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PROGNOSTIC SIGNIFICANCE OF PD-L1 EXPRESSION IN BREAST CANCER

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Objective: To investigate the immunohistochemical expression of programmed cell death ligand 1 (PD-L1) in female invasive mammary carcinoma and to analyze the association of PD-L1 expression with clinicopathological characteristics, overall survival, and disease-free survival. **Methodology:** The expression of PD-L1 and its association with the main clinicopathological parameters have been evaluated in 232 cases. The Cox regression model was used to assess the possible association of PD-L1 expression with overall survival and disease-free survival. **Results:** A total of 58 cases (28.7%) were positive for PD-L1 expression. There is an association between PD-L1 expression with tumor size, negative hormone receptors, and triple-negative molecular subtype. Negative estrogen receptor and nodal status (≥ 10 positive lymph nodes) were associated with a reduction in overall survival, and the latter was associated with a lower disease-free survival. Luminal A tumor phenotype demonstrated a greater overall survival ($p=0.042$). Despite the significant association with unfavorable clinical and pathological characteristics in univariate and multivariate analyses, no significant correlation was observed between the expression of PD-L1 and overall or disease-free survival. **Conclusions:** Our data indicate that PD-L1 expression was associated with unfavorable clinical-pathological variables, such as greater tumor size, negative hormone receptors, and a greater number of metastatic nodes. No prognostic value was observed for the expression of PD-L1 in relation to overall survival or disease-free survival.

Keywords: Breast Cancer; PD-L1; Prognostic; Immunohistochemistry.