Postoperative dose-dense sequential chemotherapy with epirubicin, paclitaxel and CMF in patients with high-risk breast cancer: safety analysis of the Hellenic Cooperative Oncology Group randomized phase III trial HE 10/00.

Fountzilas G, Dafni U, Gogas H, Linardou H, Kalofonos HP, Briasoulis E, Pectasides D, Samantas E, Bafaloukos D, Stathopoulos GP, Karina M, Papadimitriou C, Skarlos D, Pisanidis N, Papakostas P, Markopoulos C, Tzorakoeleftherakis E, Dimitrakakis K, Makrantonakis P, Xiros N, Polichronis A, Varthalitis I, Karanikiotis C, Dimopoulos AM; Hellenic Cooperative Oncology Group.

Source

Department of Medical Oncology, Papageorgiou Hospital, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece. fountzil@med.auth.gr

Abstract

BACKGROUND:

A randomized phase III trial in high-risk breast cancer patients was conducted, to further explore the impact of dose-density in the adjuvant treatment for breast cancer. The safety analysis is presented.

PATIENTS AND METHODS:

From October 2000 until June 2005, 1121 node-positive patients were randomized to sequential dose-dense epirubicin 110 mg/m(2) and paclitaxel (Taxol, Bristol Myers-Squibb, Princeton, New Jersey, USA) 250 mg/m(2) (group A), or concurrent epirubicin 83 mg/m(2) and paclitaxel 187 mg/m(2) (group B), both followed by three cycles of 'intensified' combination chemotherapy with cyclophosphamide, methotrexate and fluorouracil (CMF). Granulocyte colony-stimulating factor was given prophylactically with the dose-dense treatments.

RESULTS:

Median dose intensity of epirubicin and paclitaxel was double in group A, as designed, with significantly less cycles administered at full dose ($P < 0.001$). Median cumulative dose of all drugs and total treatment duration, however, were identical between groups. Severe taxane-related toxic effects were more frequent in group A, while severe thrombocytopenia was low and present only in group A. There were no differences in the rates of other hematological toxic effects, including febrile neutropenia. The rates of secondary malignancies were low.

CONCLUSION:

Both regimens as used in the present study are well tolerated and safe. The rates of severe taxane-related toxic effects and thrombocytopenia, although low overall, are significantly increased with the dose-dense sequential regimen.