

MotiveTxTM

*Making medicines that **think** before they **act**TM*

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- Envisioning a future where **medicines think before they act™**
- Building that future by developing **context-responsive mRNA circuits**
- Treating **autoimmune diseases** safely and precisely

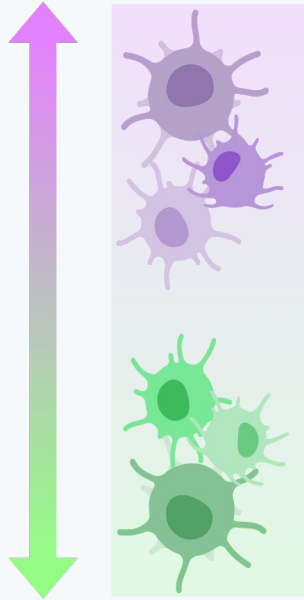
**Millions of people
with autoimmune
disease are trapped
on lifelong, systemic
*immunosuppression.***



The problem isn't a lack of *potency*, it's a lack of *precision.*

Retrain the immune system with context-responsive mRNA

PRO-INFLAMMATORY



DETECT: Sensors determine whether the message is in the right cell type

DECIDE: **IF** the cell type is correct, **THEN** the circuit is activated (TURN ON)

DEPLOY: Payload tells the immune system *precisely* what part of the body to stop attacking

TOLERANCE, not SUPPRESSION

ANTI-INFLAMMATORY

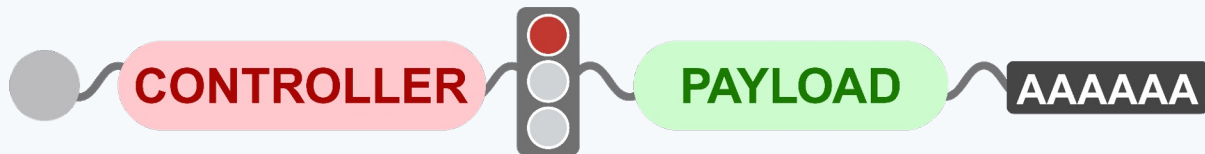
Payload is only translated in the target cells!

Conventional mRNA therapeutic



ON-Target
OFF-Target

Context-responsive mRNA therapeutic

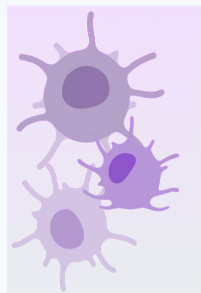


ON-Target
OFF-Target

Controller encodes a biosensor that detects proteins, not RNA!

Protein-gating restores tolerance, *safely*

PRO-INFLAMMATORY



PROTEOME



Controller Locked



NO PAYLOAD
EXPRESSION



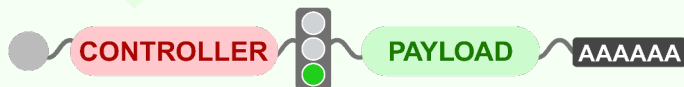
NO PRIMING



Controller Unlocked



PAYLOAD
EXPRESSION

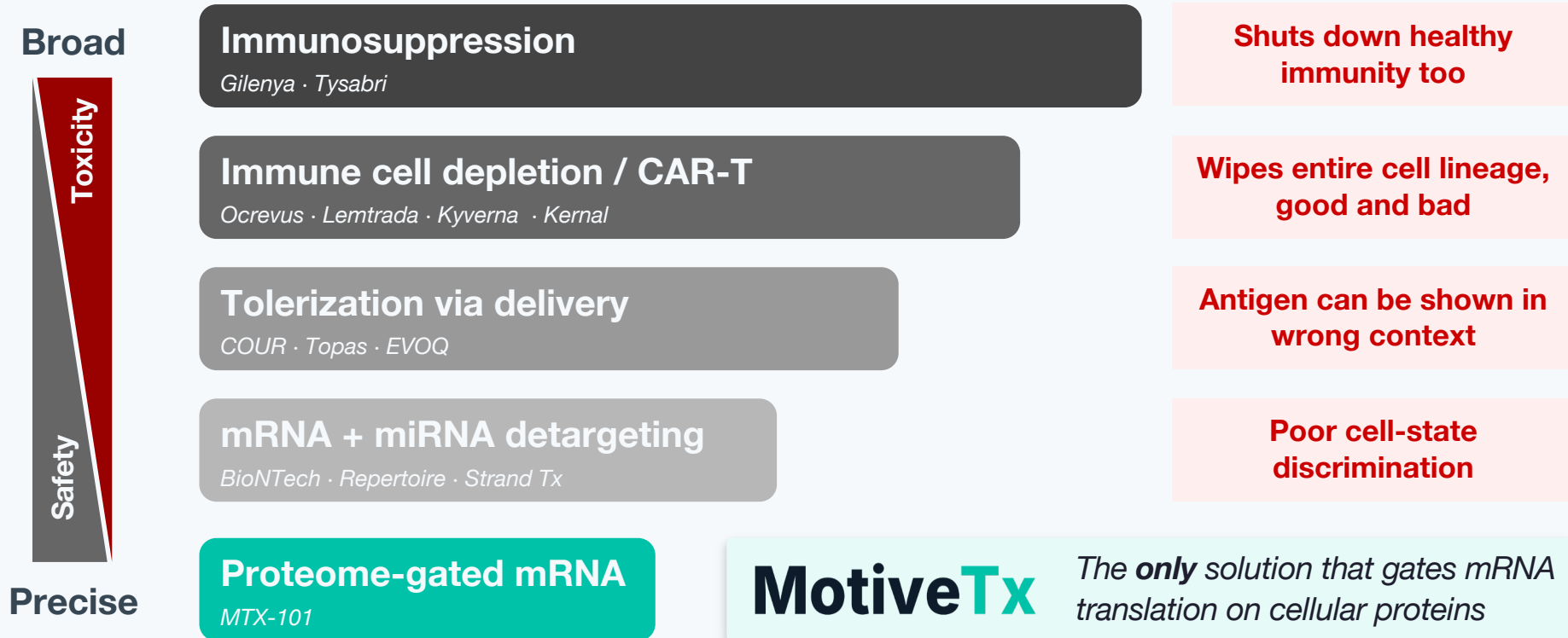


TOLERANCE



ANTI-INFLAMMATORY

MotiveTx is the only platform for protein-gated mRNA



Each filter strips away another slice of the immune system — but Motive narrows it to a single cell-state

Science externally validated by **Top 10 Pharma & NIH**

Top 10 Global Biopharma (SRA signed 5.19.2026)

Global strategic innovation evaluation

- **\$500K | *in vivo* PoC | 18 months**
- **Winner of multi-stage competition**
(abstract/full proposal/pitch)
- Reviewed by cross-functional leaders

Proof-of-Concept in Lead Indication

NIH SBIR Phase I (Awarded 7.1.2026)

Independent federal peer review

- **\$350K Phase I Grant | 12 months**
- ***In Vitro* Discovery:** Sensor design and discovery for a diverse target set
- ***In Vivo* Proof-of-Concept:** whole body, live imaging of reporter expression

Internal Pipeline

Multiple sclerosis (MS) selected as lead indication

**1.0M people living with MS (US only)
across four disease types:**

Clinically Isolated Syndrome (CIS) - n/a

Relapsing-Remitting MS (RRMS) - 85%

Secondary Progressive MS (SPMS)

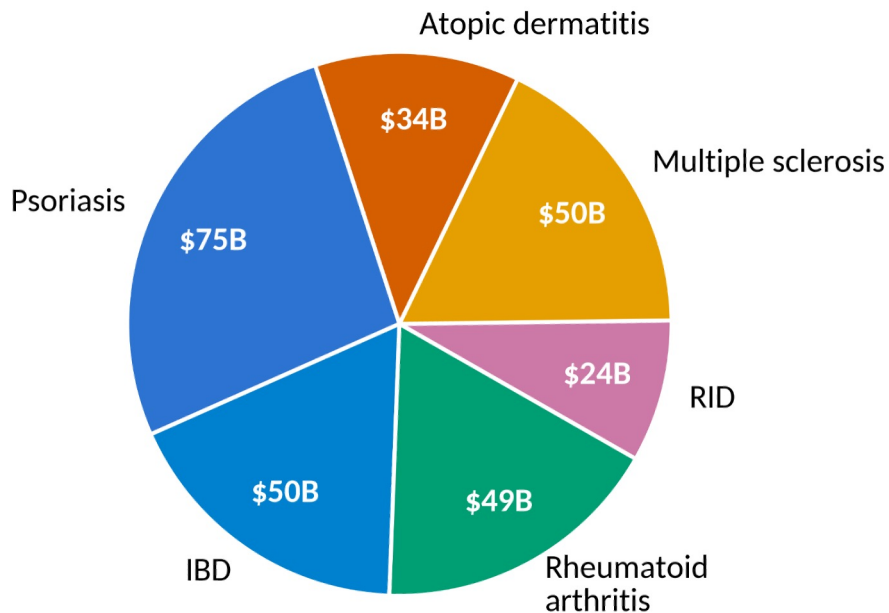
Primary Progressive MS (PPMS) - 15%

20+ Disease Modifying Treatments (DMT)

- All approved for RRMS/SPMS patients
(1 for PPMS)
- DMTs at ~\$85k/yr
- 10% of RRMS/SPMS patients
- ~\$6.8B/yr peak sales (80k x \$ 85k/yr)
- Ocrevus ~\$5-7B/yr | LOE 2030+

Context-responsive therapies address the broader I&I market

50M+ Autoimmune Patients
>\$250B Global TAM by 2035



Lead Program in MS

- SRA for *in vivo* PoC
- Tolerance-based
- Adaptive Immunity

Internal Program in Rare Inflammatory Disease (RID)

- SBIR for *in vitro* Discovery
- Orphan Drug Designation
- Fast Track / Breakthrough / RMAT
- Pediatric Rare Disease (PRV)

Exit through platform acquisition by strategic partner

Asset-Specific Revenues

Asset development validates platform and provides revenue opportunities.

M&A

Internal assets and validated platform become a strategic target for acquisition.

AbbVie reels in Capstan in \$2.1B buyout, charting course for in vivo CAR-T market

By Nick Paul Taylor · Jun 30, 2025 9:45am

AbbVie mRNA CAR-T mergers and acquisitions

4 Years

Lilly buys Orna in \$2.4B deal to enter in vivo CAR-T arena

By James Waldron · Feb 9, 2026 8:41am

Eli Lilly Orna Therapeutics mergers and acquisitions

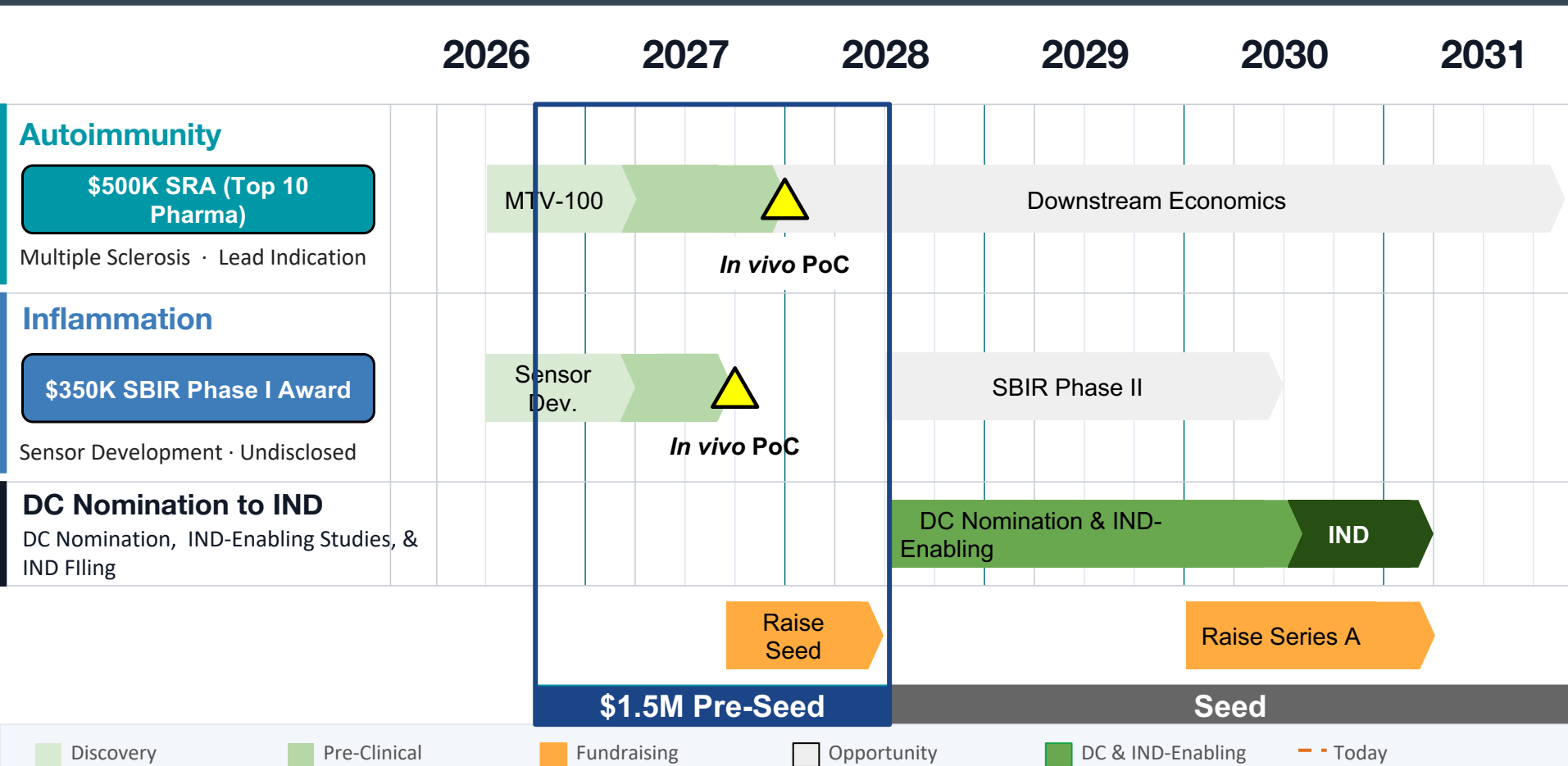
7 Years

BMS inks \$1.5B in vivo CAR-T buyout to pull Orbital into its sphere of influence

By Nick Paul Taylor · Oct 10, 2025 8:45am

3 Years

\$1.5M pre-seed enables *in vivo* PoC in lead and internal program



Founders combine academic invention and industry drug making



Russell J. Ernst, PhD
Co-Founder & CEO

- Co-inventor of two CGT assets in clinical development
- Member of SLT behind acquisition of Terrain Bio (AI-guided mRNA Sequence Design & Build Partner)
- 2026 No Patient Left Behind Fellow



Alex Marzilli, PhD
Co-Founder & CSO

- Conceived, engineered, and validated novel mRNA systems basis of the company
- Co-inventor on three patents of controllable protein and RNA-protein systems
- Drives hands-on execution and iteration of R&D



John T. Ngo, PhD
Scientific Co-Founder

- Associate Professor of Biomedical Engineering, Boston University
- Trained under Nobel laureate Roger Tsien
- ACS SynBio Young Innovator
- Co-Inventor of Motive's foundational technology

Founded by Caltech PhD classmates — 20+ years of scientific partnership before day one

\$1.5M pre-seed

TARGET RAISE

post-money SAFE

MARKET TERMS

***In vivo* PoC**

REDUCE TECHNICAL RISK