

P – 234 The T cell architecture of pancreatic ductal adenocarcinoma

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Introduction: Pancreatic cancer has the worst prognosis of any human malignancy. Our recent work has shown that immune infiltrate by transcriptomics and histopathology can predict prognosis after a Whipple's operation with lymphocyte infiltration being the most important prognostic marker.

Methods: We have now started to profile the T cells within primary pancreatic cancer to understand the T cell architecture within the tumour. We have used a 37 marker T cell focused panel to study the immune infiltrate.

Results: We see a diverse immunosuppressive immune microenvironment within the primary tumour. There is a complex architecture of macrophages, neutrophils, and Tregs. There are potential novel therapeutic strategies for Tregs using unique checkpoint inhibitors. The CD8 T cells have PD-1 activity but are not activated or proliferating.

Conclusion: The poor prognosis of pancreatic cancer could be explained by the immunosuppressive microenvironment but there are opportunities to drug Tregs in this disease.