World Academy of Science, Engineering and Technology International Journal of Medical and Health Sciences Vol:19, No:04, 2025

Tumor-Biological Characteristics of Invasive Lobular Carcinoma

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Abstract : The objective of this study is to analyze the characteristics of invasive lobular carcinoma (ILC) compared with invasive ductal carcinoma (IDC) and to investigate the impact of histology on axillary lymph node (ALN) involvement in luminal A subtype tumors. Methods: We retrospectively analyzed patients diagnosed with ILC or IDC from 2012 to 2016 who underwent surgery. Patients constituted 493 primary early breast cancer cases (82 ILC; 411 IDC). Results: Compared with IDC, ILC tumors were significantly more likely to be grade 2, estrogen receptor- (ER) positive (b), have a lower proliferation rate (Ki67 <14%), and a higher patholog- ical T stage (pT2-4). The luminal A subtype was significantly more common in ILC compared with IDC. In a multivariate regression model, grade 2, ERb, progesterone receptor-positive, pT2, and pT3 were significantly associated with ILC. Additionally, with the luminal A subtype, ALN involvement (pathological node stage (pN)1-3) was significantly more frequent with ILC versus IDC. Conclusions: Our data suggests that grade 2, positive hormone receptor status, and higher pathological T stage are associated with ILC. With the luminal A subtype, ALN involvement was more frequent with ILC versus IDC.

Keywords: breast cancer, lobular histology, tumor biology, hormone receptor, ki67 **Conference Title:** ICOG 2025: International Conference on Obstetrics and Gynaecology

Conference Location : Tokyo, Japan **Conference Dates :** April 17-18, 2025