



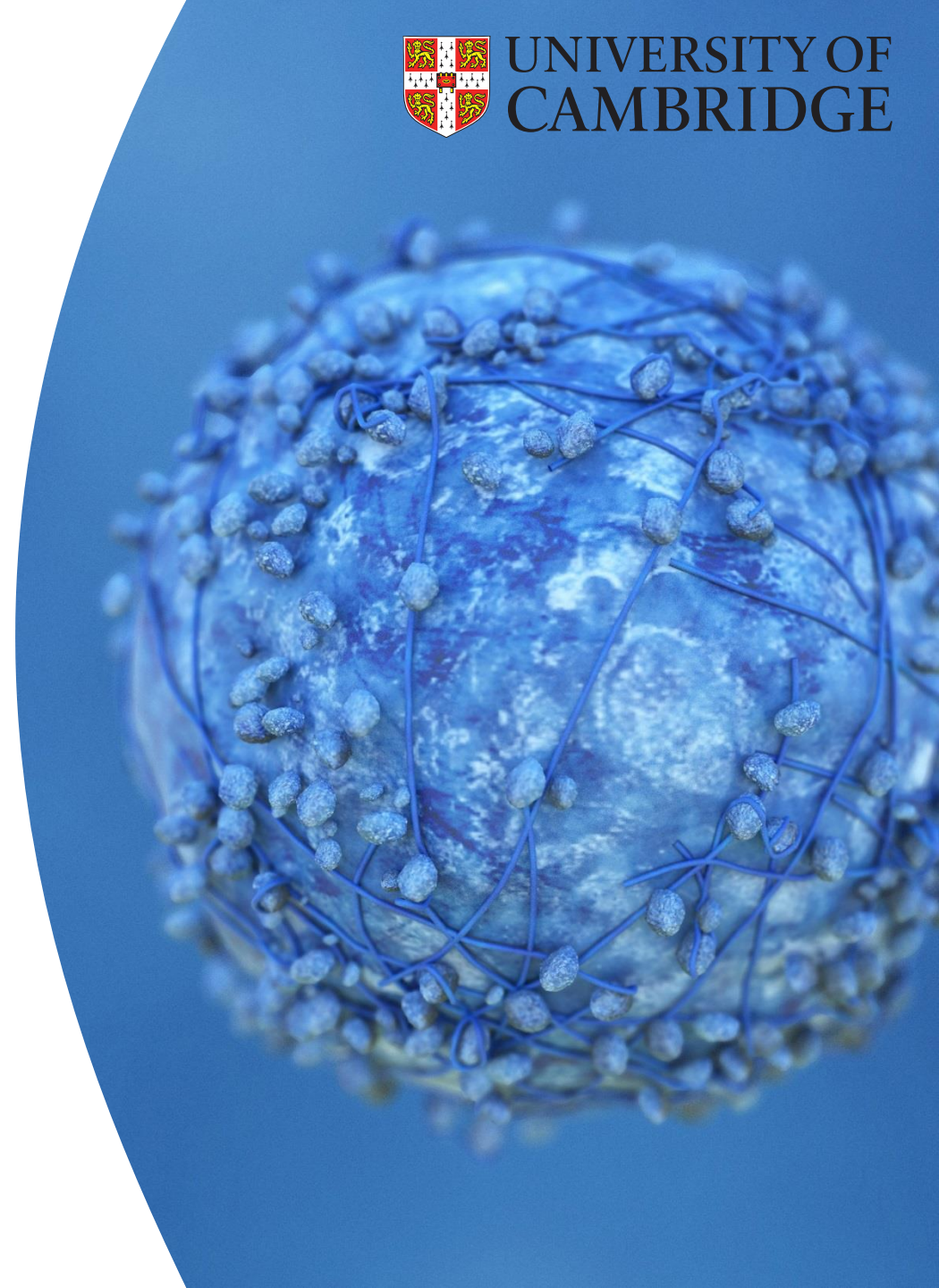
# IMMUNE REGULATORY FUNCTIONS OF ILC2 IN PDAC

Tim Halim  
13 Jun 2022

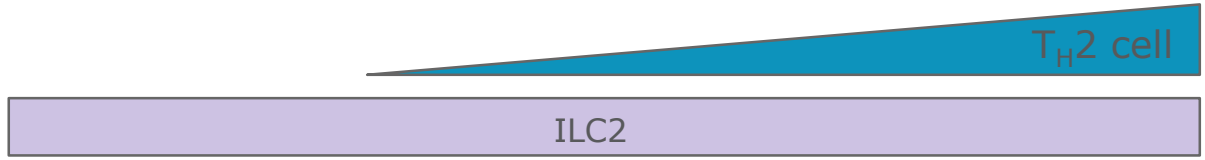
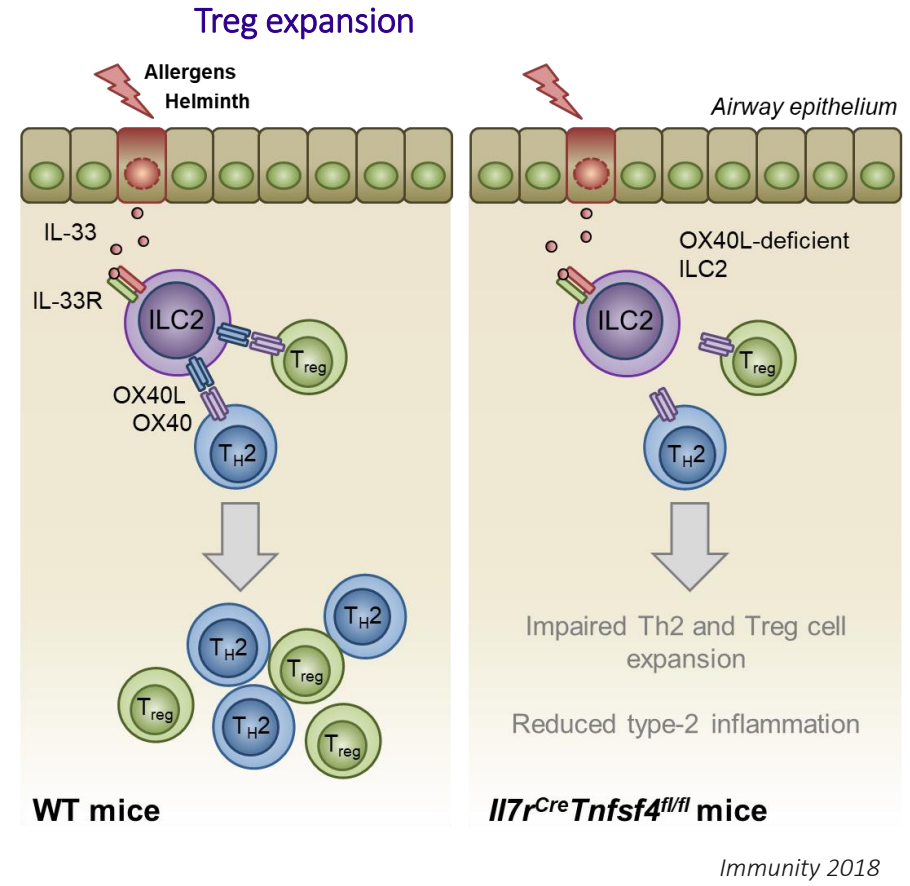
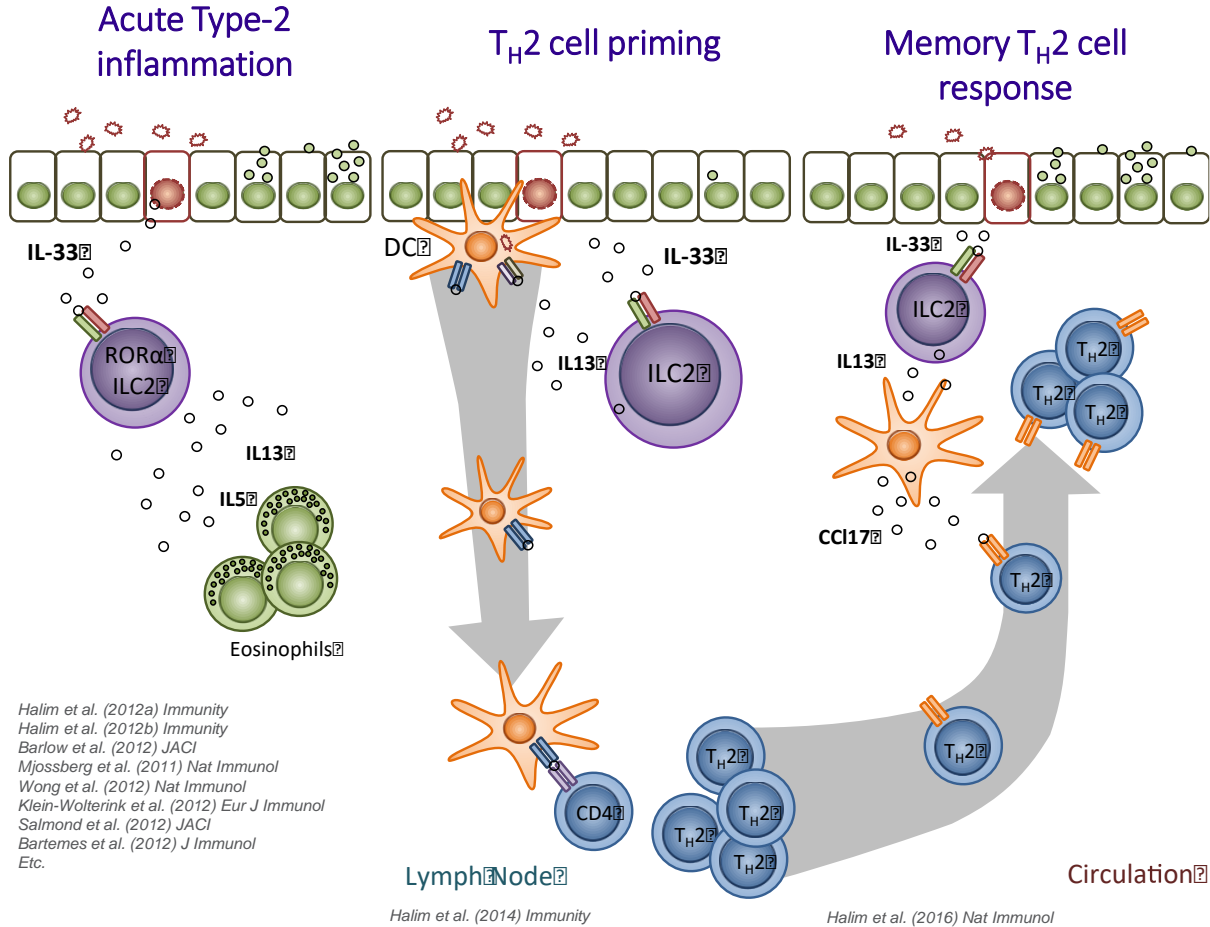


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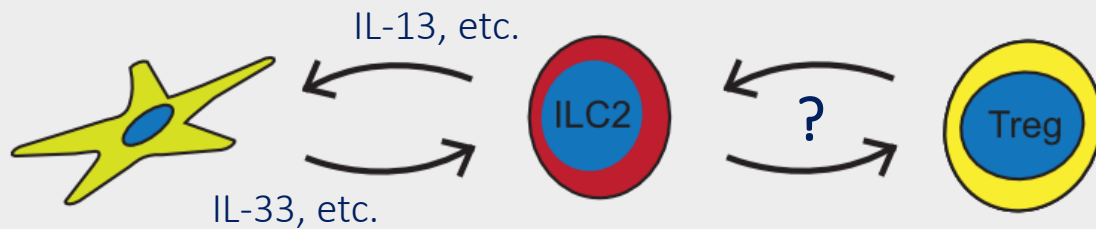
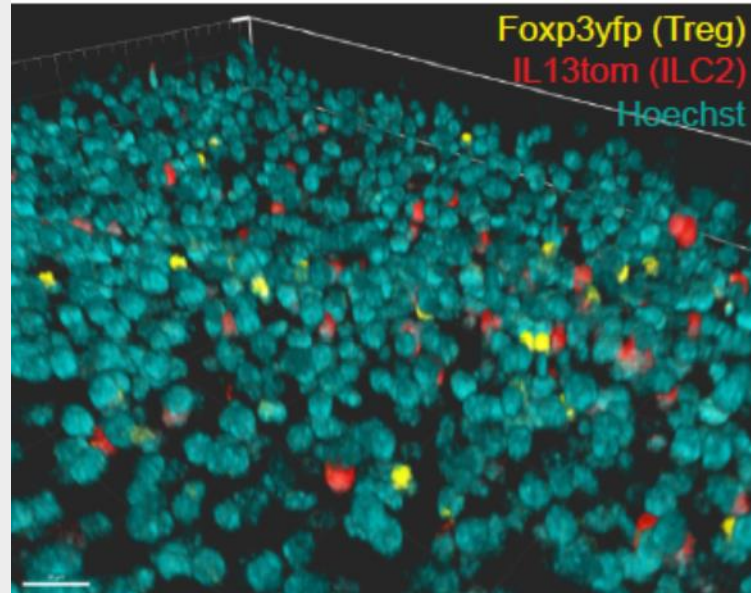
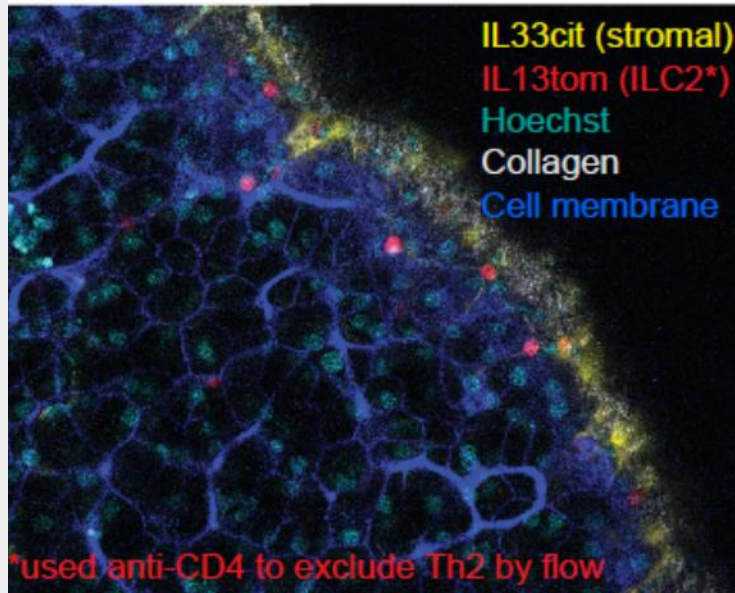
# ILC2 FUNCTION



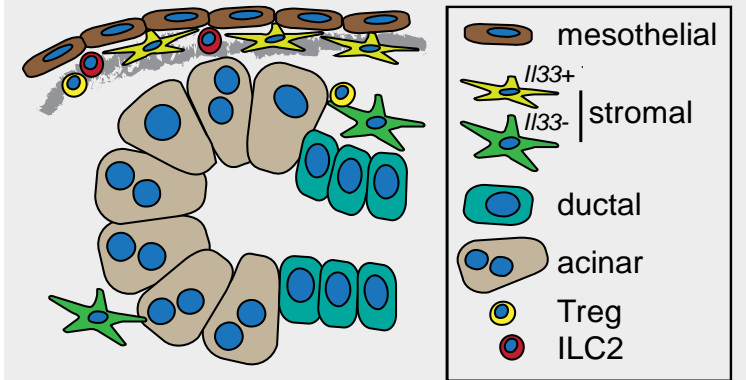
Are ILC2 involved in cancer?

# PROFILING THE EXOCRINE PANCREATIC NICHE

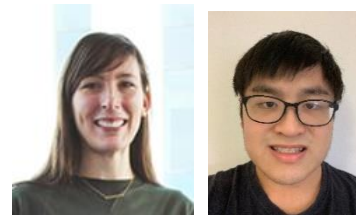
Where are ILC2 in the pancreas? What cells do they interact with?



Exocrine pancreatic niche

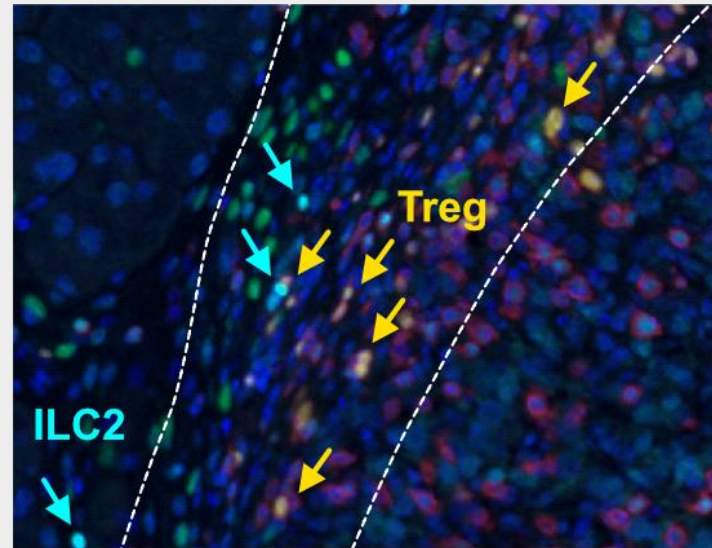
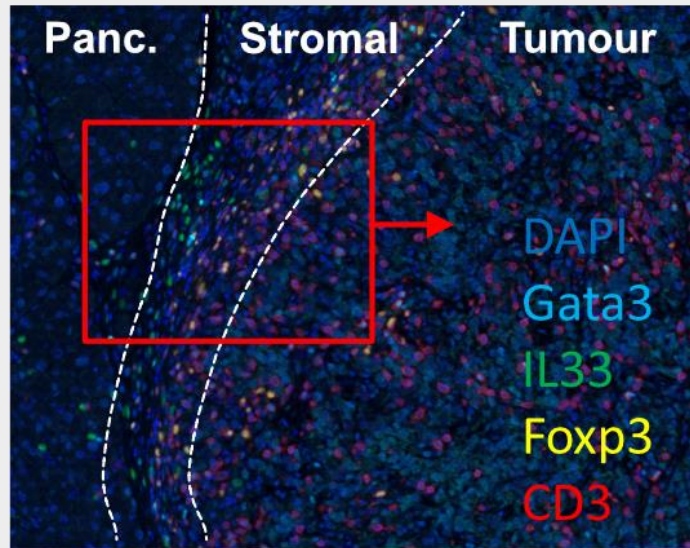


- ILC2, Treg and IL-33+ Stromal Cells occupy a distinct niche in the exocrine pancreas.
- Do these cells interact, and what are the implications of these interactions in homeostasis and disease?



# ILC2 IN PANCREATIC CANCER

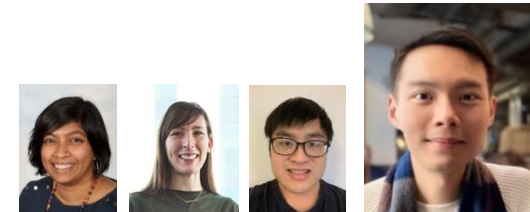
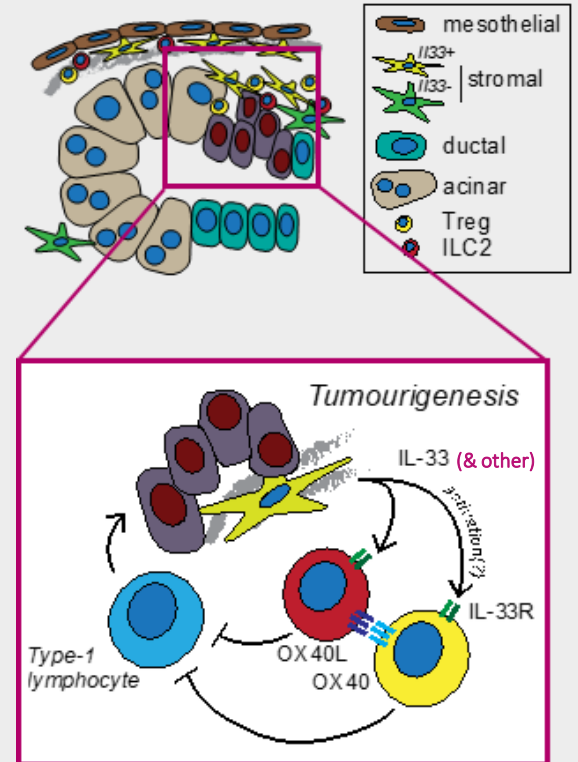
## ILC2 and Tregs in PDAC



## Main Points:

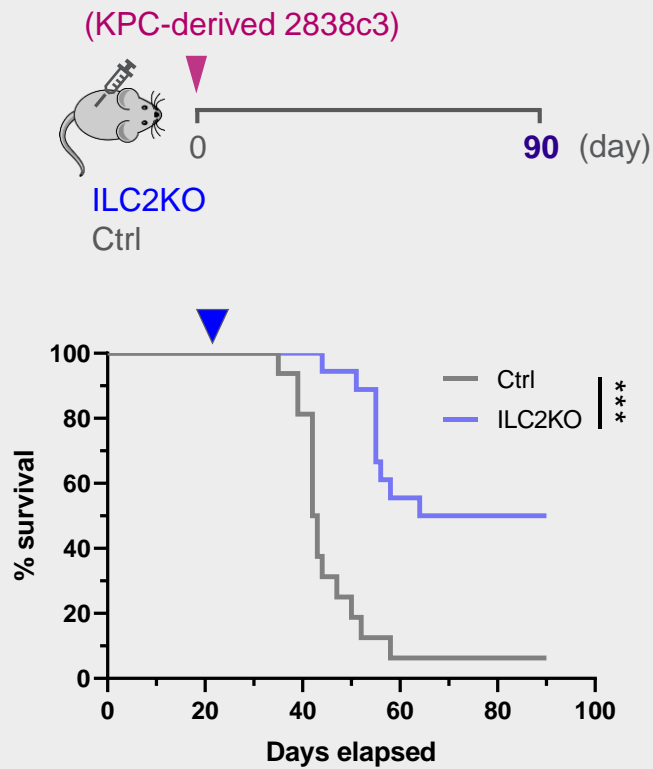
- ILC2 and Tregs are enriched during pancreatic tumourigenesis
- ILC2 and Tregs inhabit the peri-tumour niche

## Hypothesis:

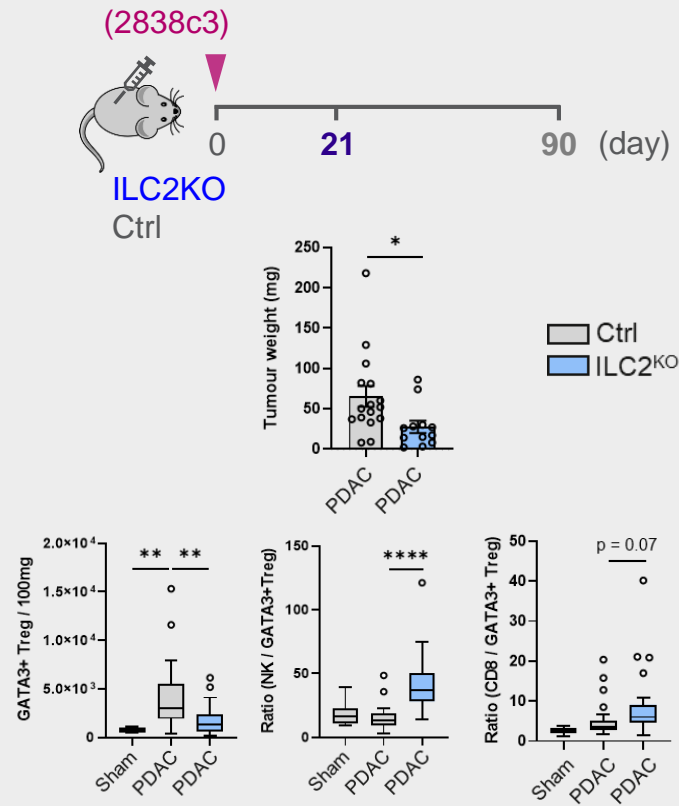


# DO ILC2 PROMOTE TUMOUR GROWTH?

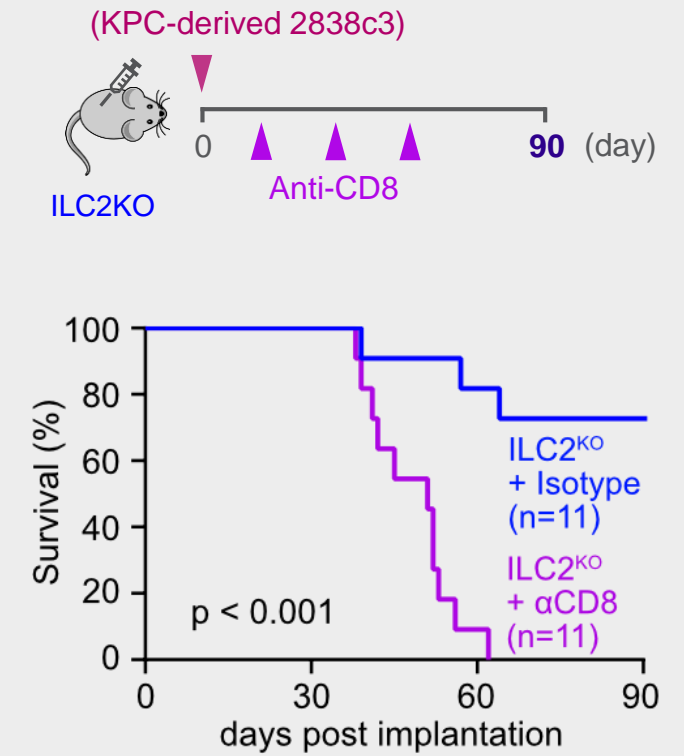
## Orthotopic model of PDAC



## ILC2 modulate the local immune landscape

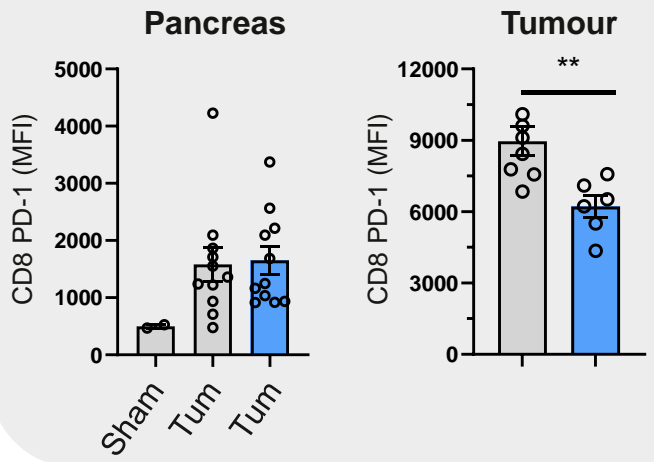
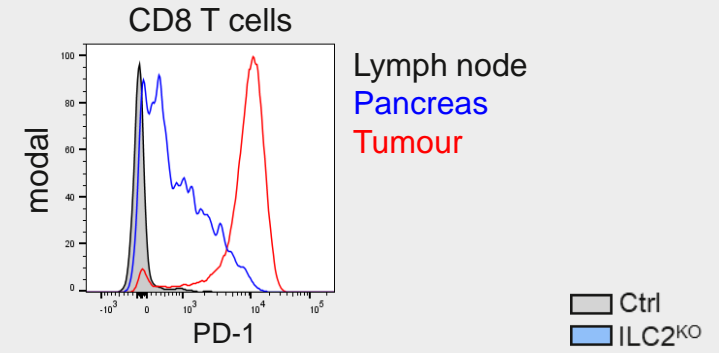


## ILC2 influence adaptive anti-tumour immunity

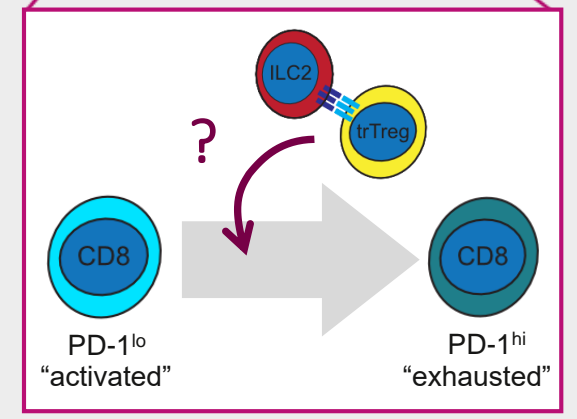
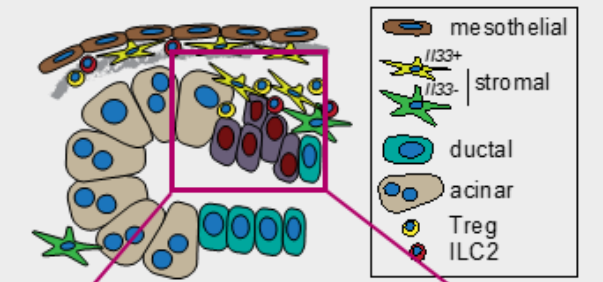
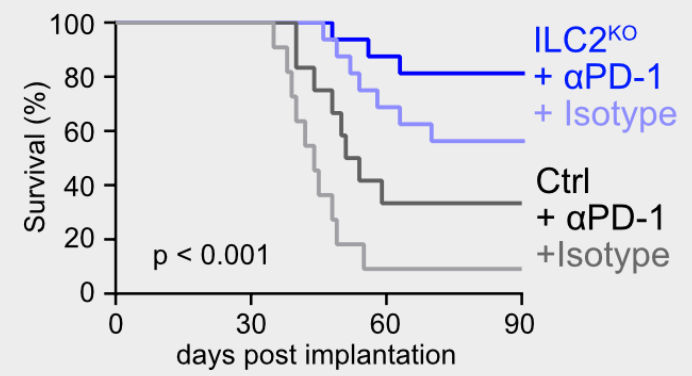
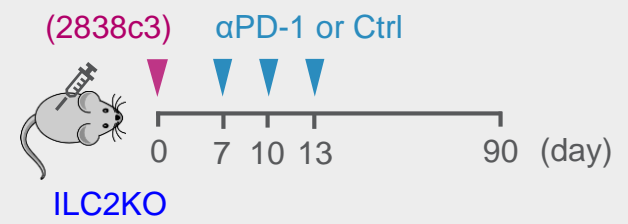


# EFFECT OF ILC2 ON CD8 T CELLS

T cell phenotype affected by ILC2?



Does ILC2 function influence immune checkpoint therapy?



- ILC2 regulate inflammation in PDAC
- ILC2 suppress adaptive anti-tumour immunity
- Mechanism?
- Can we leverage ILC2 function to improve conventional immunotherapy?

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