

Durvalumab Immunotherapy

Nursing management of immune-related adverse events during the journey of patients with stage III non-small cell lung cancer

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BACKGROUND: When resection is not an option, platinum-based chemoradiotherapy (CRT) has been the historic standard of care in non-small cell lung cancer (NSCLC). Prognosis remains poor with CRT alone. Durvalumab has shown significant improvement (versus placebo) in progression-free and overall survival in patients with unresectable stage III NSCLC without progression following CRT.

OBJECTIVES: This article aims to provide an overview of the efficacy and safety outcomes with durvalumab in patients with stage III NSCLC and identify management strategies for potential adverse events (AEs).

METHODS: A review of published literature and guidelines was performed to evaluate durvalumab clinical outcomes and AE management strategies.

FINDINGS: Durvalumab has established efficacy in patients with unresectable stage III NSCLC and is now the standard of care following CRT. Nurses need to be trained to recognize potential immune-related AEs in patients treated with immune checkpoint inhibitors.

KEYWORDS

durvalumab; immunotherapy; immune checkpoint inhibitors; NSCLC; nurse

DIGITAL OBJECT IDENTIFIER

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NON-SMALL CELL LUNG CANCER (NSCLC) accounts for about 80% of all lung cancers (Siegel et al., 2019). Surgical resection is considered the standard of care in early-stage NSCLC (National Comprehensive Cancer Network [NCCN], 2020b). Although most patients with NSCLC present with advanced disease, about 30% are diagnosed with stage III (locally advanced) disease (Siegel et al., 2019) (see Table 1). Many locally advanced NSCLC cases are not eligible for surgical resection, but patients can be treated with curative intent using chemoradiotherapy (CRT). The identification of immune checkpoints and the development of inhibitors targeting these checkpoints has altered the cancer treatment landscape for several tumor types, including NSCLC (Antonia et al., 2017; Borghaei et al., 2015; Brahmer et al., 2015; Fehrenbacher et al., 2016; Garon et al., 2015).

Immunotherapies offer significant clinical benefit, but there are risks for serious adverse events (AEs). As foundational members of an interprofessional team, nurses have unique opportunities to identify and manage these AEs early. It is vital that nurses remain informed concerning new treatment strategies and management algorithms for immune-related AEs (irAEs) (Ciccolini et al., 2017; Gordon et al., 2017). This review provides an overview of the efficacy and safety of the immune checkpoint inhibitor durvalumab and highlights patient management strategies of relevance to oncology nurses.

A key role of the immune system is to identify and remove damaged or aberrant cells. Immunotherapies enhance the immune response, allowing the immune system to identify and eradicate tumor cells that would otherwise have avoided immune detection (Pennock & Chow, 2015). The most extensively studied oncology-specific immunotherapies are immune checkpoint inhibitors, including approved antibodies against the programmed death receptor-1 (PD-1) and its ligand (PD-L1) and cytotoxic T-lymphocyte-associated protein 4 (CTLA-4) (Kyi & Postow, 2014; Meyers et al., 2018).

Durvalumab in Non-Small Cell Lung Cancer

The PACIFIC trial assessed the efficacy and safety of durvalumab in patients with unresectable stage III NSCLC whose disease did not progress following concurrent platinum-based CRT (two or more cycles) (Antonia et al., 2017). Durvalumab (an anti-PD-L1 antibody) significantly prolonged overall