INTRODUCTION

Invasive ductal carcinoma (IDC) and invasive lobular carcinoma (ILC) are the first and second most common histologic subtypes of breast cancer. Both IDC and ILC present distinguishing clinicopathologic features that contribute to differences in response to treatment and long-term prognosis.

Breast Cancer Index (BCI) is a validated gene expression-based assay with two components, the Molecular Grade Index (MGI) and the H/I ratio (HOX11/Il7rA), that evaluate tumor proliferation and estrogen signaling, respectively.

- Kaplan-Meier survival analysis and Cox proportional hazards model were performed.
- Out of the 908 patients from the translational IDEAL cohort, 142 were high-risk.
- Primary endpoints in this analysis were recurrence-free interval (RFI) and distant recurrence (DR).

METHODS

The BCI Clinical Database for Correlative Studies is an IRB-approved de-identified database containing >50 clinicopathologic and molecular variables from cases submitted for BCI testing in clinical practice. Multivariable analyses were performed.

- The BCI Clinical Database included 3814 patients submitted for BCI testing during years 4-7 post-diagnosis with available histologic subtype data (80.5% IDC; 13.2% ILC; 3.0% mixed; 3.3% other).
- BCI identified a smaller proportion of patients with ILC at high risk of late DR and high likelihood of EET benefit compared to IDC.

RESULTS

Table 1. The BCI Clinical Database clinicopathological factors

Table 2. Key IDEAL trial clinical characteristics

Table 3. The BCI Clinical Database Prognostic and Predictive Results

CONCLUSION

- The BCI IDEAL study included 142 ILC patients. Similar to the BCI Clinical Database results, ILC was associated with less aggressive disease than IDC (Grade 3: 17.9% vs 40.9%; HER2+: 11.3% vs 23.6%).

REFERENCES


Figure 2. BCI predictive performance in IDEAL study

CONCLUSIONS

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