You may already know about some of the treatment options available for cancer, such as surgery, chemotherapy, radiation or targeted therapy. With advances in science, there's now another way to treat certain cancers: immuno-oncology, or sometimes known as cancer immunotherapy.

‘Immuno’ in immuno-oncology refers to your immune system. Immuno-oncology uses drugs known as immunotherapies that target your body’s immune system to help fight cancer.

This guide will help you understand cancer immunotherapy. Keep this for your reference. We’ve provided space for you to take notes and write down any questions you may have as you read through the guide.

The topics we cover in this guide include:

- How does immunotherapy work with my immune system to fight cancer?
- How is immunotherapy different from other types of cancer treatment?
- What side effects should I expect when taking immunotherapy?
- How might the tumor respond to immunotherapy?
- What can I do to play an active role in treatment?
- Is it normal to feel this way?
- What can I do to cope?
- Where can I get more information?
How does immunotherapy work with my immune system to fight cancer?

Immunotherapy targets your body’s own immune system to help fight cancer. Here’s an analogy to explain the concept:

Imagine your body as a garden, where the soil is your immune system. When you’re healthy, the soil is rich and well tended, and the garden is green. Normally, the soil is able to prevent weeds from growing out of control.

Cancer cells are like weeds in your garden. Sometimes the soil can allow weeds to grow and spread, and soon, the entire garden suffers as your plants compete for space and nutrients.
How does immunotherapy work with my immune system to fight cancer?

Immunotherapies are like adding weed-control fertilizer to the soil. It enriches the garden’s existing soil.

Now the soil can help keep the weeds under control and can maintain the garden’s health.
How is immunotherapy different from other types of cancer treatment?

Immunotherapy is a unique approach that uses the body’s immune system to help fight cancer. To understand how immunotherapy is different from other treatments, let’s revisit the garden analogy.

If your body is like a garden, you and your healthcare team will decide on how to remove the weeds (cancer cells) while doing a lesser amount of damage to the good plants (healthy cells).

Surgery removes large patches of weeds and the soil around them, sometimes disturbing the good plants and leaving some weed roots behind.

Chemotherapy is like spraying a general weed killer on the whole garden. This approach may not kill all the weeds and may also harm some good plants.
How is immunotherapy different from other types of cancer treatment?

Radiation is like increasing the power of the sun with a magnifying glass to target and dry the weeds out, but in the process, some of the good plants can also be damaged.

With targeted therapy, weeds are directly sprayed with weed killer. Good plants may still be damaged.

Instead of targeting the weeds, immunotherapy is like adding a weed-control fertilizer to the soil. This fertilizer enriches the soil to help control weeds, which in turn restores the health of your garden. But too much fertilizer in the soil might harm your garden.

Ask your healthcare team about the different treatment options available to you.
The side effects you may experience will depend on the immunotherapy you are taking and how your immune system reacts to that treatment. Everyone’s immunotherapy experience is unique, and side effects are possible during or after treatment.

Since your immune system takes care of your whole body, side effects can happen in many of your organ systems, some of which may be serious.

Your care team will have a better idea of what side effects you may experience. Ask your care team for a list of side effects so you can recognize and manage them as soon as they come up.

To manage your side effects, it is important to report how you feel to your care team. No one knows your body better than you. Keep track of your symptoms and update your care team.
How might the tumor respond to immunotherapy?

Tumors can respond differently to immunotherapy based on how well your immune system can target the cancer cells. For some people, immunotherapy can help shrink the tumor or slow its growth. For others, the cancer may still be detectable, but could no longer be actively growing.

At your follow-up appointments, your care team will use scans to monitor your treatment progress. In the scans, the tumor may appear the same, smaller or larger compared to before. If your tumor looks larger after a round of treatment, it may not always mean that immunotherapy isn’t working.

Here’s an analogy to explain why this could happen:

Think of a bug bite, where the skin becomes red, hot and swollen around the site of the bite. This is a sign of inflammation, which results from your immune system’s reaction to the bite, not from the bite itself.
How might the tumor respond to immunotherapy?

A similar thing could appear in your scans. If the immunotherapy is working, your immune system will react and move toward the tumor site to fight cancer. This can make your tumor look larger on scans.

If your tumor looks larger, it may be that your immune system is working on the tumor. However, in other cases, it could be that immunotherapy is not working, and the tumor is growing. Everyone responds to therapy differently.

Scans are not the only way to determine if the therapy is working. Your healthcare team will also be looking at other lab results and your overall well-being to monitor your progress.

It is important to report how you feel to your care team. No one knows your body better than you.
What can I do to play an active role in treatment?

Prepare for appointments
Stay informed. Don’t be afraid to ask a lot of questions. Write them down as they come to you and bring them to your appointments. Record your progress and any side effects daily. Sometimes the amount of information you receive at each appointment can be overwhelming. Consider asking your doctor if you can record your visits so you can listen to the conversation again later.

Bring support
A friend or family member can act as a second set of ears and eyes at an appointment. They may also have their own questions for your healthcare team.

Be organized
Be sure to attend all appointments. Call ahead to confirm the appointments, and find out what you need to bring. Use the checklist below to prepare for your next visit.

Appointment checklist
- Mark the date and time on a calendar.
- Make any necessary arrangements for traveling to and from your appointment.
- Write down any questions you have in advance.
- Bring a pen and notepad.

Stay in touch
Remember, you are not alone in your fight against cancer. As you learn more about your treatment, try to anticipate your tasks and think about who can help you. For example, someone could help you plan in advance for getting to and from the clinic.

Engage your community
Allow others to take part in your journey and learn from their experiences and insights. Talking with cancer survivors, support groups and your healthcare team will help you understand the problems you might encounter and how to overcome them.

Report your symptoms
For fear of being a nuisance, some patients are reluctant to report side effects to their healthcare team. Do not hesitate! Your team is there to help you, and they need to be fully informed to provide the best care possible. Tracking your side effects is key to monitoring your progress.

Important contact information
Nurse ..............................................
Oncologist ........................................
Therapist ...........................................
Support group ....................................
Living with cancer is an emotional time. The feelings you are having are normal responses to this life-changing experience.

Sometimes we can cope with these feelings on our own, but other times we need help from others. Remember that you’re human too and not just a patient.

**Reflect**

Periodically, take a look at the questions below to help you dial in to how you are feeling. Feel free to make copies of this page.

*In the past 7 days:*

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Frequency Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt worried…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt afraid…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt angry…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt helpless…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt guilty…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt anxious…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt in denial…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt _________</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt sad…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt hopeful…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
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<tr>
<td>I felt optimistic…</td>
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<tr>
<td>I felt energetic…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
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<tr>
<td>I felt happy…</td>
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<tr>
<td>I felt empowered…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt grateful…</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
<tr>
<td>I felt _________</td>
<td>Never…..Rarely…..Sometimes…..Often…..Always</td>
</tr>
</tbody>
</table>

Identifying how you are feeling is the first step to taking care of yourself. The next page gives examples of how you can support your emotional well-being.
What can I do to cope?

Your emotional well-being is just as important as your physical health. There are many ways for you to take care of your emotional health, such as:

- Talking to your care team
- Talking to friends and family
- Talking to a counselor
- Finding local or online support groups
- Finding time for yourself
- Setting aside quiet time
- Journaling
- Going for a walk
- Getting fresh air
- Meditating
- Exercising
- Resting

It is common for patients to seek support from other people. If there are aspects of your therapy that you are uncomfortable sharing with those closest to you, consider speaking with others in your community, such as:

- Friends and family
- Your healthcare team
- Therapists
- Support groups
- Fellow patients
- A religious advisor

Reflect

Take a look at the questions below to see how you can expand your support network:

Do you talk to others about yourself or your situation?
Never.....Rarely.....Sometimes.....Often.....Always

Do you have someone to confide in or talk to about yourself or your situation?
Never.....Rarely.....Sometimes.....Often.....Always

Do you have someone who will listen to you when you need to talk?
Never.....Rarely.....Sometimes.....Often.....Always

Your healthcare team knows this is a difficult time for you. Feel free to approach them for additional help. They may be able to introduce you to other resources in your area.
Where can I get more information?

Your healthcare team is excited to offer you this new option for treatment. For more information about cancer immunotherapy, ask your healthcare team or visit the following websites.

Cancer Research Institute [www.cancerresearch.org](http://www.cancerresearch.org)
American Cancer Society [www.cancer.org](http://www.cancer.org)
Stand Up to Cancer [www.standup2cancer.org](http://www.standup2cancer.org)
Cancer Support Community [www.cancersupportcommunity.org](http://www.cancersupportcommunity.org)
CancerCare [www.cancercare.org](http://www.cancercare.org)

This list of resources is provided as a convenience. Bristol-Myers Squibb does not endorse and is not responsible for information provided by third-party organizations.