AB012. S012. Immunophenotypes of pancreatic ductal adenocarcinoma

Ines de Santiago, Christopher Yau, Mark Middleton, Michael Dustin, Florian Markowetz, Shivan Sivakumar

University of Oxford, Oxford, UK

Abstract: Pancreatic ductal adenocarcinoma (PDAC) is the most common malignancy of the pancreas and has one of the highest mortality rates of any cancer type with a 5-year survival rate of <5% and median overall survival of typically 6 months from diagnosis. PDAC has not had much success with any of the known checkpoint therapies so far but there are other immunotherapies currently under investigation. Here we use known expression signatures of immune cells on two independent cohorts to postulate three immunophenotypes for PDAC. We define these as "adaptive", "innate" and "immune-exclusion" immunologic signatures, which are prognostic across independent cohorts. We subsequently looked at our immunophenotypes across previously published sub-type studies (Collisson *et al.* 2011, Moffitt *et al.* 2015, Bailey *et al.* 2016, Sivakumar *et al.* 2017). The immunophenotypes are present within sub-types described across all these studies. Despite the fact that immunotherapies have yet to have an impact in treatment of PDAC, the gene expression signatures that stratify PDAC across studies are immunologic. An appreciation of the immune composition of PDAC with prognostic significance is an opportunity to understand distinct immune escape mechanisms in development of the disease and design novel immune-oncology therapeutic strategies to overcome current barriers.

doi: 10.21037/apc.2018.AB012

Cite this abstract as: de Santiago I, Yau C, Middleton M, Dustin M, Markowetz F, Sivakumar S. Immunophenotypes of pancreatic ductal adenocarcinoma. Ann Pancreat Cancer 2018;1:AB012. doi: 10.21037/apc.2018.AB012