

Research No.(2):

Tumoral and Stromal Pdl1 and Pdl2 Checkpoints Immunohistochemical Expression in Pancreatic Ductal Adenocarcinoma, a Promising Field Of Study

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Open Access Maced J Med Sci. 2022 Mar 28; 10(A):775-781

Abstract

Background: Pancreatic ductal adenocarcinoma (PDAC) is world-widely considered as one of the most malignant tumors. Programmed cell death protein 1 (PD-1) through its ligands PDL1 and PDL2 plays a critical role in cancer immunoediting. The ligands are expressed in many solid tumors and there is an emerging hope of using anti-PDL in cancer immunotherapy.

Materials and methods: This study included that 40 patients with PDAC who underwent pancreaticoduodenectomy. PDL1 and PDL2 pancreatic expression were evaluated in these patients using immunohistochemical staining and correlated their expression levels with each patient's reported clinicopathological features.

Results: There were a significant correlations between high tumoral PDL1 expression and the PDAC tumor histologic grade ($p = 0.021$) and the tumor status (T) ($p = 0.022$), while the stromal expression of PDL1 showed non significant correlation with any of the studied features. There were a significant correlations between high tumoral PDL2 expression and tumor stage ($p = 0.012$), while the stromal expression of PDL2 showed a significant correlation with tumor status, lymph node status, tumor stage, and the presence lymphovascular invasion with P value equal 0.001, 0.009, 0.009, and 0.045, respectively.

Conclusion: This study showed that in PDAC patients, high tumoral PDL1 and PDL2 expression was associated with some important prognostic factors, while only stromal PDL2 expression was significantly associated with most of the studied prognostic features emphasizing a role of both markers in the prognosis of this neoplasm.