



PD-1 REBOOT

Restoring Hope: Breaking Barriers for
Non-Responder Cancer Patients

June 4, 2025

Sebastian
Bio Pharma



- **Unmet Need:** 70% of cancer patients don't respond to PD-1 inhibitors
- **Resistance Biomarker:** Neoantigen deficiency
- **Concept:** Modulating antigen presentation via TAP reduction
- **Technology:** Antibody-Oligonucleotide Conjugate (AOC)
- **Preclinical Proof:** 4 peer-reviewed publications
- **IP Status:** Exclusive UM license & 2 patents pending
- **Target Patients:** MSS colorectal cancer
- **Team:** Leading RNA, TAP & Immuno-Oncology experts
- **Stage:** Candidate selection with 3 potential leads
- **Funding:** Raising \$3M with a defined exit in 2 years

The Neoantigen Gap in Colorectal Cancer: A Critical Unmet Need

2nd Deadliest Cancer in US

154,270 CRC New Estimated Cases in 2025

2X Increase in Early-Stage Onset from 2000 to 2020



Neoantigen Negative
138,843 Patients Non-Eligible for
PD-1 & No Therapeutic Options

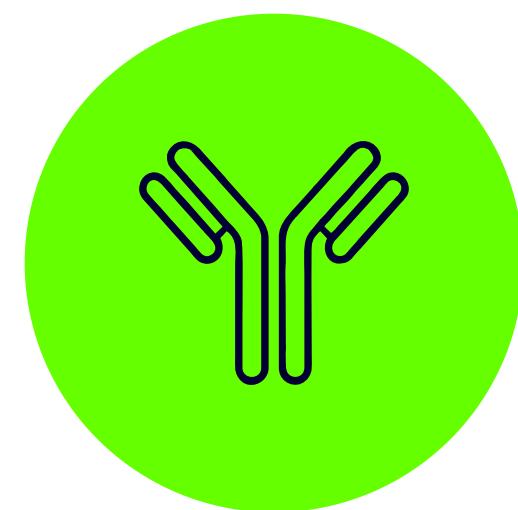
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Neoantigen Positive
15,427 Patients Eligible for
PD-1 & Durable Response

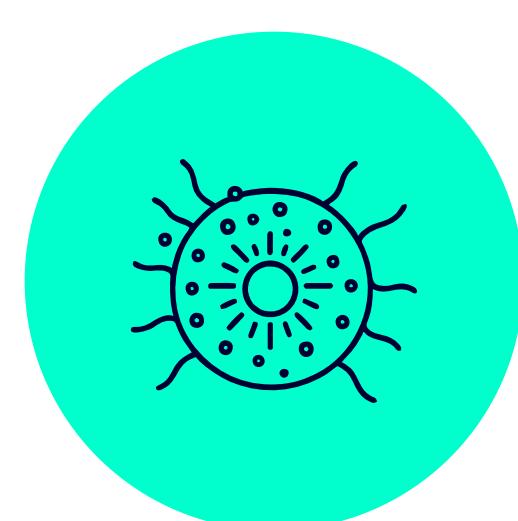
Source: CRC Cancer Alliance

SBP PD-1 Enhancer: Sensitizing Non-Responsive Patients to PD-1 Through Neoantigen Induction

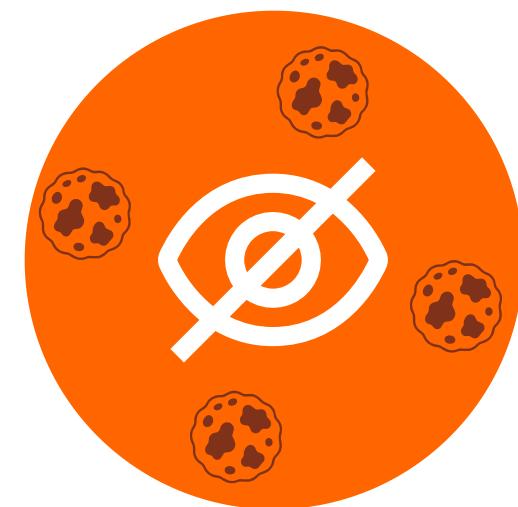
Expanding Market Access by 4X



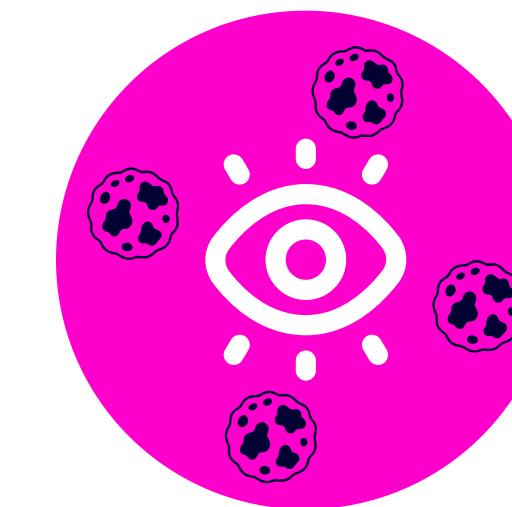
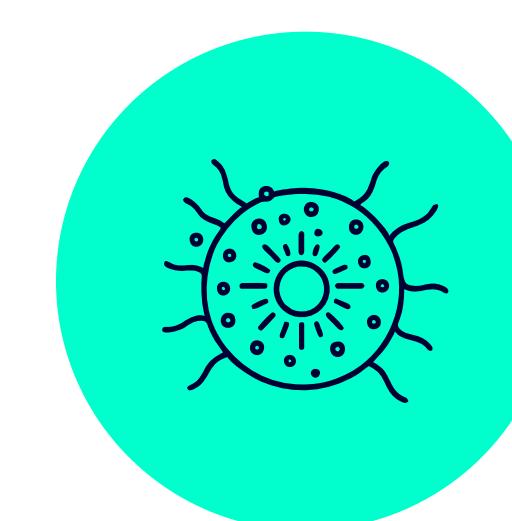
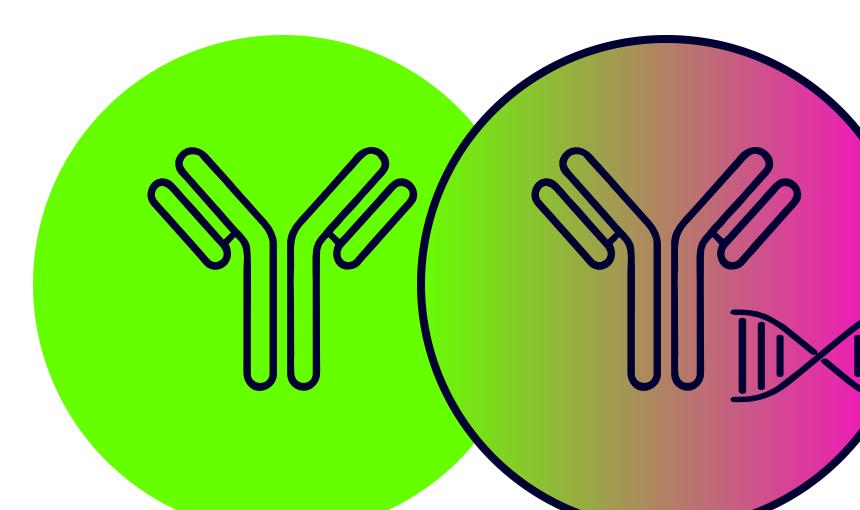
PD-1
Antibody



T Cell

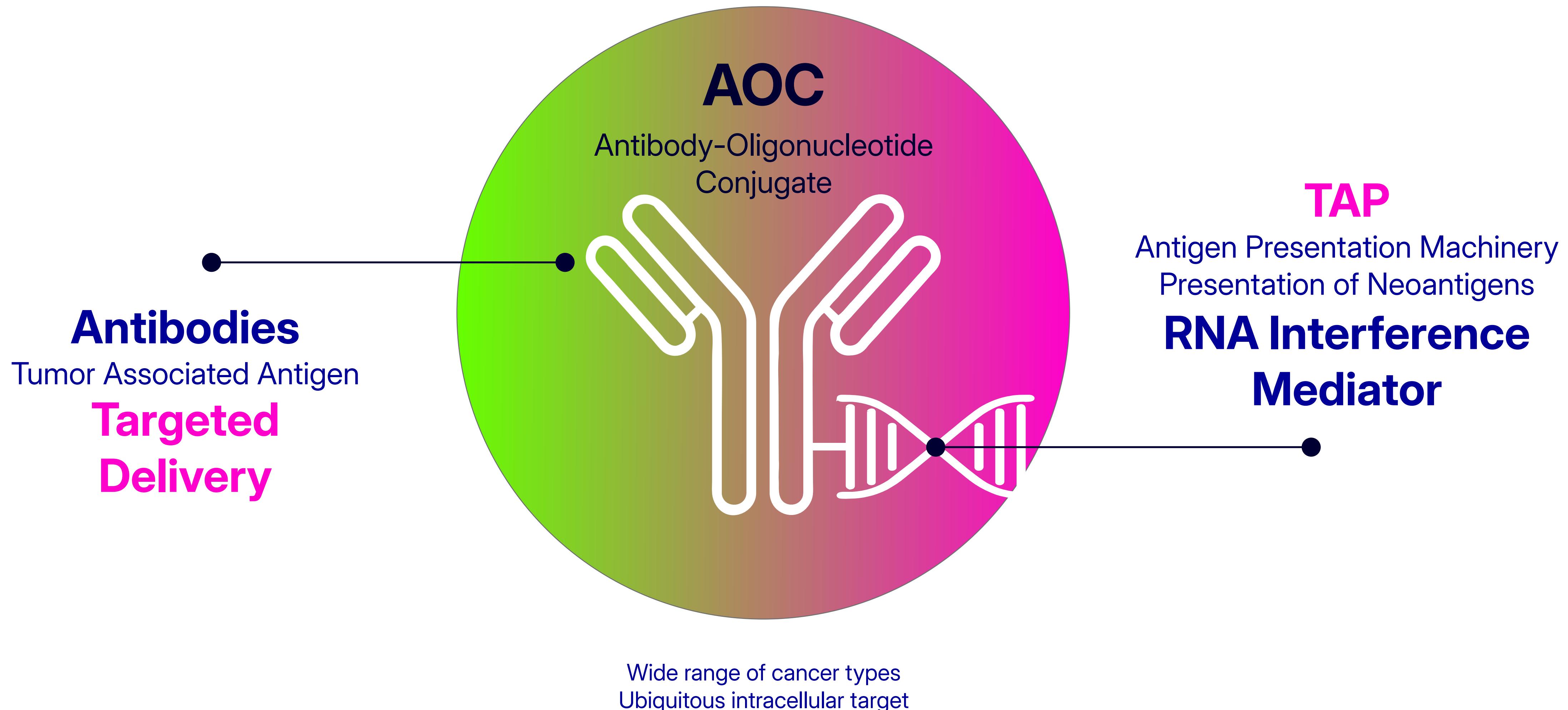


Tumor



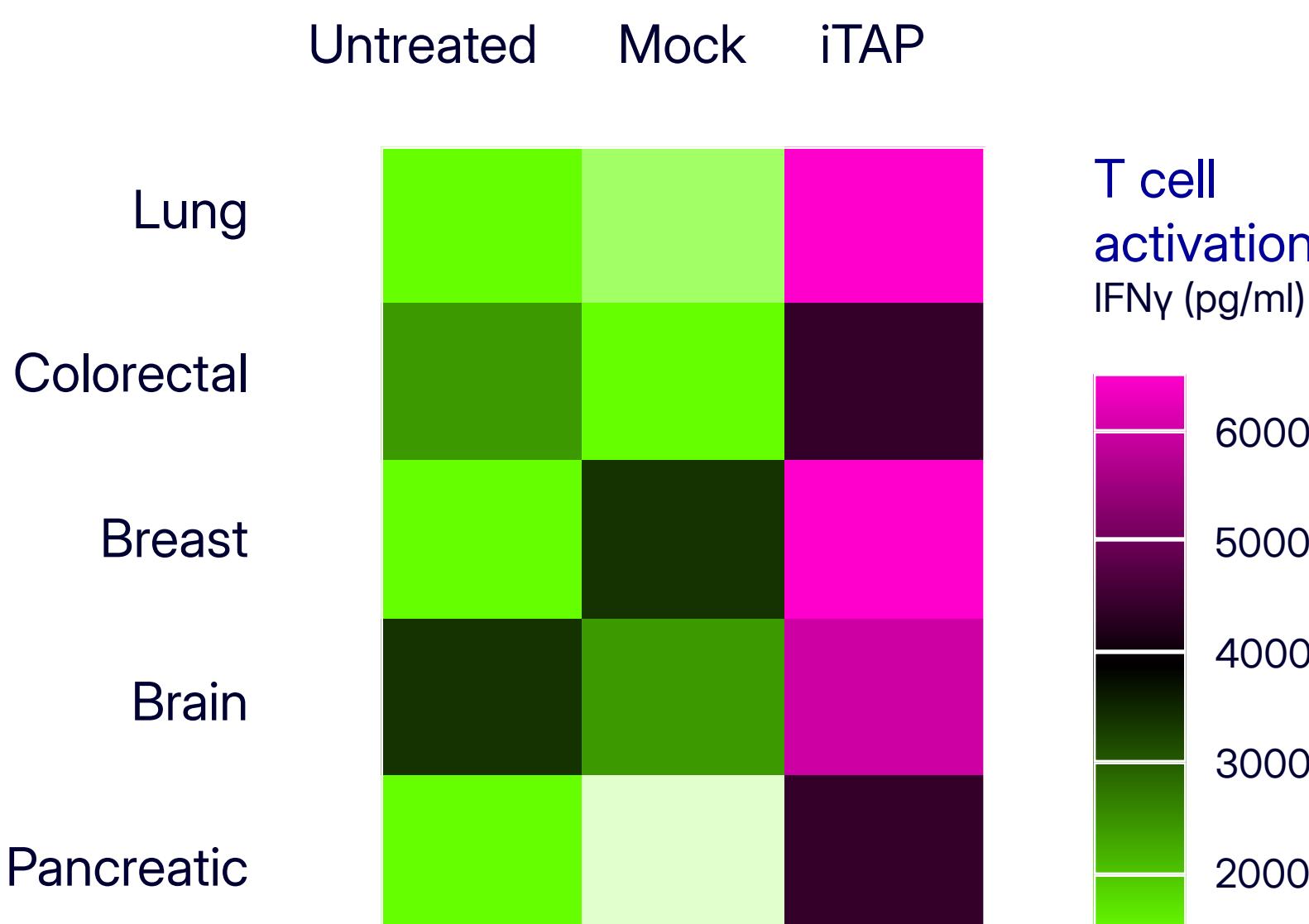
SBP
PD-1 Enhancer

iTAP: SBP “Plug-and-Play” PD-1 Enhancer Platform Technology

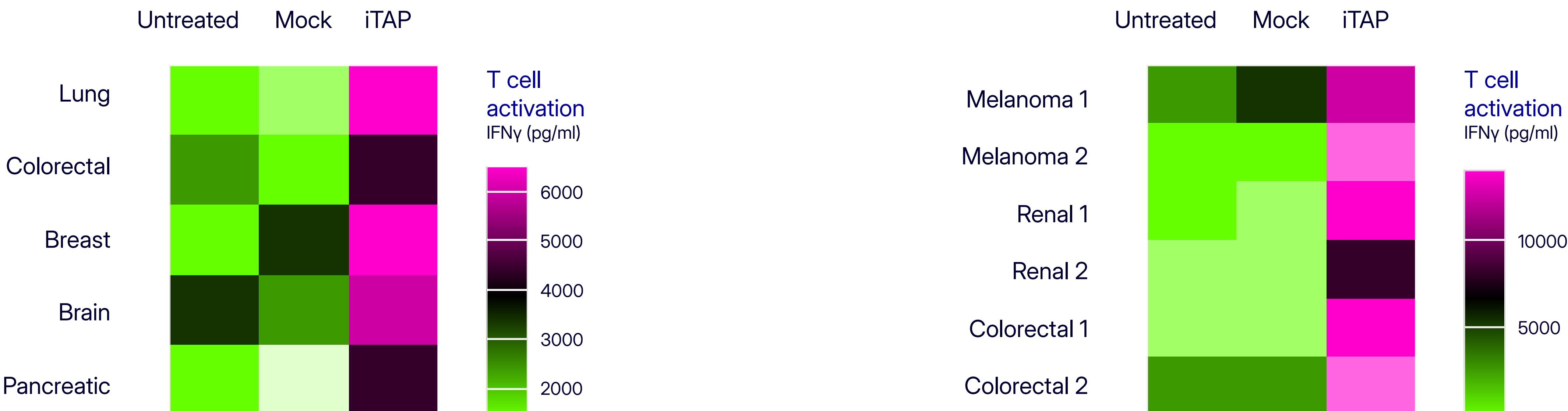


iTAP: Driving Shared Neoantigen Presentation and T Cell Activation

Mouse Tumor Cell Lines

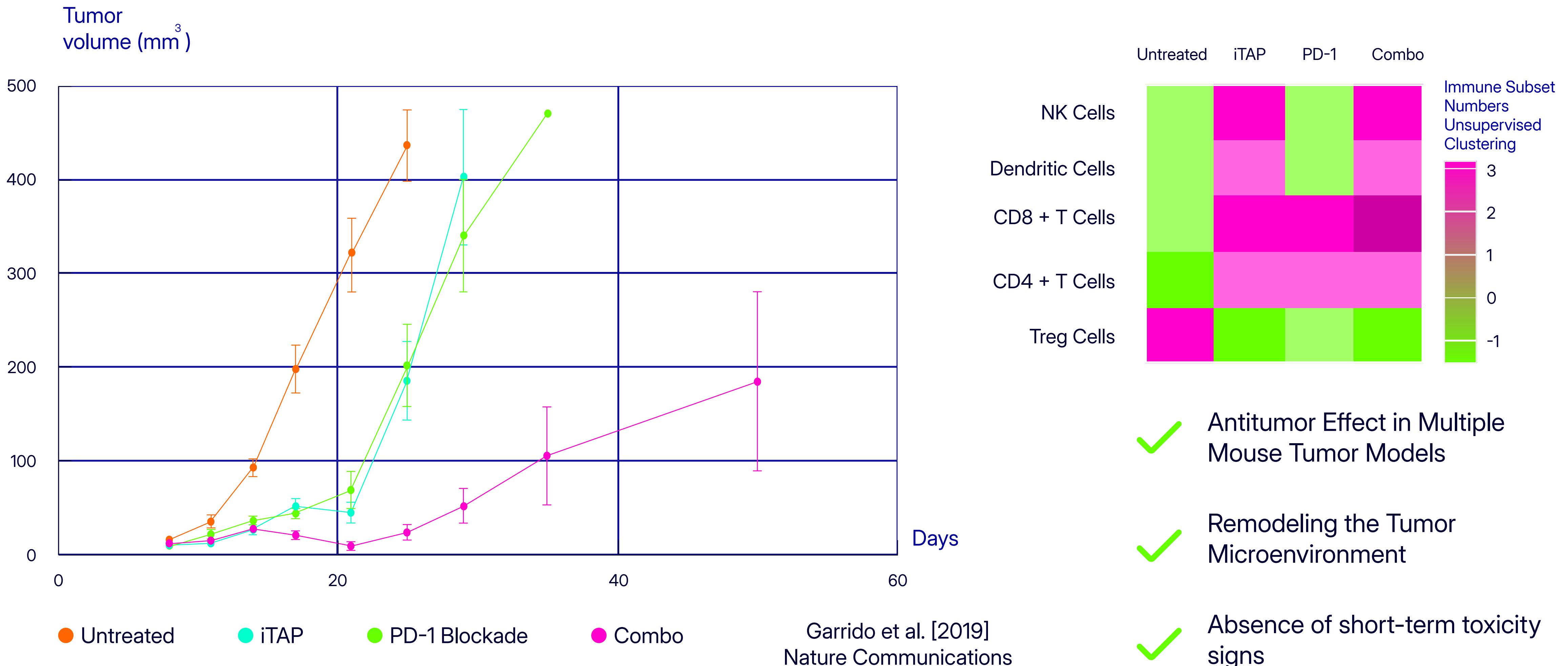


Human Tumor Cell Lines



Garrido et al. [2019]
Nature Communications

iTAP + PD-1 Blockade: Synergizing for Potent Tumor Immune Rejection



SBP: Redefining Neoantigen Innovation with Unmatched Differentiation

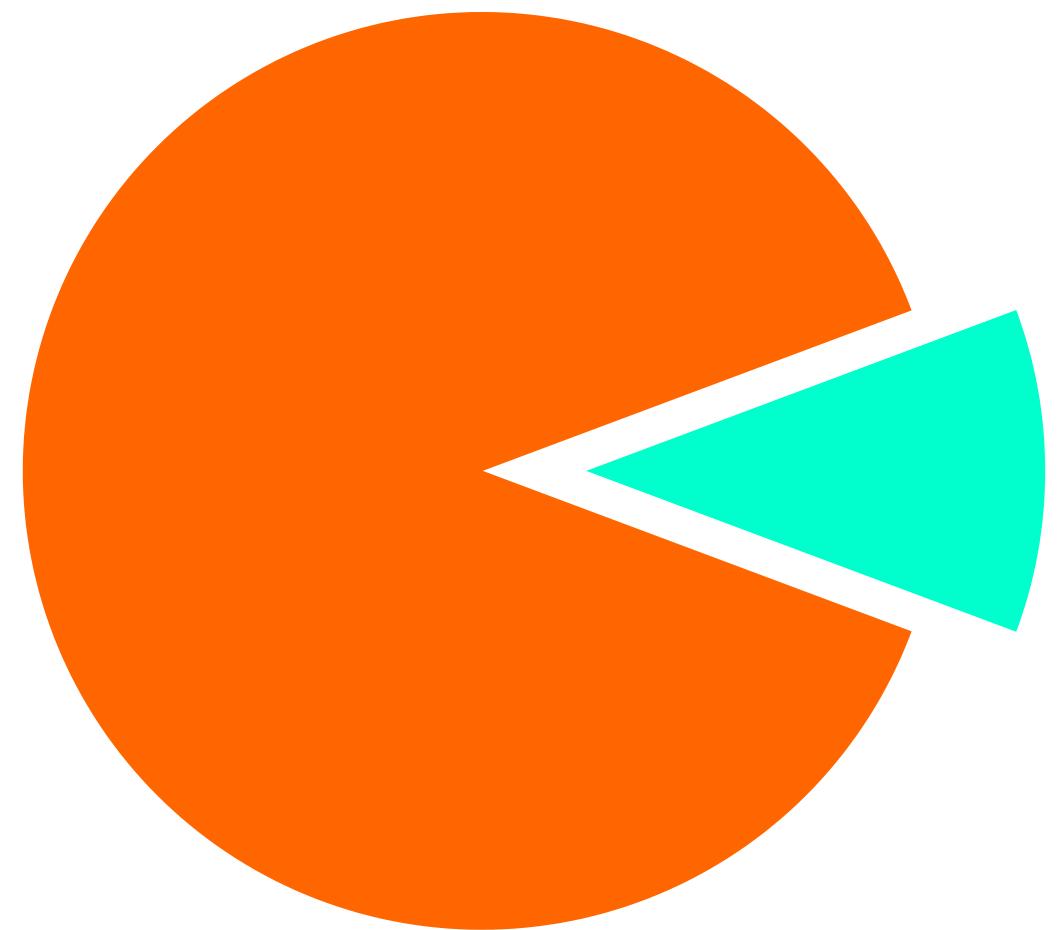
Neoantigen Induction Landscape	Sebastian Biopharma	Grey Wolf Therapeutics	Neophore
Target Pathway	Antigen Presentation	Antigen Presentation	Mismatch Repair
Target Molecule	TAP	ERAAP	PMS2
Shared Neoantigens	Yes	No	No
Delivery type	Tumor Specific	Non-Tumor Specific	Non-Tumor Specific
Stage	Preclinical	Phase 1 ¹	Preclinical ²

¹ Greywolf Therapeutics presents first clinical data for GRWD5769, a first-in-class ERA1 Inhibitor, at the 2024 American Society for Clinical Oncology (ASCO) Annual Meeting

² NeoPhore presented preclinical data from our PMS2 program at the AACR Annual Meeting, San Diego, 5 - 10 April 2024. | Neophore

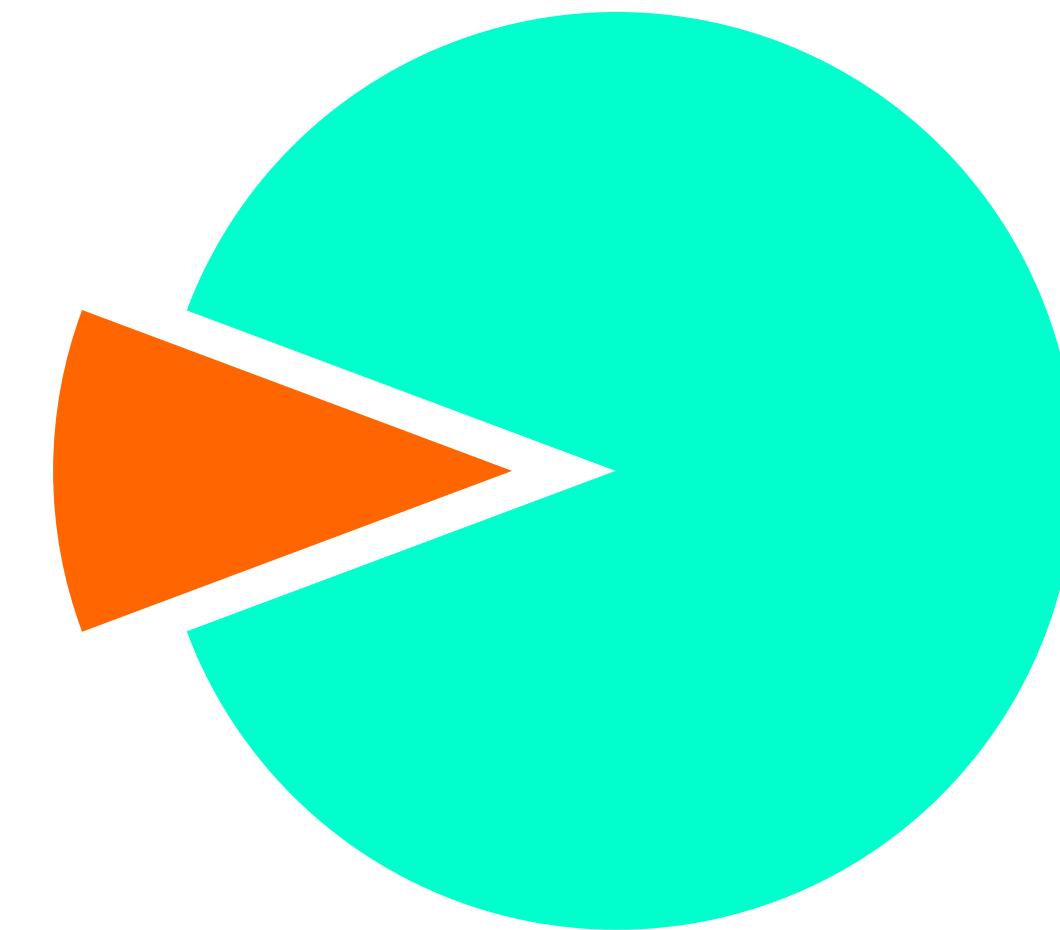
The PD-1 Patent Cliff: A Major Disruption to Market Sales

87.5 %
Keytruda and Opdivo
($\approx 42.5 \text{ B}$)



2025
As Today

$\approx 48.7 \text{ B}$
U.S in 2024



22 %
Keytruda and Opdivo
($\approx 10.6 \text{ B}$)

2028

Key Patents for Blockbuster
Drugs Starting to Expire

2033

Declining Sales Over the Next 5 Years

Source: PD-1 and PD-L1 Inhibitors - Competitive landscape, 2025

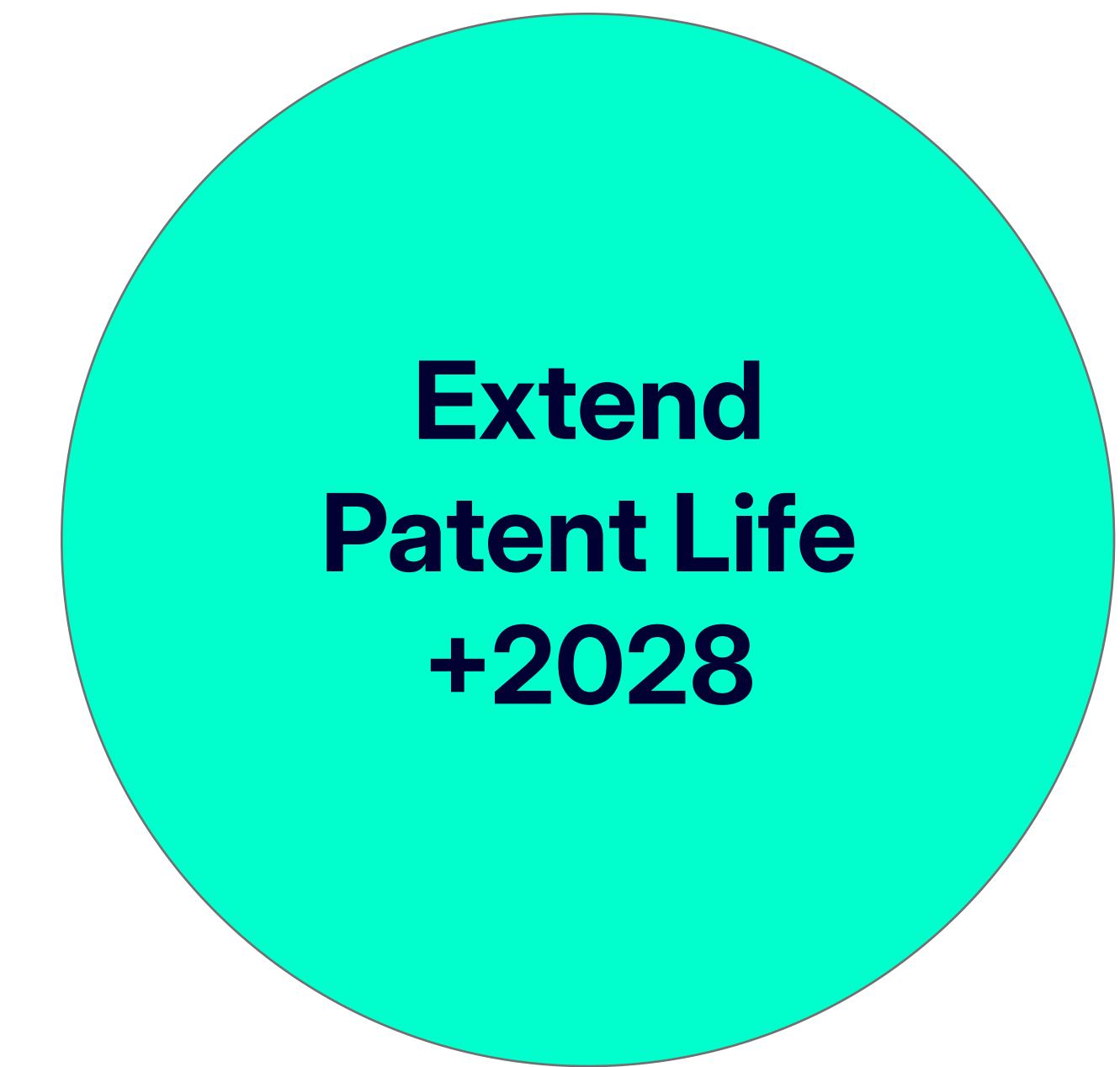
SBP: Meeting Big Pharma's Next Innovation Demand



Partnering
Licensing



On Going



Unlocking Market Potential with PD-1REBOOT (iTAP + PD-1 Antibody)



- ✓ Differentiated Mechanism of Action
- ✓ Market Expansion-Driven
- ✓ De-Risked Regulatory Pathway
- ✓ Extend Patent Life for PD-1 Drugs

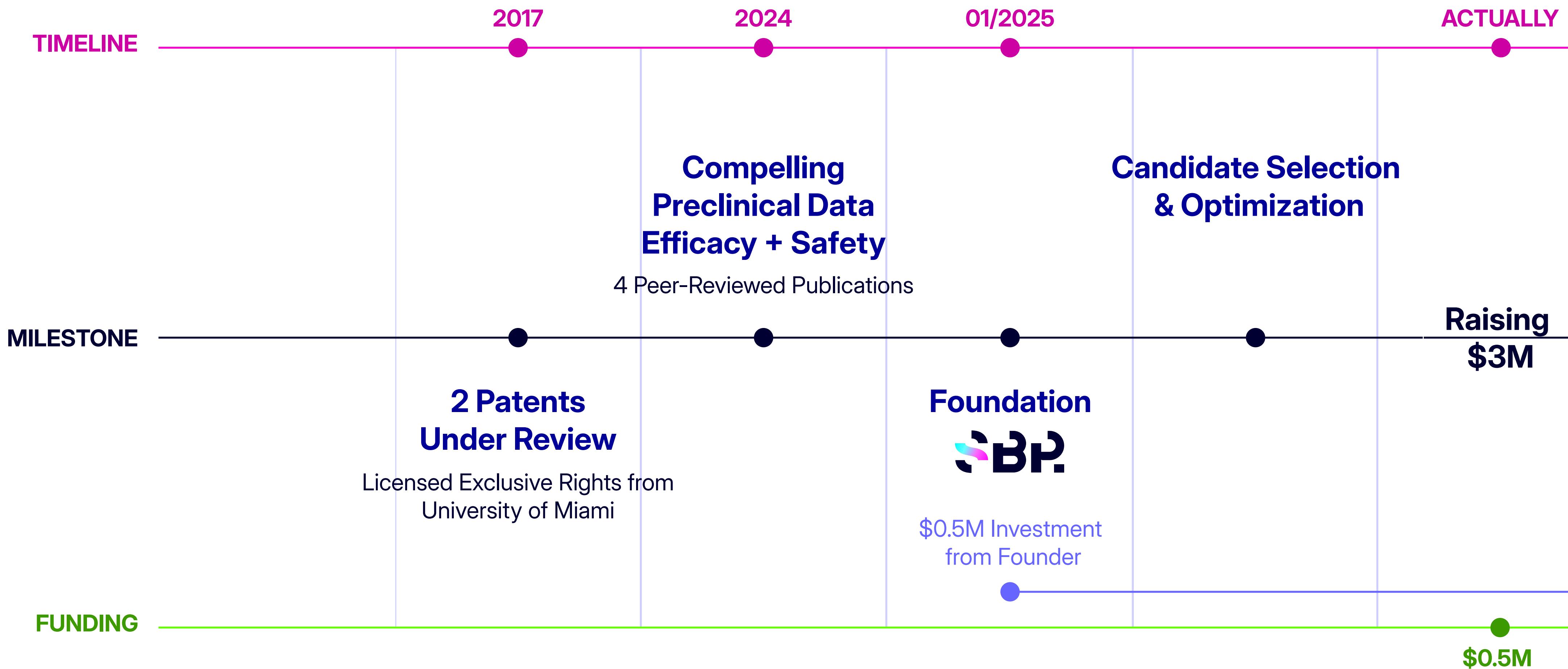


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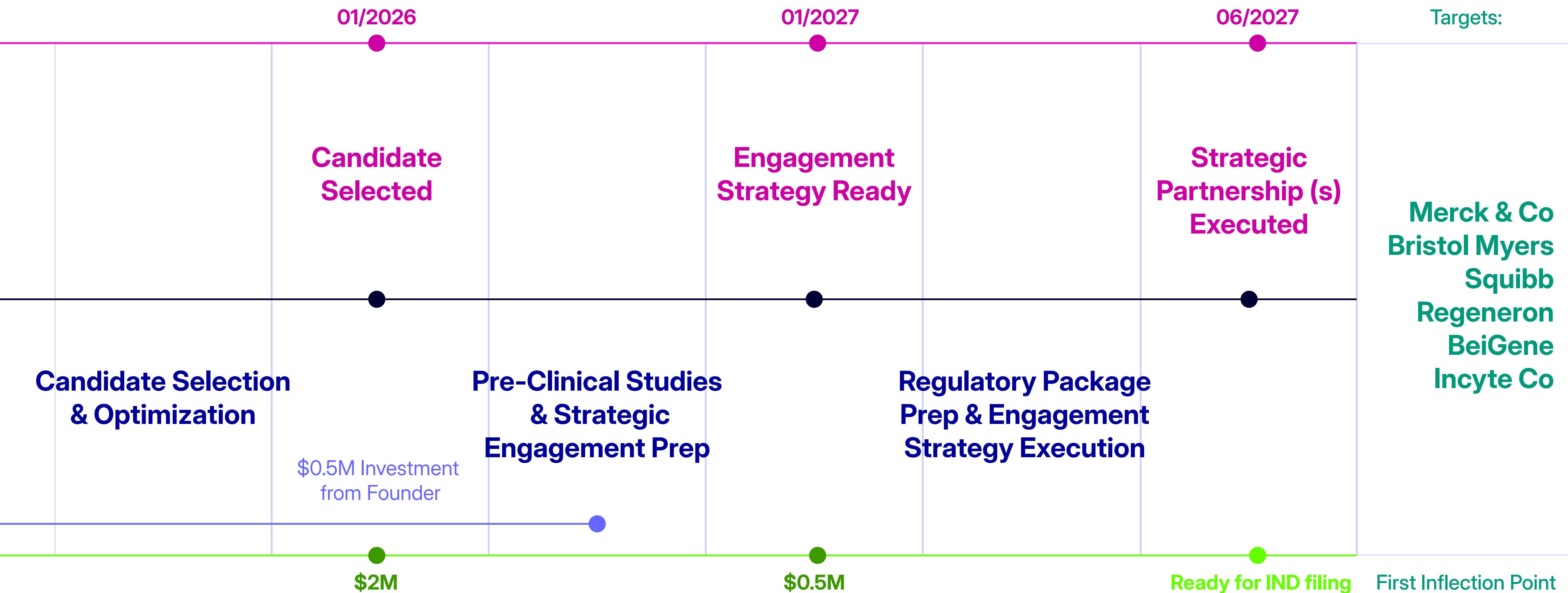


Current Progress: Where We Stand Today

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Raising \$3M with a Defined 2-Year Exit Strategy





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Meet the Team Driving SBP Innovation



Eli Gilboa, PhD
CSO & Founder

Scientific Leader in Tumor
Neoantigen & RNA Therapeutics
Multiple Grant Awarded for
Sebastian Bio's Pipeline



Greta Garrido, PhD
CEO & Co-Founder

Biotech Executive Driving IO Drug
Development & Strategic Growth
Led 2 FDA Approvals (From Discovery to Phase I)
>50M in Successful Fundraising



Memorial Sloan Kettering
Cancer Center



PRINCETON
UNIVERSITY
Massachusetts
Institute of
Technology



Advisors



Thorbald van Hall, PhD
Leiden University Medical Center
TAP World Leader



Jane Lebkowski, PhD
President, Regenerative Patch Technologies
From Discovery to Commercialization



John Goldberg, MD
CMO, Rafael Holdings, Inc.
Clinical & Business Development



Invest in Sebastian Biopharma —Pioneering the Future of Immunotherapy. Join Us in Transforming Patient Outcomes and Unlocking Unparalleled Market Potential!

Contact:

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