

How Immunotherapy is Used to Treat Cancer



Immunotherapy is treatment that uses certain parts of a person's immune system to fight diseases such as cancer. This can be done in a couple of ways:

- Stimulating, or boosting, the natural defenses of your immune system so it works harder or smarter to find and attack cancer cells
- Making substances in a lab that are just like immune system components and using them to help restore or improve how your immune system works to find and attack cancer cells

In the last few decades immunotherapy has become an important part of treating some types of cancer. New immunotherapy treatments are being tested and approved, and new ways of working with the immune system are being discovered at a very fast pace.

Immunotherapy works better for some types of cancer than for others. It's used by itself for some of these cancers, but for others it seems to work better when used with other types of treatment.

What the immune system does

Your immune system is a collection of organs, special cells, and substances that help protect you from infections and some other diseases. Immune cells and the substances they make travel through your body to protect it from germs that cause infections. They also help protect you from cancer in some ways

The immune system keeps track of all of the substances normally found in the body. Any new substance that the immune system doesn't recognize raises an alarm, causing the immune system to attack it. For example, germs contain substances such as certain proteins that are not normally found in the human body. The immune system sees these as "foreign" and attacks them. The immune response can destroy anything containing the foreign substance, such as germs or cancer cells.

The immune system has a tougher time targeting cancer cells, though. This is because cancer starts when normal, healthy cells become changed or altered and start to grow out of control. Because cancer cells actually start in normal cells, the immune system doesn't always recognize them as foreign.

Clearly there are limits on the immune system's ability to fight cancer on its own, because many people with healthy immune systems still develop cancer:

- Sometimes the immune system doesn't see the cancer cells as foreign because the cells aren't different enough from normal cells.
- Sometimes the immune system recognizes the cancer cells, but the response might not be strong enough to destroy the cancer.
- Cancer cells themselves can also give off substances that keep the immune system from finding and attacking them.

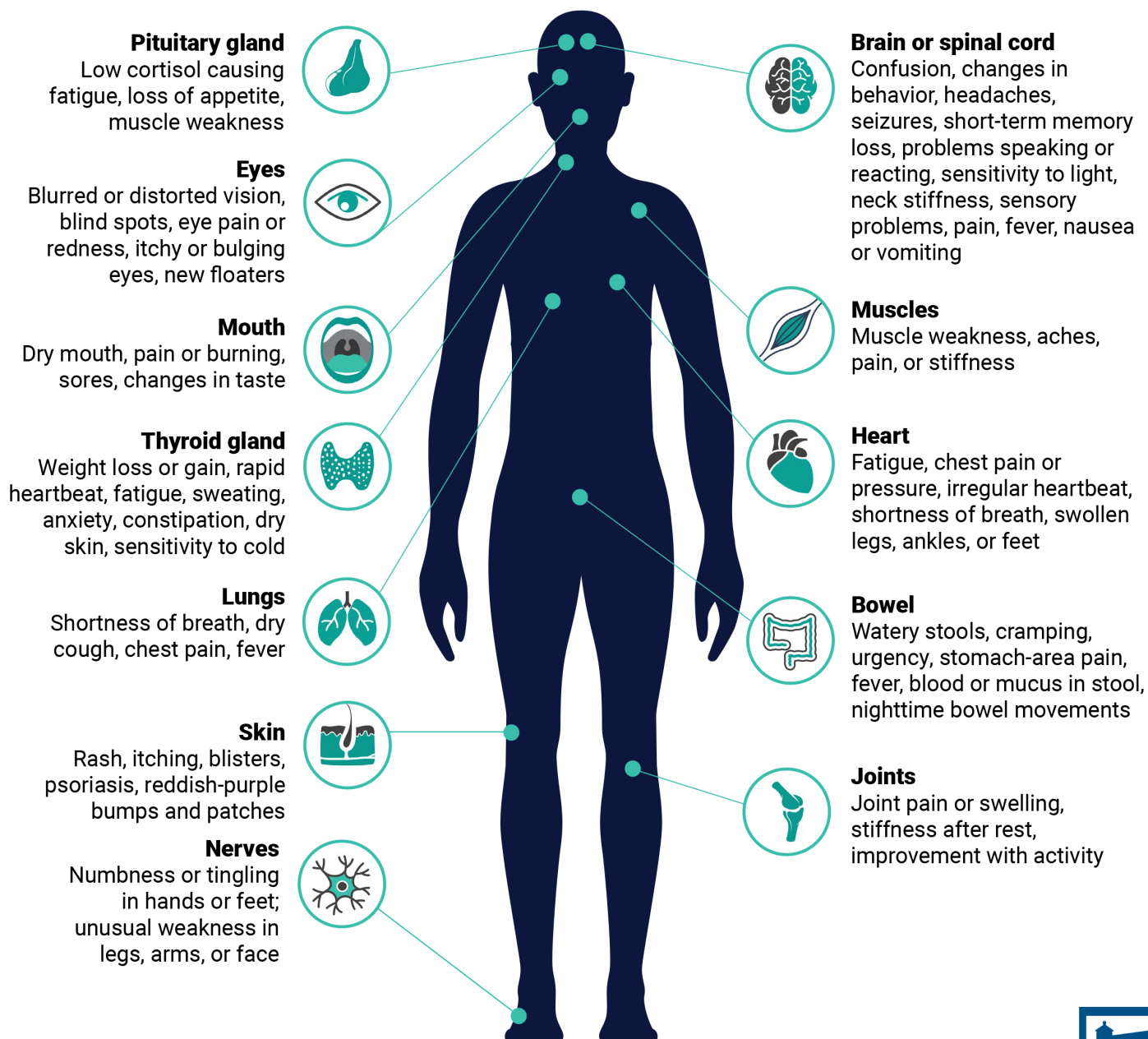
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Immunotherapy Side Effects

Immune checkpoint inhibitors (a type of immunotherapy) offer a promising new way to treat certain cancers. But these medicines can cause your immune system to attack normal organs and tissues in your body, affecting the way they work. Serious side effects typically occur in less than 5% of patients, but certain mild side effects can occur in up to 30% – 50% of patients.

Contact your health care provider right away if you think you may be experiencing ...



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Source: National Comprehensive Cancer Network



What is immunotherapy?

- Immune checkpoint inhibitors are designed to work with your immune system to treat certain types of cancer.
- Immunotherapy works differently than traditional chemotherapy and can cause different kinds of side effects.
- It is important to be aware of possible side effects and contact your health care professional right away if you experience any problems.

Ask your care team for an immunotherapy wallet card

This card lists your immunotherapy regimen, potential side effects, and contact numbers for your cancer care team. A printable card is available from the Oncology Nursing Society (ONS) website.

Did you know?

- No matter where your cancer began, side effects from immunotherapy can affect your whole body.
- Side effects may appear shortly after beginning treatment, within the first couple of months, or even after you finish treatment.
- Because many of these side effects can occur from other causes that would be treated differently, make sure your doctor knows you are or were on immunotherapy.
- You may be more likely to experience side effects if you are taking more than one kind of immunotherapy or immunotherapy combined with other types of cancer medicines.
- Many of these immune side effects are treatable. Your doctor may prescribe corticosteroids or other medications to help manage any problems.
- Rare but serious side effects can lead to death, especially if left untreated.

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