

Your Guide to Prostate Cancer

If you face a diagnosis of prostate cancer, what's next?

We can help.

A prostate cancer diagnosis can be overwhelming. The good news is that while prostate cancer can be serious, we now have a wide range of very effective treatments.

The American Cancer Society says that four out of five prostate cancers are found at the earliest stage, when survival rates approach 100%. Nearly 3 million men in the United States today are living after a prostate cancer diagnosis. **This means you have time to carefully consider all your options.** With your medical team, you can thoughtfully choose the course that fits you best.

We designed this guide to help you understand the basics about prostate cancer and its treatment. It also includes a list of important questions to ask your doctor.

With the help of the right team of experts, you've got this.

What is prostate cancer?

The prostate is a walnut-sized gland in men that makes some of the fluid found in semen. Prostate cancer occurs when cells in the prostate change and begin to grow uncontrollably. In most cases, this growth occurs slowly and may pose less threat. In some cases, growth may be more aggressive.

The American Cancer Society (ACS) is the official keeper of cancer statistics in the United States. According to ACS, prostate cancer is the most common cancer in American men behind skin cancers. One in every seven American men will be diagnosed with prostate cancer during his lifetime.

Prostate cancer is most common in older men. About 60 percent of cases occur after age 65. The average age of diagnosis is 66. Cases under age 40 are rare.

Because of the location of the prostate, treatment may impact many other important functions. This includes sexual function, urination and bowel movements. Fortunately, there are more options than ever to protect these functions. Look for an experienced team that understands and offers an entire range of possibilities. That way, you can be sure your team considers and addresses all details that are important to you.

Detection and diagnosis

Symptoms may include trouble with urination or blood in the urine or semen. In its early stages, prostate cancer may cause no symptoms. A man may be referred for evaluation after a prostate cancer screening test. This might be a PSA (prostate specific antigen) blood test or an exam in the doctor's office called a digital rectal exam (DRE).

Other things may cause symptoms or abnormal PSA levels. If you've been told you may have prostate cancer, the first step is to get an accurate diagnosis. It is important to do this with a team of experts who specialize in prostate cancer and work together. This team should include specialists in surgery, radiation therapy, oncology and pathology.

Vanderbilt's very accurate technology

You'll also want a team with access to the latest technology to help make sure the diagnosis is accurate, which is the foundation for the best treatment plan. The first step in diagnosis is usually a biopsy. A surgeon removes very tiny tissue samples from different areas of the prostate.

Vanderbilt-Ingram Cancer Center offers the most sophisticated technology to diagnose prostate cancer, 3-D MRI fusion targeted biopsy. This technique combines 3-D images with real-time ultrasound imaging, magnetic resonance imaging (MRI), and robotics. The surgeon can "see" the areas where cancer is most likely to be and aim the biopsy there. This increases accuracy and reduces the chances of a "false negative." A false negative occurs when results that say there is no cancer even though there are cancer cells that have been missed. This technique also reduces side effects from the biopsy.

If cancer cells are found, Vanderbilt-Ingram's team may do special tests to predict how likely the cancer is to grow and spread. Most prostate cancers grow slowly. A more quickly growing tumor may be called "aggressive." These "genetic biomarker" tests look for changes in genes that make cancers more aggressive. This information is used to decide whether aggressive treatment is warranted. It may also help men avoid repeat biopsies or unnecessary treatment.

A wide range of options for personalized care

Today, there are many effective treatments for prostate cancer. Each has its own benefits and risks.

Working with an expert team of specialists, like the one at Vanderbilt-Ingram, allows you to choose what's best for you. The right treatment will consider details about your cancer, including how aggressive it may be. It also considers other important things like your overall health, your age, your lifestyle, and the demands of your job or hobbies. It all comes down to what matters most to you.

A comprehensive cancer center like Vanderbilt-Ingram will offer a range of options, including:

Active surveillance: Remember, most prostate cancers are detected at an early stage. Many prostate cancers grow slowly and pose less threat. Treatments like surgery or radiation are effective and better than ever. But they are not without important side effects that you should discuss with your doctor.

Depending on how aggressive a tumor is, many men opt for "active surveillance." Active surveillance doesn't mean "doing nothing." It means watching the cancer very closely so that swift action can be taken before the cancer shows any signs of growing or causes other problems. It includes blood work, testing the tumor's DNA to understand what is making the cancer grow and biopsies, often every two or three years.

Surgery: Surgery to remove the prostate may be the right treatment for you. Some centers like Vanderbilt-Ingram often use robotic surgery to treat prostate cancer. In this approach, the surgeon controls the robot to remove the cancer. Traditional “open surgery” may be needed. However, if robotic surgery is appropriate, it can mean smaller incisions, faster recovery and other benefits. Research shows that centers that perform the most surgeries have better outcomes. You can rest easy knowing that Vanderbilt’s urology team is one of the most experienced prostate surgery centers in the United States.

Surgeons may also use methods to kill the tumor without removing the prostate gland. This may include using very cold gas to freeze the gland (cryoablation or cryotherapy). Another technique, called high-intensity focused ultrasound (HIFU), uses ultrasound waves to heat up the prostate gland to kill prostate cancer cells. In addition, Vanderbilt-Ingram is starting to test cryotherapy and HIFU in a very focused way that kills only the tumor cells, not the entire gland. This is sometimes compared to a “lumpectomy” for breast cancer.

Radiation: Radiation can be used to kill cancer cells. There are different ways to deliver radiation. Which is best for you depends on the size, location, type and stage of your tumor. Vanderbilt-Ingram offers the latest in precise radiation therapy, which may be delivered in as few as one to five treatments. This delivers the most cancer-killing dose to the tumor cells. Healthy tissue is not harmed, so side effects are reduced.

Types of Radiation Therapy

Brachytherapy: This treatment places radioactive “seeds” inside the prostate. These seeds deliver a strong dose of radiation to the prostate. They have little impact on healthy cells near the tumor. The seeds are left inside the prostate. Over time they stop giving off radiation. Our expert team of radiation oncologists, physicists, and urologists have the specialized skill to perform this treatment in one day to get you back on your feet quickly.

Intensity-modulated radiation therapy: Called IMRT for short, this type of radiation can be carefully customized to the shape and size of the prostate. It can deliver cancer-killing doses of radiation to the prostate while avoiding healthy tissue. It is now considered the standard of care, meaning it’s the best practice for treating prostate cancer.

Image-guided radiotherapy: Called IGRT, this approach takes IMRT and adds real-time imaging with X-rays or CT scans to aim radiation at the prostate even more

precisely. It also protects nearby tissue from much of the radiation.

Stereotactic radiosurgery: “Radiosurgery” refers to the precision of this approach, but it isn’t surgery. It is so precise that it allows delivery of very high doses of radiation with only five treatments. Vanderbilt-Ingram Cancer Center has the expert team to offer this approach. In addition, Vanderbilt is the only center in the region to couple therapy with a special technique to prevent damage to the nearby rectum.

Photons vs. protons: Photons and protons are types of particles that produce radiation that can be used to kill cancer cells. Vanderbilt-Ingram Cancer Center uses photon beam therapy. Proton beam therapy is a more expensive technology. Studies have not shown it to be more effective against prostate cancer. Proton therapy is generally performed over many weeks in contrast to the shorter photon courses we may provide. Insurance plans vary in whether they cover proton beam therapy.

For advanced cancer

When prostate cancers are at high risk to spread later, or have already spread to other organs, additional treatments may be used. They include:

Chemotherapy: Chemotherapy uses drugs to fight cancer cells. This may involve pills taken by mouth or, more commonly, infusion into a vein in a clinic setting. You may have heard about nausea and other side effects of chemotherapy. Today, we have medicines to use at home that prevent or reduce side effects. These have greatly improved quality of life during cancer treatment.

Hormone therapy: Male sex hormones (testosterone and other androgens) may encourage growth of prostate tumors. Hormone therapy to block that action may be used.

Clinical trials: Before new cancer treatments become widely available, they are tested in clinical trials. We encourage anyone with a cancer diagnosis – even if their cancer is caught at an early stage – to ask if a clinical trial may be right for them. In cancer clinical trials, you will always receive a standard treatment if one is available for your situation. You may also receive a promising therapy that could be better. At Vanderbilt-Ingram Cancer Center, we have hundreds of trials available. We have a team of experts in developing and offering clinical trials. And we have staff to guide you through the process and help connect you to trials that are right for you. Call (800) 811-8480 for more information about clinical trials at Vanderbilt-Ingram.

After treatment ends

The end of cancer treatment can bring relief for patients and their families. It also can be a time of new concerns. You may have concerns about physical, emotional or practical issues related to your cancer or its treatment. Cancer survivors who are doing well may have questions about how to maintain well-being going forward.

Vanderbilt-Ingram Cancer Center offers a dedicated resource to meet these needs. The REACH for Survivorship program is for cancer survivors, regardless of age, type of cancer, how long ago they were treated or where they received their cancer care.

You'll receive a full range of follow-up care to meet your individual needs. You'll leave with a personalized Cancer Survivorship Care Plan that will be your roadmap for health and well-being.

Your prostate cancer team

As you've seen, prostate cancer treatment options vary. Treatments often involve multiple specialists working together closely for the best outcome. The best approach to any cancer care is one that involves input and collaboration of many experts who specialize in your type of cancer. Getting the right diagnosis, the first time is important to give you the most options and the best outcomes.

Research-based centers like Vanderbilt-Ingram Cancer Center offer access to these many specialists as well as the latest in treatments – some of them before they are available in other hospitals, physician practices or treatment centers.

Your prostate cancer team will include specialists in urologic surgery, radiation oncology, medical oncology, pathology and other fields to create a custom plan based on your unique needs. At Vanderbilt-Ingram, these experts work with you

and your family as the most important members of the team. They meet regularly in a setting called a “tumor board” to review cases and contribute their expertise to each patient’s treatment plan.

We’d be honored to care for you

We are committed to personalized care based on the latest scientific knowledge.

For more than 20 years, Vanderbilt-Ingram has earned designation from the National Cancer Institute (NCI). The NCI is a part of the National Institutes of Health. It is the world’s foremost authority on cancer. Our NCI Comprehensive Cancer Center designation was most recently renewed with the best score possible in a review by our peers at other leading cancer centers across the country. We are the only cancer center in Nashville – and the only one that treats adults with cancer in Tennessee and four surrounding states – to earn this designation.

We are honored to be consistently recognized by U.S. News and World Report among the best hospitals for urology and cancer care in the United States. We are also the No. 1 hospital in Tennessee in both specialties. We are the only center in both specialties to rank nationally.

Our prostate cancer team is setting the standard that others follow. We are part of the National Comprehensive Cancer Network. Our team members serve on “guidelines committees” that review the standard of care each year and respond to new information that may change standards. Doctors across the country look to these guidelines to choose care, and insurance companies look to them to determine what to cover. We are the only center in Tennessee included in this nonprofit alliance of 26 leading centers that develops the guidelines on which cancer care across the country is based.

We are honored these organizations have placed their trust in us. We hope you will, too.

Questions to ask your doctor

- What kind of prostate cancer do I have?
- How advanced is my cancer?
- What are my treatment choices?
- What is the goal of my treatment?
- What are the benefits of the treatments you are suggesting?
- What are the risks of the treatments you are suggesting?
- How quickly do I need to make a decision about treatment?
- Should I consider active surveillance? Why or why not?
- Why do you recommend this treatment?
- How much experience do you have in this treatment?
- What are your outcomes?
- What are the common negative side effects and what is your experience in reducing risk of them?
- How long would this treatment last?
- Will I be able to work during treatment?
- Is there anything I should do to get ready for treatment?
- What will treatment be like?
- Should I talk to other doctors before deciding what to do? How can I do that? Should I consider a clinical trial? What clinical trials do you offer?
- Will my insurance cover the treatment you are recommending?
- Where can I find more information?