Advances in the understanding of the immunogenicity of tumors have provided the basis for immuno-oncology, the development of immunotherapeutic agents that augment the patient’s antitumor immunity and disrupt the immune-regulatory circuits that allow tumors to evade the immune system. Two immunomodulatory agents recently have been introduced for the treatment of malignancy: sipuleucel-T and ipilimumab. Unlike cytotoxic chemotherapy, immunotherapies stimulate the patient’s immune system to mount or augment existing endogenous antitumor immune responses. Both agents have demonstrated significant improvements in long-term overall survival in patients. Like other immunotherapies, sipuleucel-T and ipilimumab also are characterized by adverse events that manifest as immune-related inflammatory conditions that typically are low grade. Management guidelines have been developed and emphasize early recognition of the signs and symptoms of immune-related adverse events and treatment with corticosteroids. Because these events can manifest even after the cessation of therapy, patients treated with immunotherapies should continue to be followed by their oncology team and other healthcare providers.

Rajni Kannan, BS, MS, RN, ANP-BC, and Kathleen Madden, RN, BSN, MSN, FNP-BC, AOCNP®, and Stephanie Andrews, MS, ANP-BC, are nurse practitioners in the Laura and Isaac Perlmutter Cancer Center at New York University Medical Center in New York City, and Stephanie Andrews, MS, ANP-BC, is a nurse practitioner in medical oncology at Moffitt Cancer Center in Tampa, FL. The authors take full responsibility for the content of this article.

Kannan, Madden, and Andrews served on the speakers bureau for Bristol-Myers Squibb. Writing and editorial support was provided by Jennifer Wietzke, PhD, at StemScientific through support from Bristol-Myers Squibb. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the independent peer reviewers or editorial staff. Kannan can be reached at rajni.kannan@nyumc.org, with copy to editor at CJONEditor@ons.org.

(Submitted March 2013. Accepted for publication August 25, 2013.)

Key words: immuno-oncology; immunotherapy; immune responses; patient management

Digital Object Identifier: 10.1188/14.CJON.311-317