

Prostate Cancer: Vaccine Therapy



You've heard of vaccines to help boost your body's ability to protect against infections like the measles, flu, and COVID-19. There is also a vaccine to help prevent several types of cancers caused by HPV. But if you have prostate cancer, a vaccine called sipuleucel-T may be a treatment option. This vaccine is used to treat people with metastatic prostate cancer. It is used in cases when prostate cancer may no longer respond to hormone therapy but there are few or no cancer symptoms.

You may feel curious or even a bit nervous about getting a vaccine to treat your prostate cancer. That's understandable. This article gives details on this type of therapy and how it can affect your body.

How the vaccine works

It's helpful to break down the process of this therapy into a few steps.

Step 1: Collecting immune cells

The vaccine is designed specifically for you. That way, it's ready to help fight your prostate cancer. To create the vaccine, your healthcare provider will first take a sample of your immune cells (white blood cells).

They'll connect an IV (intravenous) line to a vein in your hand or arm. A machine will take a sample of your blood and preserve the immune cells. This process is called leukapheresis. The remaining parts of the blood that aren't needed go back in your body. The whole process takes a few hours.

Step 2: Creating a vaccine just for you

Your immune cells are then sent to a lab. There they are exposed to a protein found on prostate cancer cells (called prostatic acid phosphatase or PAP). At the same time, they are exposed to a chemical to boost the immune response to PAP. This helps the immune cells recognize and attack prostate cancer cells.

Step 3: Receiving your vaccine

The lab will send the vaccine to your healthcare provider's office or hospital a few days later.

You'll get the vaccine as 3 infusion treatments, about 2 weeks apart. For each treatment, your provider will connect an IV line to a vein in your hand or arm. The other end of the line will be connected to a bag with the treated immune cells. Your healthcare team will watch you for side effects.

Possible side effects

Talk to your healthcare provider about what side effects you may have and when to report them.

During or after the infusion, you may have:

- Extreme tiredness (fatigue)
- Fever
- Chills
- Headache
- Back or joint pain
- Nausea

- Itchy skin
- Skin rash

Many of these symptoms may go away a few days after treatment. In rare cases, you may have trouble breathing or high blood pressure.

After you get the vaccine

This vaccine does not cure prostate cancer. It won't lower PSA levels or shrink the cancer. But it may help someone with prostate cancer live longer.

If you have any side effects after you get the vaccine, write them down and let your healthcare team know. Have your providers' contact information for evenings and weekends and holidays in case you need to reach them during off-hours. Your providers will monitor you and update your treatment plan if needed.

© 2000-2027 The StayWell Company, LLC. All rights reserved. This information is not intended as a substitute for professional medical care. Always follow your healthcare professional's instructions
This information is not intended as a substitute for professional medical care. Always follow your Healthcare professional's instructions. Copyright Krames LLC.