Aim: Recent 1st line phase III trials in MBC demonstrated improved progression-free survival (PFS) for the combination of Cap/Bev as compared to Cap alone, but inferior efficacy when compared to paclitaxel plus Bev. Frequently used to treat MBC, Vin has few overlapping toxicities with Cap. The CARIN trial aims at further improving efficacy by adding Vin to Cap/Bev for a less toxic alternative to taxane-based 1st line therapy.

Methods: CARIN was a prospective, open-label, multicenter, randomized phase III trial. Key eligibility criteria included confirmed measurable or non-measurable HER2 negative, locally advanced or MBC, ECOG ≤2, and no prior palliative chemotherapy. The 600 patients (pts) randomized (1:1) received oral Cap 1000 mg/m² BID days 1-14 plus Bev 15 mg/kg q3w IV (Arm A) or Cap/Bev regimen combined with Vin 25 mg/m² IV days 1 + 8 (Arm B) until progression or unacceptable toxicity. Randomization was stratified by prior adjuvant anthracycline and/or taxane therapy (yes/no) and hormone receptor status (ER/PR + /-). The primary endpoint was defined as PFS; secondary endpoints included objective response rate, overall survival (OS) and safety.

Results: 297 pts in Arm A and 295 in Arm B with a median age of 62 were included in the efficacy analysis. Median follow-up was 2.4 years. 38% of pts in Arm A and 32% in Arm B were taxane pretreated; 20.8% were triple negative. The median treatment exposure was 28 weeks for both arms. Median PFS was 8.7 and 9.6 months (ms) (p = 0.03). The effect was most pronounced in pts < 65 years (n = 335, A vs B: 8.2 vs 10.2 ms, p = 0.008), in pts with triple negative disease (A vs B: 4.2 vs 6.9 ms, p = 0.003) and taxane pretreated pts (A vs B: 6.5 vs 8.0 ms, p = 0.05). Median OS was 23.8 and 25.2 ms in Arm A vs B (ns), respectively. Adverse events > Grade 3 were 60.6% and 76.3% in Arm A vs B, respectively, with neutropenia and leucopenia being more common in Arm B. No unexpected side effects were observed. Results of a multivariate cox regression will be presented.

Conclusions: The addition of Vin to Cap/Bev is at least as effective as the combination of taxanes/Bev as reported in the RIBBON-1 trial and seems an option for taxane pretreated and TNBC pts.

Disclosure: A. Welt: Advisory boards: Roche, TEVA, Eisai, Novartis Professional fee for oral presentations: P. Fabre N. Marschner: 1. Share holdings and executive employee iOMEDICO AG 2. Advisory board Roche T. Decker: Advisory Board Roche; C. Salat: Professional fee for oral presentations: Roche; S. Busies: Employee iOMEDICO AG; S. Hegewisch-Becker: Advisory Boards: Roche, Lilly, Merck. All other authors have declared no conflicts of interest.