Table.
8-year OS and treatment received in patients from the Italian single-center cohort stratified by MammaPrint

	MP Low Risk n = 118
Treatment received, n (%)	
CT+ET	30 (25.4)
CT only	0 (0)
ET only	84 (71.2)
No AST	2 (1.7)
Unknown	2 (1.7)
8-year OS (%)	
Overall	97.3
CT	96.6
no CT	97.5

AST, adjuvant systemic therapy; CT, chemotherapy; ET, endocrine therapy; OS, overall survival.

Conclusion(s): In the 8-year follow-up of the Italian cohort, patients with a MammaPrint Low Risk had an excellent OS. Survival within the MammaPrint Low Risk group was independent of treatment, suggesting that patients with a MammaPrint Low Risk result might safely forego chemotherapy. These results confirm the ability of MammaPrint to correctly predict long-term outcomes in patients with clinically intermediate to high-risk EBC and to guide treatment decisions.

P158

PONDx Aragon: First spanish prospective study evaluating the impact of the 21-gene test on real praxis for N1 patients after RxPONDER results

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Goals: The aim of the PONDx Aragon study was to prospectively evaluate the impact of the 21-gene test (Oncotype DX Breast Recurrence Score ®) on physicianś treatment decisions and to assess the real life utilization of this assay in spanish N1 patients, especially after the release of RxPONDER study results.
Methods: We conducted a prospective observational study in which 100 HR+ HER2 -negative, N1 (excluding N1mic) breast cancer patients were enrolled between September 2019 and June 2022 at two different sites in the Autonomous Community of Aragon (Spain). Participating physicians completed a virtual questionnaire indicating treatment selection before and after availability of RS results. The primary analysis focused on the change in physicianś recommendations for chemotherapy prior to and post 21-gene results. Secondary analysis explored the association between RS results and different clinicopathological factors, including grade, tumor size and Ki67.
Results: A total of 98 patients were included in the final data analysis. From this cohort, 22 patients were initially assigned to ET only while CET was recommended before testing for the other 76 patients. After genomic testing only 26 patients received CET, with these results translating into an 63% decrease in CET use for the studied population. When these data were analyzed taking into account the menopausal status of patients (pre/postmenopausal), differences in CET decrease were observed between the two groups, with a more pronounced reduction among postmenopausal women (79% CET reduction) vs premenopausal women (33% CET reduction). When exploring the relationship between clinicopathological parameters (Ki67, grade, tumor size) and RS results, a wide distribution of RS values was observed across each one of the studied clinicopathological variables, with a weak correlation between ki67 and RS results (Rho coefficient <0.30), and no association of RS results with tumor grade (p value = 0.28) or tumor size (p value = 0.9).
Conclusion(s): This is the first prospective observational study performed in Spain evaluating the impact of the 21-gene test on real clinical praxis after the release of RxPONDER results. In our study the utilization of the 21-gene test clearly influenced treatment decisions and was associated with a pronounced reduction in CET use, specially for N1 postmenopausal patients. Our data showed a weak association between RS results and clinicopathological factors, reinforcing the utility of well validated genomic tools.
Conflict of Interest: Employed by Palex Medical SA.

P159

Neutrophil-to-lymphocyte Ratio and Platelet-to-lymphocyte Ratio are not predictive of Pathologic Complete Response to Neoadjuvant Chemotherapy in Triple-negative Breast Cancer

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Goals: Pathological complete response (pCR) to neoadjuvant chemotherapy (NAChT) has been validated as a predictor of long-term survival in breast cancer (BC), especially in triple-negative breast cancer (TNBC). Previous research has looked at the pre-treatment neutrophil-to-lymphocyte ratio (NLR) and the platelet-to-lymphocyte ratio (PLR) in the peripheral blood as predictors of pCR in BC. A low NLR or a low PLR could suggest a more immunogenic phenotype, which would predict a better response to NAChT. In some studies, high NLR and high PLR were independently associated with poor response to NAChT in all BC subtypes. However, recent studies have cast doubt on the predictive value of these ratios and proposed the combination of both low NLR and low PLR (NLRlow/PLRlow), as an even better pCR predictor. We aim to independently verify the effectiveness of these biomarkers as pCR predictors in a population of TNBC patients.
Methods: Multicentric retrospective study of all female TNBC patients diagnosed between 2018 and 2022 who completed NAChT. Patients' demographic and clinicopathological information, treatment history and complete blood counts were gathered from patient records. The NLRlow/PLRlow group was defined by NLR < 2.42 and PLR < 104.47. Mann-Whitney U test was used for numeric variables and Fisher's exact test as a test of independence. A p value < 0.05 was considered significant.
Results: A total of 111 patients were included. Median age was 51 years old (min 29, max 82). Tumors were stage I in 6% patients, stage II in 55% and stage III in 35%. All patients had NAChT with anthracyclines (66% in a dose-dense regimen) and taxanes (68% with platinum). pCR was achieved in 44% of patients. In this cohort, median NLR wasn't statistically different in the pCR and non-pCR groups (Mann-Whitney U test, p = 0.52), and neither was the PLR (p = 0.52). The area under the ROC curve for each of these parameters was 0.54 and 0.51 respectively. pCR wasn't shown to depend on NLRlow/PLRlow status (Fisher's exact test, p = 0.84).
Conclusion(s): The NLR and PLR, either alone or in combination, were not predictive of pCR in our sample of TNBC patients. Data from different studies remain equivocal. Together with previous research, our negative results suggest at best a limited role for these biomarkers in TNBC. Caution should be applied when using these ratios in clinical practice. Further studies are needed.