



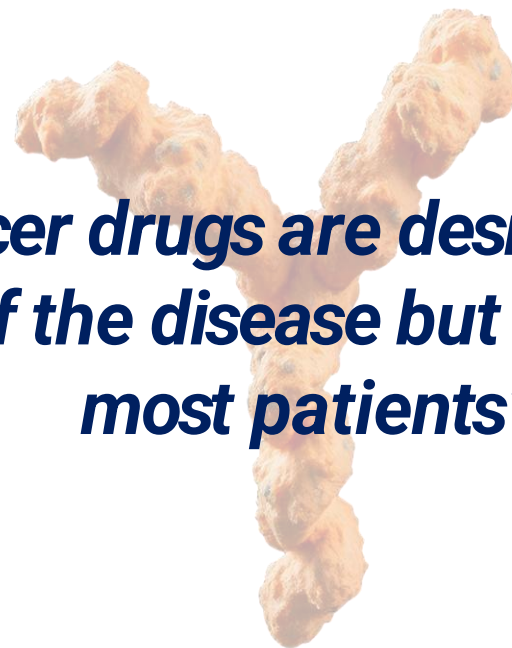
BIOARCHITECH

Mining the genomes of viruses for cancer immunotherapy

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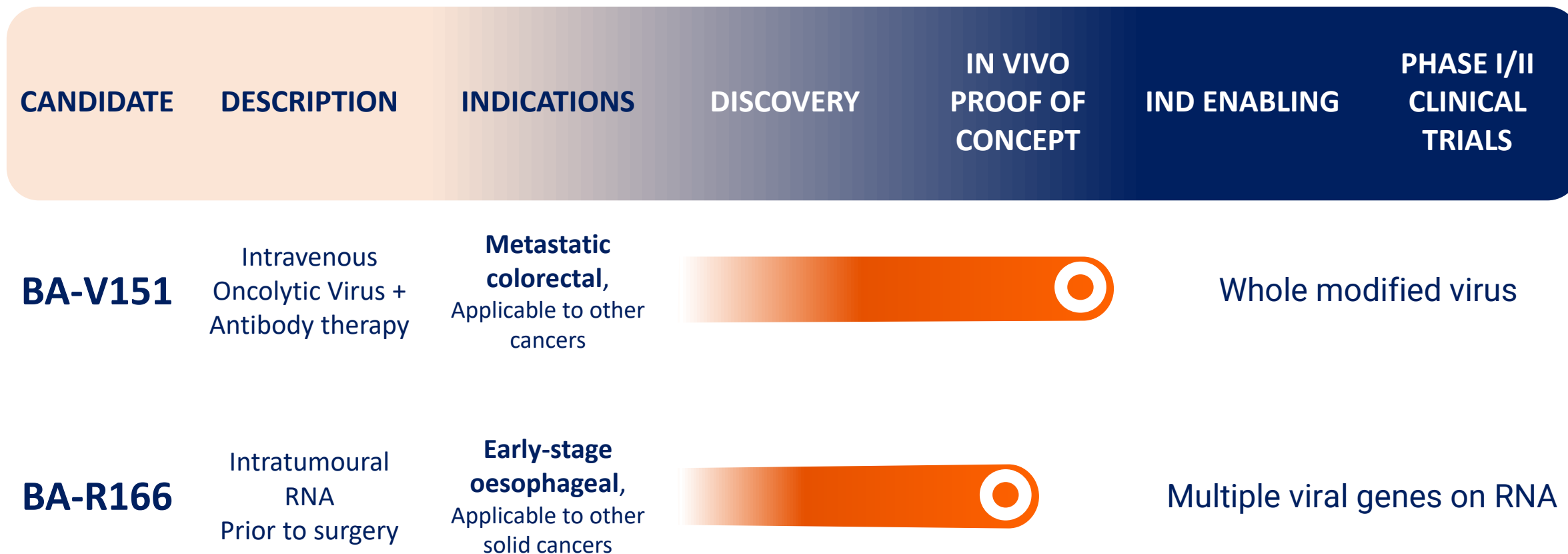
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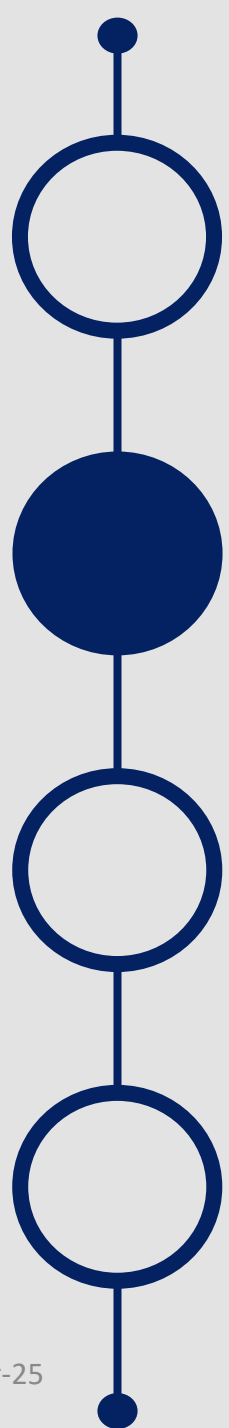


“Current cancer drugs are designed to inhibit a single aspect of the disease but are unable to cure most patients”

Bioarchitech uses multifunctional genes evolved in viruses to hack into cancer cells and modulate the immune system

ASSET PIPELINE





Introduction

Product 1: BA-V151 Late-Stage Cancer

Product 2: BA-R166 Early-Stage Cancer

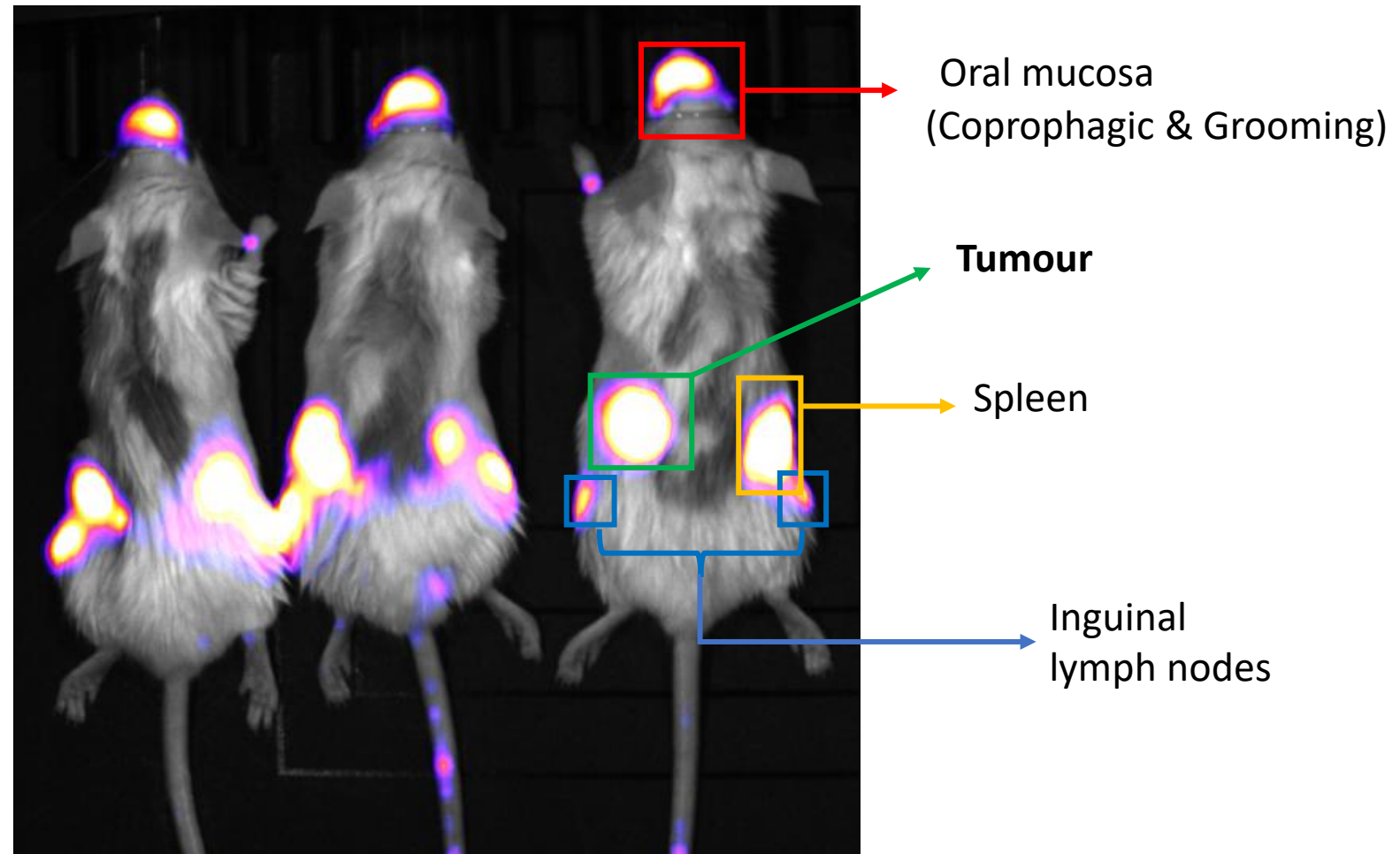
Summary and Investment Timeline

Component	Mechanism of Action
Vaccinia virus	Oncolytic & Immune Adjuvant
CD47 nanobody transgene	Inhibitor of “ <i>Don’t eat me</i> ” signal expressed inside tumours

- ❖ Patent protection
- ❖ Established manufacturing protocols
- ❖ Known intravenous dose to reach metastases
- ❖ Just two doses required while on antibody therapy
- ❖ Unleash full clinical potential of monoclonal antibodies

VACCINIA BIODISTRIBUTION

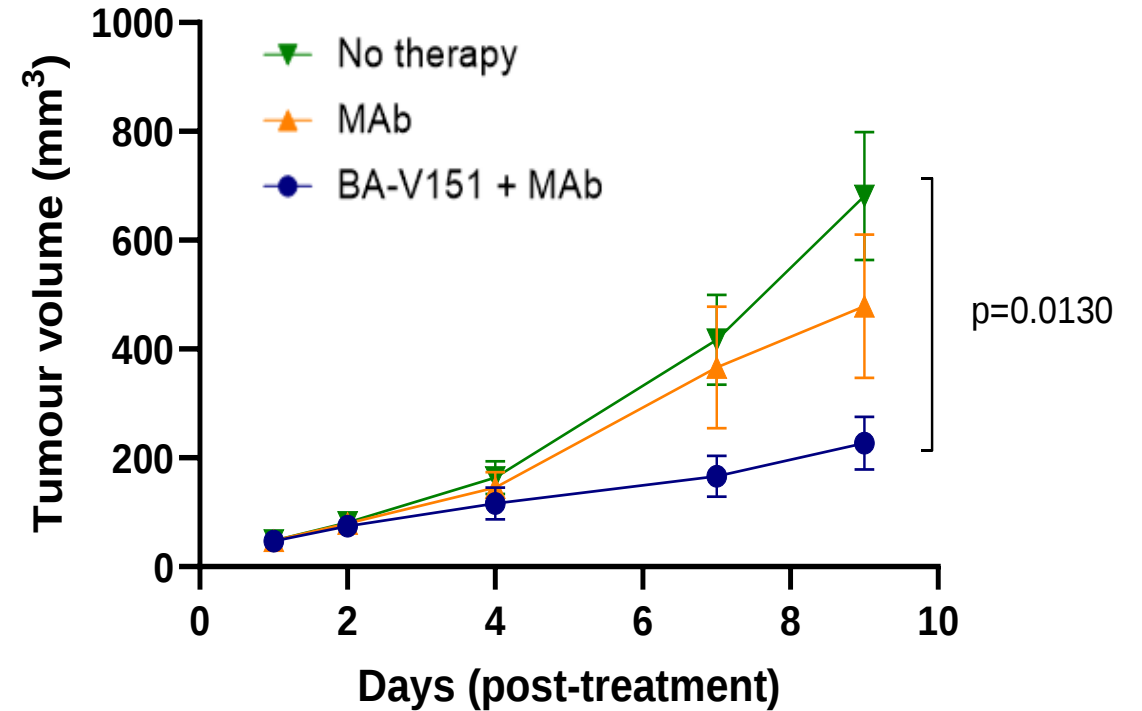
Intravenous delivery BA-V15



Vaccinia with firefly luciferase transgene

BA-V151 IN VIVO EFFICACY

- ❖ BA-V151 inhibits primary tumour growth in B16.F10 mouse cancer model
- ❖ B16.F10, Typically 20-50% mice premature death from metastases
- ❖ **BA-V151 completely inhibits metastases**

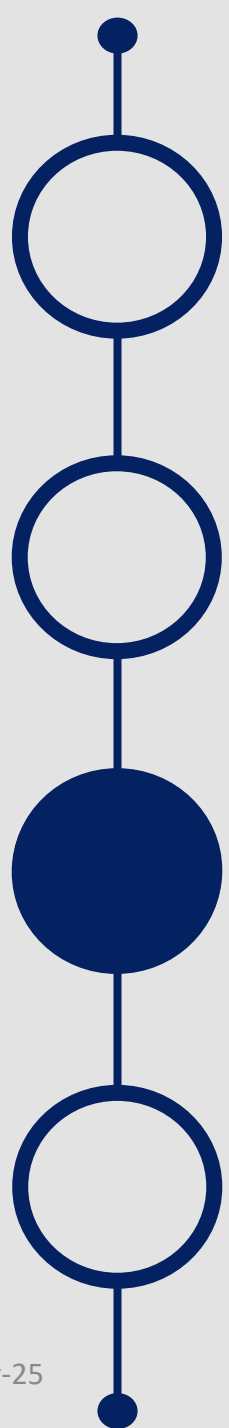


Group	Mice premature death, metastases
Antibody therapy (MAb)	50%
BA-V151 + MAb	0%

BA-V151 COMPETITIVE LANDSCAPE

																
Local delivery		✓	✓	✓	✓	✓	✓	✓		✓						
Systemic delivery	✓								✓		✓	✓	✓	✓	✓	✓
Immunotherapy transgene	✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
Synergy with FC-functional antibodies	✓															

 Recently met Phase III primary endpoints



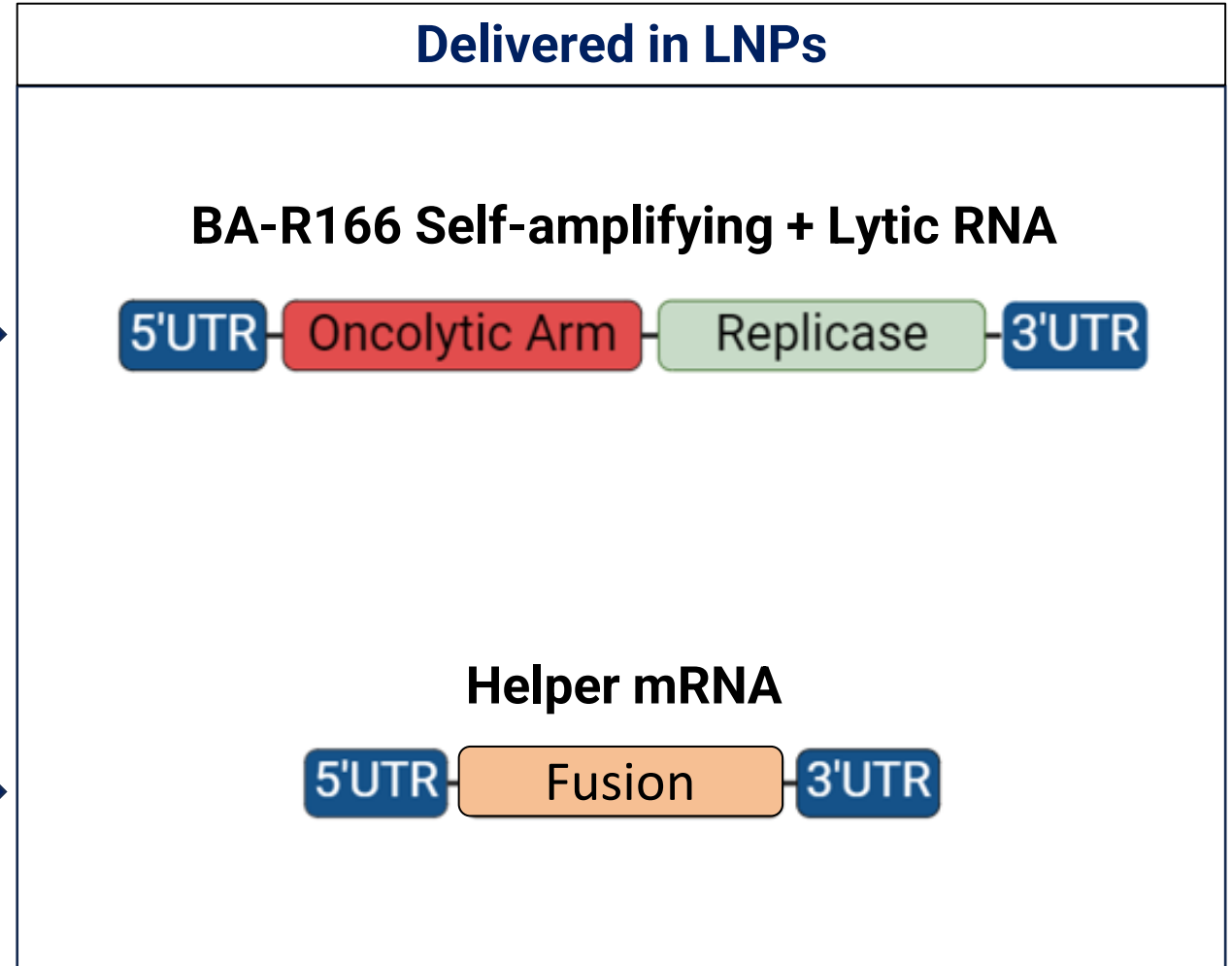
About us

Product 1: BA-V151 Late-Stage Cancer

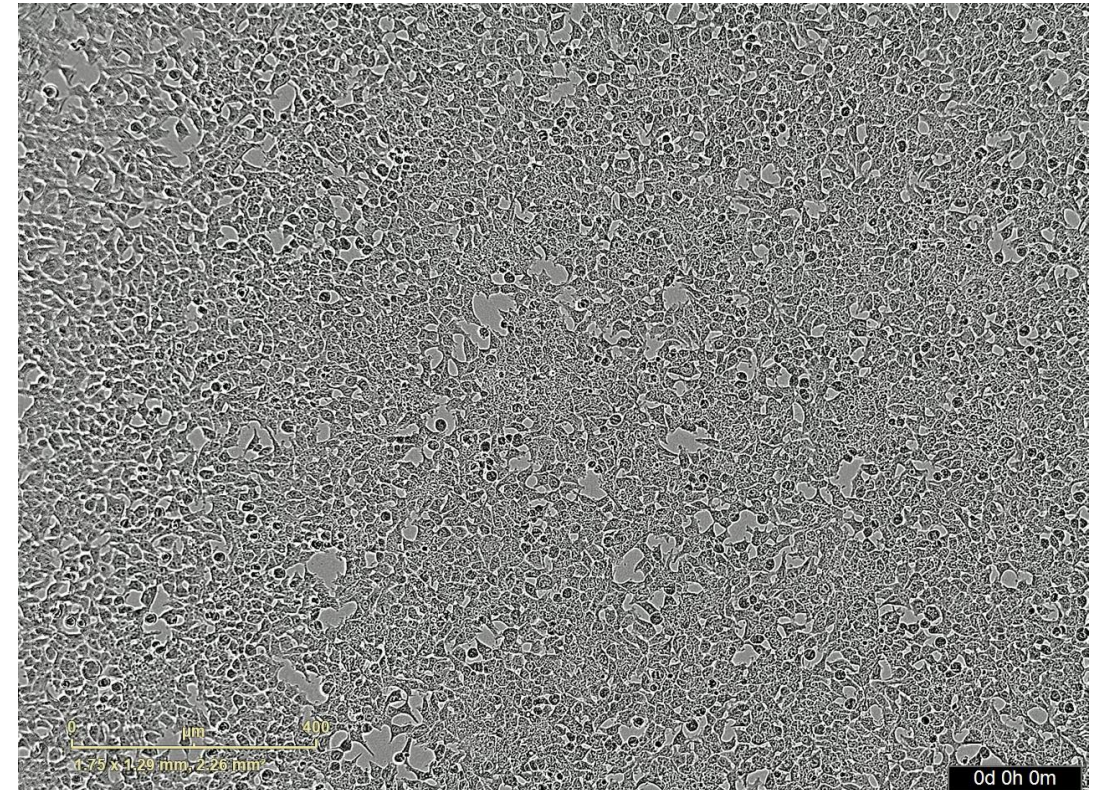
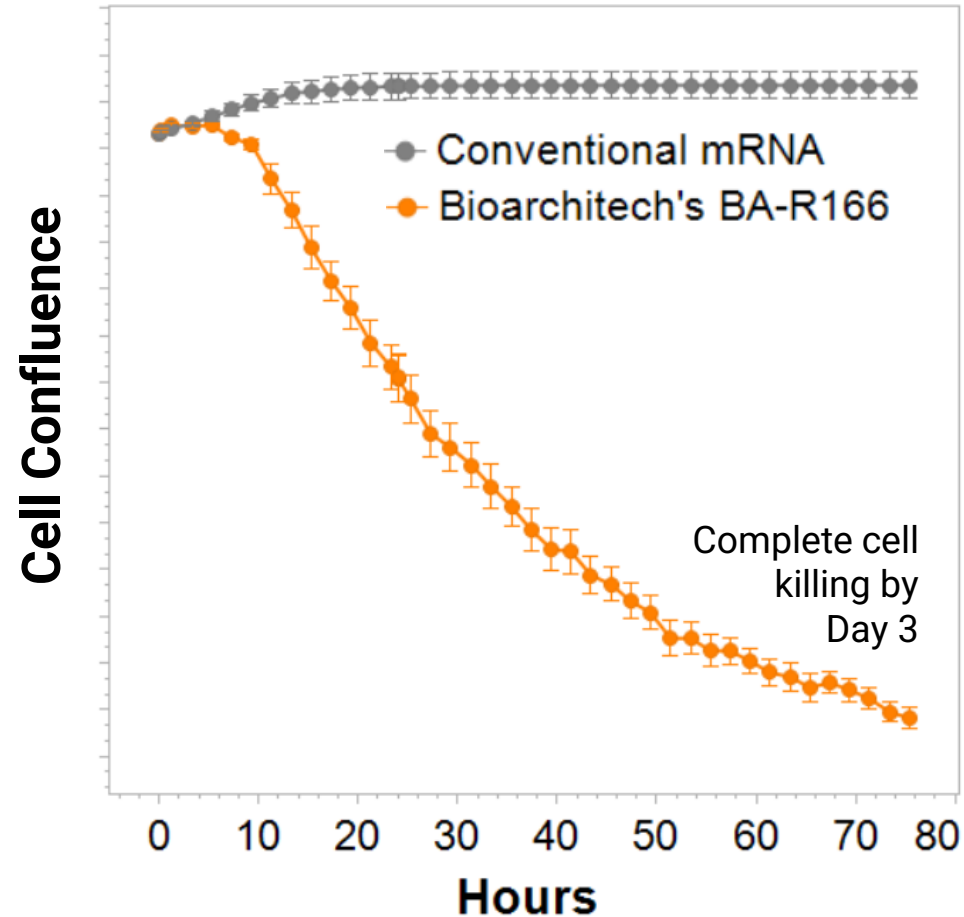
Product 2: BA-R166 Early-Stage Cancer

Summary and Investment Timeline

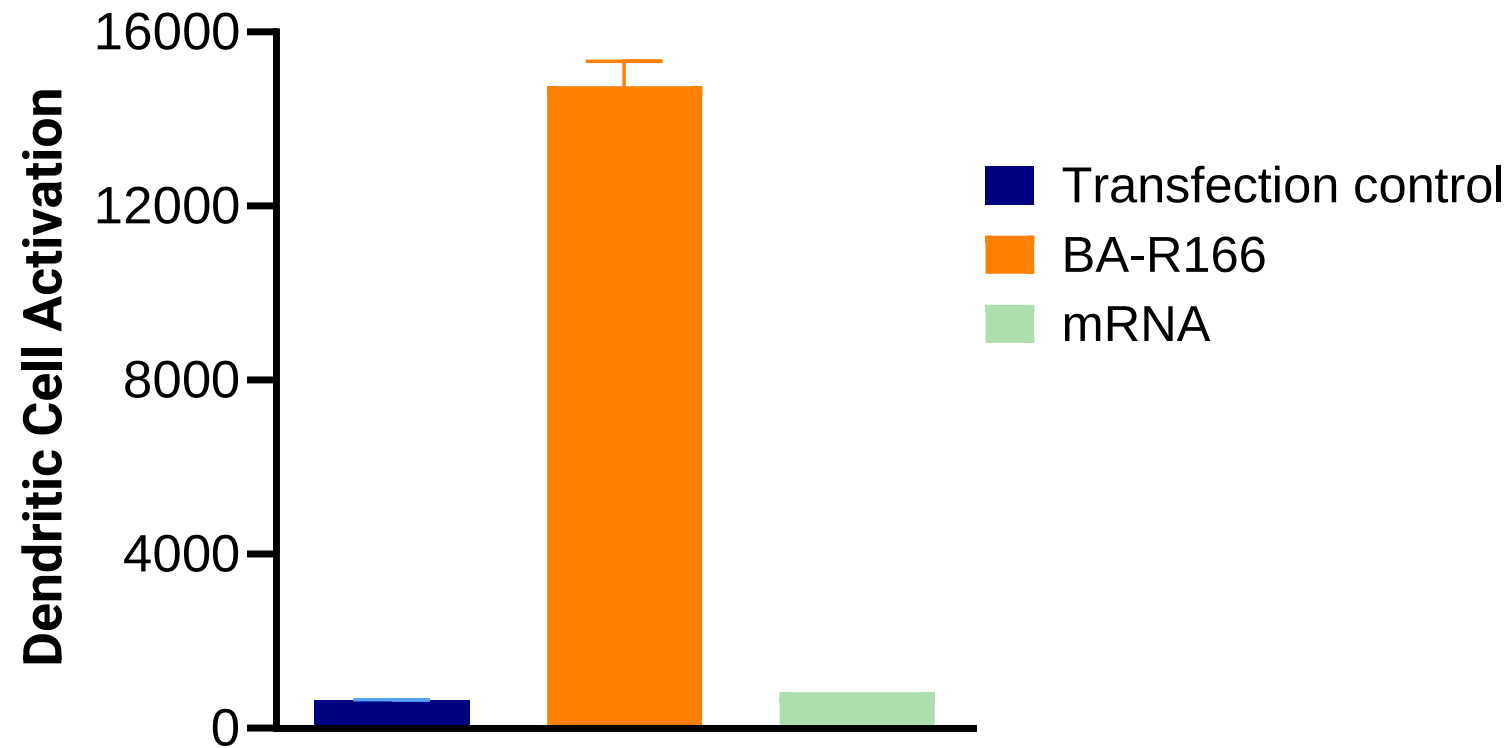
1. **Replicase** - Makes dsRNA a potent immunostimulatory danger signal
2. **Oncolytic arm** – Shrink tumour and release of intracellular cancer antigen and danger signals (dsRNA) debris
3. **Helper RNA** improves distribution through dense tumour tissue via cellular fusion.



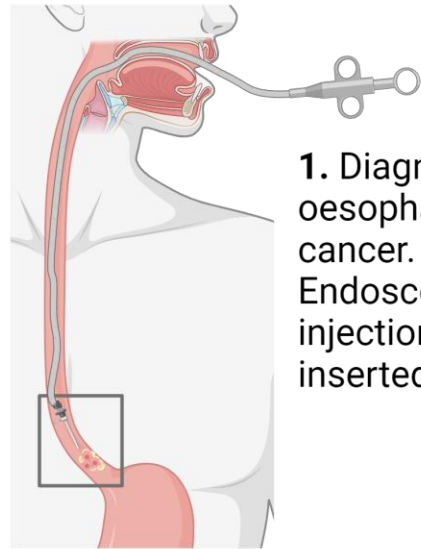
1. Rapid cell killing – Releases intracellular cancer antigens



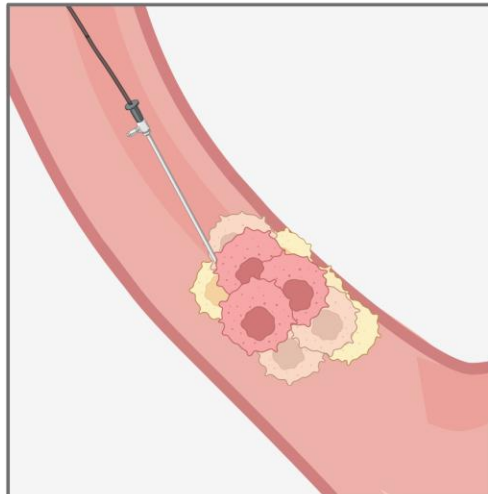
2. BA-R166- Cancer cell death is immunogenic causing dendritic cell maturation



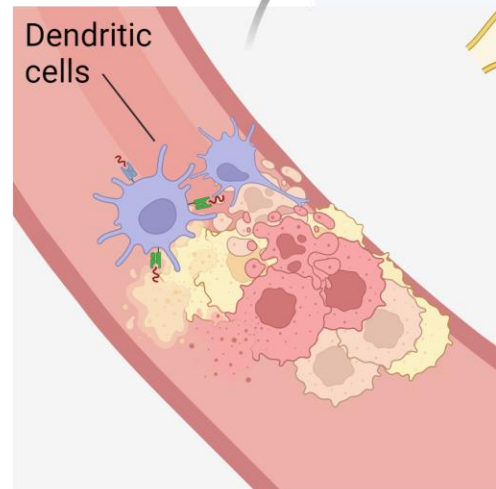
BA-R166 OESOPHAGEAL CANCER



1. Diagnosis of oesophageal cancer. Endoscopic injection system inserted.

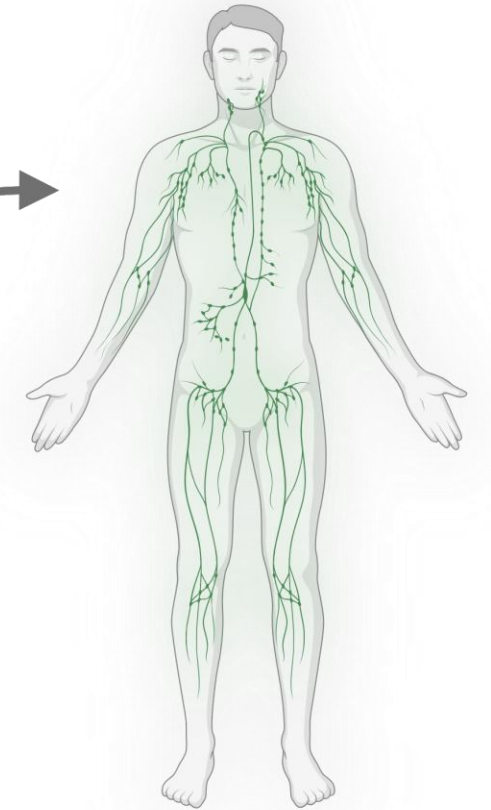
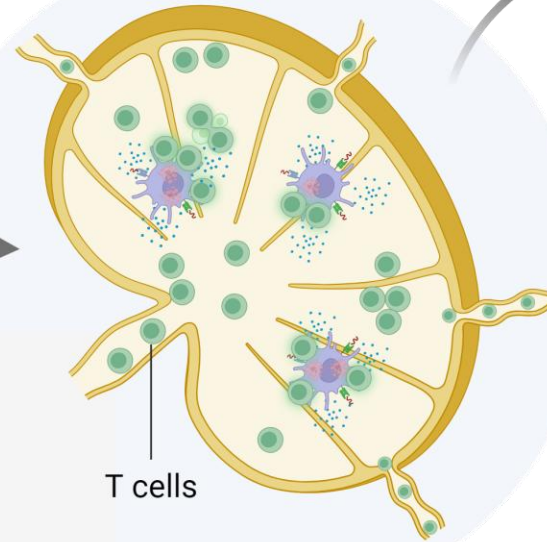


2. Endoscopic intratumoural injection of BA-R166.



3. BA-R166 causes oncolysis and activation of dendritic cells.

4. Dendritic cells traffic to lymph nodes to expand cancer specific T cells.



5. T cells provide systemic protection from metastases.

BA-R166 COMPETITIVE LANDSCAPE

										
Non-replicating mRNA		✓	✓	✓	✓	✓			✓	✓
Self-amplifying mRNA	✓						✓	✓	✓	✓
LNP delivery	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cytotoxic Effect	✓									



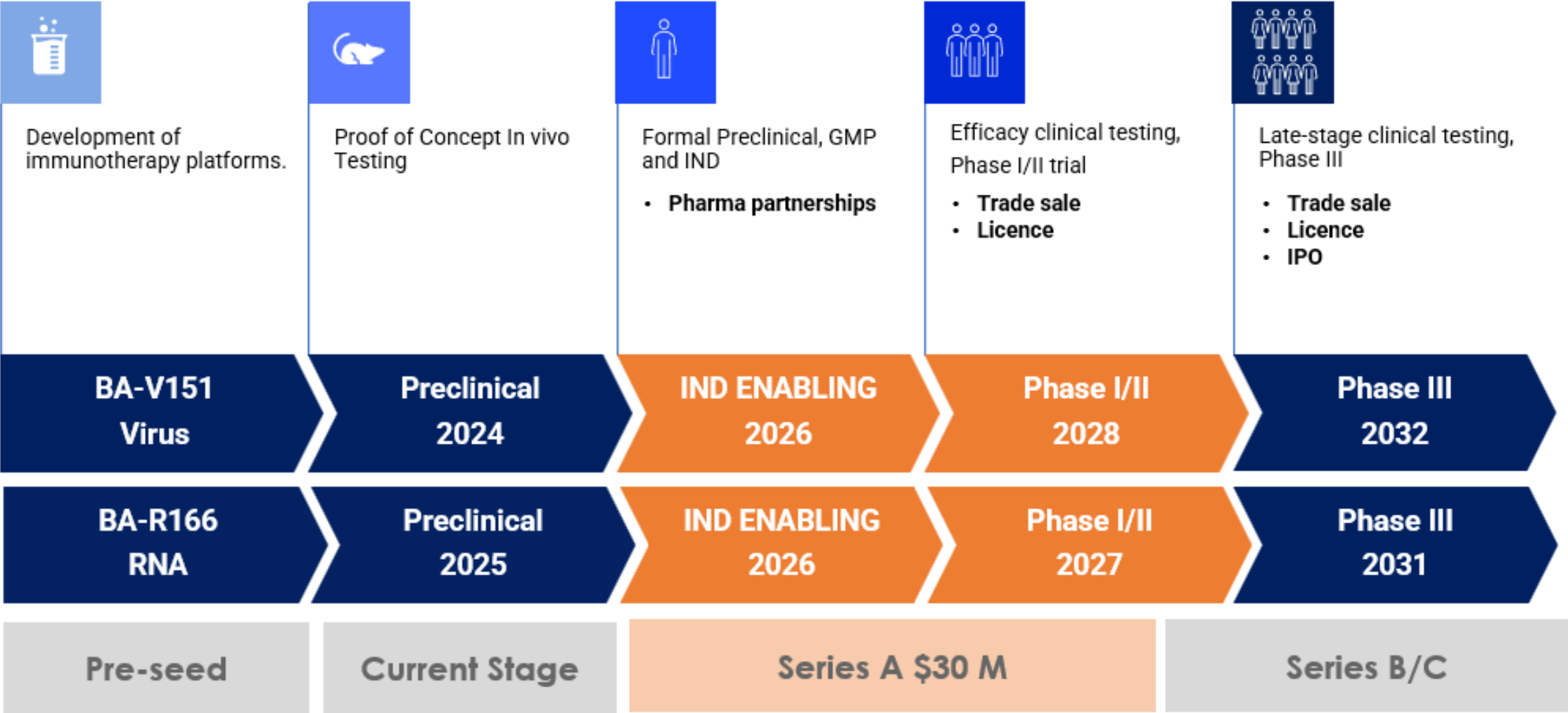
BA-V151

1. Intravenous oncolytic virus for metastatic cancer
2. Enhances monoclonal antibody co-therapy with 2-doses
3. Prevents deaths from metastases
4. **Unleashes the full clinical potential of monoclonal antibodies**

BA-R166

1. Intratumoural RNA of primary tumours prior to surgery
2. Kills cells releasing cancer antigens & dsRNA immune adjuvant
3. Fast (MoA 3 days), Cheap (vaccine), Safe
4. **Turn tumour into its own vaccine (off-the-shelf personalised vaccine)**

TIMELINE





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