

# What is Hormone Therapy for Prostate Cancer?

Prostate cancer cells use the male hormone testosterone to grow. Hormone therapy lowers testosterone levels to "choke" the cancer's growth. Hormone therapy is also called androgen deprivation therapy (ADT).

With less testosterone, prostate cancer tumors can shrink or stop growing. Symptoms can be eased, and the cancer may be slowed down, but hormone therapy cannot cure the cancer.

Causing your body to make less testosterone is either done with surgery or medication.

Surgery: Removes the testicles and glands that make testosterone. The surgery is called an orchiectomy.

**Medication:** Many types can lower how much testosterone the body makes. There are many types of hormone therapy your doctor could suggest to lower or stop your body from making testosterone.

- GRNH Agonists (analogs). LHRH/GnRH agonists are often the first treatment for localized cancer. It is also used for cancer that has come back, whether or not it has spread. These drugs are given as shots or as small pellets placed under the skin and some types are Goserelin, Histrelin, Leuprorelin and Triptorelin.
- **GRNH Antagonists.** These drugs are the second line of treatment for localized cancer or cancer that has come back. These are injected (shot) under the skin, in the buttocks or belly. One such agent is Degarelix.
- Anti-androgen drugs. This therapy depends partly on where the cancer has spread and its effects. These drugs are taken by mouth as a pill and some types of are Bicalutamide, Flutamide and Nilutamide. These are many

times used along with the GRNH Agonists (analogs) class of drugs discussed above. See CAB below.

- CAB (combined androgen reducing treatment, with anti-androgens). This method blends castration (by surgery or with the drugs described above) and antiandrogen drugs. The treatment blocks testosterone and stops it from binding to cancer cells.
- Androgen synthesis inhibitors. Men newly diagnosed with metastatic hormone sensitive prostate cancer (mHSPC) or men with metastatic castration-resistant prostate cancer (mCRPC) may be good candidates for this therapy. These drugs may be taken by mouth as a pill and the drug used is Abiraterone acetate. Because of the way it works, this drug must be taken with a steroid called Prednisone.
- Androgen receptor binding inhibitors. These may be used in men with newly diagnosed mHSPC or mCRPC before or after chemotherapy. These drugs may be taken by mouth as a pill and some types are Apalutamide and Enzalutamide. You do not need to take a steroid with this

Intermittent vs. continuous hormone therapy: Most prostate cancers treated with hormone therapy will stop responding over time. Some doctors use intermittent (onagain, off-again) treatment. Other doctors believe that continuous (ongoing) therapy might help men live longer. At this time, it isn't clear which way is best. Men should think about how side effects weigh into their choices.

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







# Hormone Therapy for Prostate Cancer



American Urological Association

## Is Hormone Therapy Right for Me?

Hormone therapy is often used for:

- Men with advanced cancers
- Men with cancer that has come back after treatment
- Men who get radiation therapy. (It is used before and after radiation treatment to make cancer respond better to radiation.)

Choosing the right treatment for prostate cancer is personal. It is best to make this choice with your doctor and the people closest to you.

There are many things to think over before choosing ADT, such as your diagnosis, treatment goals, costs and how well you can handle side effects.

Before starting any type of hormone therapy, ask your health care provider questions to include questions about how to deal with side effects. Also talk about whether on-and-off or ongoing hormone therapy would be better for you.

# What are the Side Effects of Hormone Therapy?

Hormone therapy for prostate cancer may help shrink tumors or stop them from growing. Side effects are:

- Loss of sex drive and erectile dysfunction
- Hot flashes
- Weight gain
- Mood swings
- Anemia (low blood counts)
- Feeling tired
- Loss of muscle mass and bone strength
- Swollen and tender breasts
- Genital shrinkage

These treatments have also been linked to heart disease and risk of heart attack. Hormone therapy may lead to high blood sugar. There are some concerns about whether ADT can cause changes in memory.

You should talk with your health care provider about all of these side effects before starting ADT.

### **Other Considerations**

Hormone therapy often works well for a while — oftentimes this period of control can last years. Over time, the cancer may "learn" how to bypass this treatment. Prostate cancer can then grow in spite of the low hormone level. When this happens, other treatments are needed to manage the cancer and its symptoms.

If you have advanced cancer, but your cancer does not respond to ADT, you have other choices. Many men move on to chemotherapy or other therapies, often with ADT to help.

Talk to you doctor about which treatment is right for you.

#### **About the Urology Care Foundation**

The Urology Care Foundation is the world's leading urologic foundation – and the official foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make health changes. Our information is based on the American Urological Association resources and is reviewed by medical experts. To learn more, visit the Urology Care Foundation's website, UrologyHealth.org/UrologicConditions or go to UrologyHealth.org/FindAUrologist to find a doctor near you.

#### Disclaimer

This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologists or health care provider about your health concerns. Always talk to a health care provider before you start or stop any treatments, including medications.

For more information, visit UrologyHealth.org/Download or call 800-828-7866.

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







