

Pathological Complete Response to Neoadjuvant Cisplatin in BRCA1-Positive Breast Cancer Patients

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ABSTRACT

Purpose:

To estimate the frequency of complete pathologic response (pCR) after neoadjuvant treatment with cisplatin chemotherapy in women with breast cancer and a BRCA1 mutation.

Patients and Methods:

107 women with breast cancer and a BRCA1 mutation, who presented with stage I to III breast cancer between December 2006 and June 2014 were treated with cisplatin 75 mg/m² every three weeks for four cycles, followed by mastectomy and conventional chemotherapy (AC). Information was collected on clinical stage, grade, hormone receptor status and Her2neu (HER2) status prior to treatment. Pathologic complete response was determined by review of surgical specimens.

Results:

107 patients were enrolled in the study, including 93 patients who were treated for first primary breast cancer and 14 patients who had previously received treatment for a prior cancer. A pathologic complete response (pCR) was observed in 65 of the 107 patients (61%).

Conclusions:

Platinum-based chemotherapy is effective in a high proportion of patients with BRCA1-associated breast cancer.