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Survival analysis of the randomized phase III GeparOcto trial comparing neoadjuvant chemotherapy (NACT) of iddEPC versus weekly paclitaxel, liposomal doxorubicin (plus carboplatin in triple-negative breast cancer, TNBC) (PM(Cb)) for patients (pts) with high-risk early breast cancer (BC)

A. Schneeweiss¹, V. Möbus², H. Tesch³, P. Klare⁴, C. Denkert⁵, K. Kast⁶, C. Hanusch⁷, T. Link⁶, M. Untch⁸, C. Jackisch⁹, J-U. Blohmer¹⁰, P.A. Fasching¹¹, C. Solbach¹², J. Huober¹³, K.E. Rhiem¹⁴, V. Nekljudova¹⁵, K. Lübbe¹⁶, S. Loibl¹⁷

¹ Gynecologic Oncology Division, National Center for Tumor Diseases, University Hospital and German Cancer Research Center, Heidelberg, Germany, ² Medical Clinic II, University Hospital Frankfurt, Frankfurt, Germany, ³ Private Practice - Dr. Hans Tesch, Bethanien Hospital, Frankfurt am Main, Germany, ⁴ Breast Centre, Medical Center, Berlin, Germany, ⁵ Institute of Pathology, Uniklinikum Giessen und Marburg, Marburg, Germany, ⁶ Department of Gynecology and Obstetrics, Medical Faculty and University Hospital Carl Gustav Carus, Dresden, Germany, ⁷ Department of Gynecology, Rotkreuzklinikum, Munich, Germany, ⁸ Clinic for Gynecology, Gynecologic Oncology and Obstetrics, Helios Klinikum Berlin Buch, Berlin, Germany, ⁹ Department of Obstetrics and Gynecology, Sana Klinikum Offenbach, Offenbach Am Main, Germany, ¹⁰ Department of Gynecology and Breast Cancer, Charité, Berlin, Germany, ¹¹ Department of Gynecology and Obstetrics, Universitätsklinikum Erlangen, Erlangen, Germany, ¹² Breast Center, University Hospital Frankfurt, Frankfurt, Germany, ¹³ Department of Gynecology, Breast Center, Universitaetsfrauenklinik Ulm, Ulm, Germany, ¹⁴ Center for Familial Breast and Ovarian Cancer, University Hospital Cologne, Cologne, Germany, ¹⁵ Medicine & Research, German Breast Group (GBG) Forschungs GmbH, Neu-Isenburg, Germany, ¹⁶ Breast Center, Diakovere Henriettenstift, Hannover, Germany ¹⁷ Department of Medicine and Research, German Breast Group (GBG) Forschungs GmbH, Neu-Isenburg, Germany

Background

GeparOcto investigated dose-dense NACT with intense dose-dense epirubicin, paclitaxel, cyclophosphamide (iddEPC) and PM(Cb) in high-risk early BC. Primary endpoint pathological complete response (pCR; ypT0/is ypN0) was comparable in the whole cohort as well as in subgroups (Schneeweiss et al. EJC 2019). Here, we report the secondary endpoints invasive disease-free survival (iDFS) and overall survival (OS).

Methods

Pts were randomized (stratified by BC subtype, Ki67, lymphocyte-predominant BC) to receive 18 weeks of E (150 mg/m²) followed by P (225 mg/m²) followed by C (2000 mg/m²), each q2w for 3 cycles or weekly P (80 mg/m²) plus M (20 mg/m²) plus, in TNBC, Cb (AUC 1.5). HER2+ BC pts additionally received trastuzumab (6 [loading dose 8]mg/kg q3w) and pertuzumab (420 [840]mg q3w) with all P and C cycles. Adjuvant locoregional and endocrine therapy were given according to national guidelines. Secondary time-to-event endpoints were iDFS and OS.

Results

Between 12/2014 and 06/2016, a total of 961 pts were randomized and 945 started treatment (iddEPC n=470, PM(Cb) n=475). After a median follow-up of 47.0 (range 1.6-61.5) months, 75 iDFS events in iddEPC and 87 in PM(Cb) were reported. Overall, there was no difference in iDFS (hazard ratio PM(Cb) to iddEPC 1.16, 95%CI 0.85-1.59, p=0.3357) or OS (hazard ratio 0.90, 95%CI 0.58-1.40, p=0.6371) between both arms. In the subgroup of hormone-receptor (HR)+/HER2- BC, iDFS was significantly longer for iddEPC (4-year iDFS 62.5% with PM vs.77.9% with iddEPC; hazard ratio 2.11, 95%CI 1.08-4.10, p=0.0284), translating into an OS benefit (4-year OS 80.1% vs. 94.7%; hazard ratio 3.26, 95%CI 1.06-10.00, p=0.0388). There was no significant difference in survival in HER2+ or TNBC.

Conclusions

While there was no difference in survival following NACT with iddEPC or PM(Cb) for the entire cohort, the subgroup of HR+/HER2- BC significantly benefits from treatment with iddEPC. This supports the concept of effective therapy beyond pCR in luminal BC pts.

Clinical trial identification

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Link: Non-remunerated activity/ies: Pharma Mar; Non-remunerated activity/ies: Daiichi Sankyo; Honoraria (self), Non-remunerated activity/ies: MSD; Honoraria (self): Amgen; Honoraria (self), Non-remunerated activity/ies: Pfizer; Honoraria (self): Novartis; Honoraria (self): Teva; Honoraria (self): Tesaro; Honoraria (self), Non-remunerated activity/ies: Roche; Honoraria (self), Non-remunerated activity/ies: Clovis; Non-remunerated activity/ies: Celgene. M. 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