



## Correction to: 35<sup>th</sup> European Congress of Pathology-Abstracts

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The Results under the Abstract **PS-01-016** pages **S60–S61** was incorrect. The updated version of the Abstract is presented as follows:

### **PS-01-016**

#### **Residual lymphovascular invasion after neoadjuvant chemotherapy is associated with poor prognosis in breast carcinoma**

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**Background & objective:** The poor prognostic significance of lymphovascular invasion (LVI) in breast carcinoma (BC) is recognized in several studies. Its prognostic role in post-neoadjuvant chemotherapy (NACT) remains unclear. We wanted to evaluate prognostic importance of residual LVI (rLVI) after NACT and surgery.

**Methods:** 01.01.2008–31.12.2021, 655 BC patients were treated by NACT and surgery. Clinical history and primary tumor characteristics were obtained from database. Residual cancer burden (RCB) system was used for evaluation. Complete pathologic response (pCR) was defined as ypT0/isN0, rLVI as carcinoma cells within endothelial-lined space (H&E). Survival analysis was performed using Kaplan-Meier and covariates were tested with Cox proportional hazards model.

**Results:** Out of 654 tumors (data missing for 1 case), rLVI was present in 28.9% of patients (Table 1). After the median follow-up of 40 months, 71/465 without rLVI and 66/189 with rLVI progressed. rLVI was associated with poor disease-free survival (DFS) in univariate analysis (HR 2.36 (95% CI 1.69–3.31),  $p < 0.001$ ) (Figure 1). Tumor size (T1 vs T2 and T3), presence of lymph node (LN) metastases, Her2 positivity and RCB categories II and III were also predictors of poor DFS in univariate analysis. In multivariate analysis, T stage and RCB categories II/III remained significantly associated with poor DFS. Patients' characteristics as well as the results of uni- and multivariate analyses are summarized in Table 2.

**Conclusions:** We identified post-NACT rLVI as a strong factor predictive of poor DFS in retrospective series of 655 BC patient treated by NACT and surgery and evaluated by RCB prognostic scoring system. The effect was lost on multivariate analysis, while RCB status remained significant. Residual LVI should be systematically reported in post-NACT pathology reports and could serve as indicator of poor survival in cases where RCB score cannot be calculated with certainty (e.g., in false negative sentinel lymph node biopsy).

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