

# Manage Toxicities From Immune Checkpoint Inhibitors

You'll get **questions about adverse effects with immune checkpoint inhibitors (ICIs) as use increases.**

Immune checkpoint inhibitors, such as pembrolizumab (*Keytruda*), are a common type of cancer immunotherapy.

Cancer immunotherapy works by helping the patient's immune system find and kill cancer cells. It's different from chemotherapy, which directly targets dividing cells...malignant or healthy.

Be aware that toxicities can occur at any time, even months or more after stopping an ICI...and can be life-threatening.

Look for immune-related adverse effects...due to a revved up immune system. These can affect any body system.

Expect the most common to be dermatologic (rash, pruritis, etc)...or GI (diarrhea, colitis, etc). Other common toxicities include endocrine disorders, hepatitis, and pneumonitis.

Rule out other culprits, such as *C. diff* in a patient with colitis...or a viral infection causing elevated liver enzymes.

Use prednisone or methylprednisolone to treat the majority of severe ICI toxicities...and many moderate cases. Temporary steroid-induced immunosuppression doesn't seem to diminish antitumor effects.

Generally taper steroids over at least 4 to 6 weeks once symptoms are minimal.

If there's no response to steroids in 2 to 3 days, expect to give additional immunosuppressants (infliximab, mycophenolate, etc).

Use adjuncts as needed, such as loperamide and hydration for colitis...antihistamines for rashes...or beta-blockers for thyrotoxicosis.

At discharge, be sure to communicate with outpatient oncology providers. They may need to hold or permanently stop ICIs based on the severity of adverse effects.

Remind patients to carry a wallet card that lists their immunotherapy...or keep the information in their phone.

## Key References:

-National Comprehensive Cancer Network. Management of immune checkpoint inhibitor-related toxicities (Version 3.2023). [https://www.nccn.org/professionals/physician\\_gls/pdf/immunotherapy.pdf](https://www.nccn.org/professionals/physician_gls/pdf/immunotherapy.pdf). (Accessed November 27, 2023).

-Schneider BJ, Naidoo J, Santomasso BD, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update. *J Clin Oncol*. 2021 Dec 20;39(36):4073-4126.

Hospital Pharmacist's Letter. February 2024, No. 400217