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Aging Human Hematopoietic Stem Cells Manifest Profound Epigenetic Reprogramming of Enhancers That May Predispose to Leukemia ..........1080
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Cross-Species Single-Cell Analysis of Pancreatic Ductal Adenocarcinoma Reveals Antigen-Presenting Cancer-Associated Fibroblasts ..........1102
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Elyada and colleagues profiled human pancreatic ductal adenocarcinoma tumors and adjacent normal tissue along with mouse pancreatic tumors and discovered a previously unknown class of cancer-associated fibroblasts (CAF) they named antigen-presenting CAFs (apCAF). These CAFs are unique in their expression of MHC class II-related genes, which implies they may interact with CD4+ T cells; supporting this idea, apCAsF activated CD4+ T cells ex vivo in an antigen-dependent fashion. Also unlike other CAFs, apCAsF upregulate MYC targets and antigen presentation, antigen processing, fatty-acid metabolism, and MTORC1 signaling pathways. Hinting that apCAsF may contribute to immune suppression in PDAC, they do not produce costimulatory molecules needed for induction of T-cell proliferation. For details, please see the article by Elyada and colleagues on page 1102.
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