

NCCN QUICK GUIDE™

Immunotherapy Side Effects

Immune Checkpoint Inhibitors



This NCCN QUICK GUIDE™ sheet summarizes key points from the complete [NCCN Guidelines for Patients: Immunotherapy Side Effects - Immune Checkpoint Inhibitors](#). These guidelines explain which tests and treatments are recommended by experts in cancer. To view and download the guidelines, visit NCCN.org/patients or, to order printed copies, visit Amazon.com

NCCN Guidelines
for Patients®
Page Number

What are the side effects of immune checkpoint inhibitors?



Skin	Rash with both flat patches and bumps (maculopapular rash) and itching (pruritus) are very common. Symptoms are usually mild and can be managed without stopping immunotherapy. While rare, a severe blistering disorder (Stevens-Johnson Syndrome) can occur.	12
Fatigue	Tiredness and lack of energy are common. Severe fatigue may be a sign of a hormone-related (endocrine) problem. Urgent testing and treatment may be needed.	19
Gastrointestinal	An increase in bowel movements (diarrhea) and inflammation of the large intestine (colitis) are common. Symptoms of colitis include watery diarrhea, cramping, and abdominal pain. Liver inflammation (hepatitis) is less common and does not usually cause symptoms.	23
Endocrine	Hormone-related (endocrine) side effects include hypothyroidism, inflammation of the pituitary gland (hypophysitis), and low cortisol production (primary adrenal insufficiency or Addison's disease).	27
Lung	Symptoms of lung inflammation (pneumonitis) include trouble breathing, dry cough, fever, and chest pain. Mild pneumonitis does not always cause symptoms but can be seen on imaging tests.	33
Musculoskeletal	Inflammatory arthritis (eg, rheumatoid arthritis; psoriatic arthritis), muscle pain and inflammation, and polymyalgia rheumatica (PMR) are possible. PMR causes aching and stiffness in the neck, shoulders, and hips.	37
Less common	Less common but potentially serious effects include nervous system disorders, heart rhythm problems, heart inflammation (myocarditis), inflammatory eye conditions, and inflammation of the kidneys and pancreas.	42



How are side effects treated?

- Corticosteroids are the preferred treatment for most immune checkpoint inhibitor side effects. Prednisone and methylprednisolone are commonly used corticosteroids.
- Side effects of corticosteroid therapy include increased appetite, weight gain, mood changes, and high blood pressure.
- Corticosteroids can raise blood sugar. This is especially problematic for people whose blood sugar is already high due to diabetes or pre-diabetes. Blood sugar monitoring and treatment may be needed.
- Corticosteroid therapy should not be stopped suddenly. Withdrawal symptoms such as anxiety, sweating, nausea, and insomnia can occur.
- Additional immune-suppressing medicines (immunosuppressants) are needed for side effects that do not improve with steroid therapy.

9

What else should I know?

- Stay in close contact with the center where you are receiving treatment. Symptoms that may seem unrelated may be signs of an immunotherapy-related side effect.
- Notify all of your health care providers—especially your primary care doctor—that you are receiving, or have received, immunotherapy.
- You will be monitored closely to detect potential side effects and to see how well immunotherapy is working against your cancer.
- Monitoring includes having physical exams and blood and other laboratory tests on a regular basis during immunotherapy.

8

When should I contact my cancer care team?

- If you develop new signs and symptoms such as severe fatigue, headache, rash, cough, shortness of breath, chest pain, abdominal bloating, change in bowel habits, weight loss, vision changes or eye pain, severe muscle weakness, severe muscle or joint pains, or mood changes
- If you are seen by a new health care provider
- If you are admitted to the hospital
- Before getting any immunizations or vaccinations

52

The NCCN QUICK GUIDE™ series and NCCN Guidelines for Patients® are supported by charitable donations made to the NCCN Foundation®. For more details and the full library of patient and caregiver resources, visit [NCCN.org/patients](https://www.nccn.org/patients).



DONATE NOW
[NCCNFoundation.org/Donate](https://www.nccn.org/Donate)



[NCCN.org/patients](https://www.nccn.org/patients) - for Patients | [NCCN.org](https://www.nccn.org) - for Clinicians