

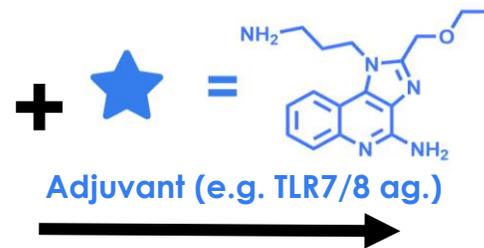
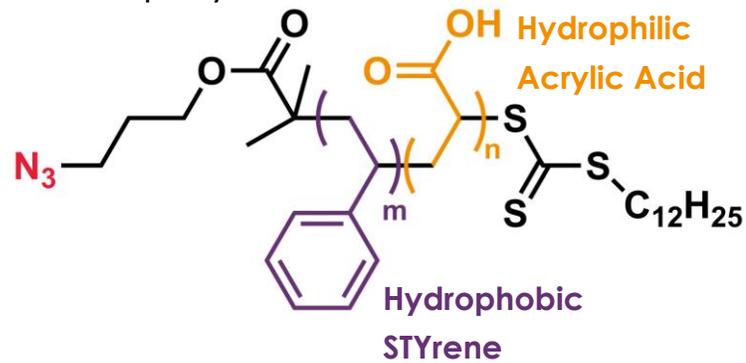


# POLYCEUTIX

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**



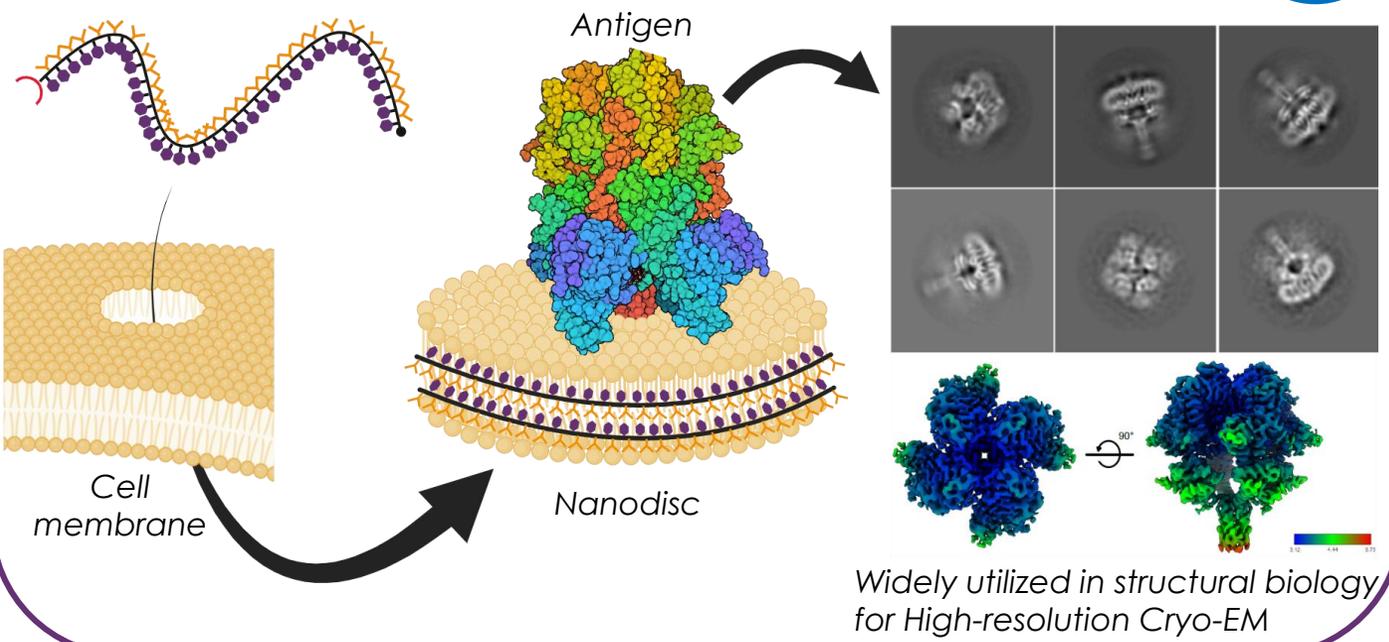
**Patent 2**

**AASTY-TLR**

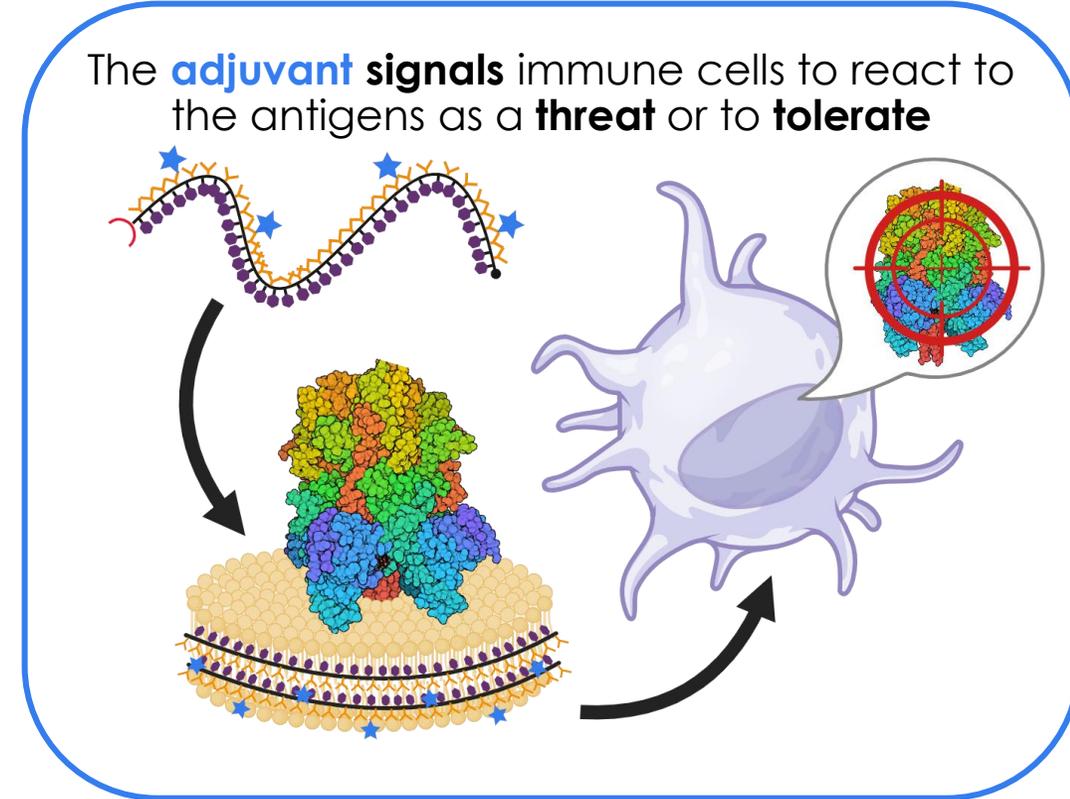
**Lead Compound**

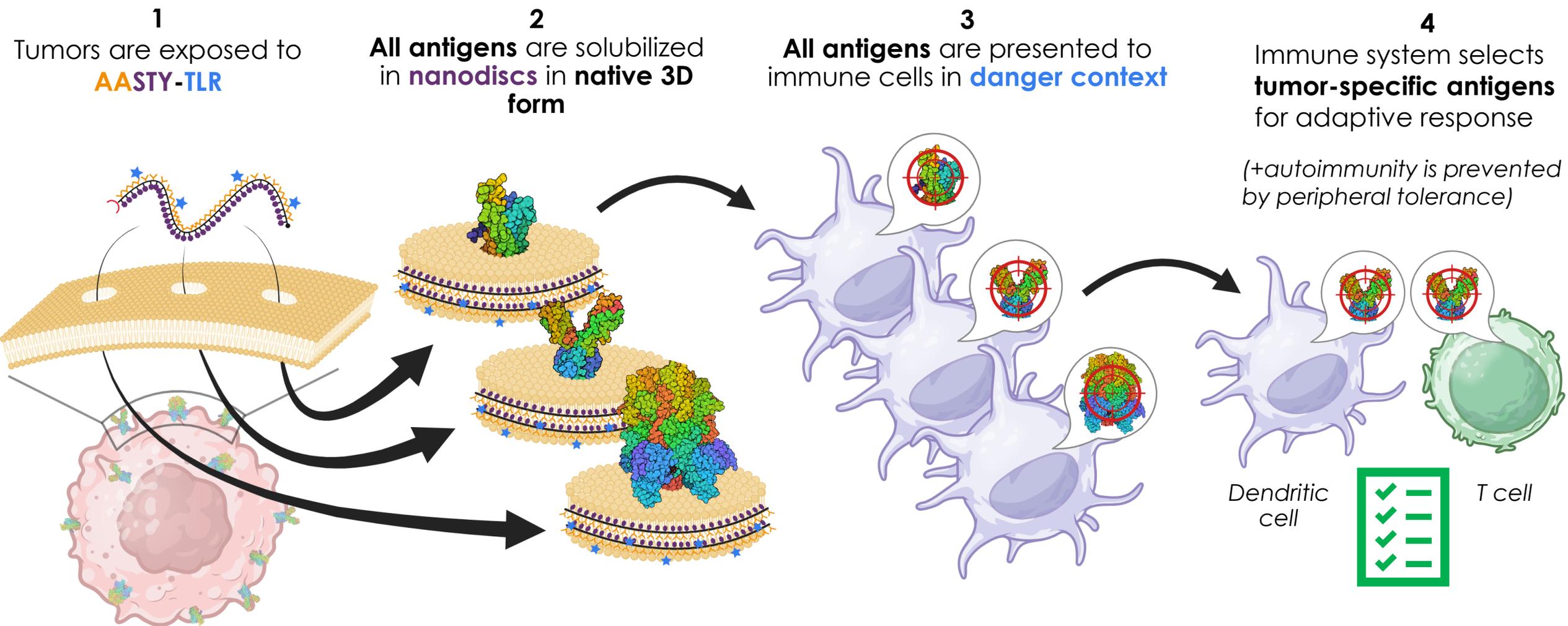
**AASTY** captures membrane-proteins in **nanodiscs** and **preserves their native 3D structure**

**Patent 1**



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



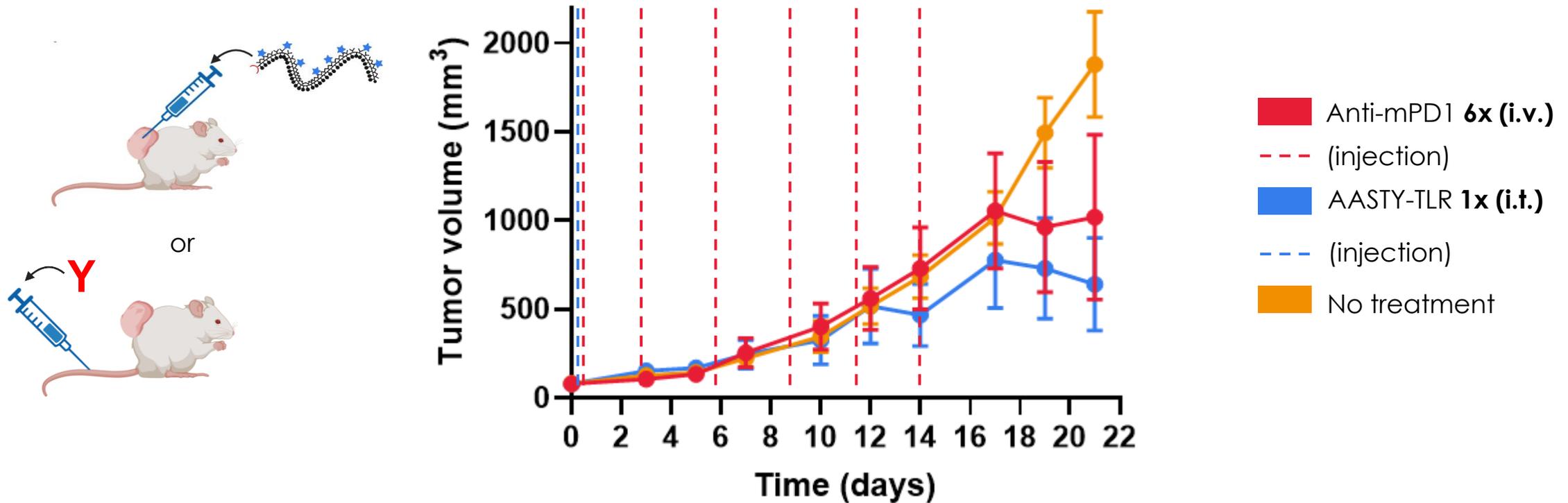


➔ While so little is known about the selection of neoantigens, **AASTY-TLR lets the immune system make the right decisions by itself**

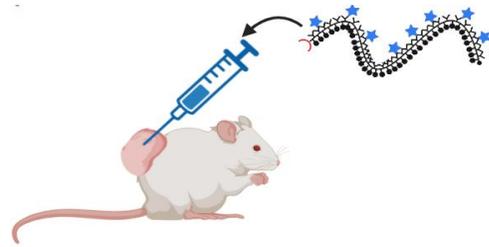
**Model:** CT26 = Aggressive, hot tumor. 80-150 mm<sup>3</sup> at treatment start

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

Average tumor volumes



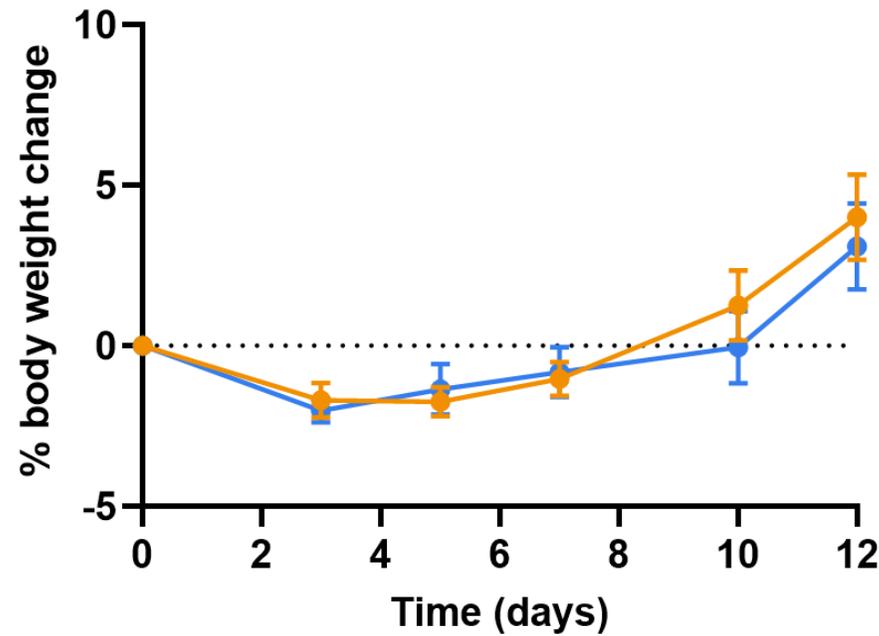
➔ **Single injection** of AASTY-TLR has **high efficacy** and is **better than six injections of the best immunotherapy** on the market



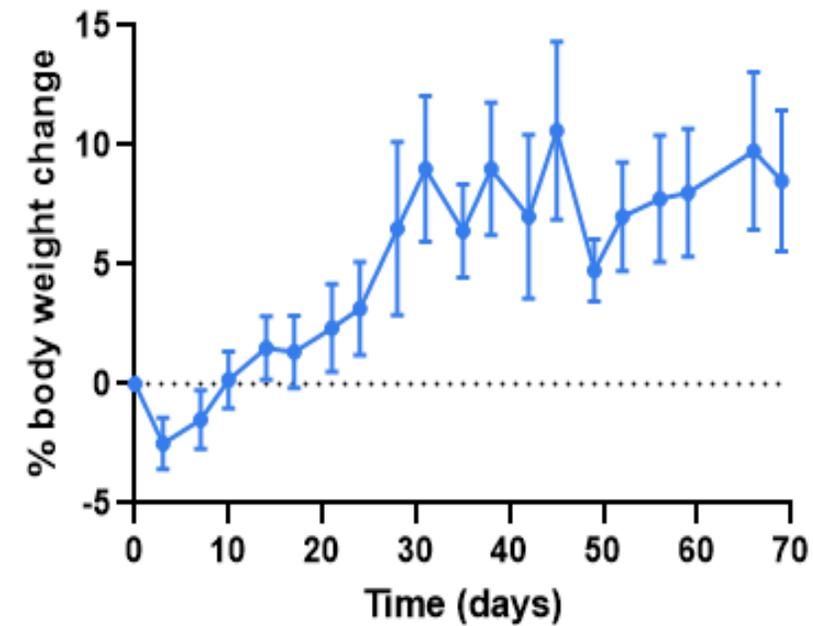
**Model:** CT26 (and all other cancer models tested)

**Objective:** Safety and toxicity

AASTY-TLR in **short term**



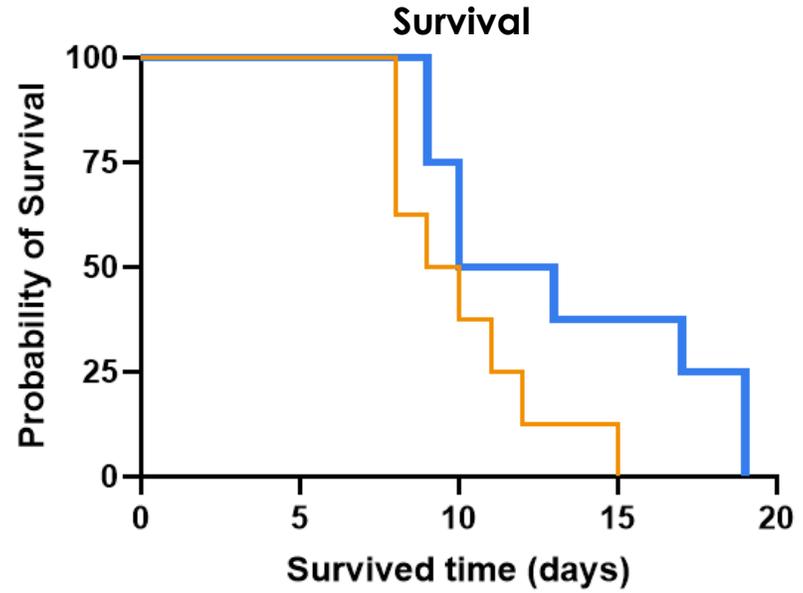
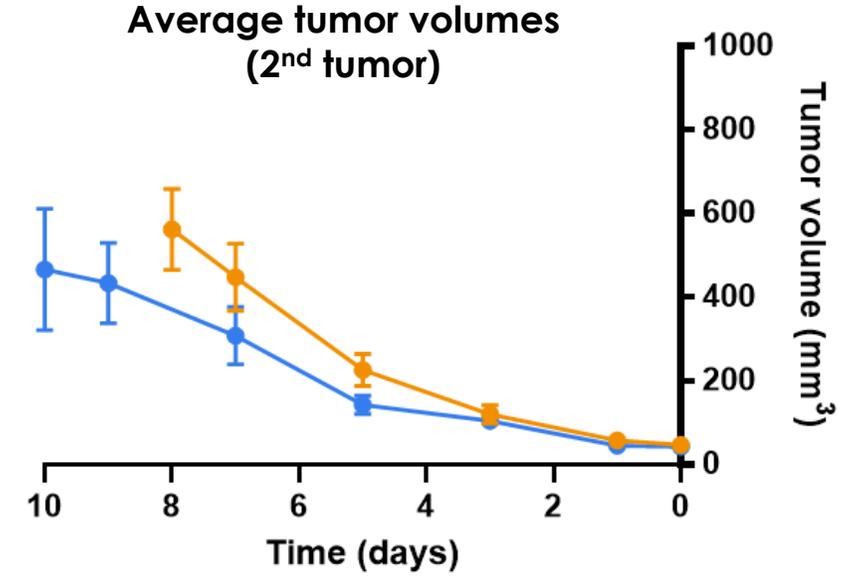
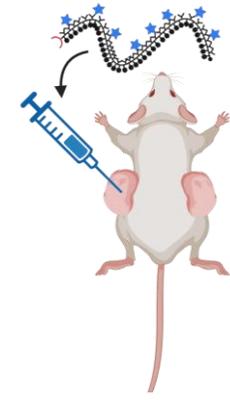
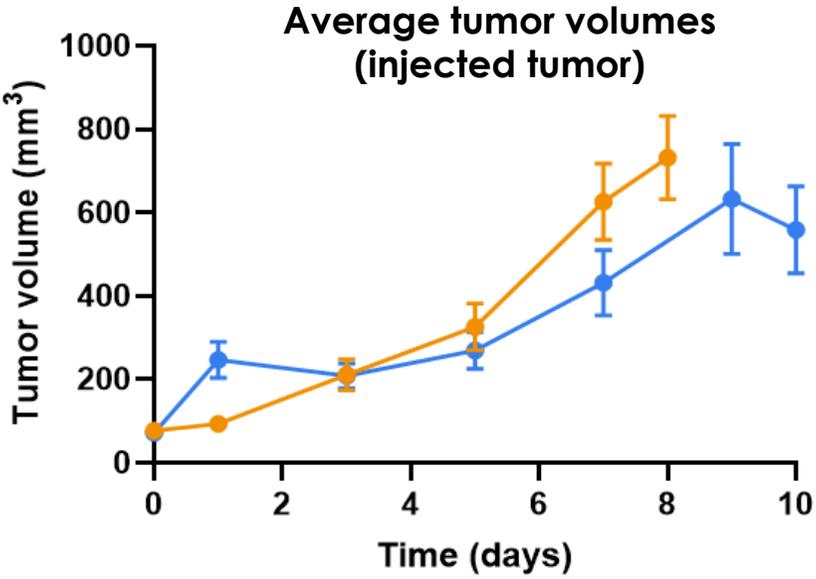
AASTY-TLR in **long term**



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



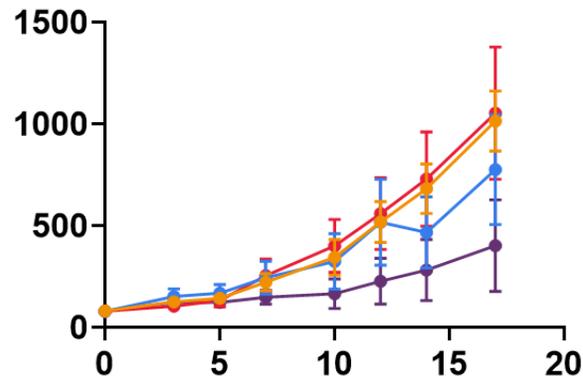
Monotherapy

Anti-mPD1

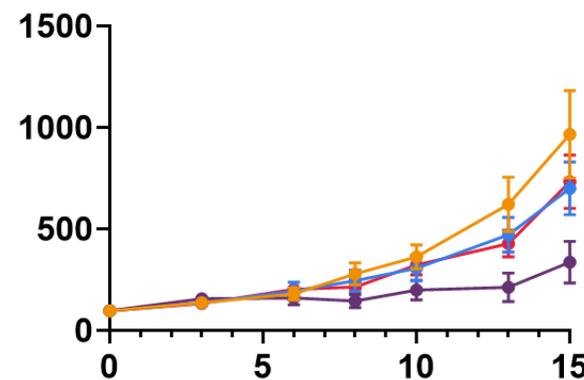


Combination therapy

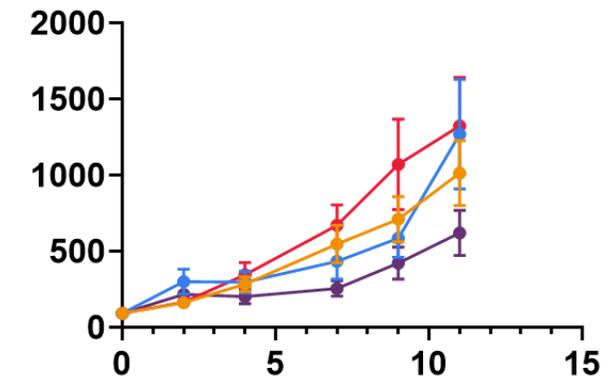
**CT26**  
Hot tumor



**MC38**  
Cold-to-hot tumor



**B16F10**  
Cold tumor



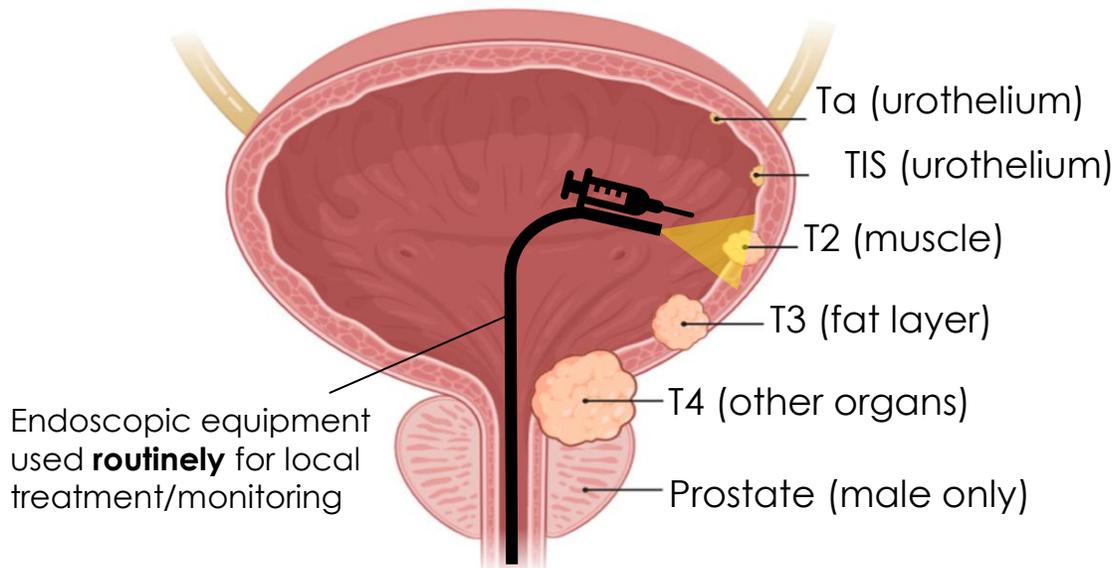
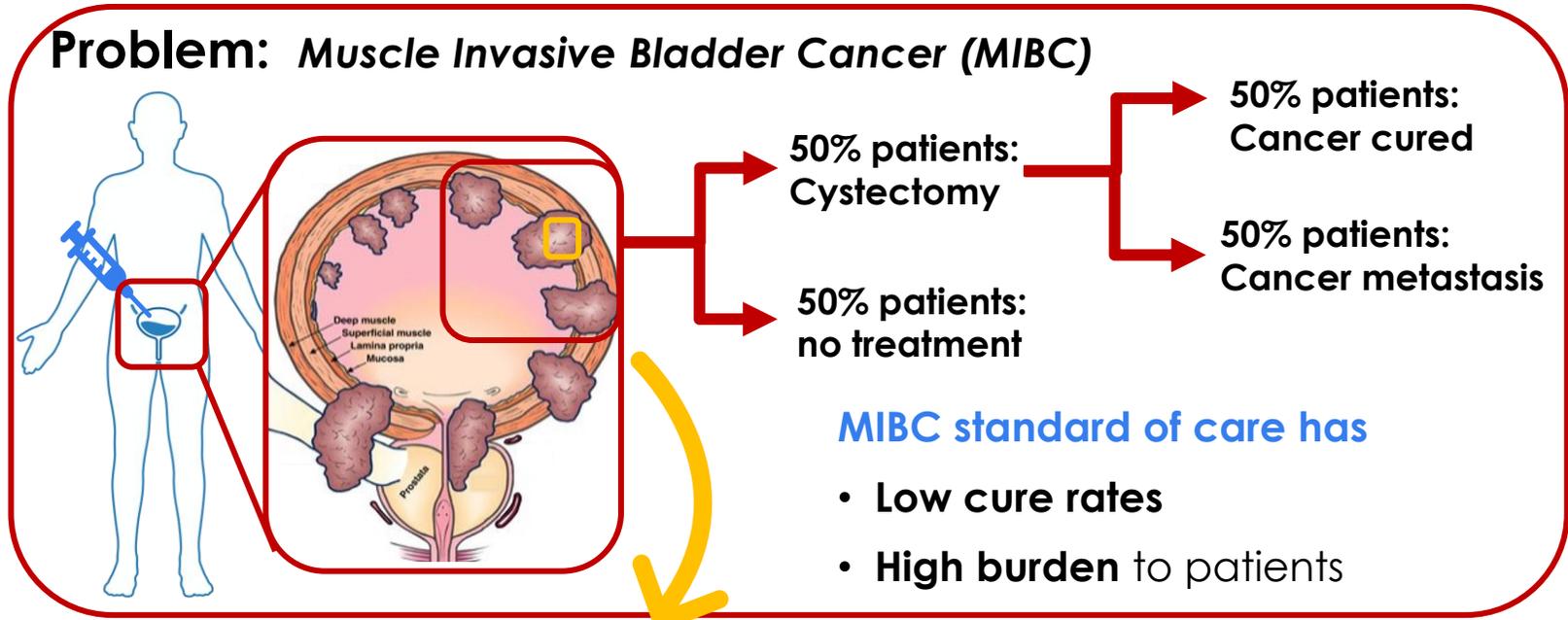
■ Anti-mPD1 6x (i.v.)     ■ Combination  
■ AASTY-TLR 1x (i.t.)     ■ No treatment

**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	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	✓	✗	✗	✓	✗	✓



## Market potential

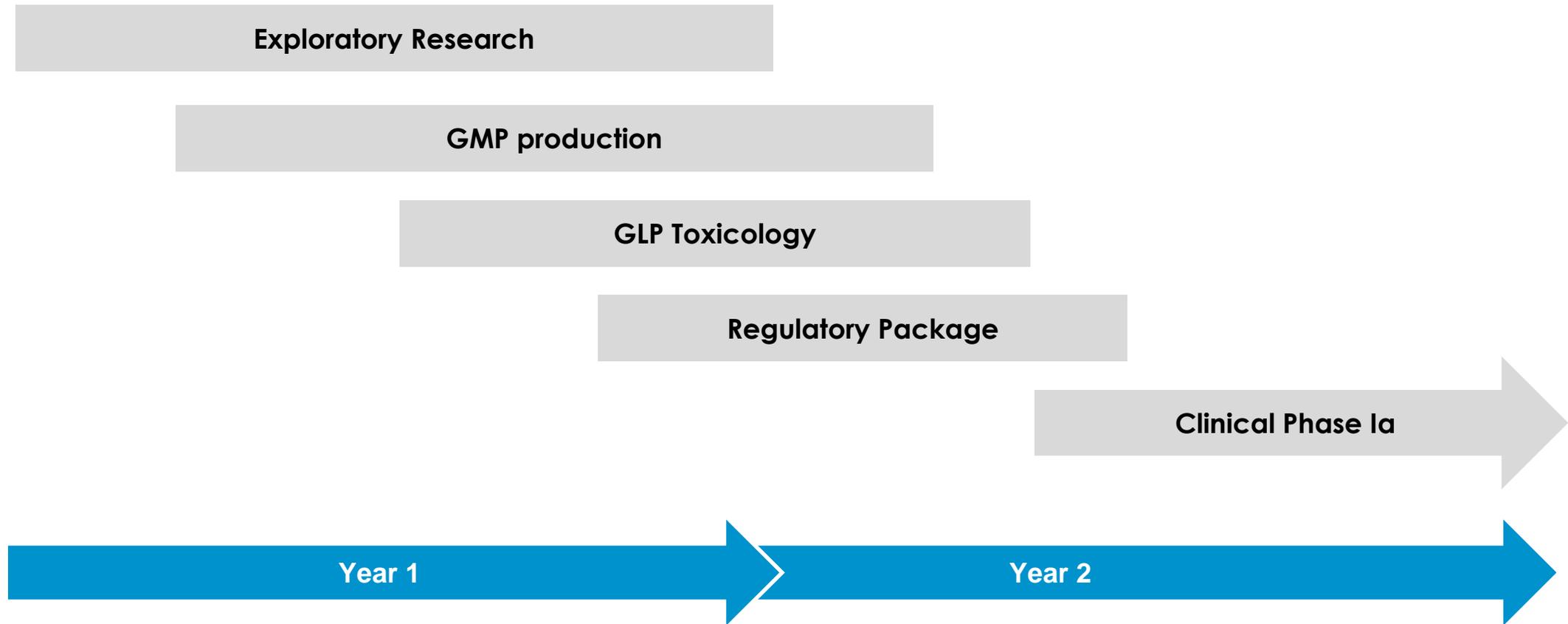
Total market size of Bladder Cancer:  
**\$ 4.0 Billion**

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



## Consultants



**Nicklas Roest**  
Regulatory specialist



**Hans Holmegaard Sørensen**  
CMC specialist



### CBO



**Mads Holmegaard Sørensen**  
PharmD, MBA, Co-Founder



### Principal Scientist



**Neil Jean Borthwick**  
PhD, Co-founder, inventor



## Scientific Advisors



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*Dept. of Material Science & Eng. Stanford University*



**Prof. Jørgen Bjerggaard,**  
*Dept of Urology, Aarhus University Hospital*

### VP of Non-Clinical Dev



**Lars Holten- Andersen,**  
PhD



### Research Scientist



**Philip Mark Lund**  
PhD



**Dr. Kristoffer Rohberg**  
*Head of Oncology Phase I Unit, Rigshospitalet*



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*Dept of Urology, MD Anderson*



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