



**Know
Your
Stats**

About Prostate Cancer®

Advanced Prostate Cancer: Treatment Options

WHAT IS ADVANCED PROSTATE CANCER?

Prostate cancer is divided into 4 stages.

- **Stages I & II:** The tumor hasn't spread beyond the prostate. This is often called "early stage" or "localized" prostate cancer.
- **Stage III:** Cancer has spread outside the prostate, but only to nearby tissues. This is often called "locally advanced prostate cancer."
- **Stage IV:** Cancer has spread outside the prostate to other tissues and often the lymph nodes, bones, liver or lungs. Often called "advanced cancer."

This fact sheet is for men with advanced disease. If you have localized or "locally advanced" prostate cancer, see our Prostate Cancer Patient Guide.

When an early stage prostate cancer is found, it may be treated and cured, or left alone. If prostate cancer spreads beyond the prostate or returns after treatment, it's often called advanced prostate cancer.

Stage IV prostate cancer is not "curable," but there are several new ways to treat it. And more treatments are being studied. Treatment can control advanced prostate cancer and help you feel better, longer. It helps to talk about your treatment options with an experienced health care provider.

ADVANCED PROSTATE CANCER CAN BE:

- **Metastatic:** Cancer cells have spread beyond the prostate.
- **Biochemical recurrence:** PSA (prostate specific antigen) level has risen after the first treatment(s) with no other sign of cancer.
- **Castrate-resistant prostate cancer (CRPC):** PSA has risen, even after surgery to remove the testicles or drugs to block testosterone. (Prostate cancer cells can change and learn how to adapt. They can find ways to grow, even when the testosterone level is very low.)
- **Metastatic castrate-resistant prostate cancer (mCRPC):** PSA has risen after hormone treatment, AND cancer has spread to other parts of the body. Many of the newest treatments are for men with mCRPC.

SIGNS OF ADVANCED PROSTATE CANCER

Men with advanced prostate cancer may or may not have symptoms. Symptoms depend on the size of new growth and where the cancer has spread.

With advanced disease, you may have problems urinating or see blood in your urine. Some men may feel tired, weak or lose weight. When prostate cancer spreads to the pelvic bones, for example, you may feel lower back or hip pain.

Please tell your doctor and nurse about any pain or other symptoms you feel. There are treatments that can help.

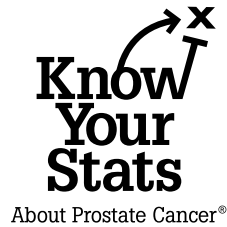
Urology Care
FOUNDATION™
The Official Foundation of the
American Urological Association



National Headquarters: 1000 Corporate Boulevard, Linthicum, MD 21090

Phone: 410-689-3990 • Fax: 410-689-3878 • 1-800-828-7866 • info@UrologyCareFoundation.org • www.UrologyHealth.org

Advanced Prostate Cancer: Treatment Options



HOW IS ADVANCED PROSTATE CANCER TREATED?

The goal of advanced prostate cancer treatment is to shrink the tumor(s), control symptoms and help you to live longer. Common treatments include: hormone therapy, chemotherapy, immunotherapy, radiation and others listed here. Which treatment to use, and when, will depend on discussions with your doctor.

For metastatic cancer, biochemical recurrence, CRPC or mCRPC there could be several treatment options to talk about. Also, it's important to discuss how to manage side effects before you choose a plan.

Treatment offers hope for extending a man's quality of life.

TREATMENT OPTIONS MAY INCLUDE:

Hormone Therapy or Androgen Deprivation Therapy (ADT)

Hormone therapy (ADT) is any treatment that lowers androgen (male sex hormone) levels or blocks its effects. Testosterone is the main hormone that fuels the growth of prostate cancer cells. Stopping or blocking testosterone can slow cancer growth. ADT can be from castration or drugs. There are many side effects to consider. Types of hormone therapy include:

- **Orchiectomy (surgery to remove the testicles).** This surgery removes the testicles to stop the body from making testosterone. There could be fast relief from cancer symptoms. It's a fairly simple outpatient surgery, but it is less commonly used.
- **LHRH or GnRH agonists (analogs).** These drugs lower testosterone levels. They are used as adjuvant radiation treatment for men with advanced or aggressive prostate cancer or, for cancer that returns. ("Adjuvant" means that this treatment is given after trying others.) Some available types are: Leuprorelin (Lupron Depot®) and (Eligard®), Goserelin (Zoladex®), Triptorelin (Trelstar®), and Histrelin (Vantas®). They are given as shots or as small pellets

placed under the skin. Depending on the drug used, they are given anywhere from once/month to once/year.

- **LHRH or GnRH antagonists.** These drugs also reduce testosterone, but more quickly. Degarelix (Firmagon®) is an LHRH antagonist given as a monthly shot under the skin for advanced prostate cancer.
- **Anti-androgen drugs.** These drugs block testosterone from linking to the cancer cells. For example, Flutamide (Eulexin®), Bicalutamide (Casodex®), and Nilutamide (Nilandvon®) are given as a daily pill.
- **Androgen synthesis inhibitors.** These drugs stop other parts of your body (and the cancer itself) from making additional testosterone and its metabolites. Abiraterone acetate (Zytiga®) is a drug you take as a pill. This is taken with an oral steroid, prednisone. It may be used before or after chemotherapy in men with mCRPC.
- **Androgen receptor binding inhibitors.** These drugs block testosterone from linking to prostate cancer cells (like anti-androgens). Enzalutamide (Xtandi®) is taken as a pill. You do not need to take a steroid with this drug. It may be used before or after chemotherapy in men with mCRPC.
- **CAB (combined androgen reducing treatment, with anti-androgens).** This strategy combines castration (by surgery or with the drugs described above) and anti-androgen drugs. The treatment blocks testosterone and stops it from binding to cancer cells.
- **Estrogen hormone therapy.** Estrogens are female sex hormones. They are used to block testosterone. Clinical trials are being done to see if this hormone can lower testosterone levels with fewer side effects.

Before considering hormone therapy, or which type to use, it helps to ask questions. There are many benefits and risks to each type. There are also side effects to discuss and manage. Since hormone therapy can be used as the cancer advances or returns, it also helps to consider when to use it. Hormone therapy can be helpful, but it's not a cure. Over time, the cancer can grow in spite of the low testosterone level.

If you use hormone therapy, try to stay as healthy as possible. Experts suggest taking Vitamin D and Calcium for

National Headquarters: 1000 Corporate Boulevard, Linthicum, MD 21090

Phone: 410-689-3990 • Fax: 410-689-3878 • 1-800-828-7866 • info@UrologyCareFoundation.org • www.UrologyHealth.org

Advanced Prostate Cancer: Treatment Options



bone health. They also believe that a plant-based diet and regular exercise can help limit your weight and improve energy.

Immunotherapy

Immunotherapy uses the body's immune system to fight cancer. It is an option for men with mCRPC who have no symptoms or only a few. If the cancer returns and spreads, your provider may offer Sipuleucel-T (Provenge®). This is a cancer vaccine that can boost your immune system so that it can attack the cancer cells.

Bone-targeted Therapy

Men with prostate cancer found in the bones are at risk for "skeletal-related events (SREs)". SREs can include fractures, pain and other problems. Two drugs that can reduce SRE's are Zoledronic Acid (Zometa®) and Denosumab. They are used to stop the cancer from causing SREs when it's spread to the bones.

Calcium and/or Vitamin D are supplements also used to help protect your bones. They are often recommended for men on hormone therapy to treat prostate cancer.

Radiopharmaceuticals are drugs with radioactivity. In the past, they were used to help with bone pain from metastatic cancer. Examples are Strontium-89 (Metastron®) and Samarium-153 (Quadramet®).

Radium-223 (Xofigo®) is newer for men whose mCPRC has spread to their bones. It was approved because it helps with bone pain and keeping men alive longer. It may be offered when hormone therapy or ADT doesn't work. It gives off small amounts of radiation that only travel short distances, and has been shown to be safer than radiopharmaceuticals used in the past. This can target radiation to the exact areas where cells are growing.

Chemotherapy

Chemotherapy drugs can slow the growth of cancer. It can reduce symptoms and extend life. It may help men with mCRPC or men with very aggressive cancer that's newly diagnosed. (Men who have not yet been treated with hormone therapy or who have normal levels of testosterone.) The chemotherapy drugs Docetaxel (Taxotere®) and Cabazitaxel (Jevtana®) have been shown to help men live longer. Mitoxantrone (Novantrone ®), with a steroid, is used for prostate cancer that doesn't respond to ADT.

Radiation

Radiation can help ease pain when prostate cancer spreads to the bones. It can ease other symptoms as well. It uses high-energy beams, directed to kill tumors.

For all treatments, it is important to ask your doctor about side effects and how to manage them.

QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER

1. Which treatment options do you recommend for me, and why?
2. What are the pros/cons of each treatment?
3. What side effects should I expect, and what should I do to manage side effects?
4. Can you put me in touch with other patients who've received the treatment you recommend for me?
5. Will my insurance cover the costs of treatment, or can you help me get financial aid?
6. Will I need extra help from my spouse, partner or a friend during or after treatment?
7. How can a clinical trial help me, and what trials should I consider?
8. What else can I do to stay as healthy as possible?

Advanced Prostate Cancer: Treatment Options



About Prostate Cancer®

RESOURCES

It may be very difficult to live with the uncertainty of cancer, but there are support systems if you need them. Always ask for help to learn about your body, your treatment options and how to improve your quality of life.

Advocacy Connector

The Advocacy Connector is a directory listing of national and state resources for patients and caregivers. It includes helplines, support, clinical trials information and financial, legal and insurance assistance. (www.advocacyconnector.com)

American Association of Sexuality Educators, Counselors and Therapists (AASECT)

Medical professionals and counselors are available who specialize in erectile dysfunction after prostate cancer. AASECT also has a directory you can use to find a certified sex therapist near you. (www.aasect.org)

Caregiver Action Network

The Caregiver Action Network offers a family caregiver forum and toolbox of resources. (www.caregiveraction.org)

Hormone Health Network Patient Guides

Look for the Osteoporosis and Men's Health Fact Sheet and the Prostate Cancer and Bone Loss Fact Sheet (www.hormone.org)

Malecare Cancer Support

Malecare has a number of programs, including specific educational and support programs for men with advanced prostate cancer. (www.malecare.org)

MedlinePlus

Prostate Cancer (English)
<https://www.nlm.nih.gov/medlineplus/prostatecancer.html>

Cáncer de próstata (Español)
<https://www.nlm.nih.gov/medlineplus/spanish/prostatecancer.html>

National Cancer Institute at the National Institutes of Health

Prostate Cancer information (www.cancer.gov - or call 1-800-4-CANCER)

National Coalition for Cancer Survivorship

Their Cancer Survivor Toolbox can help at any point in your care. Also, their Dying Well audio program and resource booklet have excellent resources for those nearing end of life. (www.canceradvocacy.org)

Patient Access Network Foundation (PAN Foundation)

The PAN Foundation offers co-pay assistance for metastatic castrate-resistant prostate cancer. (www.panfoundation.org)

Patient Advocacy Foundation

The Patient Advocacy Foundation Patient Services program offers case management to assist with access to care, medical debt and job retention related to illness. (www.patientadvocate.org)

UsTOO International Prostate Cancer Education & Support Network

Find a support group near you. (www.ustoo.org)

Book Available for Purchase or at Libraries

Androgen Deprivation Therapy: An Essential Guide for Prostate Cancer Patients and Their Loved Ones by Richard J. Wassersug, PhD

Other UrologyHealth.org Articles You May Want to Read

Advanced Prostate Cancer

Know Your Stats® About Prostate Cancer
(www.KnowYourStats.org/Resources)

Urology Care Foundation

www.UrologyHealth.org

You may download this fact sheet and print it yourself at www.UrologyHealth.org/AdvPCaFS.

For additional information on Advanced Prostate Cancer and other urologic conditions, visit **UrologyHealth.org/Order** or call 800-828-7866.

Patient resources made possible through the generous support of



National Headquarters: 1000 Corporate Boulevard, Linthicum, MD 21090

Phone: 410-689-3990 • Fax: 410-689-3878 • 1-800-828-7866 • info@UrologyCareFoundation.org • www.UrologyHealth.org