BREAST CANCER

TNBC: can we treat the untargetable?

Survival in patients with triple negative breast cancer (TNBC) is extremely poor. The risk of relapse is particularly increased in women who do not achieve a pathological complete response (pCR)—a surrogate end point for survival in women with either HER2-positive breast cancer or TNBC—to neoadjuvant treatment. Studies have showed that treatment with anthracyclines and carboplatin is active in both groups of patients. Furthermore, cohort studies have suggested high sensitivity to cisplatin or carboplatin in patients with TNBC and *BRCA* mutations.

As the true efficacy of carboplatin in breast cancer is not fully determined, Gunter von Minckwitz and coauthors wanted to assess the potential benefit of adding neoadjuvant carboplatin to an anthracycline, taxane and targeted therapy regimen (trastuzumab and lapatinib for women with HER2-positive disease or bevacizumab in women with TNBC).

In the final analysis, 43.7% of women treated with carboplatin achieved a

pCR compared with 36.9% of women who had not received this agent. Of the patients with TNBC, 53.2% treated with carboplatin achieved a pCR compared with 36.9% of the patients who were not treated with this agent. “Carboplatin increases the pCR rate in TNBC to a high extent. This finding had been indicated by some small cohort studies, but never demonstrated in a randomized trial,” explains von Minckwitz.

For women with HER2-positive disease, a similar number achieved a pCR regardless of carboplatin treatment or no treatment (32.8% versus 36.8%, respectively). Haematological and non-haematological adverse effects were significantly more common with carboplatin in both disease subgroups.

A phase III neoadjuvant study—GeparOcto—will soon open and the aim is to “compare the combination of carboplatin with a taxane to that of a dose-intensified sequential chemotherapy regimen of epirubicin, paclitaxel, and

cyclophosphamide, a regimen which has already demonstrated the highest efficacy in a large adjuvant study,” says von Minckwitz. At the ASCO 2014 meeting, his team will also present the results of the carboplatin and taxane-based regimen in the GeparSixto study according to *BRCA* mutations and family risk status.

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Original article von Minckwitz, G. *et al.* Neoadjuvant carboplatin in patients with triple-negative and HER2-positive early breast cancer (GeparSixto; GBG 66): a randomized phase 2 trial. *Lancet Oncol.* doi:10.1016/S1470-2045(14)70160-3