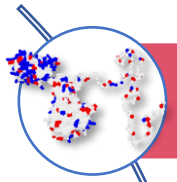
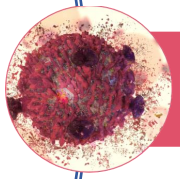
CytoSeek Enabling the next generation of cell therapies

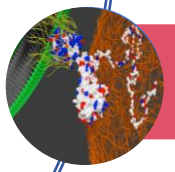


Versatile Artificial Membrane Binding Protein (AMBP) non-GM* platform addressing current cell therapy challenges

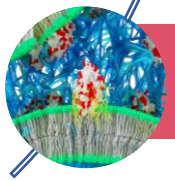
AMBPs enable rapid addition of enhanced functionality to cell therapies, portfolio of AMBPs in development



Developing proof of concept non-clinical data for AMBPs to enhance CAR-T effectiveness in solid tumours



Business model anticipates partnering and own asset development



Initial seed round 2019, next raise Q4 2020 to expand pipeline of AMBPs, initiate asset development

*Genetically modified

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CytoSeek platform enables the next frontier in CAR-T Therapies to be targeted: Solid Tumours

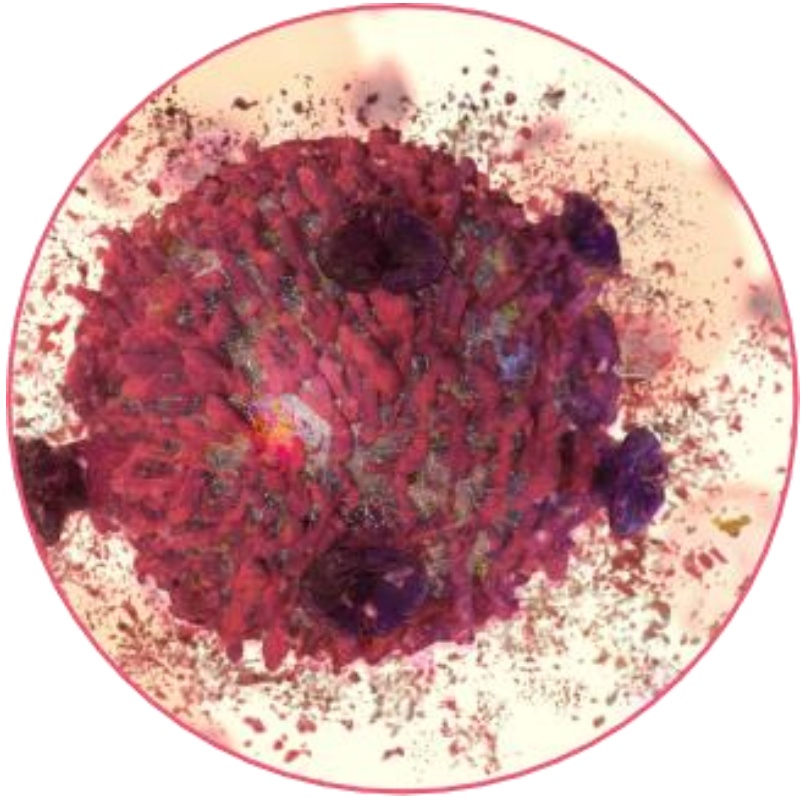
8.5M* people die from solid tumours worldwide each year

CAR-T cell therapies have limited success in treating solid tumours

Effectiveness limited by various factors including immuno-suppression mediated by the tumour microenvironment

CytoSeek AMBP have the potential to enhance CAR-T by providing additional functionality to these therapies

Functional domains can be added to CAR-T therapies that address current challenges



Source: WHO global cancer observatory

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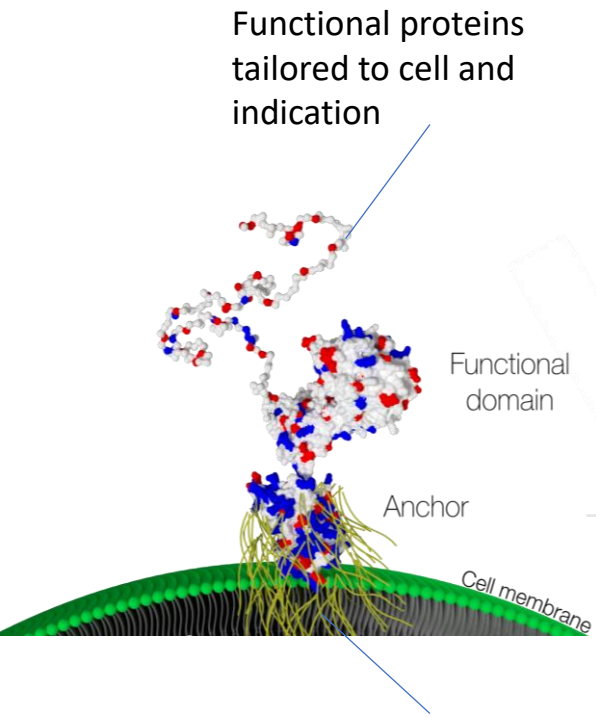
CytoSeek AMBP can enhance partners T cell therapies by adding tailored functional domains

AMBP



Objective	Mechanism	Potential functional domains
Enhance tumour targeting	Homing	Aminopeptidase N binding peptide (NGR), FAS-L, neuropilin 1 binding peptide (e.g. TPP11)
	Persistence	Matrix Metalloproteinases (MMP2 and MMP9), anti-VEGFR (ramucirumab), dn*VEGF
	Recruitment of other cells e.g NK	Antigen presenting cell activation, CD40L Cytokines e.g. IL12, IL15
Control T cell activity	Homeostatic expansion	IL2, IL7, IL12, IL17
	T cell metabolism	Enzymes e.g Adenosine deaminase
Enhance T cell activity	Immune modulation	dnPD1, anti-CTLA4, dnTGFβ receptor
	Hypoxia resistance	Myoglobin
	Tumour cell Apoptosis	Anti-TRAIL or TRAIL-Ligand

*dominant negative

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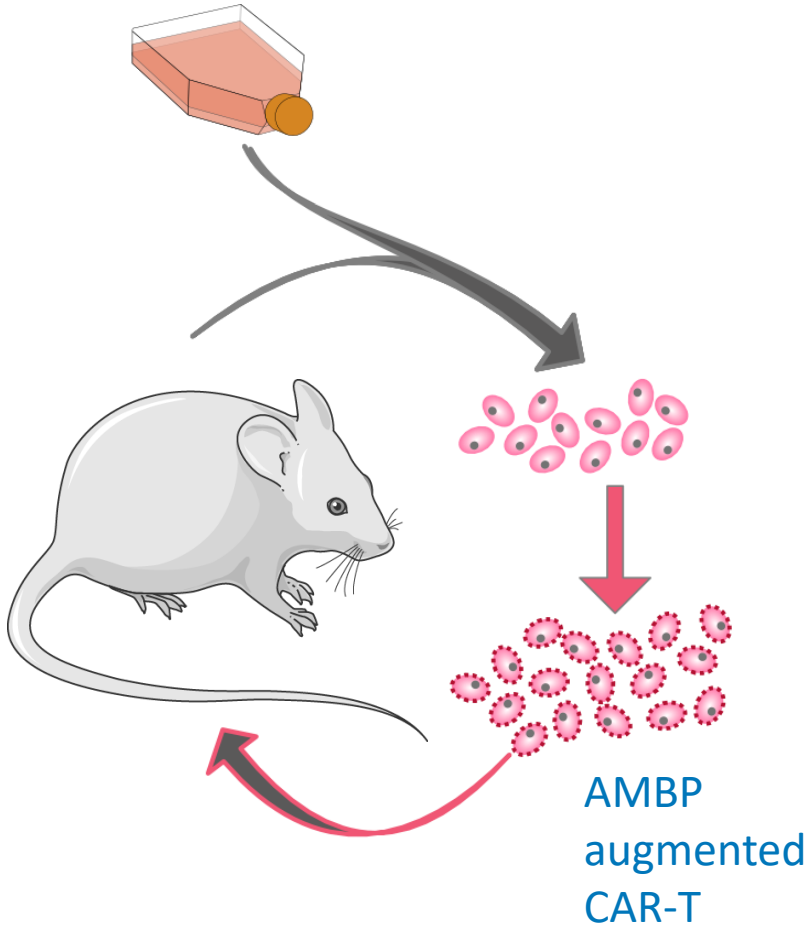
CytoSeek is developing a non-clinical data package for AMBP augmented T cells in solid tumours

- *In vitro* studies testing safety and function of AMBP augmented cells ongoing
- *In vivo* studies scheduled H2 2020 with AMBPs
  - To protect T cells from hypoxia and;
  - To modulate immuno-suppression
- Animal models will test efficacy and safety of AMBP augmented T cells
  - Murine Transgenic T cell against Renal cell carcinoma (RENCA)
  - Human CAR-T Breast adenocarcinoma (MDA-MB231)



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CytoSeek and AMBP Summary

- Versatile IP protected AMBP platform addressing current challenges in cell therapies
- Near term development plan focused on generating validation data for T cells enhanced with CytoSeek AMBP in solid tumours
- Business model is to seek co-development partnerships and develop own assets
- Seeking interested investors for next financing round to expand AMBP platform and initiate development of own assets
- Seeking interested partners developing cell therapies that could be enhanced with CytoSeek AMBP

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