Impact of 12 weeks nab-paclitaxel + carboplatin or gemcitabine followed by anthracycline administration according to pCR in triple-negative early breast cancer: Survival results of WSG-ADAPT-TN phase II trial. First Author: Oleg Gluz, Breast Center Niederrhein and University Clinics Cologne, Moenchengladbach, Germany

Background: Optimal chemotherapy in TNBC EBC is unclear. ADAPT TN demonstrated higher pCR (46% vs. 29%) and better safety for only 12 weeks nab-paclitaxel/carboplatin vs nab-paclitaxel/gemcitabine (JNCI 2017). Methods: Patients with centrally confirmed TNBC (ER/PR < 1%, HER2-, cT1c-cT4c, cN0/+ ) were randomized to neoadjuvant A: 4x nab-paclitaxel 125 mg/m$^2$/gemcitabine 1000 mg/m$^2$ d1,8 q3w vs. B: 4x nab-paclitaxel 125 mg/m$^2$/carboplatin AUC2 day 1/8 3-weekly (q3w). Primary endpoint was pCR (ypT0/is/ypN0) after 12 weeks of therapy. Event-free (EFS) – defined as time from registration to any invasive relapse, secondary malignancy or death of any cause – and overall survival (OS) were secondary endpoints. Adjuvant anthracycline-based chemotherapy (4xEC) was optional in patients with pCR. Here, we report the per-protocol interim survival analysis recommended by the DSMB after a median follow-up of 3 years. Results: 336 patients were enrolled (48 centers, arms A/B: n = 182/154). Median age was 50 years. At baseline, about 63% had cT2-4c tumors, 26.2% were clinically node-positive. After 36 months median FU, 68 EFS events (A/B: 37/29) and 37 deaths (A/B: 24/ 13) were observed. pCR (vs. non-pCR) is highly prognostic for EFS (3y EFS: 92% vs. 71%, p = 0.001) and OS (3y OS: 99.1% vs. 81.6%, p = 0.001). Despite the strong impact of carboplatin on pCR, 3y EFS was similar in (77.6% vs. 80.8%) in both arms; OS was numerically higher in Arm B (84.7% vs. 92.2%, p = 0.09). Final analysis regarding anthracycline use and its survival impact will be presented at the meeting. Conclusions: 12w nab-paclitaxel/ carboplatin is a tolerable and effective neoadjuvant option in early stage TNBC. In ADAPT TN, the strong impact of carboplatin vs. gemcitabine on pCR seems to be “mitigated” regarding survival by subsequent adjuvant anthracycline/ cyclophosphamide therapy. Our findings provide first prospective evidence supporting individualized chemotherapy regimens in early TNBC. Clinical trial information: NCT01815242.