

# **SURVIVAL IN PATIENTS WITH PANCREATIC CANCER AND ASSOCIATION WITH INSULIN RESISTANCE**

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**Introduction:** Pancreatic adenocarcinoma is usually diagnosed in people over 70 years. Insulin is a peptide hormone secreted by the  $\beta$  cells of the pancreatic which is responsible for maintaining normal glucose levels blood. Prospective studies have reported that insulin resistance confers an increased risk of developing pancreatic cancer. However, there are few data on the relationship between insulin resistance in non-diabetic patients and its effect on survival in patients with pancreatic cancer. The index score HOMA-IR (Homeostatic Model Assessment - Insulin Resistance). The primary endpoint is evaluate the association between overall survival (OS) and the HOMA-IR index score in patients with advanced pancreatic cancer, without a previous diagnosis of diabetes. Secondary objectives were to analyze the relationship between the HOMA-IR and progression-free survival (PFS). To investigate the association between OS with different variables, smoking, sex and body mass index of the patients according to the HOMA-IR.

**Method:** Observational and retrospective study. 51 medical histories were analyzed. Patients were divided into two groups: with and without IR. This division was performed according to the value of the index score HOMA-IR (pre-established in  $RI > 1.67$ ). Kaplan-Meier was the statistical method used for survival.

**Results:** The group without RI ( $HOMA-IR < 1.67$ ), consisting of 28 patients, had an average OS of 12.32 months and a PFS of 8.32 months (m). The group with IR ( $HOMA-IR > 1.67$ ), the remaining patients, had an average OS of 5 m. and a PFS of 2.56 m. These differences were statistically significant ( $p = 0.000013$  and  $p = 0.00001$ ). The relationship between HOMA-IR index and the different variables showed that smokers have a patient with RI SG almost 4 times less compared with nonsmokers without RI (3.3 m vs 13.8 m). Women with IR have a slightly lower OS than men with IR (5 m. vs 4 m). These differences between HOMA-IR index and the different variables were not statistically significant ( $p = 0.079$  and  $p = 0.87$ ).

**CONCLUSIONS:** The index score HOMA-IR pre-treatment measurements can provide important prognostic outcomes in patients with pancreatic cancer. In this study we found that patients with  $HOMA-IR > 1.67$  had a significantly lower value of both OS and PFS. We should take into account the factor of RI, defined by scoring index HOMA-IR, as a prognosis in our patients with advanced pancreatic cancer factor.