective evaluation of short-term impact and recovery of health related quality of life in men undergoing robotic assisted laparoscopic radical prostatectomy versus open radical prostatectomy. *J Urol*. 2007 Sep;178(3 Pt 1):854-8; discussion 859. Epub 2007 Jul 16.
20. Trinh QD, Sammon J, Sun M, Ravi P, Ghani KR, Bianchi M, Jeong W, Shariat SF, Hansen J, Schmitges J, Jeldres C, Rogers CG, Peabody JO, Montorsi F, Menon M, Karakiewicz PI. Perioperative outcomes of robot-assisted radical prostatectomy compared with open radical prostatectomy: results from the nationwide inpatient sample. *Eur Urol*. 2012 Apr;61(4):679-85. Epub 2011 Dec 22.
21. Hohwu L, Akre O, Pedersen KV, Jonsson M, Nielsen CV, Gustafsson O. Open retropubic prostatectomy versus robot-assisted laparoscopic prostatectomy: A comparison of length of sick leave. *Scand. J. Urol. Nephrol*. Apr 7 2009:1-6.
22. <http://www.cancer.gov/ncicancerbulletin/080911/page4>
23. <http://www.cancer.gov/cancertopics/coping/radiation-therapy-and-you/page8#SE3>
24. Zelefsky MJ, Chan H, Hunt M, Yamada Y, Shippy AM, Amols H. Long-term outcome of high dose intensity modulated radiation therapy for patients with clinically localized prostate cancer. *J Urol*. 2006 Oct;176(4 Pt 1):1415-9.
25. Alicikus ZA, Yamada Y, Zhang Z, Pei X, Hunt M, Kollmeier M, Cox B, Zelefsky MJ. Ten-year outcomes of high-dose, intensity-modulated radiotherapy for localized prostate cancer. *Cancer*. 2011 Apr 1;117(7):1429-37. doi: 10.1002/cncr.25467.
26. Bhojani N, Capitanio U, Suardi N, et al. The rate of secondary malignancies after radical prostatectomy versus external beam radiation therapy for localized prostate cancer: a population-based study on 17,845 patients. *Int J Radiat Oncol Biol Phys*. 2010 Feb 1;76(2):342-8.
27. Zelefsky MJ, Housman DM, Pei X, et al. Incidence of Secondary Cancer Development After High-Dose Intensity-Modulated Radiotherapy and Image-Guided Brachytherapy for the Treatment of Localized Prostate Cancer. *Int J Radiat Oncol Biol Phys*. 2012 Jul 1;83(3):953-9. Epub 2011 Dec 13.
28. <http://www.cancer.org/Cancer/ProstateCancer/DetailedGuide/prostate-cancer-treating-hormone-therapy>
29. <http://www.cancer.org/Cancer/ProstateCancer/DetailedGuide/prostate-cancer-treating-cryosurgery>
30. <http://www.cancer.org/Cancer/ProstateCancer/DetailedGuide/prostate-cancer-treating-chemotherapy>

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**Talk to your doctors about
ALL treatment options.**