Postoperative dose-dense sequential versus concomitant administration of epirubicin and paclitaxel in patients with node-positive breast cancer: 5-year results of the Hellenic Cooperative Oncology Group HE 10/00 phase III Trial.

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Source

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Abstract

To explore the impact of dose intensity (DI) in the adjuvant setting of breast cancer, a randomized phase III trial was conducted comparing postoperative dose-dense sequential chemotherapy with epirubicin, paclitaxel, and cyclophosphamide, methotrexate and fluorouracil (CMF)in high-risk breast cancer patients. From Oct 2000 to June 2005, 1,121 node-positive patients were randomized to dose-dense sequential epirubicin 110 mg/m(2) and paclitaxel (Taxol(®), Bristol Myers-Squibb, Princeton, NJ) 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 CMF. By protocol design total cumulative dose and duration of treatment were identical in both groups. Dose intensity of epirubicin and paclitaxel was double in the dose-dense arm. Prophylactic treatment with granulocyte colony-stimulating factor was given with the dose-dense treatments. Disease-free survival (DFS) was the primary endpoint. At a median follow-up of 76 months, 253 patients (23%) had documented disease relapse (123 vs. 130 in groups A and B, respectively) and 208 deaths (101, group A and 107, group B) had been observed. The 5-year DFS rate of 74 and 74% and OS rate of 86 and 85% were observed for group A and group B, respectively. No differences were found in DFS or OS between the two treatment groups (P = 0.78 and P = 0.45 for DFS and OS, respectively). Safety analysis results showing that both regimens were well tolerated and safe have been previously published (Fountzilas et al. Ann Oncol 2008). No DFS or OS benefit from the dose-dense sequential epirubicin and paclitaxel was detected when compared to the concurrent administration of the same drugs. No additional safety issues were raised with long-term follow-up.