Toxicity Management
Development of a novel and immune-mediated adverse events algorithm

Haleigh E. Mistry, MS, PA-C, Sheryl G. Forbes, BSN, MEd, RN, CCRP, and Nathan Fowler, MD

BACKGROUND: Novel immunotherapy and biologic agents are being developed with the potential to improve outcomes and reduce long-term toxicities among individuals with hematologic malignancies. These emerging drugs affect neoplastic cells and the surrounding microenvironment, causing unique immune-mediated toxicities.

OBJECTIVES: The aim was to develop an algorithm for clinical staff to manage unique toxicities associated with next-generation immunotherapies indicated in the hematologic population, using a system-focused approach.

METHODS: Data were collected using specific toxicities based on the four major novel biologic classes. Immune-mediated adverse events were reported across studies. Based on published literature, institutional experience, and group consensus, a novel algorithm for managing immune-mediated toxicities was created.

FINDINGS: The development of this treatment algorithm provides a more streamlined approach for managing common but unique toxicities and improves safety, compliance, patient outcome, and quality of life with novel immuno-oncologic agents.

KEYWORDS
immunotherapy; toxicities; novel agents; immune-mediated; adverse events

DIGITAL OBJECT IDENTIFIER
10.1188/17.CJON.S2.53-59