

# Fixed Combination Antiemetic

## A literature review on prevention of chemotherapy-induced nausea and vomiting using netupitant/palonosetron

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**BACKGROUND:** Prevention of chemotherapy-induced nausea and vomiting (CINV) can be improved with guideline-consistent use of antiemetics. However, adherence to antiemetic guidelines remains often insufficient. Therefore, new strategies that improve adherence are needed.

**OBJECTIVES:** To review the latest antiemetic guideline recommendations and provide an update on the use of NEPA, a fixed combination antiemetic composed of the neurokinin-1 receptor antagonist (RA) netupitant and the 5-hydroxytryptamine-3 RA palonosetron (Akynzeo®).

**METHODS:** Analysis of the literature was performed, including guidelines, published literature, congress data on NEPA, and relevant articles on CINV.

**FINDINGS:** Nurses are in a unique position to promote guideline-consistent antiemetic prophylaxis and are central in the education of patients and caregivers. Thus, nurses' continuous education on antiemetic treatments is key for the prevention and management of CINV. NEPA offers a simplified antiemetic therapy with the potential to increase guideline adherence.

### KEYWORDS

chemotherapy-induced nausea and vomiting; antiemetic guidelines; NEPA

### DIGITAL OBJECT IDENTIFIER

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**CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING (CINV)** is a common and distressing side effect for patients receiving highly emetogenic chemotherapy (HEC) or moderately emetogenic chemotherapy (MEC) (Hesketh, 2009). Without adequate prophylaxis, greater than 90% of patients receiving HEC and 30%–90% of patients receiving MEC will experience CINV (Aapro et al., 2012). Consequences often include metabolic imbalance, nutrient depletion, and anorexia; impaired daily functioning and reduced quality of life; postponement or dose reduction of chemotherapy; and increased resource use and costs (National Comprehensive Cancer Network [NCCN], 2017; Viale, Grande, & Moore, 2012).

Oncology nurses have observed that clinical challenges, often manifested as obstacles to CINV prophylaxis, may be timely opportunities to provide education to patients, family members, and significant others involved in the ongoing care of patients receiving potentially emetogenic chemotherapy. Patient perceptions may affect the control of CINV. Some patients interpret nausea and vomiting as a positive response to chemotherapy and a sign that it is working. Many patients fear that a dose reduction or discontinuation of treatment will occur if CINV is reported to physicians and nurses, and others expect to suffer during chemotherapy and are concerned that reporting CINV would be interpreted as complaining. These perceptions represent excellent opportunities for nurses to provide comprehensive education regarding planned chemotherapy and all supportive care medications that can be administered (Salsman et al., 2012; Thompson, 2012).

The selection of antiemetic agents for CINV prevention is supported by evidence-based guidelines. The most relevant, up-to-date guidelines include those from the Multinational Association of Supportive Care in Cancer (MASCC)/European Society for Medical Oncology (ESMO) (Roila et al., 2016), American Society of Clinical Oncology (ASCO) (Hesketh et al., 2017), and NCCN (2017). With guideline-consistent use of antiemetics, emesis can be prevented in the majority of patients (Jordan, Jahn, & Aapro, 2015). However, guidelines are not always followed; therefore, CINV remains a challenge for some patients (Aapro et al., 2012; Vidall et al., 2015). Additional antiemetic options are now available, such as netupitant/palonosetron (NEPA) (Akynzeo®) (Helsinn Healthcare SA, 2016),