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Treating Adrenal Cancer

If you've been diagnosed with adrenal cancer, your care team will discuss treatment with you. It's important to take time and think about your options. It's important to weigh the benefits and risks of each option.

- A radiation oncologist: a doctor who uses radiation to treat cancer
- A medical oncologist: a doctor who uses chemotherapy and other medicines to treat cancer

You might have many other specialists on your treatment team as well, including physician assistants (PAs), nurse practitioners (NPs), nurses, psychologists, social workers, rehabilitation specialists, and other health professionals.

- [Health Professionals Who Are Part of a Cancer Care Team](#)

Making treatment decisions

It's important to discuss all treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. You may feel that you need to make a decision quickly, but it's important to give yourself time to absorb the information you have learned. Ask your cancer care team questions.

If time permits, it is often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more confident about the treatment plan you choose.

- [Questions to Ask About Adrenal Cancer](#)
- [Seeking a Second Opinion](#)

Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials.

- [Clinical Trials](#)

Considering complementary and alternative methods

You may hear about alternative or complementary methods to relieve symptoms or treat your cancer that your doctors haven't mentioned. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods are treatments that are used **along with** your regular medical care. **Alternative** treatments are used **instead of** standard medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be harmful.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision.

- [Complementary and Integrative Medicine](#)

Help getting through cancer treatment

People with cancer need support and information, no matter what stage of illness they may be in. Knowing all of your options and finding the resources you need will help you make informed decisions about your care.

Whether you are thinking about treatment, getting treatment, or not being treated at all, you can still get supportive care to help with pain or other symptoms. Communicating with your cancer care team is important so you understand your diagnosis, what treatment is recommended, and ways to maintain or improve your quality of life.

Different types of programs and support services may be helpful, and they can be an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services - including rides to treatment, lodging, and more - to help you get through treatment. Call our Cancer Knowledge Hub at 1-800-227-2345 and speak with one of our caring, trained cancer helpline specialists. Or, if you prefer, you can use our chat feature on cancer.org to connect with one of our specialists.

- [Palliative Care](#)
- [Programs & Services](#)

Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors as you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

- [If Cancer Treatments Stop Working](#)

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask your cancer care team any questions you may have about your treatment options.

Surgery for Adrenal Cancer

The main treatment for adrenal cancer is removal of the .

More information about Surgery

For more general information about surgery as a treatment for cancer, see [Cancer Surgery](#)².

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)³.

Hyperlinks

1. www.cancer.orgfile:///C:/cancer/managing-cancer/finding-care/where-to-find-cancer-care.html
2. www.cancer.org/cancer/managing-cancer/treatment-types/surgery.html
3. www.cancer.org/cancer/managing-cancer/side-effects.html

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Last Revised: October 1, 2024

Radiation Therapy for Adrenal Cancer

Radiation therapy uses high-energy x-rays (or particles) to kill cancer cells. Radiation therapy is generally not used as the main initial treatment for adrenal cancer. Rather, it is usually offered to patients as:

- **Adjuvant therapy:** Radiation may be used after surgery to help keep the tumor from coming back.
- **Local control of metastasis:** If the cancer has spread to other organs, such as the brain, lung, liver, or bone, radiation therapy to those areas may improve symptoms like pain.
- [Types of radiation therapy](#)
- [Possible radiation side effects](#)
- [More information about radiation therapy](#)

Types of radiation therapy

External beam radiation therapy (EBRT) focuses radiation on the cancer from a machine outside the body. It is like getting an x-ray and is not painful. Treatments are often given once or twice a day, 5 days a week for several weeks. The actual treatment time only lasts a few minutes, although the setup time - getting you into place for treatment - usually takes longer to make sure that the radiation is aimed accurately at the cancer. Before treatment starts, the radiation team will take measurements to find the correct angles for aiming the radiation beams and the proper dose of radiation. This planning session, called **simulation**, usually includes getting imaging tests such as [CT](#)¹ or [MRI](#)² scans.

Brachytherapy (internal radiation therapy) uses small pellets of radioactive material placed next to or directly into the cancer. This type of radiation is not often used to treat adrenal cortical cancer.

Radiofrequency ablation uses high-energy radio waves to heat and destroy the tumor cells. A thin, needle-like probe is put through the skin and moved until the tip is in the tumor. Placement of the probe is guided by CT scans. This is usually done as an outpatient procedure, using local anesthesia (numbing medicine) where the probe is inserted. You may be given medicine to help you relax. Some people with adrenal cancer might not be healthy enough for surgery. Others may have a tumor that cannot be surgically removed, either due to size or where it is. For these patients, radiofrequency ablation may be an option.

Possible radiation side effects

Common side effects of radiation therapy include:

- Nausea and vomiting
- Diarrhea (if an area of the abdomen is treated)
- Skin changes in the area being treated, which can range from redness to blistering and peeling
- Hair loss in the area being treated
- Fatigue
- Low blood counts

More information about radiation therapy

To learn more about how radiation is used to treat cancer, see _____

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Last Revised: October 1, 2024

Chemotherapy for Adrenal Cancer

- **Adjuvant therapy:** Mitotane can be given after surgery, after all the visible cancer has been removed. This is meant to kill any cells that were left behind but were too small to see. Giving the drug this way is intended to prevent or delay the cancer's return.
- **Therapy for unresectable, recurrent, or metastatic disease:** If the cancer has not been completely removed by surgery or has come back, mitotane may be used to shrink the cancer in some patients.

Mitotane is particularly helpful for people with adrenal cancers who have problems caused by excessive hormone production. Even when it doesn't shrink the tumor, mitotane can reduce abnormal hormone production and relieve symptoms. Most patients with excess hormone production are helped by mitotane.

This drug is a pill taken 3 to 4 times a day. Like other types of chemo, treatment with mitotane needs to be supervised closely by a doctor.

Possible side effects of Mitotane

Mitotane can also keep the other normal adrenal gland from producing steroid hormones. This can lead to low levels of cortisol and other hormones, which can make you feel weak and sick. If this occurs, you'll need to take steroid hormone pills to bring your hormone levels up to normal. Mitotane can also alter levels of other hormones, such as thyroid hormone or testosterone. If that occurs, you'd need drugs to replace these hormones as well.

Other common side effects are abdominal discomfort, nausea, vomiting, diarrhea, depression, dizziness, rash, and high cholesterol.

Other chemo drugs used for adrenal cancer

Drugs are sometimes combined with mitotane to treat advanced adrenal cancer. The chemo drugs used most often in combination with mitotane are:

- Carboplatin or Cisplatin
- Etoposide (VP-16)
- Doxorubicin (Adriamycin)

Hyperlinks

1. www.cancer.org/cancer/managing-cancer/treatment-types/chemotherapy.html
2. www.cancer.org/cancer/managing-cancer/side-effects.html

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Immunotherapy for Adrenal Cancer

An important function of your immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses proteins (or "checkpoints") on immune cells that need to be turned on (or off) to start an immune response. Adrenal cancer cells sometimes use these checkpoints to avoid being attacked by the immune system. Drugs that target these checkpoint proteins, help restore the immune response against adrenal cancer cells.

- [Checkpoint \(PD-1\) inhibitor](#)
- [Possible side effects of immune checkpoint inhibitors](#)

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Checkpoint (PD-1) inhibitor

Pembrolizumab (Keytruda) is a drug that targets PD-1, a checkpoint protein on immune cells called T cells. By blocking PD-1, pembrolizumab boosts the immune response against adrenal cancer cells.

It can be used with or without mitotane to treat advanced adrenal cancer.

This drug is given as an intravenous (IV) infusion, typically every 3 or 6 weeks.

Possible side effects of immune checkpoint inhibitors

Side effects of these drugs can include fatigue, cough, nausea, skin rash, poor appetite, constipation, and diarrhea.

Other, more serious side effects occur less often.

Infusion reactions: Some people might have an infusion reaction while getting these drugs. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, feeling dizzy, wheezing, and trouble breathing. It's important to tell your doctor or nurse right away if you have any of these symptoms while getting these drugs.

Autoimmune reactions: These drugs remove one of the protections on the body's immune system. Sometimes the immune system starts attacking other parts of the

body, which can cause serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, or other organs.

It's very important to report any new side effects to your health care team quickly. If serious side effects do occur, treatment may need to be stopped and you may get high doses of corticosteroids to suppress your immune system.

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Last Revised: October 1, 2024

Hormone Therapy for Adrenal Cancer

Drugs other than chemo (mitotane) may be used to decrease the hormones made by the adrenal cancer or to lower the effects of the hormones. Treatment with some of these drugs may need to be supervised by an endocrinologist (hormone doctor) because it might affect several hormone systems and might make it necessary to replace other hormones.

Drugs used to manage:

- **Elevated cortisol:** metyrapone, ketoconazole, mifepristone, etomidate
- **Elevated aldosterone:** spironolactone, eplerenone, amiloride
- **Elevated testosterone:** bicalutamide, finasteride, spironolactone
- **Elevated estrogen:** tamoxifen

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Last Revised: October 1, 2024

Treatment Choices by Stage of Adrenal Cancer

Treatment of adrenal cancer depends to a large degree on where the cancer started and [how far it has spread](#)¹.

- [Stages I and II](#)
- [Stage III](#)
- [Stage IV or unresectable disease](#)
- [Recurrent adrenal cancer](#)

Stages I and II

[Surgery](#) is the main treatment for stage I and stage II adrenal cancers. The entire adrenal gland will be removed. Since a person has 2 adrenal glands, removal of the diseased one does not generally cause problems. If nearby lymph nodes are enlarged, they will be removed as well and checked to see if they have cancer cells. These lymph nodes are not usually removed unless they are enlarged.

For many people, no further treatment is necessary. If the tumor had “high risk features,” treatment with [radiation](#) and/or [mitotane](#) may be given after surgery to help keep the cancer from coming back. High risk features of adrenal tumors include:

- The margins of the removed tumor have cancer cells.
- The tumor has a Ki-67 percentage (> 10%). A high Ki-67 score means that tumor cells are dividing quickly.
- The tumor capsule ruptured before or during surgery.
- The tumor is large.

The tumor has a high grade, which means the cancer cells look very abnormal under the microscope and is likely to grow fast.

- recurrence may be treated with [surgery](#) to remove the cancer or with radiation to destroy the cancer. Surgery is more likely to be done if all the cancer can be removed. **Distant** recurrence is treated like stage IV disease. For more information on recurrence, see [Understanding Recurrence](#).²

Most of the time, these treatments may provide only temporary help because the tumor will eventually continue to grow. When this happens and these treatments are no longer controlling the cancer, a focus on achieving a good quality of life may be the best choice. There are many other ways your doctor can help maintain your quality of life and control your symptoms. This means that it is important that you tell your doctor how you are feeling and what symptoms you are having. This type of treatment is called **palliative care**.

For more information, see [Understanding Palliative Care](#)³.

Hyperlinks

1. www.cancer.org/cancer/types/stomach-cancer/detection-diagnosis-staging/staging.html
2. www.cancer.org/cancer/survivorship/long-term-health-concerns/recurrence.html
3. www.cancer.org/cancer/managing-cancer/palliative-care/what-is-palliative-care.html

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