

As the use of immunotherapeutic agents increases in single-agent and multimodality treatment regimens, oncology nurses face the challenge of administering and caring for patients receiving new and unique agents. Oncology Nursing Society clinical staff and clinical nurses collaborated to produce a set of recommendations to educate nurses involved with the monitoring of patients receiving immunotherapy on administration procedures and safe handling of these agents to ensure patient and staff safety and to reduce risk of error. The recommendations are meant to provide clinical nurses with a framework on which to build policies and procedures for administering new treatment modalities.

#### AT A GLANCE

- Clinical nurses require fundamental knowledge of immunotherapy classes to safely and effectively care for patients receiving immunotherapeutic agents.
- Administration of immunotherapeutic agents should include safety procedures such as independent verification of drugs and doses prior to administration.
- Drug-specific considerations should be applied when determining the safe-handling needs of practices caring for patients receiving immunotherapy.

#### KEYWORDS

treatment modalities; drug therapy; healthcare policies; safe-handling procedures

#### DIGITAL OBJECT IDENTIFIER

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# Immunotherapy Administration

## Oncology Nursing Society recommendations

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Although many unknowns about immunotherapies exist, the base of literature on administration considerations, anticipated side effects, and treatment strategies for immuno-oncology is broadening. However, little has been published regarding evidence-based administration and safe-handling procedures. Nurses may be administering immunotherapeutic agents possibly for the first time in their practice. This article presents a summary of recommendations based on Oncology Nursing Society (ONS) guidelines for practice and the anecdotal experiences of professionals at cancer centers with various backgrounds in immunotherapy administration. ONS is committed to following trends regarding immunotherapeutic agents to provide timely recommendations and guidelines based on the best evidence available to support institutional policies and procedures and the healthcare professionals administering immunotherapy.

### Education and Competencies

ONS's position on the education of nurses who administer and care for individuals receiving chemotherapy and biotherapy agents is that they hold fundamental knowledge of the agents being received by patients, including, but not limited to, mechanisms of action, pharmacologic and administration principles, indications for treatment, expected toxicities and adverse events, assessment and management rec-

ommendations, and a process to ensure patient safety (ONS, 2015). The same position holds true for immunotherapy agents. ONS recommends that nurses have a fundamental knowledge of the class of immunotherapy the patient is receiving, as well as knowledge of specific agents and protocols to follow, and apply this knowledge to administration and monitoring for efficacy and adverse events during the treatment trajectory. Similar to processes for defining and maintaining chemotherapy competence, institutions involved in immunotherapy administration must determine what educational programs and competencies will be required of nurses and healthcare practitioners working with patients receiving these agents and build these competencies into existing policies and procedures.

The importance of a fundamental knowledge of immunotherapy becomes critical when considering the highly unique and life-threatening complications associated with immunotherapeutic agents such as checkpoint inhibitors, interleukins, oncolytic viruses, and chimeric antigen receptor (CAR) T-cell therapies (Maude, Barrett, Teachey, & Grupp, 2014; Tyre & Quan, 2007). In addition, the immunotherapy-related side effect of diarrhea is managed very differently from diarrhea caused by traditional cytotoxic chemotherapy. Although it may be difficult to obtain side effect information on investigational agents, nurses must be aware of available drug information, and