

Immuno Delivery I

Presenter: Alaa Zam

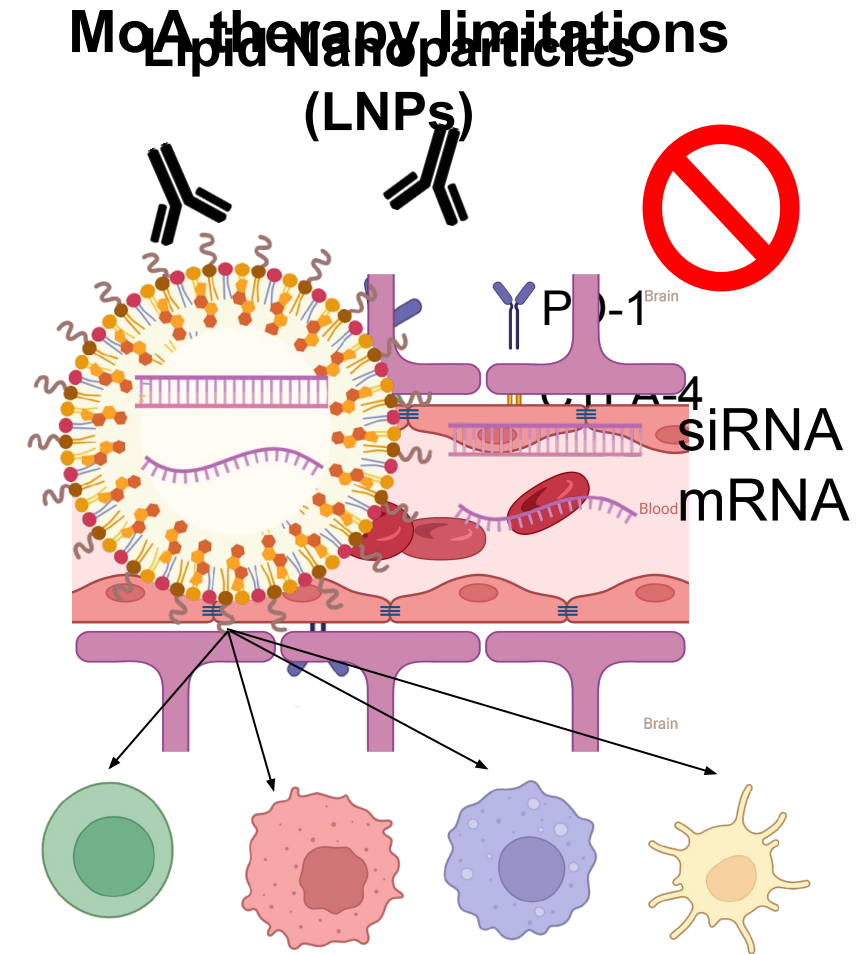
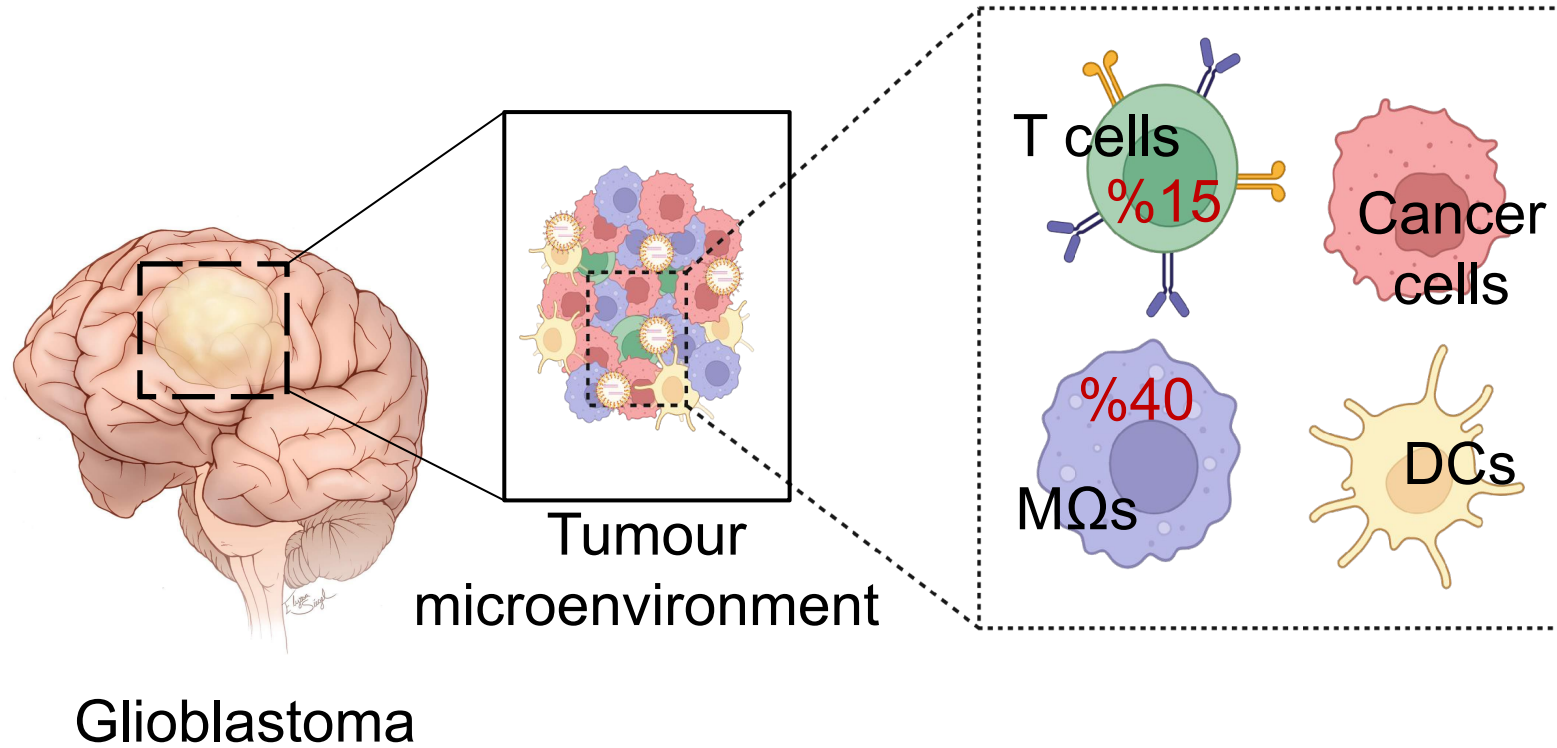
Development of Lipid Nanoparticle for In Vivo Silencing of Negative Immune Checkpoints in Glioblastoma Cancer Stem Cells

Supervisor: Prof. Khuloud T. Al-Jamal

Co-supervisor: Dr. James Arnold

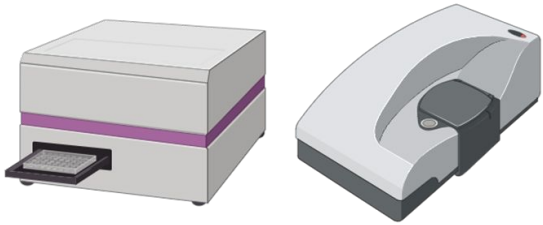


Introduction

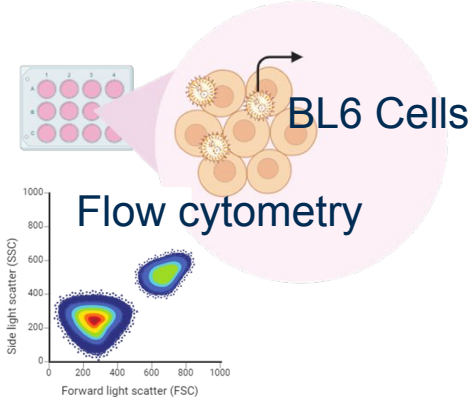


Methods & Results

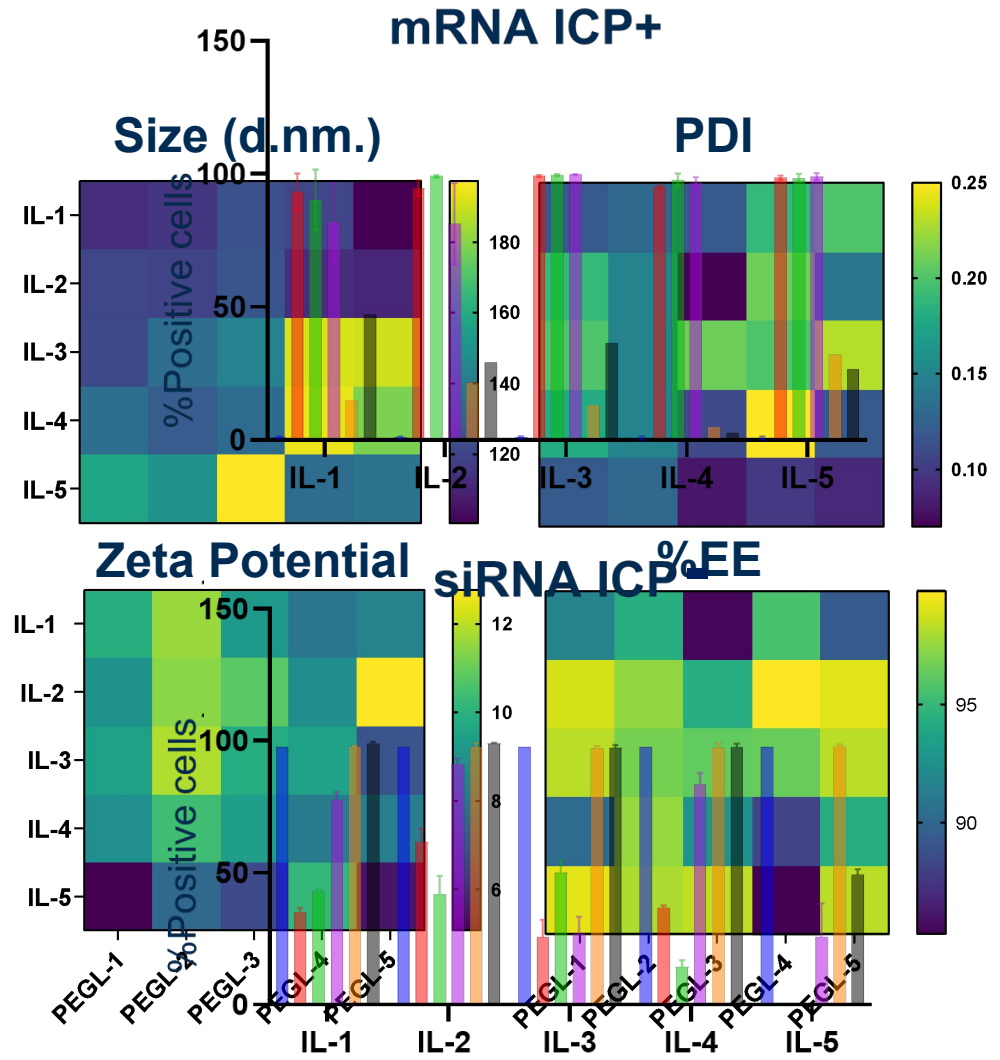
ILs PEGLs	Dlin-MC3-DMA	Dlin-KC2-DMA	ALC-0315	SM-102	C12-200
C14:0-PEG2000					
DMG-PEG2000					
C16-PEG2000					
C18:0-PEG2000					
C18:1-PEG2000					



Physico-chemical
characterisation



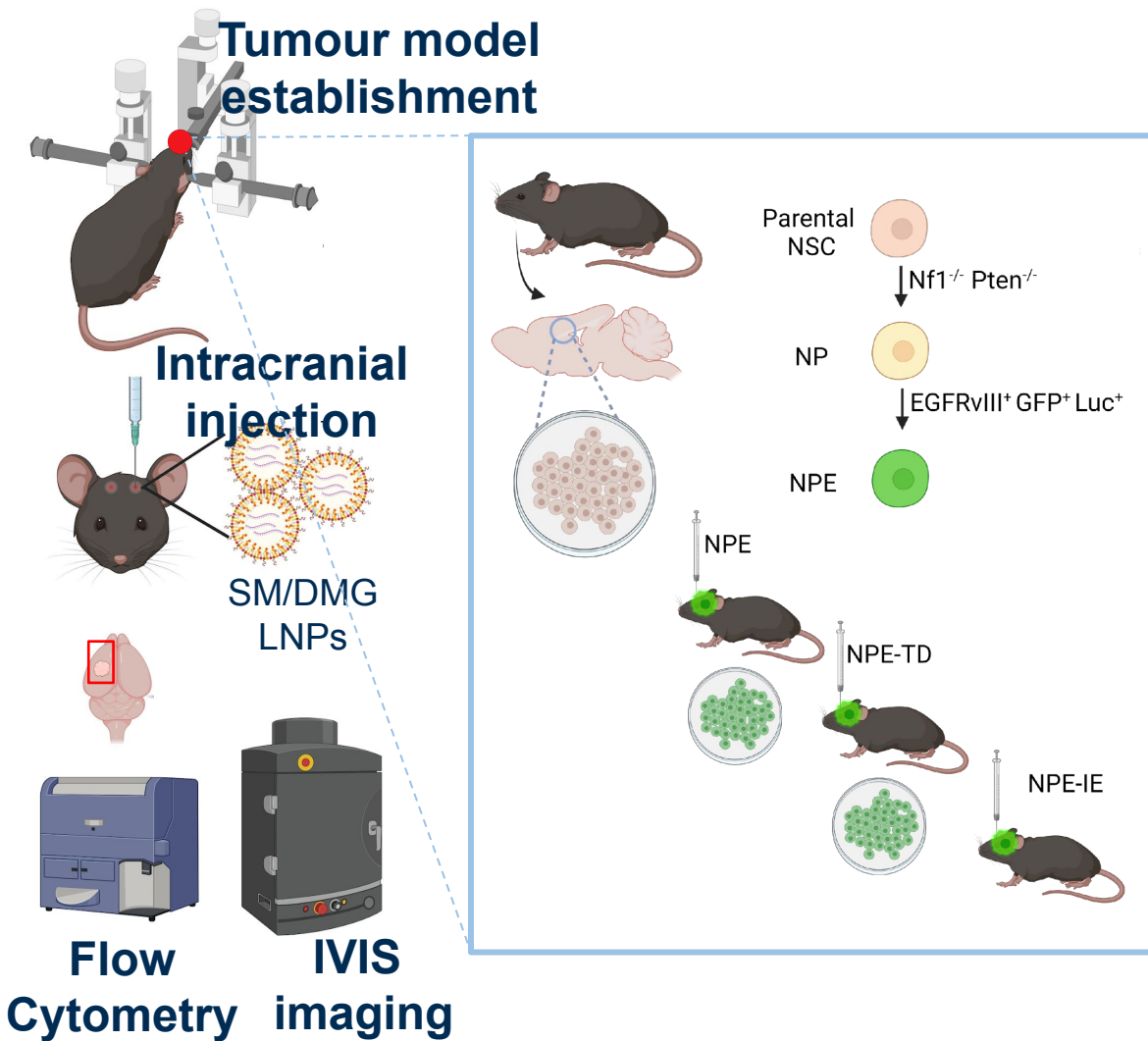
In vitro transfection



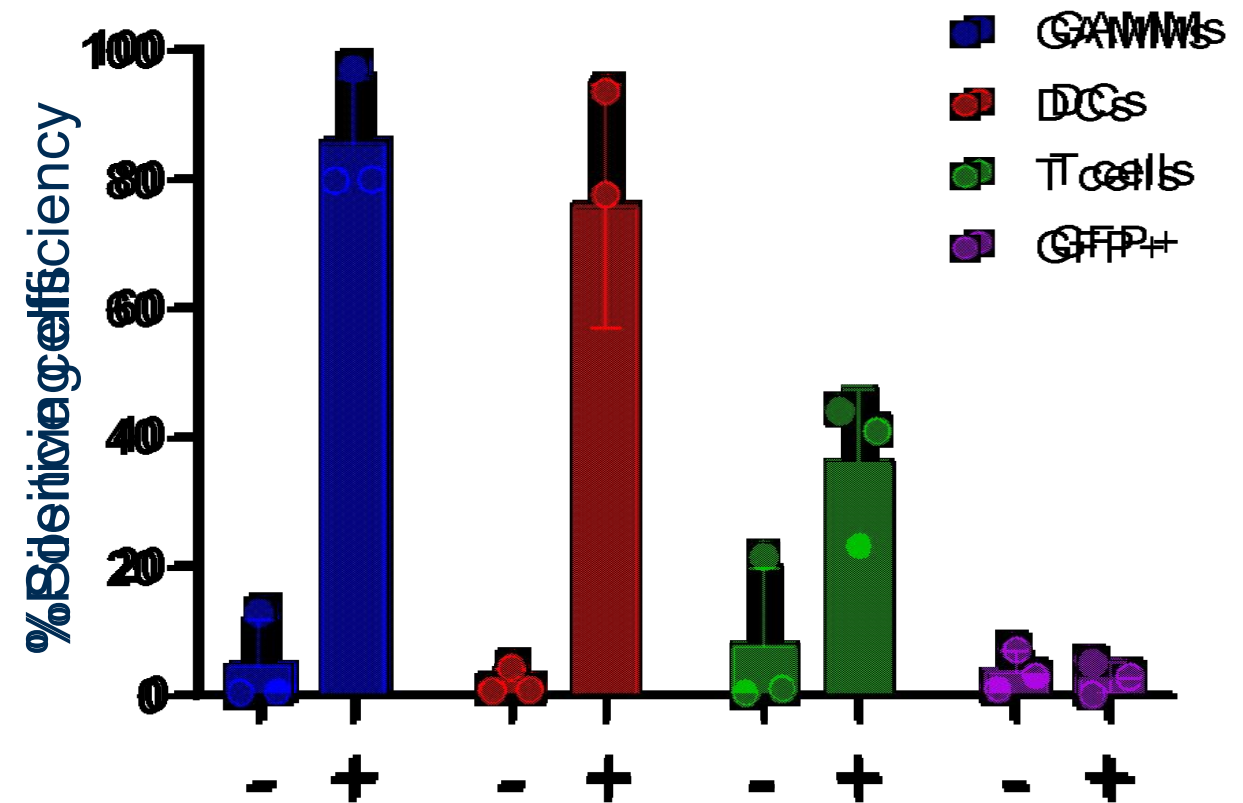
Control PEGL-2 PEGL-4
PEGL-1 PEGL-3 PEGL-5



Methods & Results

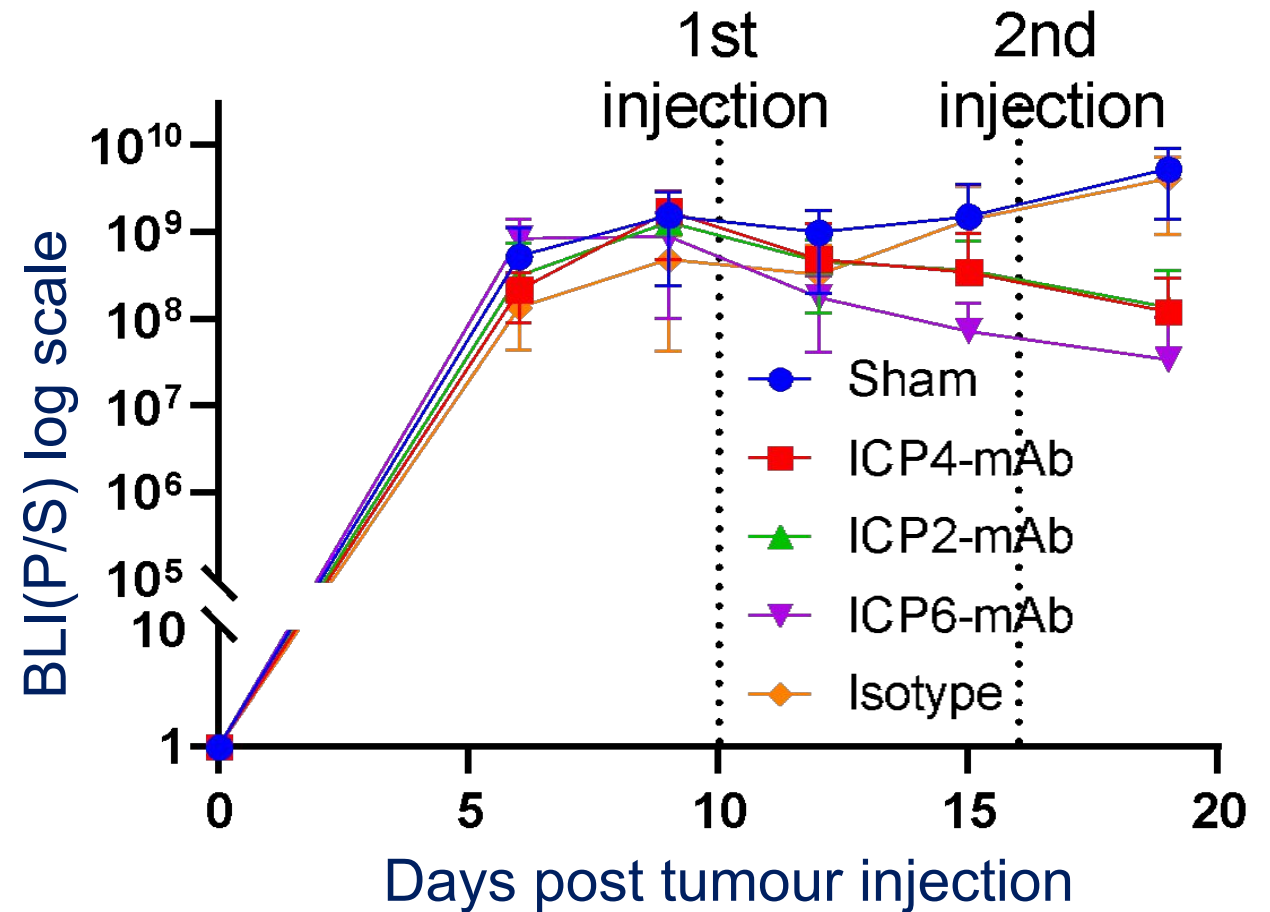
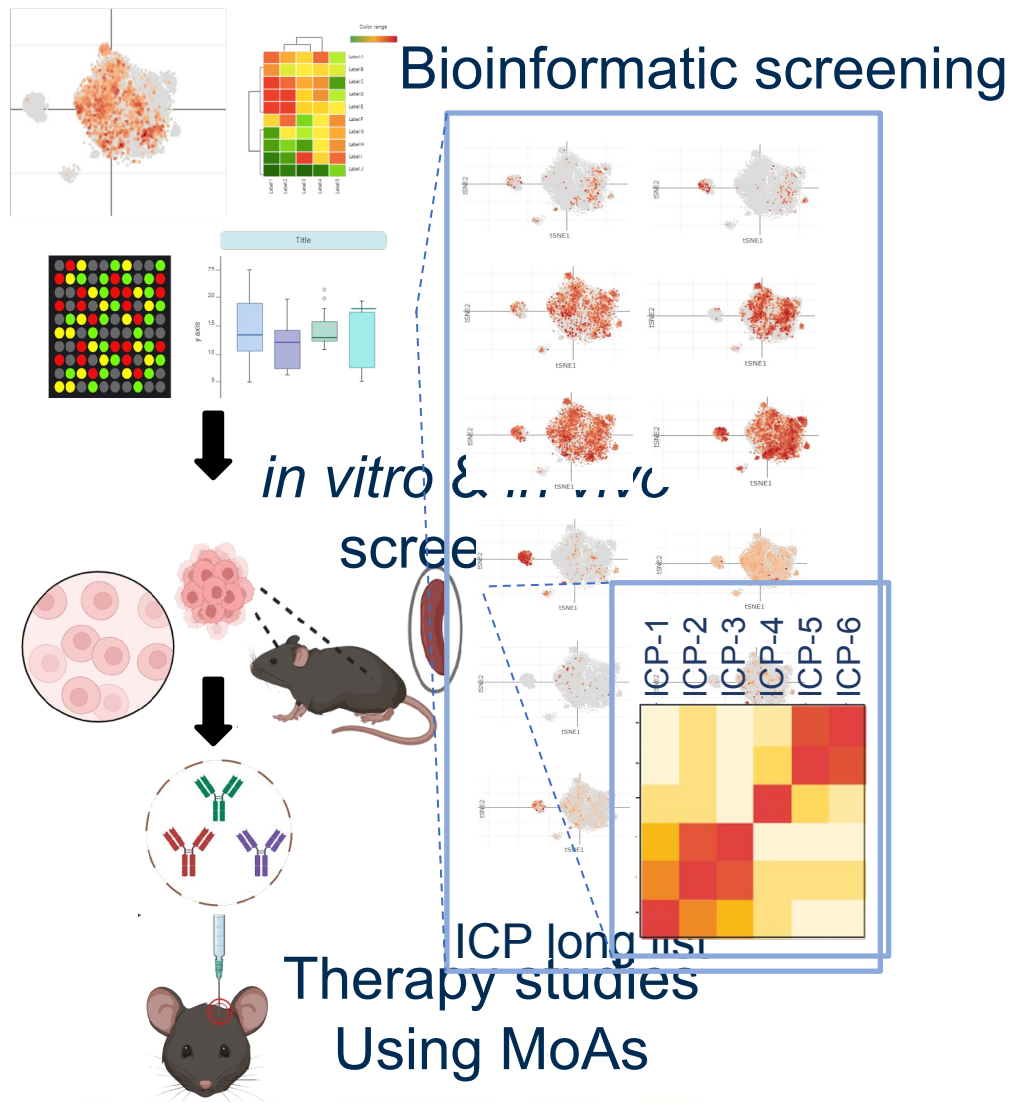


siRNA ICP+

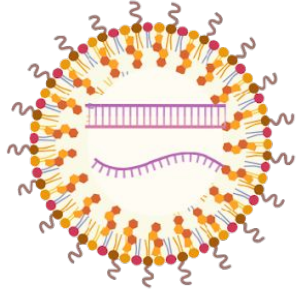


- : negative control
+ : LNP treatment

Methods & Results

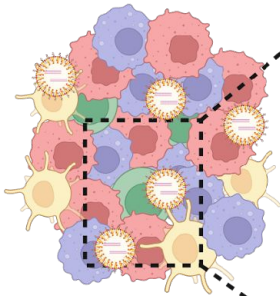


Conclusions/Future work

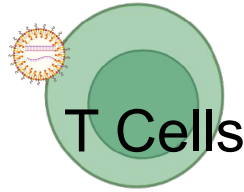


LNPs

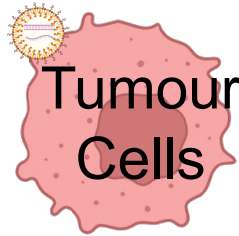
Multiple cells
Multiple cargo



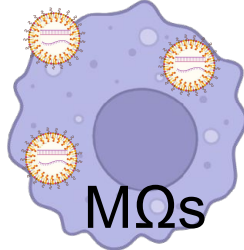
GBM TME



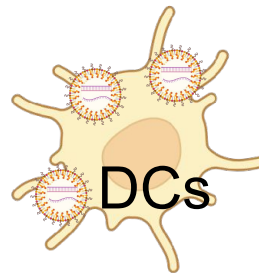
T Cells



Tumour Cells

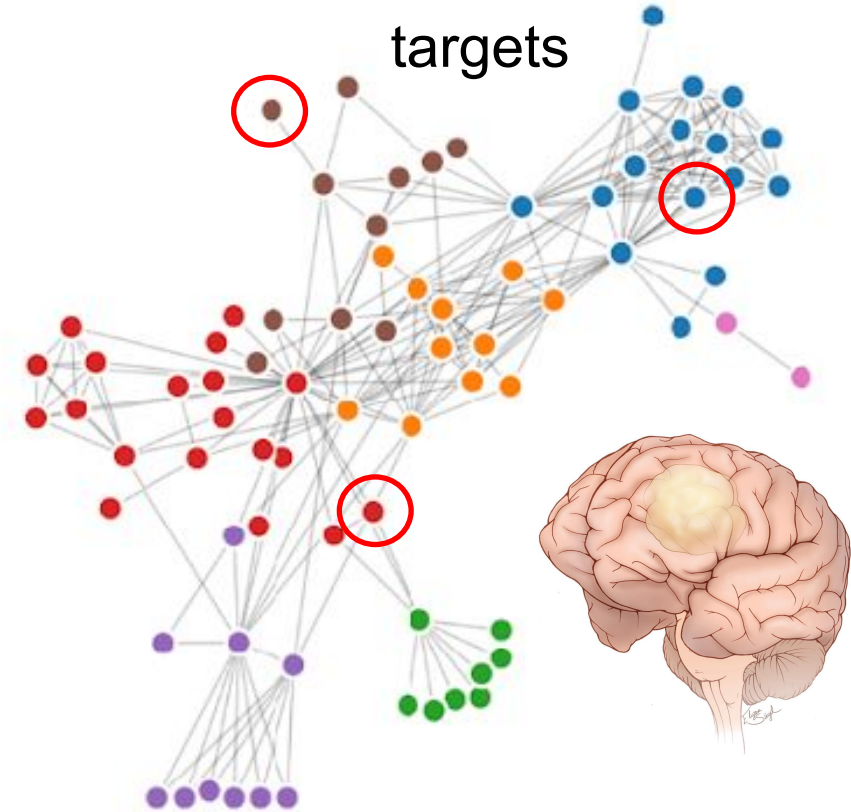


MΦs



DCs

Unravel new ICP
targets



Thank you

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