NASDAQ: DCOY
decoytx.com

DECOY therapeutics

One drug. Many viruses. Many people

June 2026

Corporate Presentation

Forward-Looking Statements

This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 regarding Decoy Therapeutics Inc. ("Decoy" or the "Company"), including statements regarding the expected achievement of milestones for its lead assets and the future prospects of the Company. These statements may discuss goals, intentions and expectations as to future plans, trends, events, results of operations or financial condition, or otherwise, based on the current beliefs of the Company's management, as well as assumptions made by, and information currently available to, management. Forward-looking statements generally are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "can," "should," "would," "expect," "anticipate," "plan," "likely," "believe," "estimate," "project," "intend," and other similar expressions. Statements that are not historical facts are forward-looking statements. Forward-looking statements are inherently uncertain and are subject to significant known and unknown risks, uncertainties and other factors, many of which are beyond the Company's control. They are based on the Company's current beliefs and on assumptions that may not prove to be accurate, and they are not guarantees of future performance. These statements should not be relied upon as predictions of future events or performance, and there can be no assurance that any forward-looking statement will be achieved or that the underlying events or results will occur. Actual results, performance or achievements could differ materially from those expressed or implied by any forward-looking statement as a result of various factors, including, without limitation, risks and uncertainties relating to the Company's business, financial condition and capital requirements, including its need for and ability to obtain additional financing; its research, development, preclinical and clinical programs, including its product candidates and the IMP3ACT™ platform; regulatory processes and approvals; competition; its intellectual property; its ability to maintain the listing of its securities on Nasdaq; and the other risks and uncertainties described under "Risk Factors" in the Company's Annual Report on Form 10 K for the fiscal year ended December 31, 2025, filed with the SEC on March 31, 2026, as amended by its Form 10 K/A, filed with the SEC on April 30, 2026, and as updated or supplemented by its subsequent Quarterly Reports on Form 10 Q, including the Form 10 Q filed on May 8, 2026 and other filings with the SEC. Readers are urged to carefully review and consider the various disclosures made by the Company in its reports filed with the SEC, including its filings with the SEC. The forward-looking statements in this presentation speak only as of the date of this presentation, and, except as required by law, the Company undertakes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

One drug. Many viruses. Many people.

A revolutionary multi-viral platform built on **Designable Multi-Antivirals (D-MAV™)** — enabled by proprietary rapid synthesis and ML/AI.

2 in 2
Two clinical programs in 24 months

250+
Human-infecting viruses

One conserved target; current programs designed to address up to 70%+ of annual virus positive respiratory viral infections.

$6.5M
Non-dilutive funding[1]

Funding from leading global health, technology and government organizations.

$5.7B
Paxlovid 2024 annual sales

Large, persistent antiviral market; mutation & resistance drive demand for differentiated solutions.

$9.2B
Cidara acquisition

Big pharma is buying multi-viral antiviral platforms.

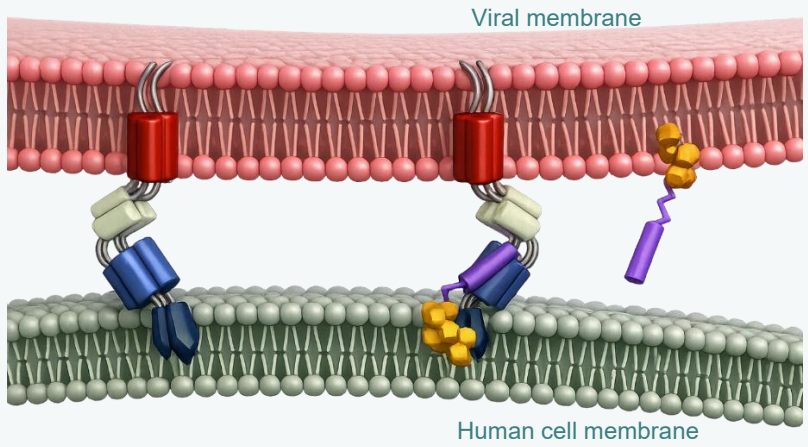
1 Gates Foundation BARDA NVIDIA INCEPTION PROGRAM CARE

THE D-MAV PLATFORM · VIRAL FUSION INHIBITION

A single conserved target transforms antiviral discovery, development & use

Viral Fusion Inhibition

THE TARGET · HOW IT WORKS



D-MAV's target is **structurally conserved across 250+** human-infecting viruses and is **essential to the first step** in viral infection.

ENABLES →

One Drug – Multi Virus

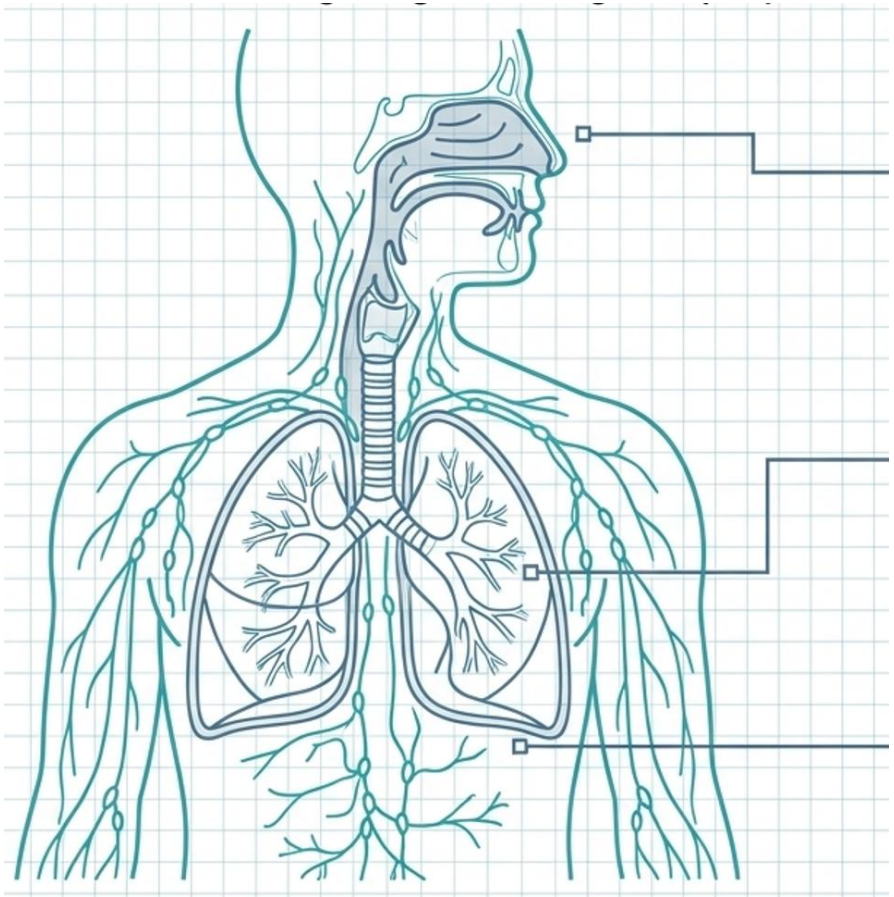
WHAT IT UNLOCKS

1. **Broadly conserved target MOA**
2. **Higher barrier to viral escape**
3. **Designable and adaptable**
4. **Scalable across viral families and the world**

MULTI-ANTIVIRAL BUSINESS MODEL

Formulation as pipeline: Multiple products from one multi-viral API[1]

Leverage shared supply chain and safety record with multiple formulations designed to the medical need



Upper Respiratory Tract

Deep Lung

Systemic & Lymphatic

1

[1]Active Pharmaceutical Ingredient

Effective against multiple viruses
Single supply chain and safety profile

Multiple

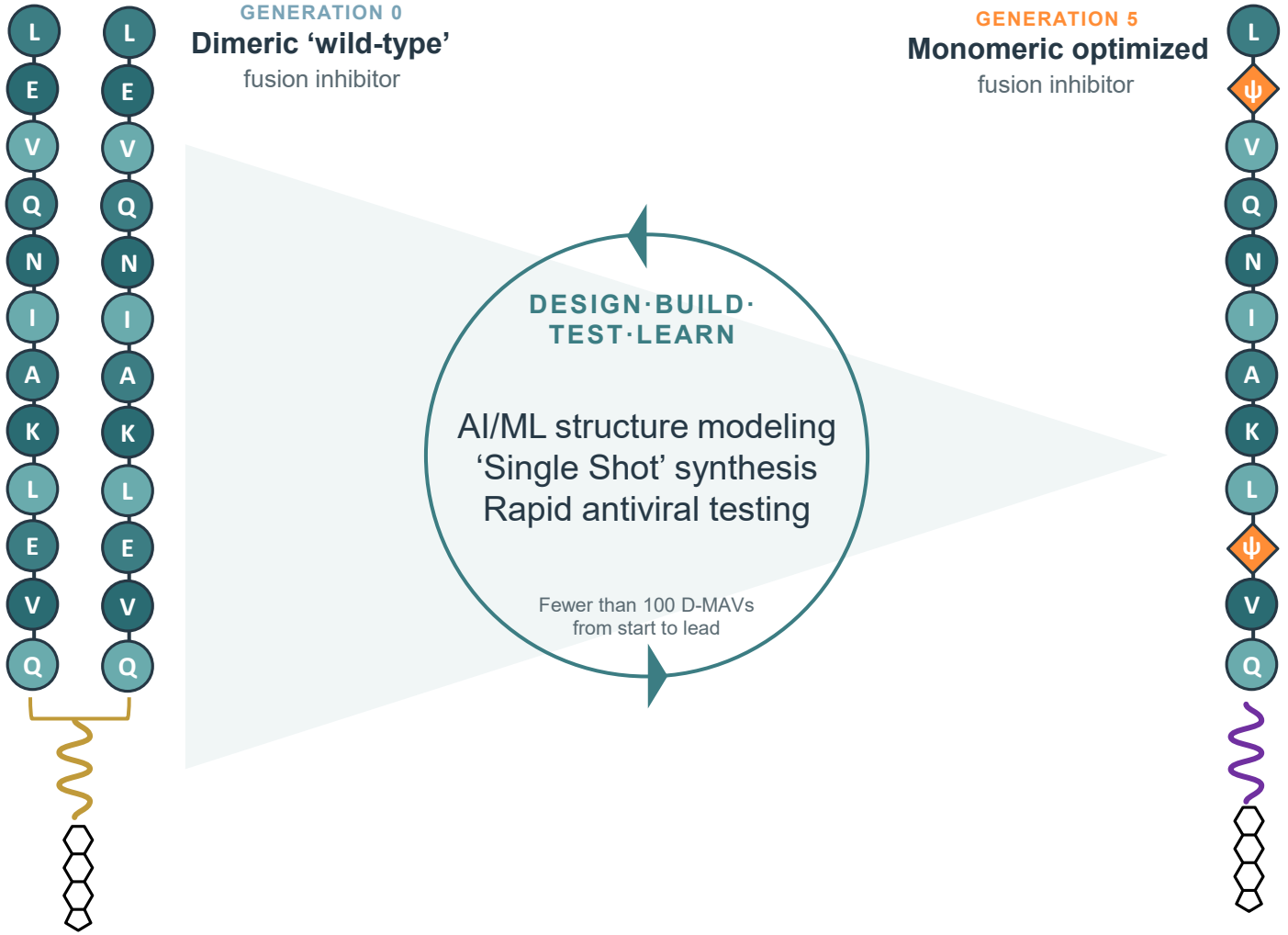
Drug Products

Tailored to indication biology by formulation, device & delivery route to ***prevent off-label use***

THE IMP³ACT™ ENGINE

D-MAVs are designed at unprecedented speed

Our AI/ML design-build-test-learn loop generates lead candidates in weeks to months — implemented on Google Cloud.



IMPROVEMENTS

- ✓ **Simplified chemical structure**
- ✓ **Optimized for enzymatic resistance**
- ✓ **Enhanced linker chemistry for greater stability**

RESULTS

- **Low-nanomolar antiviral activity**
- **No protease breakdown @ 24h in plasma predicts improved in vivo half life**
- **2× aqueous solubility**
- **Improved manufacturability at scale**

D-MAV PIPELINE

Targeting up to 70% of serious respiratory viral infections

Program	Indication	Discovery	Preclinical	Phase 1	Phase 2	Key Highlights
DCOY-CoV Broad-Acting Fusion Inhibitor	Pan-coronavirus protection for high-risk & immunocompromised					- Gates Foundation funding development to IND - Phase 1 study 2H 2027
DCOY-TRI Broad-Acting Fusion Inhibitor	Pan-flu; Pan-coronavirus; Pan-RSV family; Related viruses					- Multi-family activity achieved Q1 2026
Stealth Programs	Global Health Challenges					

AI/ML-assisted design catalyzes lead discovery feeding defined, efficient clinical path

LEAD PROGRAM · DCOY-CoV

Pan-coronavirus D-MAV Lead targeting high-risk patients

Advancing toward a Phase 1 study expected to commence 2027

U.S. ANNUAL BURDEN

~290K-450K
Hospital Admissions

~34K-53K
Deaths

MARKET VALIDATION

$5.7B
Paxlovid sales 2024

CORE MARKET

20M
Immune compromised US + EU

01 Designed for high-risk patients
Immunocompromised population with limited options for coronavirus prevention and treatment

02 Broad coverage, durable activity
In vitro activity against all tested human coronaviruses; in vivo efficacy supporting both prevention and treatment

03 Self-administered, inhaled antiviral
Nasal delivery to the seat of infections for both prophylactic and early post-infection

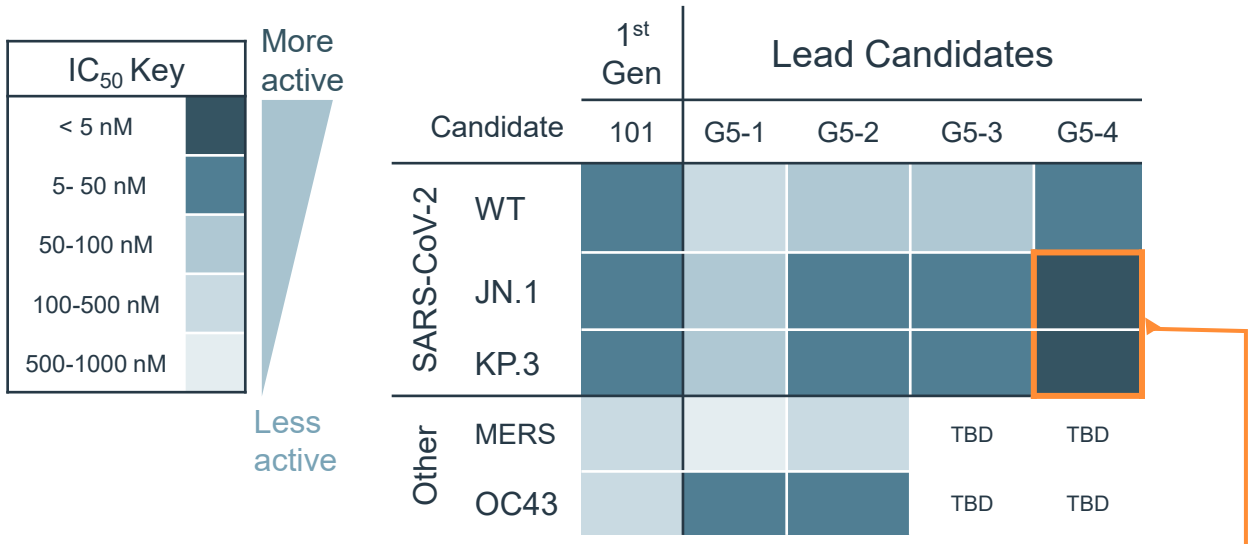
04 Flexible, differentiated product profile
Highly differentiated product attributes that meet medical needs across the disease cycle

LEAD PROGRAM · DCOY-CoV

Pan-coronavirus activity from a single D-MAV

DCOY-CoV Pan-Coronavirus Activity Heat Map

IC50 in antiviral assays — 1st generation vs. optimized Lead Candidates



Picomolar level activity

Very Robust Results

- Nanomolar activity
- All known human coronaviruses tested
- Multiple candidates
- Multiple CROs, assay types, and manufacturing lots

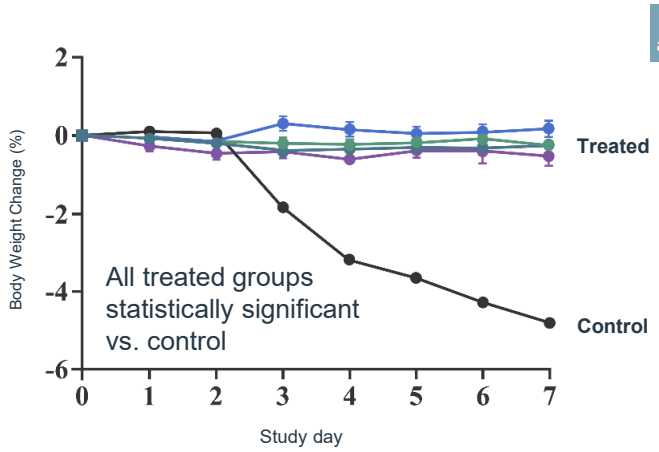
Same target sequence and structure found in non-human coronaviruses

Highly effective *in vivo*, pre- and post-viral exposure

Once daily intra-nasal (IN) dosing prevents and treats SARS-CoV-2 infections in nose & lungs for up to 36 hours post exposure

PRE-EXPOSURE PROPHYLAXIS (PREP)

Body weight change (%) · daily dosing from 2 days pre-exposure

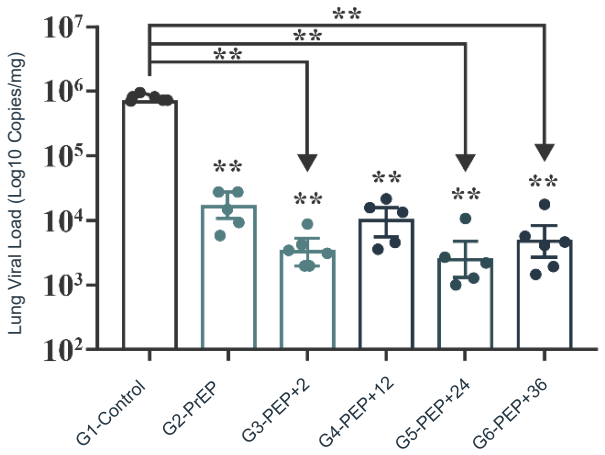


Treated animals: no symptoms.

Controls lost 4–6% body weight

POST-EXPOSURE PROPHYLAXIS (PEP)

Lung viral load (log_{10} copies/mg) · dosing after exposure



Significant log reduction 36h post-challenge

MOUSE PK

	AUC_{last}	t½ (hr)
Nasal cavity	58.2	**21**
Lung	297.4	**7**
Plasma	1.6	4.5

Complete protection

Daily intranasal dosing gave complete protection vs. infection by Day 2.

Continuous antiviral shield

~24h half-life → steady-state accumulation with trough C_{min} >> antiviral IC50.

Potential for less frequent dosing

Protease-protected leads likely have greater half-life — potential once-daily protection.

LEAD PROGRAM · DCOY-CoV

An evolving COVID market

EMERGING MARKET STRUCTURE

MPro inhibitors (Paxlovid) — $5.7B[1]

Established, effective standard of care (SOC) for non-drug/drug interaction (DDI) patients; next-gen entrants moving into high-risk/DDI patients and Pre-Exposure Prophylaxis (PEP)

KEY ENTRANTS

Paxlovid(PFE) · Global	Marketed
Xocova(Shionogi) · US, Japan	Marketed
Ibuzatrelvir(PFE)	Phase 3
Ratutrelvir(TRAW)	Phase 2

Prophylactic mAb — $1.5B[2]

Vaccine-comparable 3–6 months Pre-Exposure Prophylaxis (PrEP), positioned as a vaccine substitute for both IC and healthy patients.

KEY ENTRANT

VYD2231(IVVD)	Phase 3	FDA Fast Track

1 Paxlovid Sales 2024 2 Equity analyst peak forecast sales, available on request.

LEAD PROGRAM · DCOY-CoV

DCOY-CoV's profile is highly differentiated, including *pan-coronavirus* activity

In vitro activity against multiple viral families

COMPETITIVE DIFFERENTIATION

	Prophylactic mAb	Treatment MPro	DCOY-CoV
Target point of infection	✗	✗	✓
First step of infection	✓	✗	✓
Extended activity	✓	✗	✓
Limited systemic exposure	✗	✗	✓
Self-admin	✗	✓	✓
Shelf stable	✗	✓	✓
Pan-Coronavirus	✗	?	✓
PrEP / PEP / Treatment potential	✗	✗	✓
Host transmission control potential	✗	✗	?
Potential to address multiple novel severe viral threats	✗	✗	✓

✓ Advantage ✗ No ? Unknown / TBD

SECOND PROGRAM · DCOY-TRI

A single D-MAV targeting multiple respiratory viral families

Pan-Flu + Pan-Coronavirus + Pan-Paramyxovirus: majority of severe virally-driven lower respiratory tract infections

U.S. ANNUAL BURDEN

~1.59M

Combined Annual Hospitalizations (Flu + Covid +RSV)[1]

~138.5K

Deaths[1]

SCOPE OF DISEASE

55-70%

of of virus-positive adult respiratory infections[2]

01 Majority of severe respiratory disease

Targets pan-flu, pan-coronavirus, and pan-RSV which together account for the majority of virally-driven lower respiratory tract infections

02 Single antiviral across multiple viruses

Targets shared fusion-inhibition mechanism conserved across structurally similar viral entry machinery

03 Self-administered, inhaled antiviral

Nasal or pulmonary delivery enables localized respiratory protection

04 Large, established global market

Recurring annual healthcare burden with limited broadly effective antiviral options

1. CDC: https://www.cdc.gov/respnet/dashboard/index.html#:~:text=It%20is%20estimated%20that%20these,counties%20or%20county%20equivalents%20in%3A
2. Jain, S., et al. (CDC Centers for Disease Control and Prevention Etiology of Pneumonia in the Community Study Group). (2015). Community-Acquired Pneumonia Requiring Hospitalization among U.S. Adults. *New England Journal of Medicine*, 373(5), 415-427

SECOND PROGRAM · DCOY-TRI

In vitro results show broad activity across respiratory virus families

Targeting conserved viral fusion is highly effective across **Class I fusion** respiratory viruses.
Breadth conserved **across multiple D-MAVs.**

CORONAVIRUS

- **SARS-CoV-2**
- **SARS**
- **MERS**
- **OC43 (seasonal)**
- **NL63 (seasonal)**
- 229E (seasonal)

PARAMYXOVIRUS

- **RSV A/B**
- hMPV
- **hPIV3**
- **Nipah**
- **Measles**

INFLUENZA

- **H5N1 (avian, pandemic potential)**
- H3N2 (seasonal)
- Influenza B
- Influenza C

Sub-µM activity achieved with **multiple** D-MAVs (no single molecule yet covers all)

THE TASK AHEAD

From many D-MAVs to one broadly active D-MAV

D-MAV · coronavirus
D-MAV · paramyxovirus
D-MAV · influenza

→

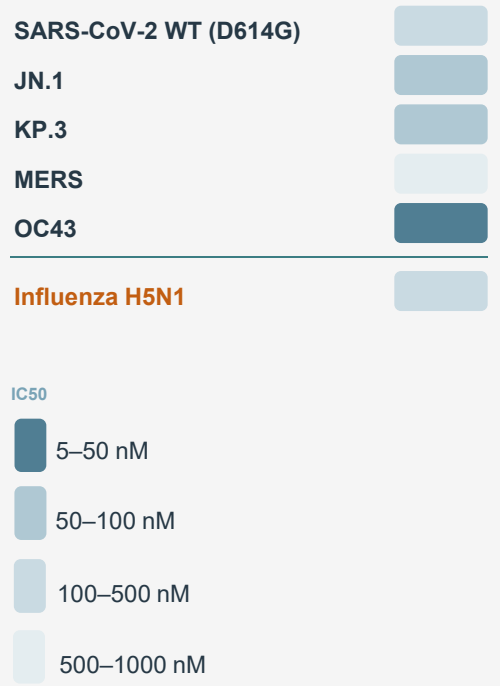
1 DCOY-TRI
single, broadly active D-MAV

3 distinct design strategies in progress

PROOF OF CONCEPT

A lead DCOY-COV candidate already has nanomolar corona *and* influenza activity

Candidate G5-1 · IC50 in pseudotype assay



DEVELOPMENT PATH

2 Programs in the clinic in 24 months — human POC via Challenge Model

Human challenge studies significantly de-risk the path market approval

Speed to data
Human POC at ~ 2yrs from FIH

Lower capital
Fast, localized challenge models

High success rates
ID > other TAs, Ph1→approval

	Q2–Q3 2026	Q4 2026	2027 H1	2027 H2	2028 / 29
DCOY-CoV Lead · Pan-coronavirus	Lead selection	In vivo efficacy · PK/Tox	★ IND / CTA filing	★ Initiate FIH · Phase 1	Base case: Mid-2029 ★ Challenge Study POC
DCOY-TRI 2nd · Flu + CoV + Paramyxo	✓ Multi-family activity	Additional cross-family data	Multiple lead ops ID'd	Lead op in progress	★ IND/CTA filing (2028)

★ Major value-inflection milestones · Both programs to clinical readiness within 24 months, powered by the IMP³ACT platform

Proven Development Expertise with Multiple Drugs Approved Across Therapeutic Areas

Javelin

Lehman Brothers

Rick Pierce, CEO
Investment Banking,
Serial Biotech Entrepreneur

Advaxis Immunotherapies

ActiveCare

Mark Rosenblum CFO
ActiveCare, Advaxis,
Haskin & Sells (Deloitte)

Millennium

Chiron

Bayer

Takeda

Barb Hibner, PhD CSO
Bayer, Chiron,
Takeda

Alkermes

Acorda Therapeutics

Michael Lipp, PhD CTO
Alkermes, Acorda,
Nocion

Merck

Vertex

Takeda

Peter Marschel, MS MBA CBO
Merck, Vertex, Takeda

MIT

Brad Pentelute, PhD
SAB Chair, Tech Advisor
Prof of Chemistry, MIT

MIT

Bob Langer, Sc.D
SAB Member
David H. Koch Institute Professor

Why Now?

2 in 2

Two clinical programs in 2 years.
Human POC in 24 months from FIH.

THE DECOY DIFFERENCE

A designed multi-antiviral platform with two programs running in parallel to human proof of concept. Speed without shortcuts. Capital allocated to the molecules most likely to work.

$9.2B
Cidara / Merck

Category Validated

Major pharma is buying multi-viral antiviral platforms.

$5.7B
Paxlovid 2024 annual sales

Market Proven

Demand for next-generation anti-virals is established and persistent.

$6.5M
non-dilutive

Independently Funded

Gates Foundation, BARDA, NVIDIA, and CARE backing the work.

IMP³ACT
platform

Engine Built

Designability, single-shot synthesis, and manufacturing path in place.

One drug. Many viruses. Many people.

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One drug. Many viruses. Many people

Thank You!