

Mitomycin C and vinblastine: an active regimen in previously treated breast cancer patients

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ABSTRACT

Background. Metastatic breast cancer has a substantial mortality burden on women worldwide. Presented herein is our experience with the combination of mitomycin-C and vinblastine in heavily pretreated breast cancer patients.

Methods. Candidates were women with measurable metastatic disease, previously exposed to two or more chemotherapy regimens. Mitomycin-C was given at the dose of 10 mg/m² on day 1 and vinblastine at 6 mg/m² on days 1 and 21 of each 42-day cycle. Analysis included patients exposed to one or more cycles of therapy. Kaplan-Meier curves were used to generate overall survival and time-to-treatment progression curves.

Results. Forty patients previously exposed to a median of three prior regimens were included. Partial response and stable disease were reported in 14 (35%) and 10 (25%), patients, respectively, for a clinical benefit of 60%. With a median follow-up of 11 months, the median time to progression and survival durations lasted 4 and 12 months, respectively. In a subgroup of 17 women with prior anthracycline and taxane exposure, partial response and stable disease were reported in 4 (23.5%) and 5 (29%), respectively. Treatment was generally well tolerated, with grade 3-4 hematologic and non-hematologic toxicity reported in 8 (20%) and 3 (7.5%) patients, respectively. Two cases of fatalities (5%) occurred with pulmonary toxicity in women heavily exposed to mitomycin-C (cumulative doses of ≥ 40 mg/m²) and soon after red blood cell transfusion.

Conclusions. Chemotherapy with mitomycin-C and vinblastine is active and well-tolerated in heavily pretreated breast cancer patients. Caution should be taken to avoid blood transfusion alone with mitomycin-C therapy.

Key words: breast cancer, mitomycin-C, vinblastine.

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