

**Tropisetron in the prevention of acute nausea and vomiting in patients treated with high dose epirubicin.**

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**Source**

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**Abstract**

Tropisetron is a novel selective antagonist of the type-3 serotonin (5-HT<sub>3</sub>) receptor, with proven efficacy in the control of emesis related to cancer treatment. Epirubicin in doses of > 100 mg/m<sup>2</sup> has a high emetogenic potential. This study was designed to determine whether a single intravenous administration of tropisetron could prevent acute nausea and vomiting in patients treated with high dose epirubicin. Forty chemotherapy naive breast cancer patients treated with epirubicin at a dose of 110 mg/m<sup>2</sup> on an outpatient basis were enrolled in the study. Tropisetron 5 mg i.v. was used as antiemetic prophylaxis. "On demand" treatment with tropisetron 5 mg p.os was used for the rescue of patients who failed on the initial i.v. dose. Complete control of acute nausea and vomiting had 62.5% (95% C.I. 47.2-77.8), partial control 15% (95% C.I. 3.8-26.2) and 22.5% (95% C.I. 9.3-35.7) insufficient control or failure. Headache was the most common adverse event reported in 3 patients (7.5%) and constipation in 2 patients (5%). Interestingly, patients with a negative experience of nausea and vomiting during pregnancy and those treated for metastatic disease, had a better control of chemotherapy-induced nausea and vomiting. In conclusion, a single 5 mg i.v. dose of tropisetron is safe and effective in preventing acute emesis in patients treated with high dose epirubicin.