

Comunicação Oral

CO-02 - FUNCTIONAL CHARACTERIZATION OF TUMOUR-INFILTRATING MACROPHAGES IN HEPATOCELLULAR AND CHOLANGIOCARCINOMA PATIENTS: AN ADVANCE IN TREATMENT

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Background: Hepatocellular carcinoma (HCC) and cholangiocarcinoma (CCA) represent the most common primary liver malignancies, whose outcome is influenced by immune response. The identification of highly diverse tumour-infiltrating (Ti) leukocyte subsets, and their distinct functions in the tumour niche, has been an important development in onco-immunology.

Methods: We've characterized, by flow cytometry, the population of macrophages and monocytes infiltrating the tumour in HCC patients (n=19) and CCA (n=8), immediately after surgical resection. Moreover, these populations were separated by cell sorting for further analysis of gene expression by qPCR.

Results: Regarding Ti macrophages phenotype, was observed a significantly higher expression of markers associated with M2 phenotype (CD206 and CD163) and a higher expression of PD-L1 (CD274) in HCC in comparison with CCA. Moreover, we have identified, by qPCR expression analysis, higher expression of IL-10 mRNA levels in HCC macrophages in comparison to CCA. We have not observed significant differences within the monocytes infiltrating those tumours.

Conclusions: The identification of Ti leukocyte subsets may help to determine the prognosis of these tumors. To sum up, results indicate a higher infiltration of M2 macrophages in HCC, in comparison with CCA, what has been associated with a worst prognosis. In addition, HCC macrophages present a higher expression of PD-L1, indicating that these patients could benefit of anti-PD-1/PD-L1 therapy and, thus, further studies in this field should be made.

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