

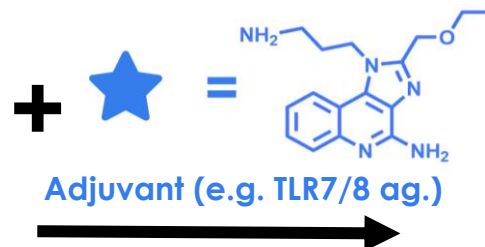
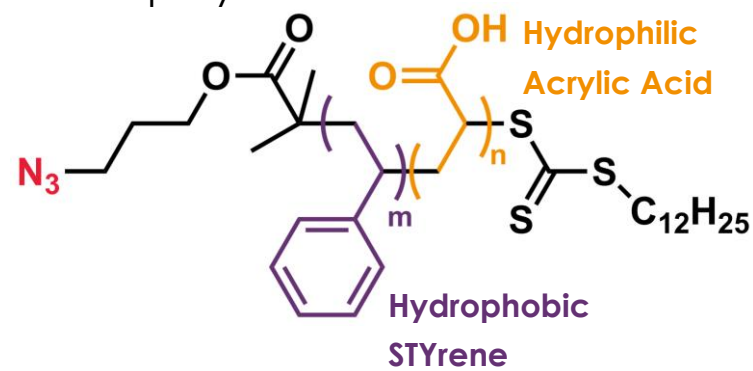
# POLYCEUTIX

Utilizing the unique antigen-presenting **potential of nanodiscs** to unlock the power of the immune system

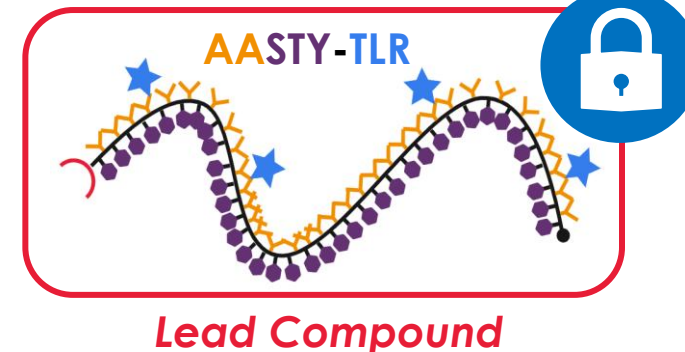


Mads Holmegaard Sørensen, PharmD, MBA  
Co-Founder

Reactive co-polymer **AASTY**

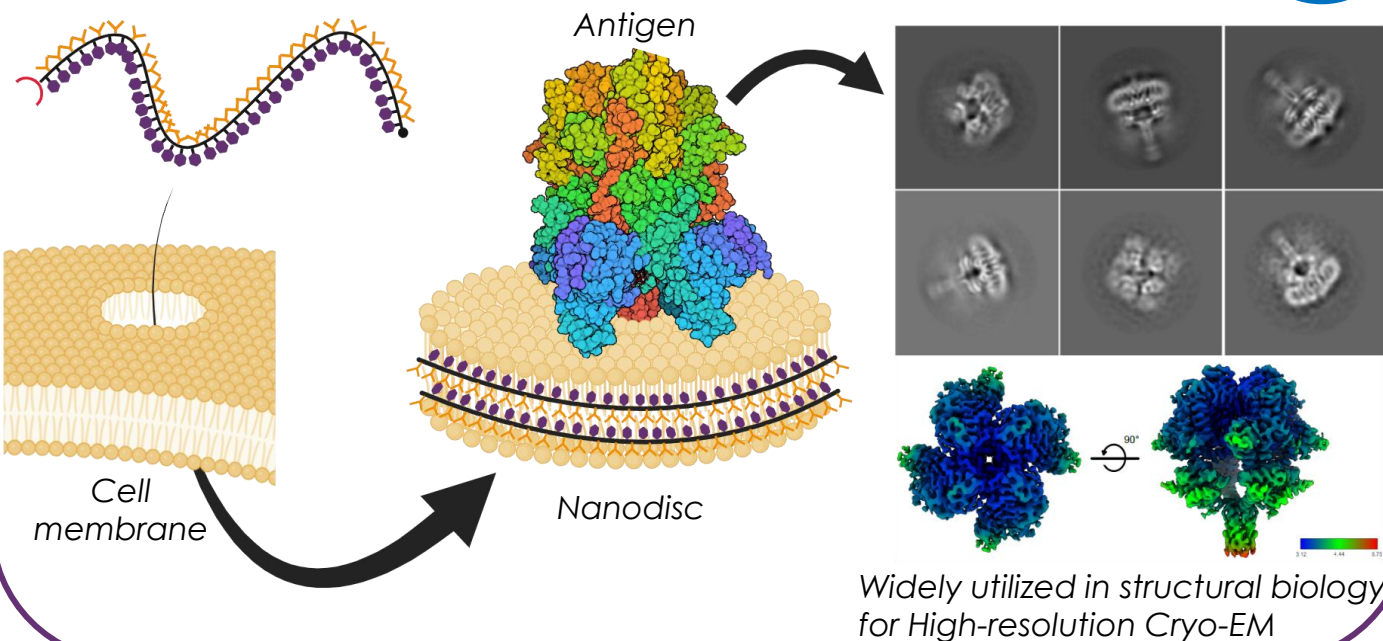


Patent 2

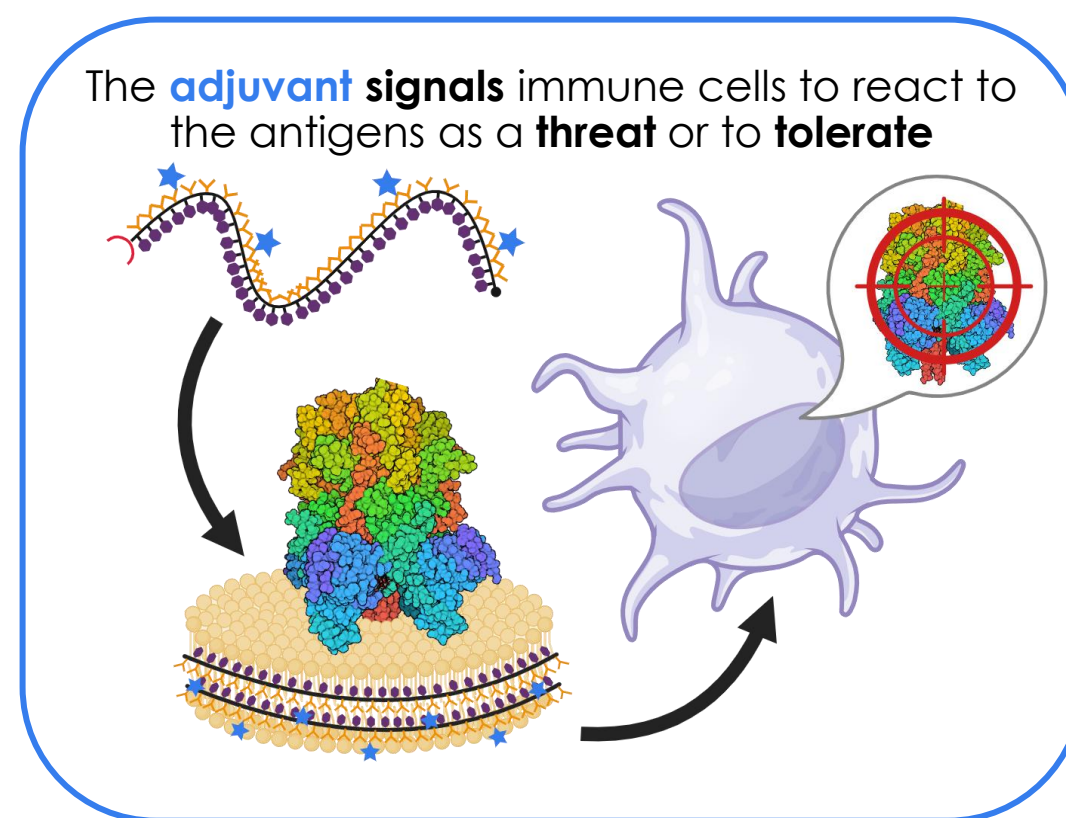


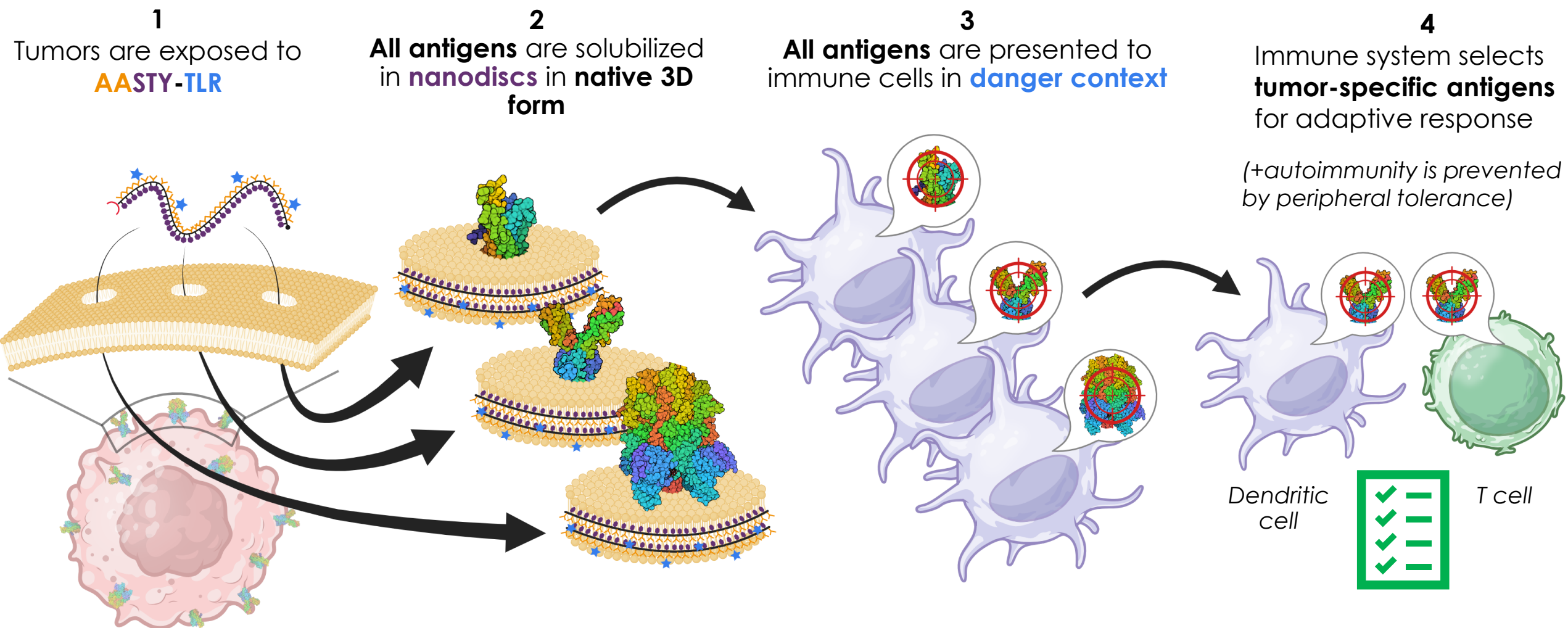
Patent 1

**AASTY** captures membrane-proteins in **nanodiscs** and **preserves their native 3D structure**



The **adjuvant signals** immune cells to react to the antigens as a **threat** or to **tolerate**



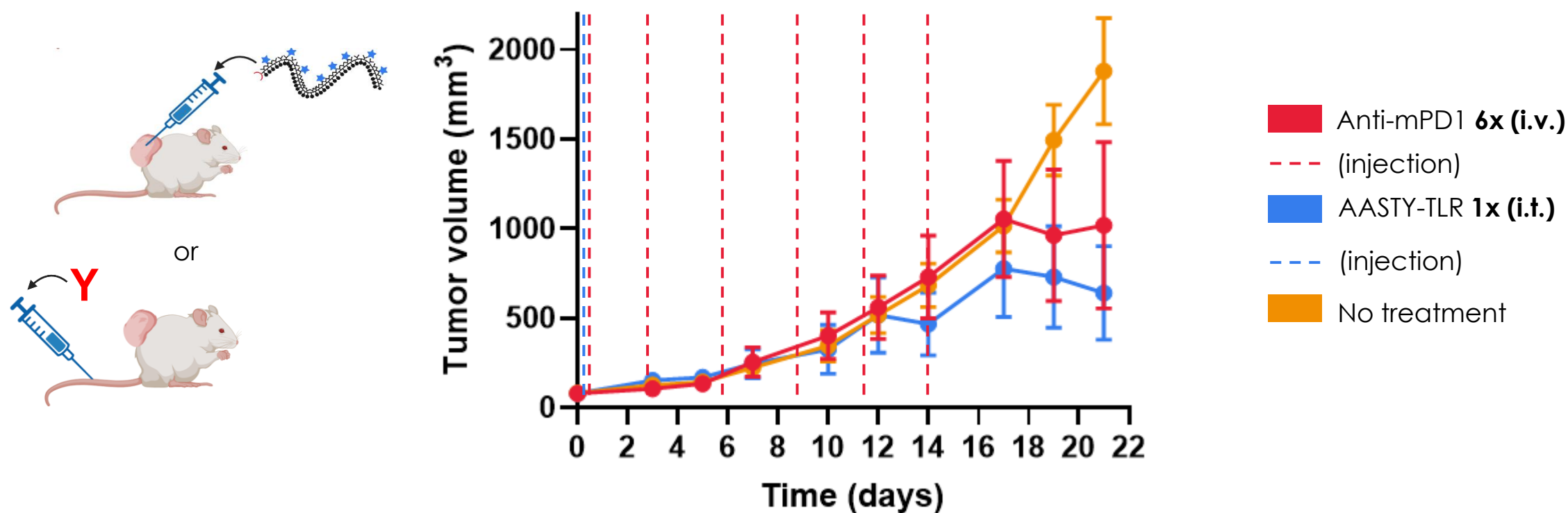


While so little is known about the selection of neoantigens, **AASTY-TLR lets the immune system make the right decisions by itself**

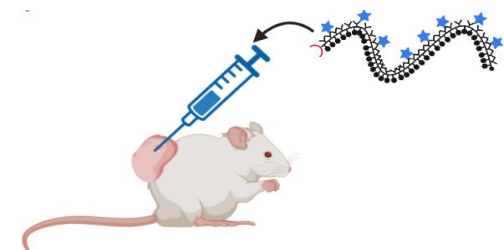
**Model:** CT26 = Aggressive, hot tumor. 80-150 mm<sup>3</sup> at treatment start

**Objective:** AASTY-TLR **single** injection potential and comparative efficacy

Average tumor volumes



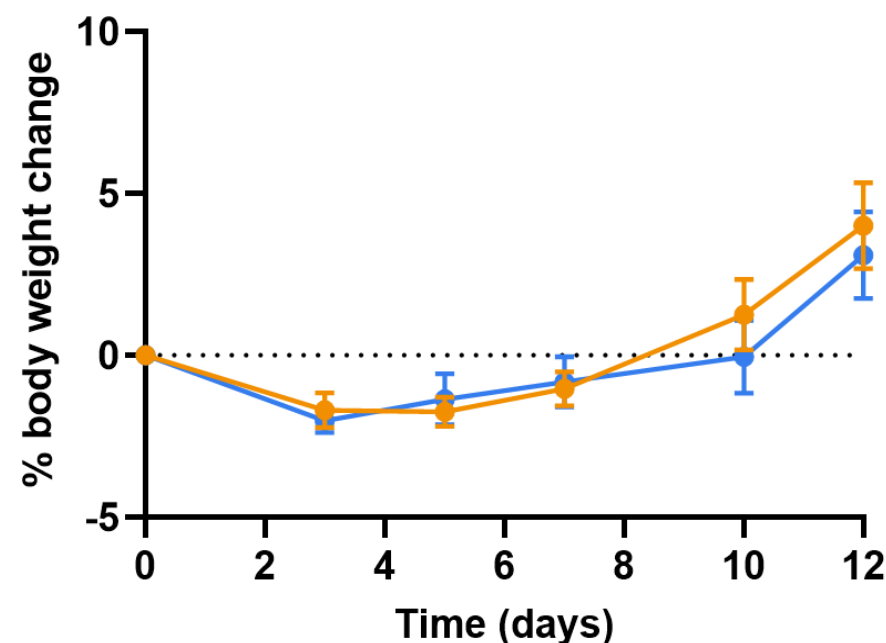
➡ **Single injection** of AASTY-TLR has **high efficacy** and is **better than six injections of the best immunotherapy** on the market



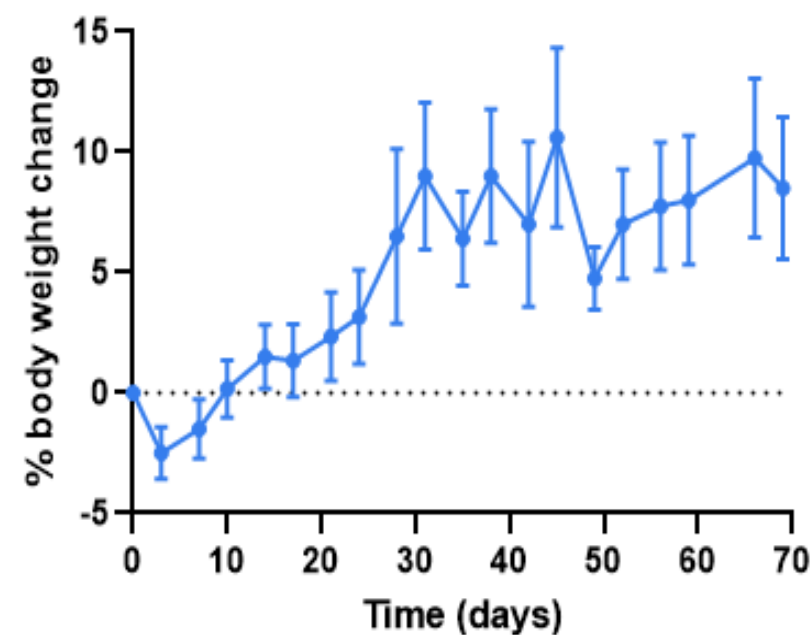
**Model:** CT26 (and all other cancer models tested)

**Objective:** Safety and toxicity

AASTY-TLR in **short term**



AASTY-TLR in **long term**

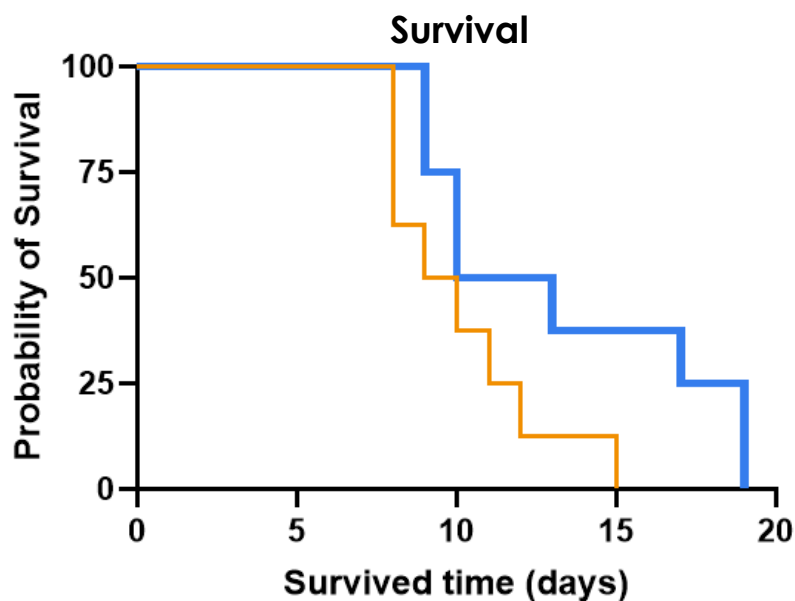
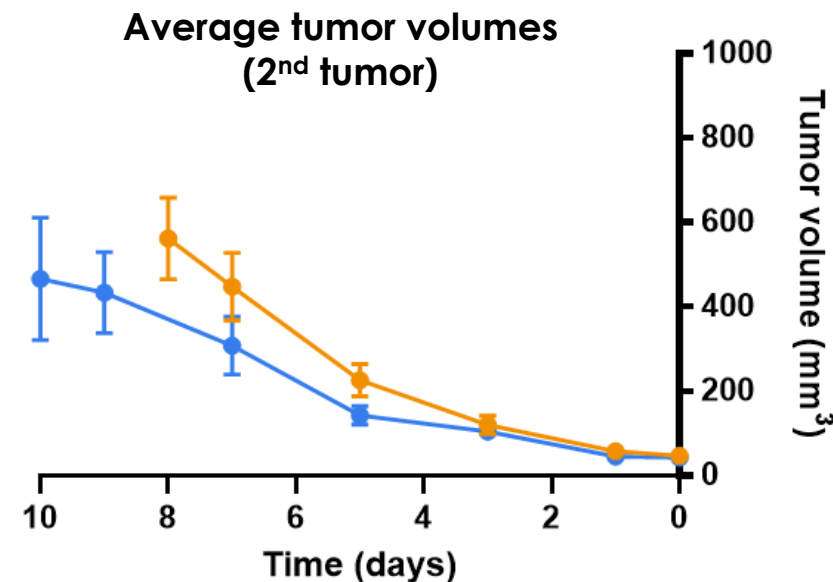
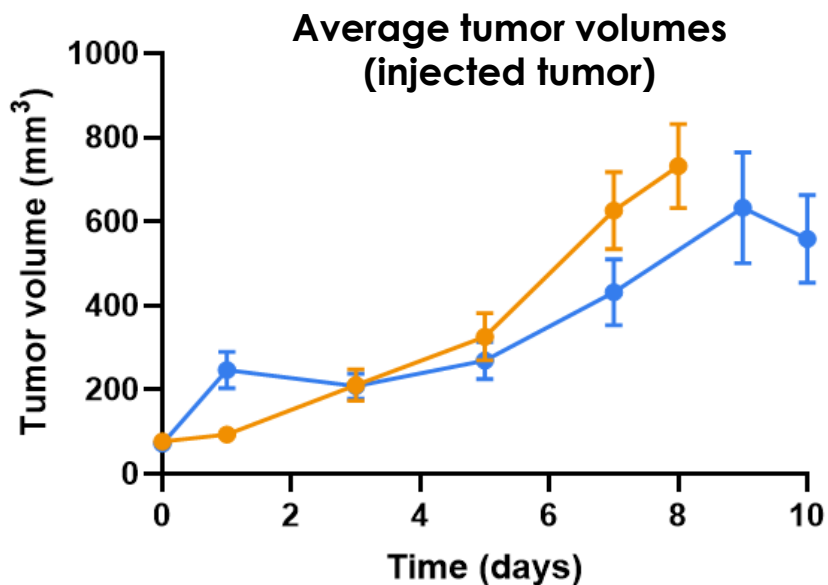


Control  
AASTY-TLR<sub>5mg/kg</sub>



**No signs of short term & long-term toxicity** over 10+ experiments





- Control (PBS)
- AASTY-TLR 1x (i.t.)

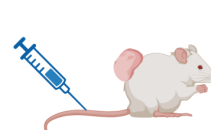
➡ Confirmation of **systemic effect**  
of local therapy and **adaptive immunity**

Saline solution



No treatment

Anti-mPD1



Standard of care



Monotherapy

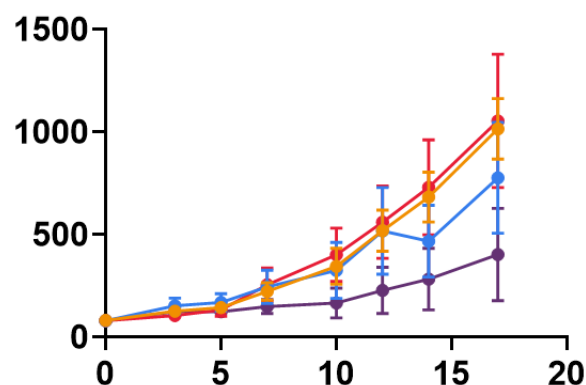
Anti-mPD1



Combination therapy

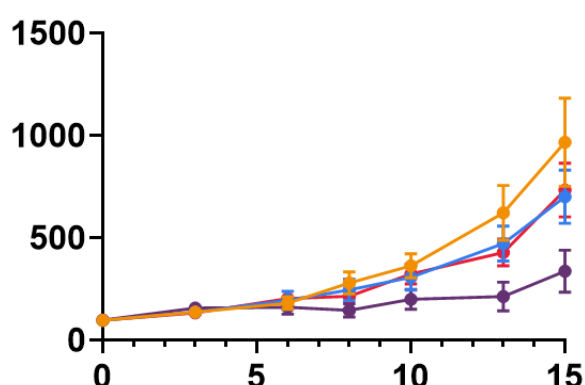
CT26

Hot tumor



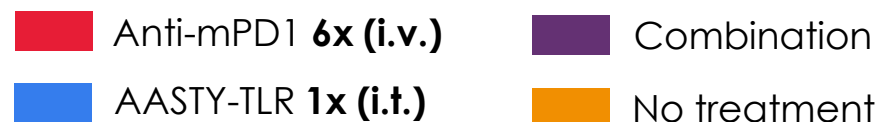
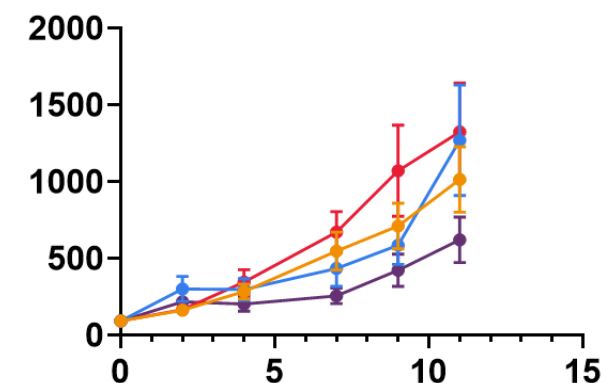
MC38

Cold-to-hot tumor



B16F10

Cold tumor









**Hot tumor** = Cancer tumors with high presence of immune cells  
**Cold tumor** = Cancer tumors with low presence of immune cells



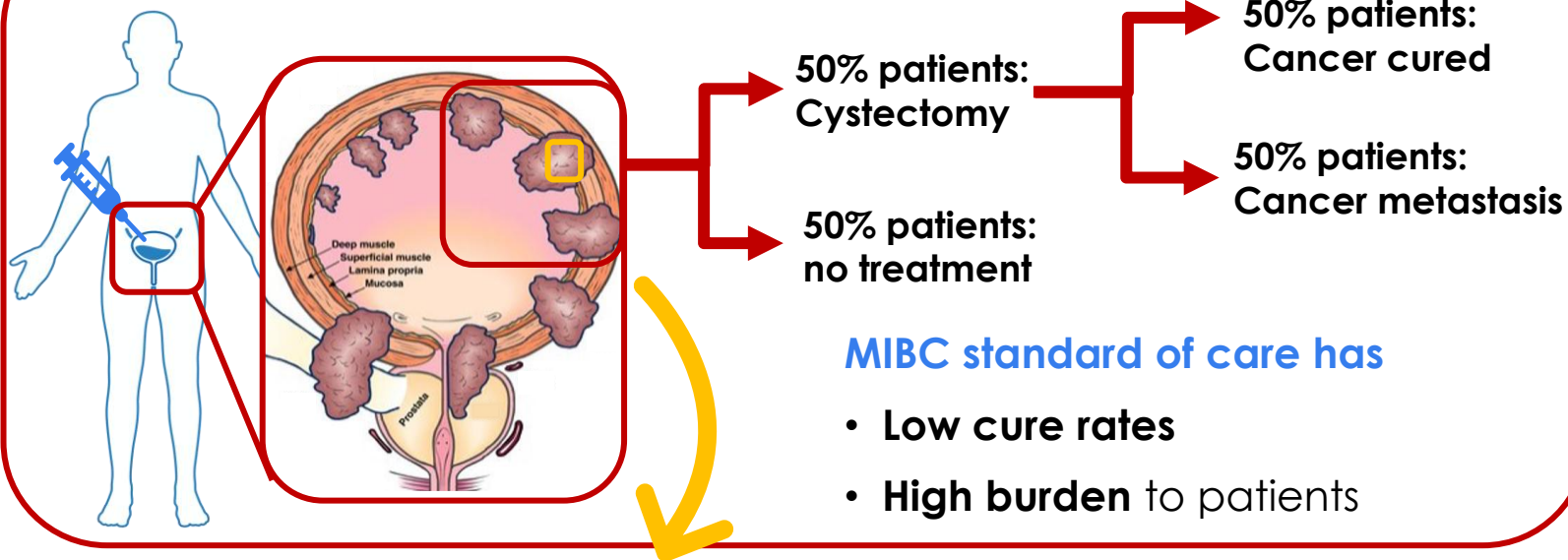
**Synergistic effect** of combination, consistent with mode of actions (kick off vs potentiation of immune response).

# AASTY-TLR has key advantages over competing technologies

	AASTY-TLR	Oncolytic Virus	Gene Therapy	Off-the-shelf Vaccine	Personalized Vaccine	ADC / ISAC
Example						
Single Treatment	✓	✗	✗	✗	✗	✗
Native Antigen Presentation*	✓	✗	✓	✗	✗	✗
Adaptive Immunity**	✓	✗	✓	✓	✓	✗
Target Agnostic	✓	✗	✓	✗	✓***	✗
Systemic Administration	✗	✗	✗	✓	✓	✓
Low-burden Logistics	✓	✗	✗	✓	✗	✓



## Problem: Muscle Invasive Bladder Cancer (MIBC)



## Market potential

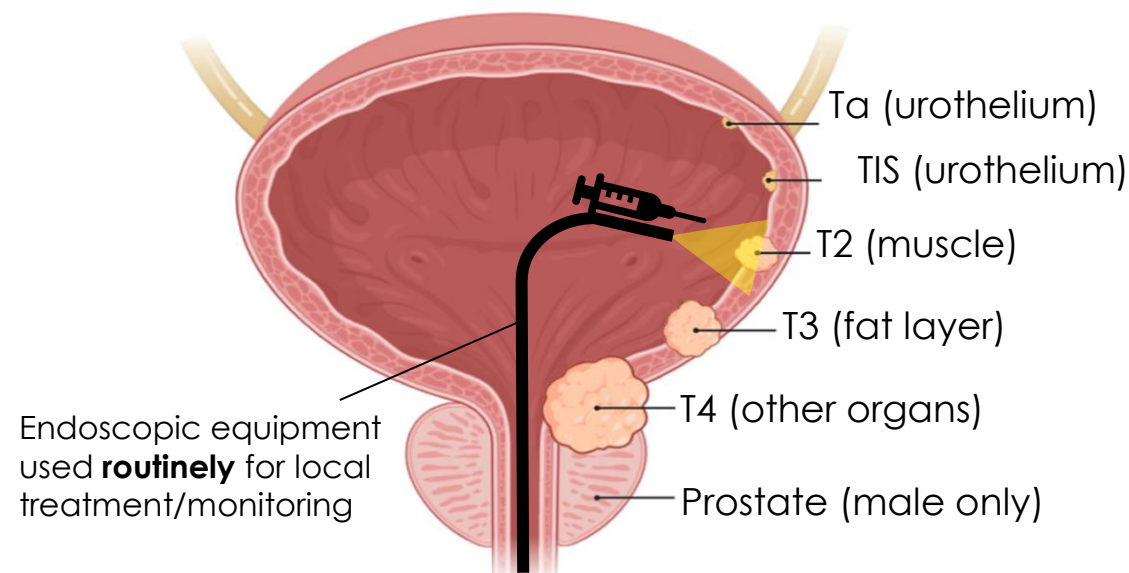
Total market size of Bladder Cancer:  
**\$ 4.0 Billion**

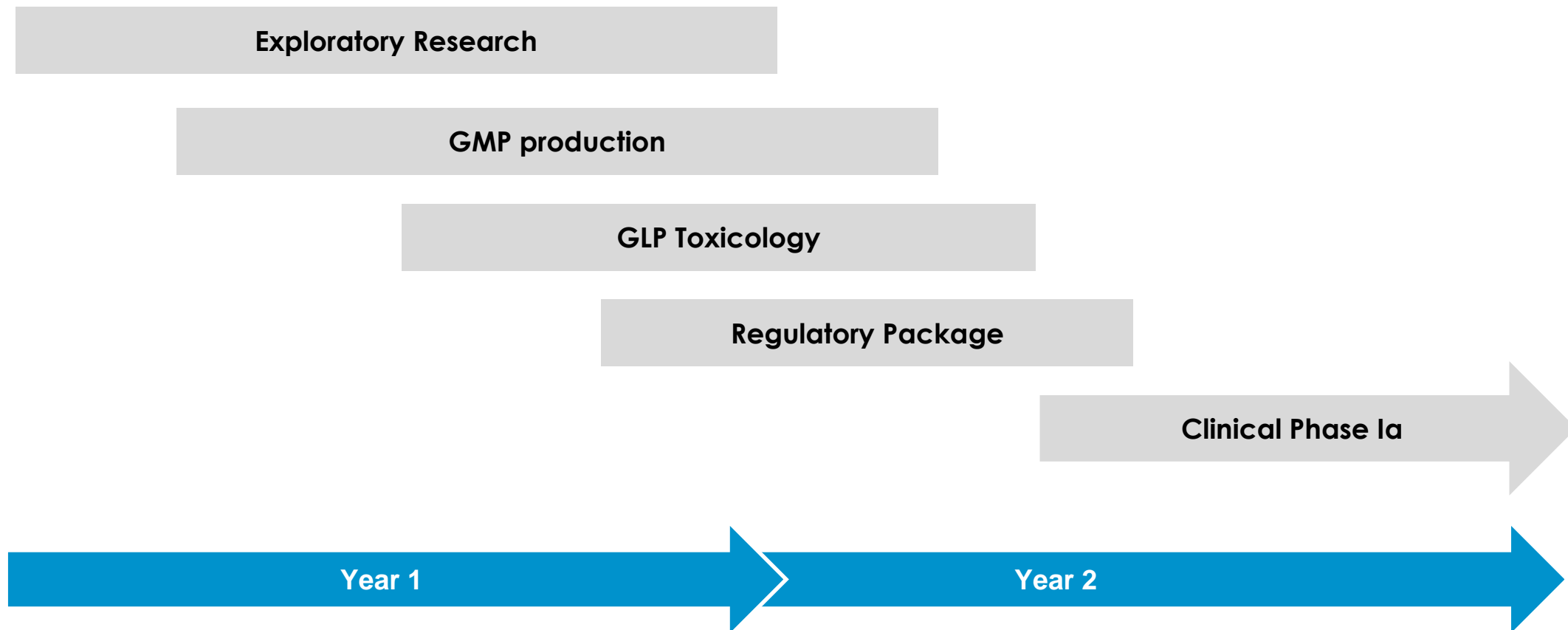
Growing market with CAGR **15.8%**

Incidence of MIBC >100,000, growing  
2.2%/year

Estimated peak sales for AASTY-TLR in  
MIBC: **\$ 1.2 B**

Potential use in several other cancers





## Core Team

### CEO



**Anton A. A. Autzen**

PhD, Co-Founder, inventor



### CSO



**Henriette E. Autzen**

PhD, Co-founder, inventor



### CBO



**Mads Holmegaard Sørensen**

PharmD, MBA, Co-Founder



### Principal Scientist



**Neil Jean Borthwick**

PhD, Co-founder, inventor



### VP of Non-Clinical Dev



**Lars Holten- Andersen,**

PhD



### Research Scientist



**Philip Mark Lund**

PhD



## Consultants



**Nicklas Roest**

Regulatory specialist



**Hans Holmegaard Sørensen**

CMC specialist



## Scientific Advisors



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(Chair)**

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Science & Eng.  
Stanford University



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Hospital



**Dr. Kristoffer Rohberg**

Head of Oncology  
Phase I Unit,  
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**Prof. Ashish Kamat**

Dept of Urology,  
MD Anderson



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