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Hormone Therapy

How hormone therapy is used to treat cancer

Hormones are proteins or substances made by the body that help to control how certain types of cells work. For example, some parts of the body rely on sex hormones, such as estrogen, testosterone, and progesterone, to function properly. There are other types of hormones in our bodies, too, such as thyroid hormones, cortisol, adrenaline, and insulin. Different types of hormones are made by different organs or glands.

Some cancers depend on hormones to grow. Because of this, treatments that block or alter hormones can sometimes help slow or stop the growth of these cancers. Treating cancer with hormones is called *hormone therapy*, *hormonal therapy*, or *endocrine therapy*. Hormone therapy is mostly used to treat certain kinds of breast cancer and prostate cancer that depend on sex hormones to grow. A few other cancers can be treated with hormone therapy, too.

Hormone therapy travels throughout the body to find and target hormones. Different types of hormone therapy work in different ways. They can:

- Stop the body from making the hormone
- Block the hormone from attaching to cancer cells
- Alter the hormone so it doesn't work like it should

Hormone therapy can be used to:

- Treat a certain kind of cancer by stopping or slowing its growth
- Lessen symptoms related to a certain type of cancer

Video

This short video provides answers to some of the most common questions that people

- CYP17 inhibitors, such as abiraterone and ketoconazole
- Luteinizing hormone-releasing hormone (LHRH) agonists and antagonists, such as goserelin, leuprolide, triptorelin, and degarelix
- Surgery to remove the testicles (known as an orchiectomy or surgical castration)

See [Hormone Therapy for Prostate Cancer](#)³ to learn more.

Endometrial (lining of the uterus or womb) cancer

- Progestins, such as medroxyprogesterone acetate or megestrol acetate
- Selective estrogen receptor modulators (SERMs), such as tamoxifen and raloxifene
- Luteinizing hormone-releasing hormone (LHRH) agonists, such as goserelin, and leuprolide
- Aromatase inhibitors (AIs), such as letrozole, anastrozole, and exemestane

See [Hormone Therapy for Endometrial Cancer](#)⁴ to learn more.

Adrenal cancer

- Adrenolytics, such as mitotane
- Estrogen receptor antagonists, such as fulvestrant and toremifene
- Selective estrogen receptor modulators (SERMs), such as tamoxifen and raloxifene

See [Chemotherapy for Adrenal Cancer](#)⁵ and [Other Drugs Used to Treat Adrenal Cancer](#)⁶ to learn more.

Getting hormone therapy

Oral drugs

Many types of hormone therapy are drugs that are taken by mouth. In these cases, you swallow the pill, capsule, or liquid just like other medicines. These are usually taken at home. How often they are taken depends on the drug being given and the type of cancer being treated. Because of this, it's very important to make sure you know exactly how it should be taken and to follow instructions exactly. There may be special precautions to take, depending on the drug you're prescribed. You can read more about special precautions for oral cancer drugs and what you should ask your cancer care team in the section on Oral Chemo in [Getting Oral or Topical Chemotherapy](#)⁷.

- Weight gain (especially around the belly) with decreased muscle mass
- Memory problems
- Increased risk of other health problems

Women getting hormone therapy for breast or endometrial cancer might have these possible side effects:

- Hot flashes
- Vaginal discharge, dryness, or irritation
- Decreased sexual desire
- Fatigue
- Nausea
- Pain in muscles and joints
- Bone loss and a higher risk for fractures
- Higher risk of other types of cancer, stroke, blood clots, cataracts, and heart disease

Men with breast cancer who are getting hormone therapy can also experience many of these same side effects, along with having erectile dysfunction.

Read more about these side effects in [Hormone Therapy for Breast Cancer](#)⁸, [Hormone Therapy for Prostate Cancer](#)⁹, or [Hormone Therapy for Endometrial Cancer](#)¹⁰. See [Managing Cancer-related Side Effects](#)¹¹ to learn about what to watch for and how to manage side effects.

Hormone therapy drug safety

Much is known about the need to protect others from exposure to standard chemotherapy because it is hazardous. This is why there are safety rules and recommendations for people who handle chemo drugs. Some hormone therapy drugs also have precautions. **Talk to your cancer care team about any special precautions that might be needed to protect yourself and others while you are taking hormone therapy.**

Hyperlinks

1. www.youtube.com/embed/c2TrhSnCVnQ/
2. www.cancer.org/cancer/breast-cancer/treatment/hormone-therapy-for-breast-cancer.html

3. www.cancer.org/cancer/prostate-cancer/treating/hormone-therapy.html
4. www.cancer.org/cancer/endometrial-cancer/treating/hormone-therapy.html
5. www.cancer.org/cancer/adrenal-cancer/treating/chemotherapy.html
6. www.cancer.org/cancer/adrenal-cancer/treating/other-drugs.html
7. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy/oral-chemotherapy.html
8. www.cancer.org/cancer/breast-cancer/treatment/hormone-therapy-for-breast-cancer.html
9. www.cancer.org/cancer/prostate-cancer/treating/hormone-therapy.html
10. www.cancer.org/cancer/endometrial-cancer/treating/hormone-therapy.html
11. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html

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