



PD-1 REBOOT

Restoring Hope: Breaking Barriers for
Non-Responder Cancer Patients

June 4, 2025

 **Sebastian
BioPharma**



- **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

01

2nd Deathliest 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

Sebastian Bio Pharma



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

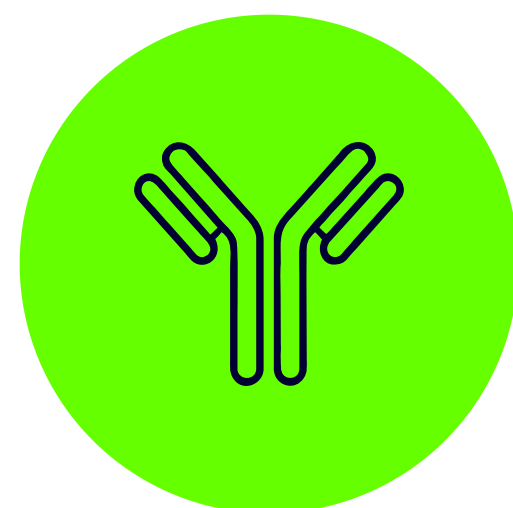
Source: CRC Cancer Alliance



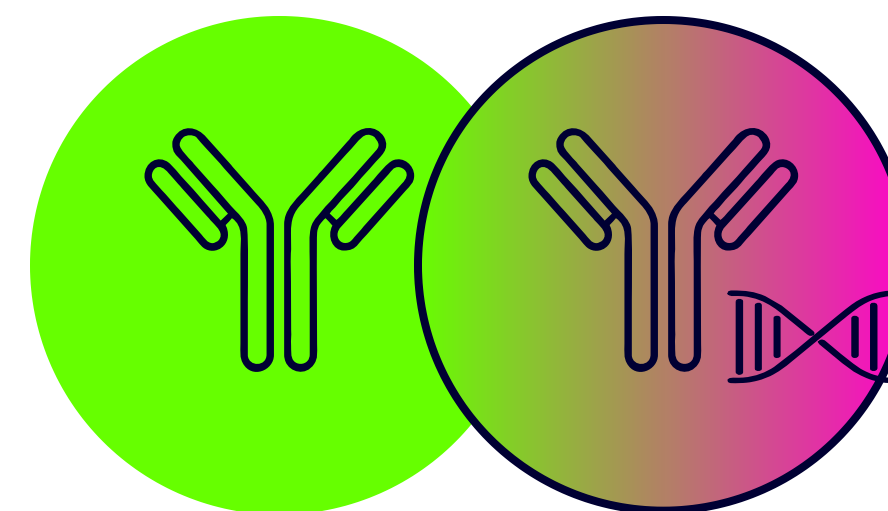
SBP PD-1 Enhancer: Sensitizing Non-Responsive Patients to PD-1 Through Neoantigen Induction

02

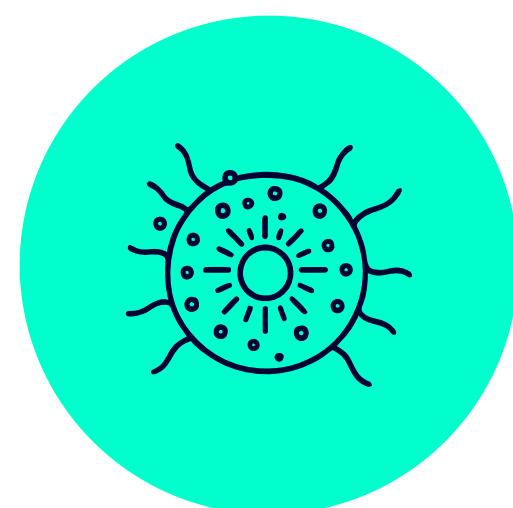
Expanding Market Access by 4X



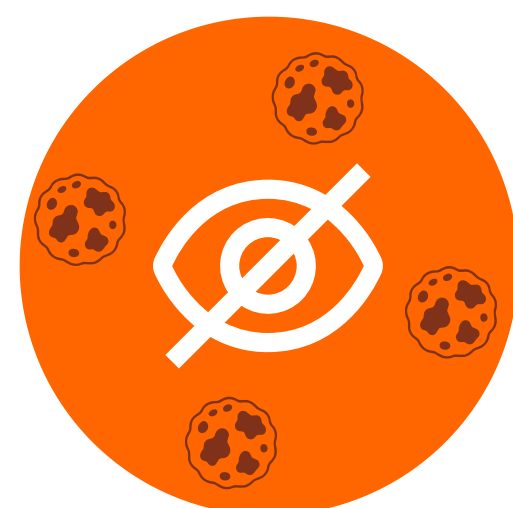
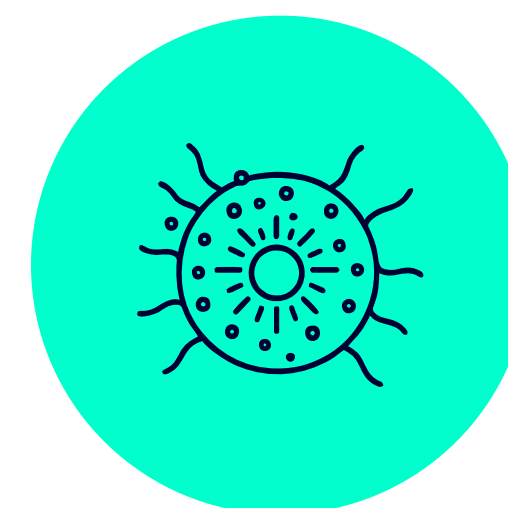
**PD-1
Antibody**



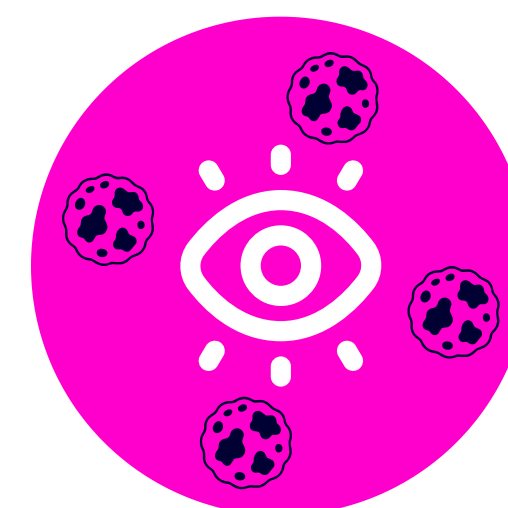
SBP
PD-1 Enhancer

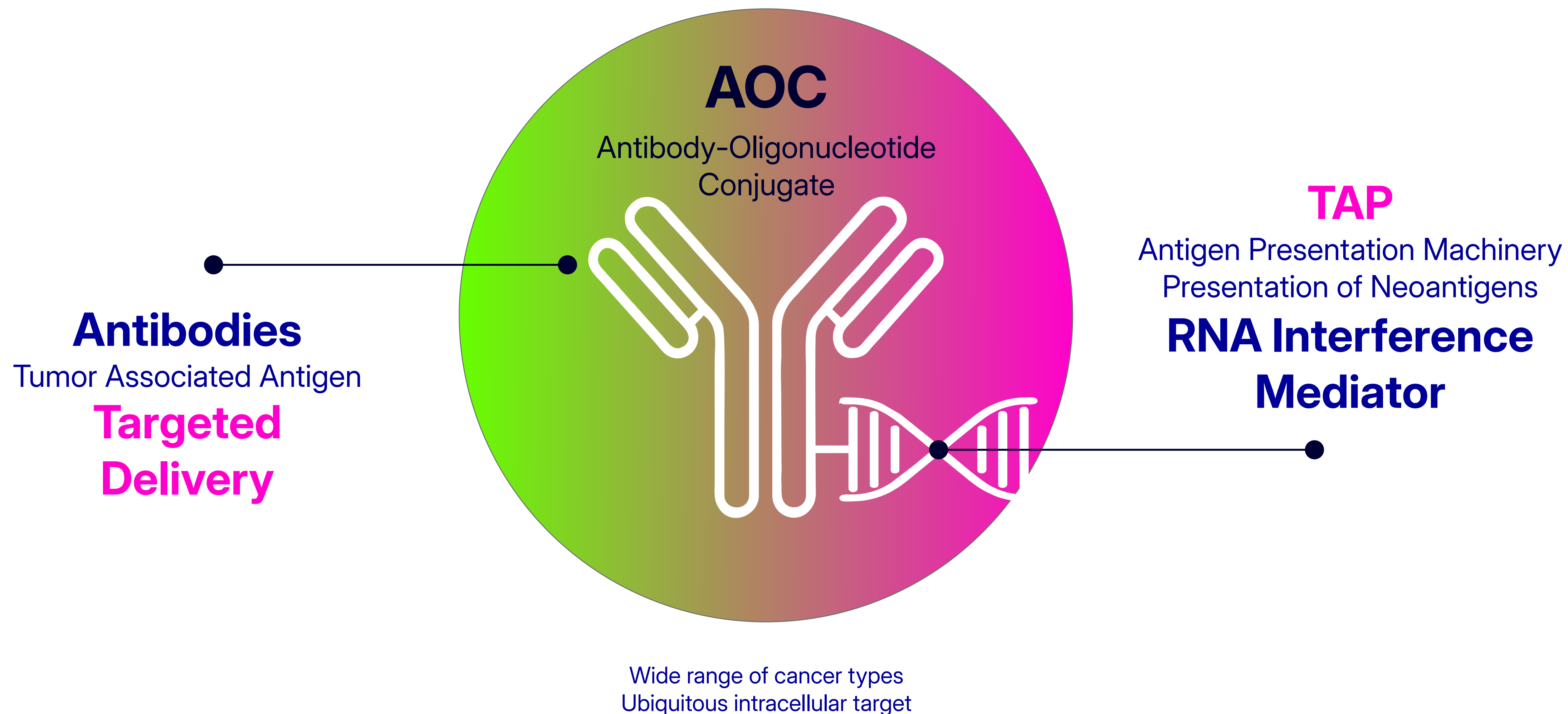


T Cell

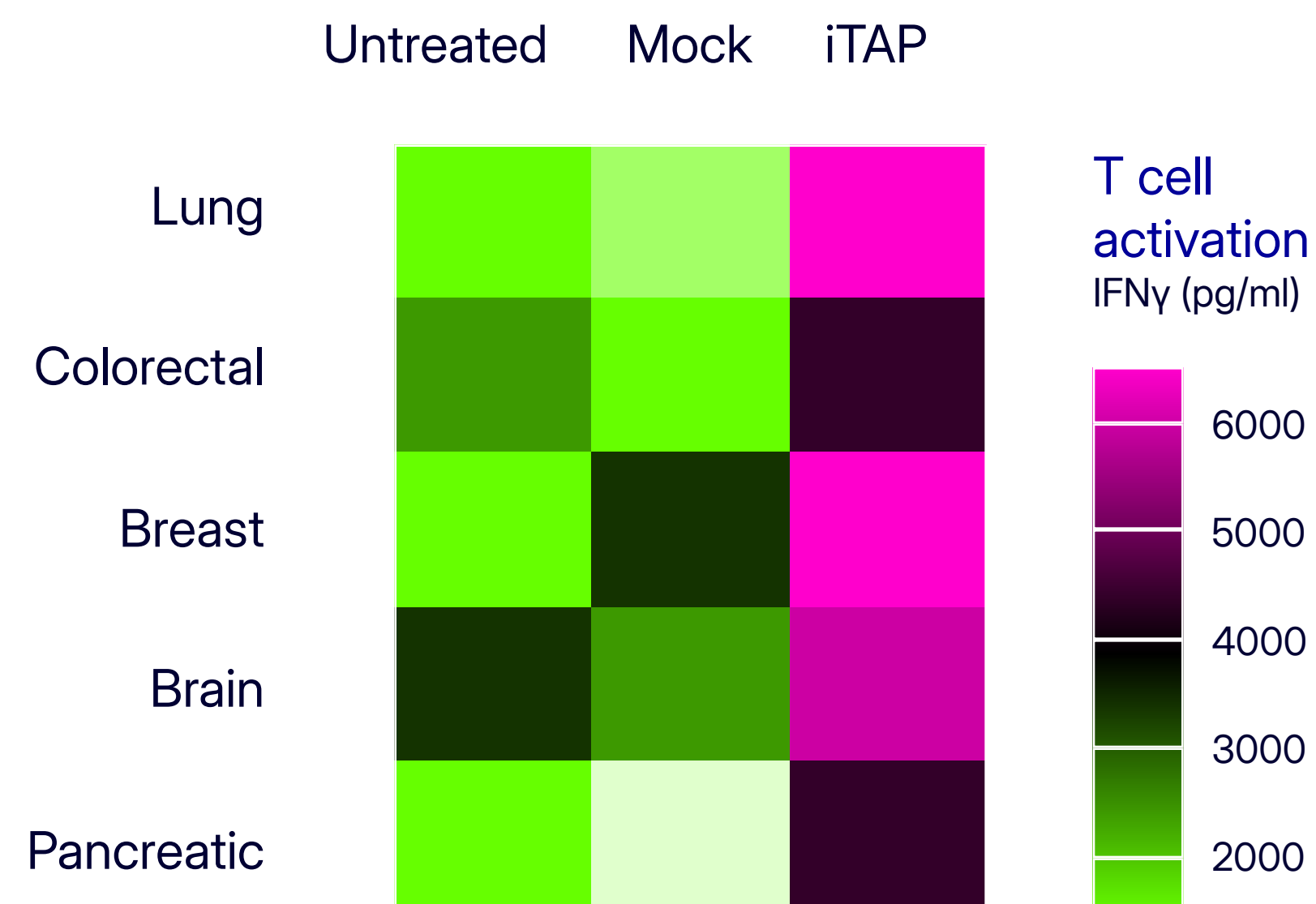


Tumor

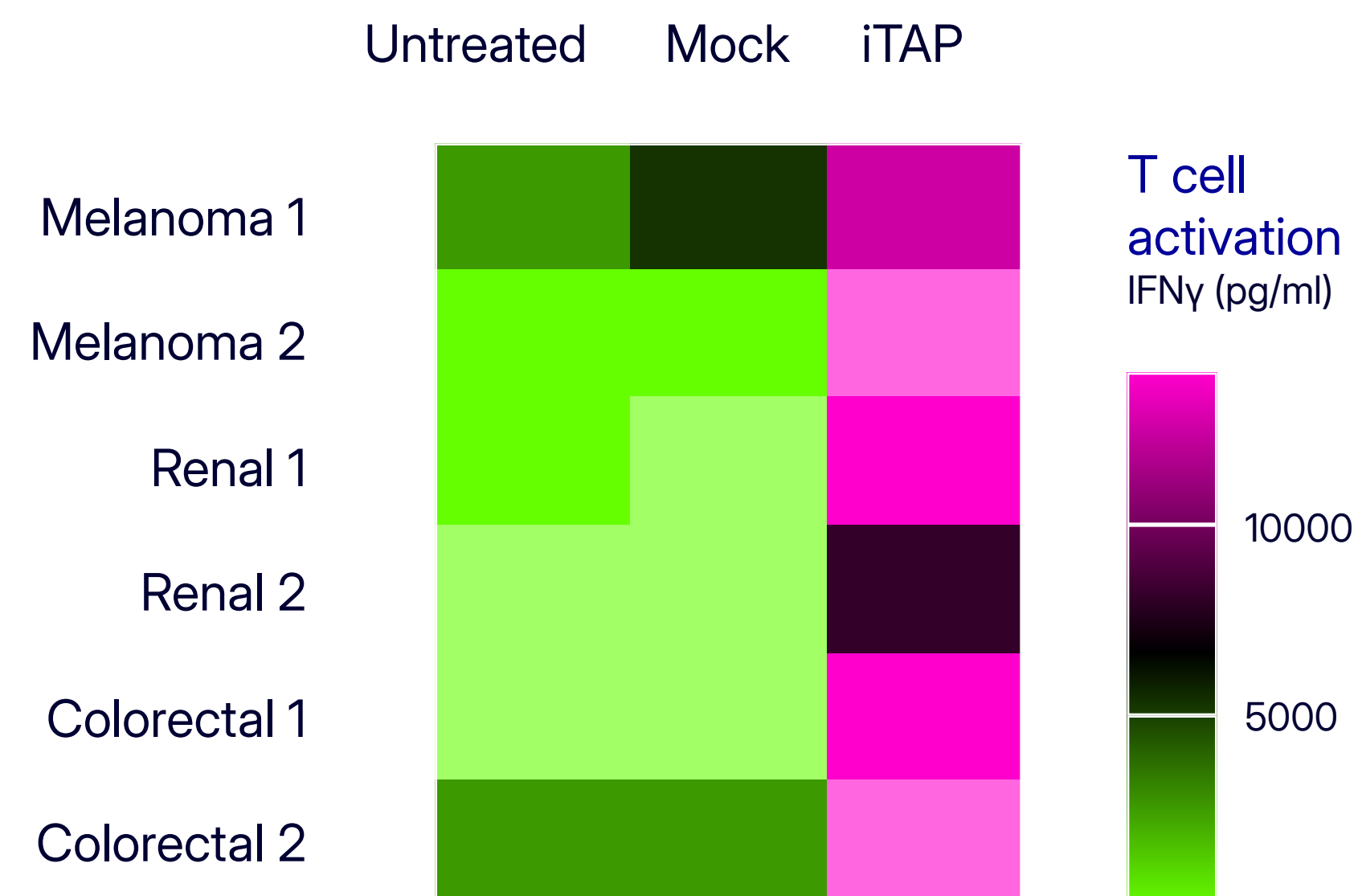




Mouse Tumor Cell Lines

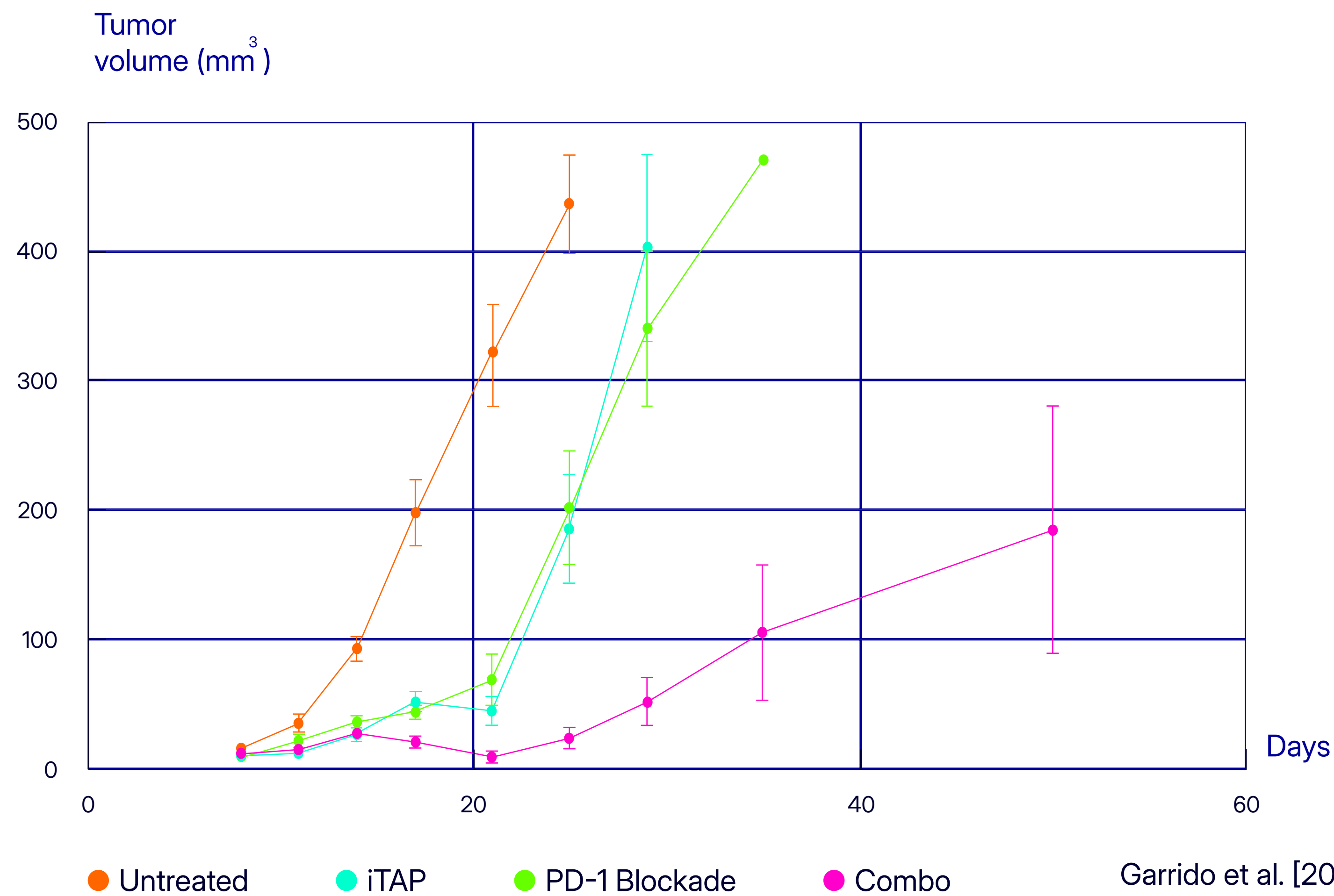


Human Tumor Cell Lines

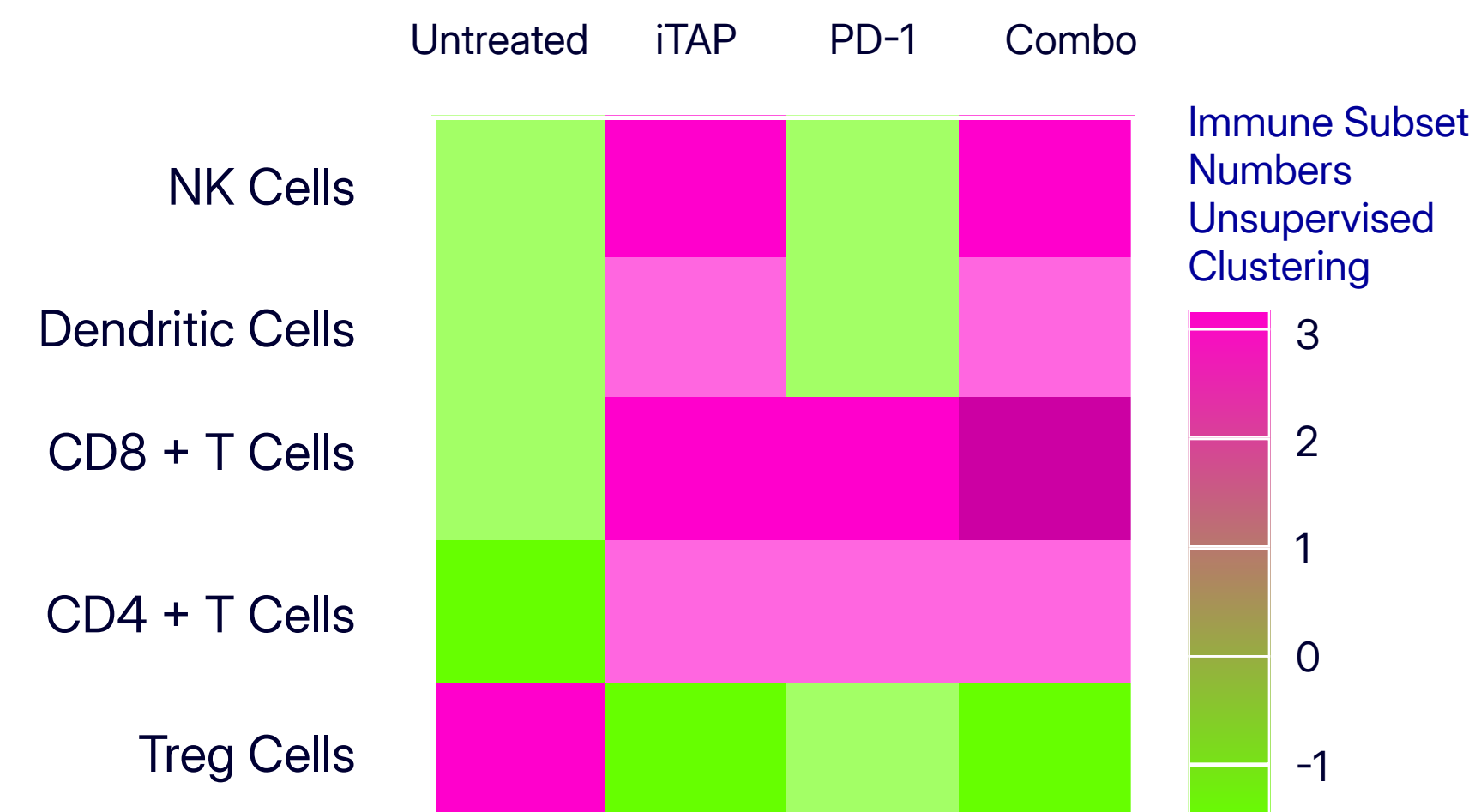


Garrido et al. [2019]
Nature Communications

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



Garrido et al. [2019]
Nature Communications



- ✓ Antitumor Effect in Multiple Mouse Tumor Models
- ✓ Remodeling the Tumor Microenvironment
- ✓ Absence of short-term toxicity signs



SBP: Redefining Neoantigen Innovation with Unmatched Differentiation

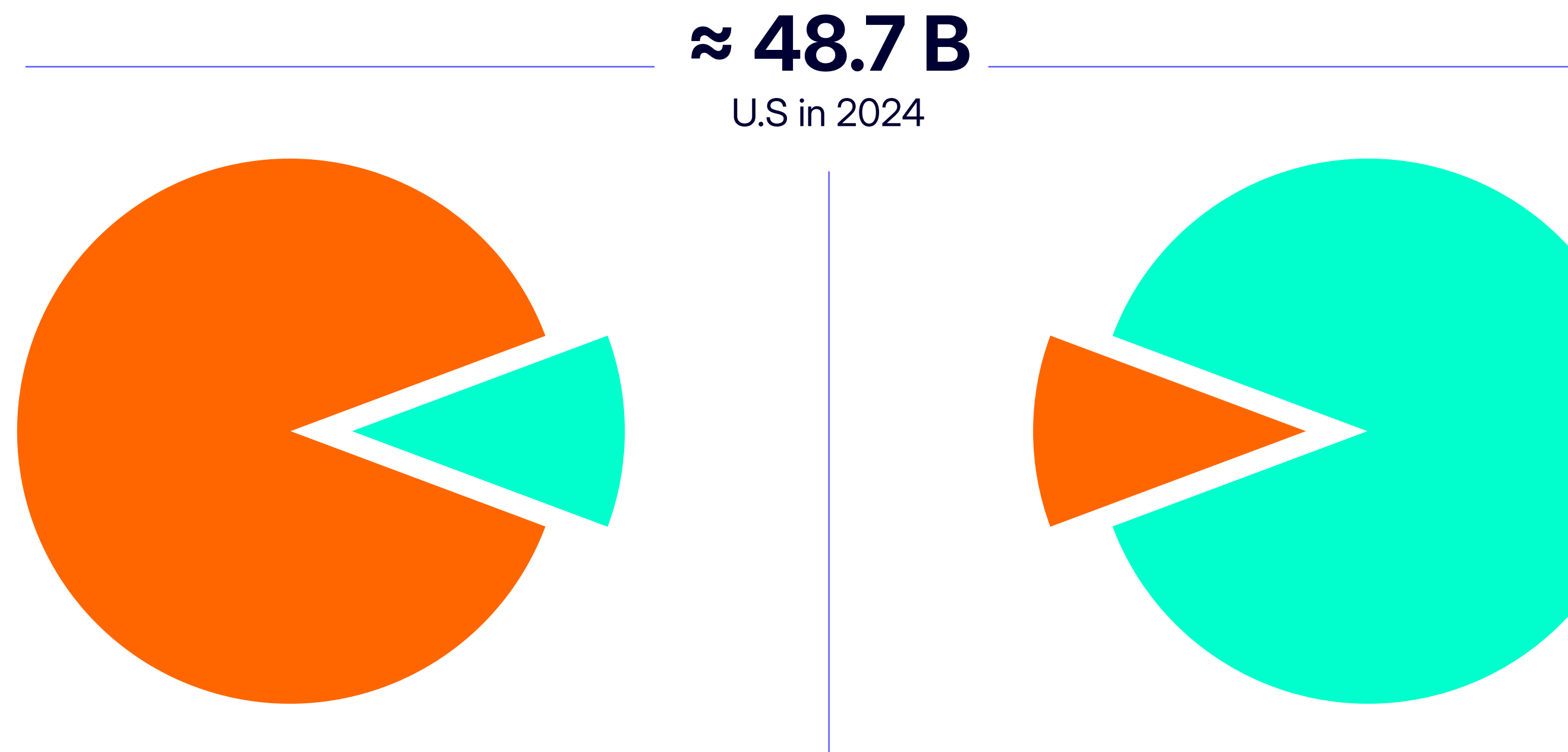
Neoantigen Induction Landscape	Sebastian Biopharma	Grey Wolf Therapeutics	Neophore
Target Pathway	Antigen Presentation	Antigen Presentation	Mismatch Repair
Target Molecule	TAP	ERAAP	PMS2
Shared Neoantigens	Yes	No	No
Delivery type	Tumor Specific	Non-Tumor Specific	Non-Tumor Specific
Stage	Preclinical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

¹ Greywolf Therapeutics presents first clinical data for GRWD5769, a first-in-class ERAAP1 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
(≈ 42.5 B)



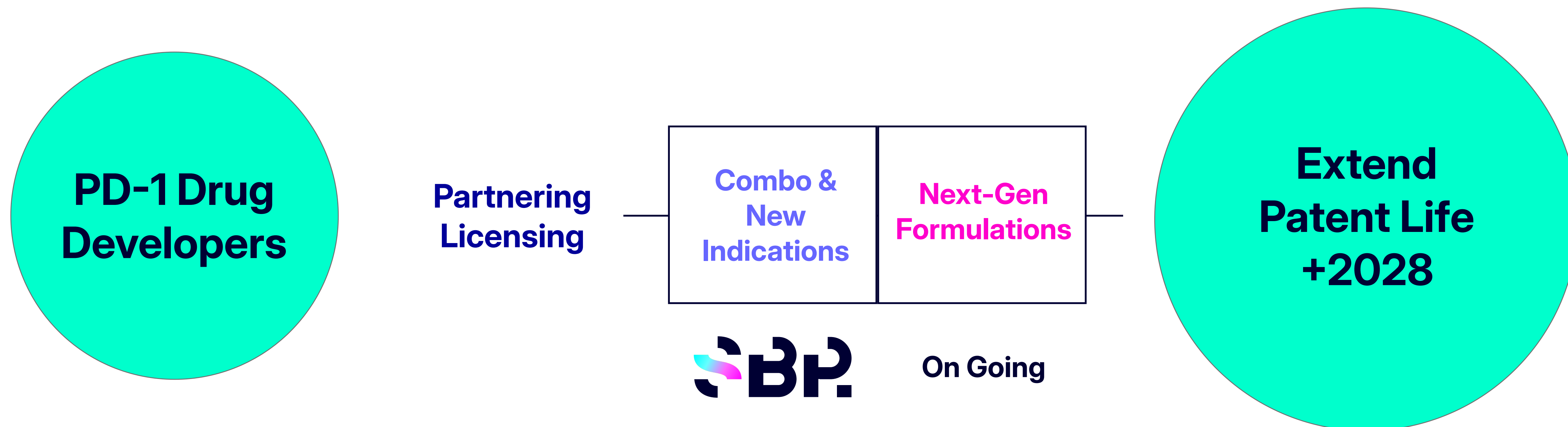
22 %
Keytruda and Opdivo
(≈ 10.6 B)

2025
As Today

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



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

09

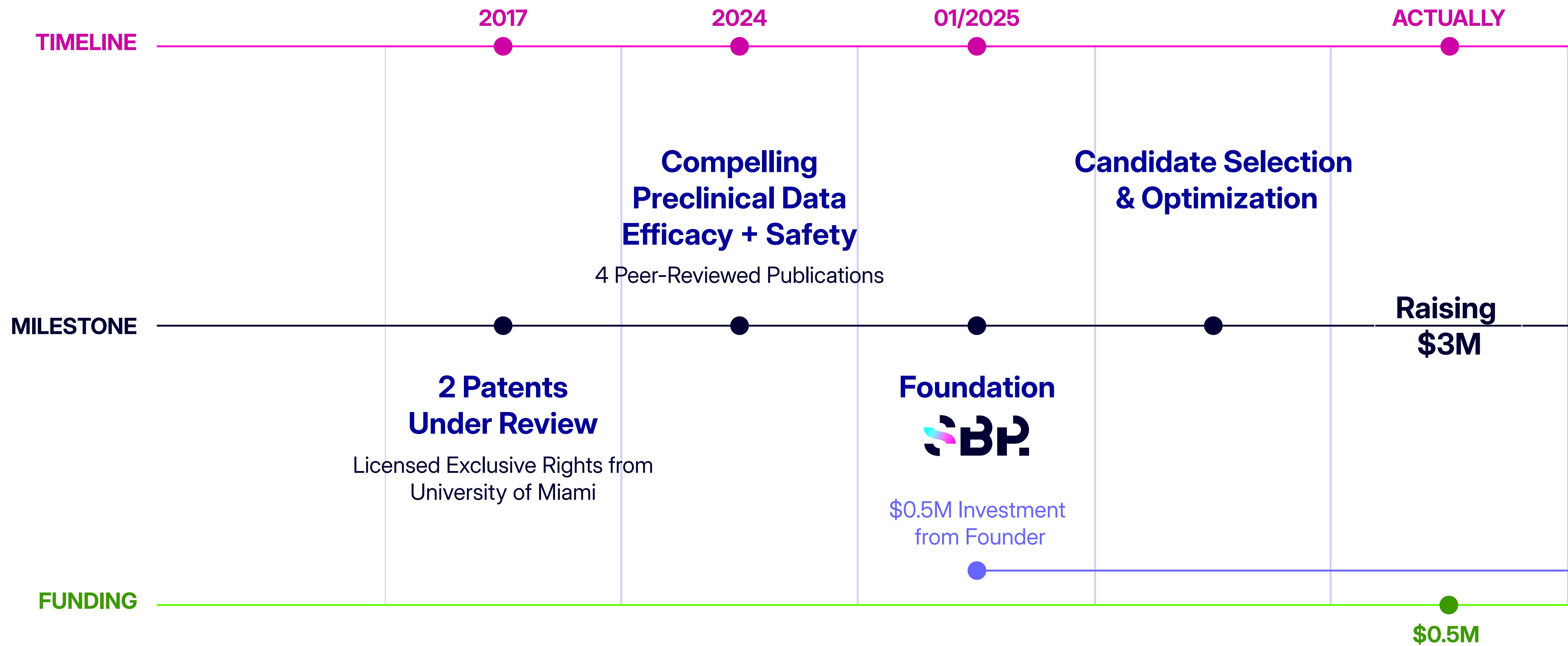


- ✓ Differentiated Mechanism of Action
- ✓ Market Expansion-Driven
- ✓ De-Risked Regulatory Pathway
- ✓ Extend Patent Life for PD-1 Drugs



Current Progress: Where We Stand Today

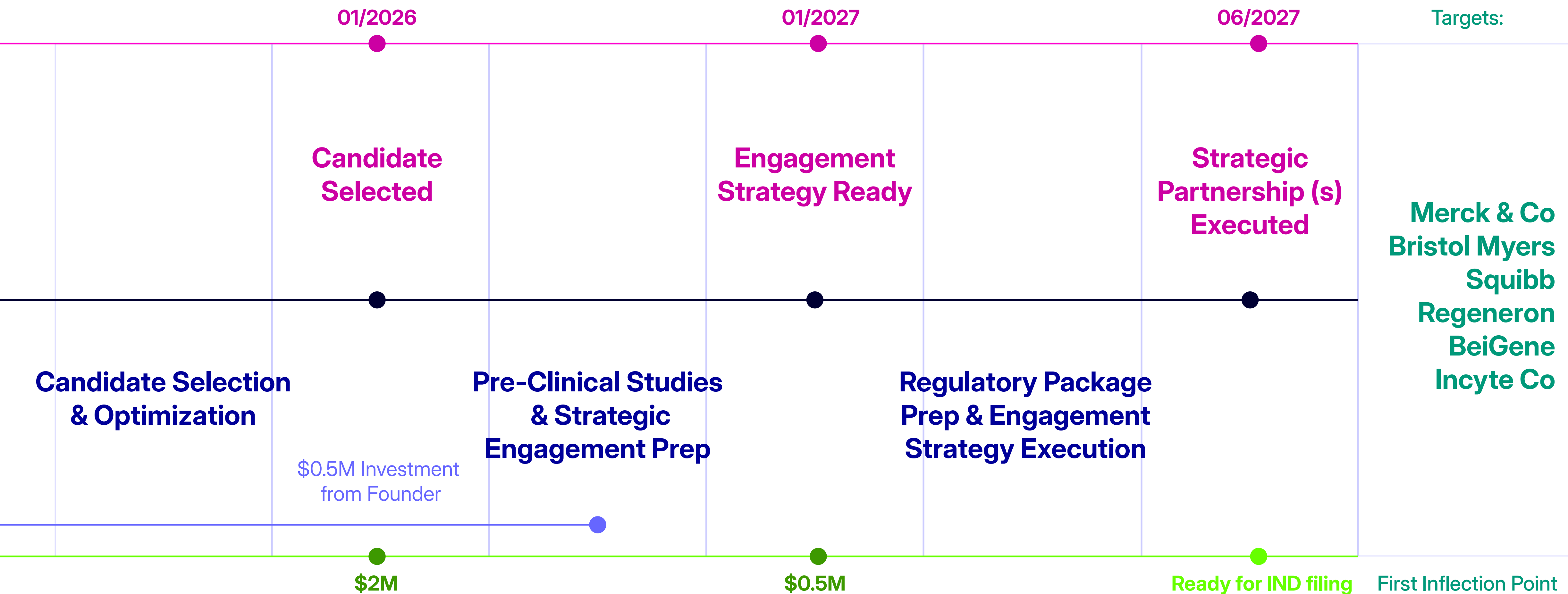
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Raising \$3M with a Defined 2-Year Exit Strategy

11





Meet the Team Driving SBP Innovation

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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



gritstone
bio



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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