

CELL-FREE BIOMANUFACTURING

Unlocking *Nature's* Molecules.

Nature's compounds have evolved to be potent agents for biology. The bottleneck was always accessibility. We solved it.

FORWARD-LOOKING STATEMENTS

eXoZymes' *Safe Harbor.*

This presentation includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements, which are based on certain assumptions and describe the company's future plans, strategies and expectations, can generally be identified by the use of forward-looking terms such as "believe," "expect," "may," "will," "should," "would," "could," "seek," "intend," "plan," "goal," "project," "estimate," "anticipate," "strategy," "future," "likely" or other comparable terms, although not all forward-looking statements contain these identifying words. All statements other than statements of historical facts included in this presentation regarding the company's strategies, prospects, financial condition, operations, costs, plans and objectives are forward-looking statements. Actual results could differ materially for a variety of reasons. You should carefully consider the risks and uncertainties described in the "Risk Factors" section of eXoZymes' quarterly reports on Form 10-Q, annual reports on Form 10-K, and other documents filed by eXoZymes from time to time by the company with the Securities and Exchange Commission. These filings identify and address important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and eXoZymes assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. eXoZymes does not give any assurance that it will achieve its expectations.

Nature has engineered *extraordinary molecules* that modulate human biology.

Metabolism, inflammation, aging, neurology.

01 / Scarcity

Too rare in nature.

02 / Complexity

Too complex to synthesize.

Until now, they were inaccessible.

We can make and scale *nature's rare molecules.*

01 – Scaled Supply

Manufacture at scale.

Grams to tonnage.

02 – Pharma Purity

>99% pure, every batch.

One pure single molecule.

03 – Functionalize

Engineer better versions.

Potent, more bioavailable, patentable
analogs.

Nature's enzymes. Engineered to run at industrial scale.

CELL-FREE BIOMANUFACTURING

Engineered cells didn't
deliver the dream.

So, we cut the cell out of the equation.

1

ENZYME

The molecular workhorse in
cells.

Catalysts that nature uses to assemble every
complex molecule.

2

EXOZYME

AI-engineered to run outside
the cell.

Stable, active, compatible with industrial
conditions.

3

CELL-FREE

Industrial-scale
biomanufacturing.

Greater than 99% purity. We expect tonnage
when needed.

OUR FIRST FLAGSHIP MOLECULE

exoZymes

COMPOUND • NCT

NCT & The Master Metabolic Switch.

*Pharma has unsuccessfully tried to target
HNF4 α .*

SLIDE 06

The Master Metabolic
Switch

NCT activates HNF4 α .

Improving how cells turn food into
energy, metabolize fat, and respond to
inflammation.

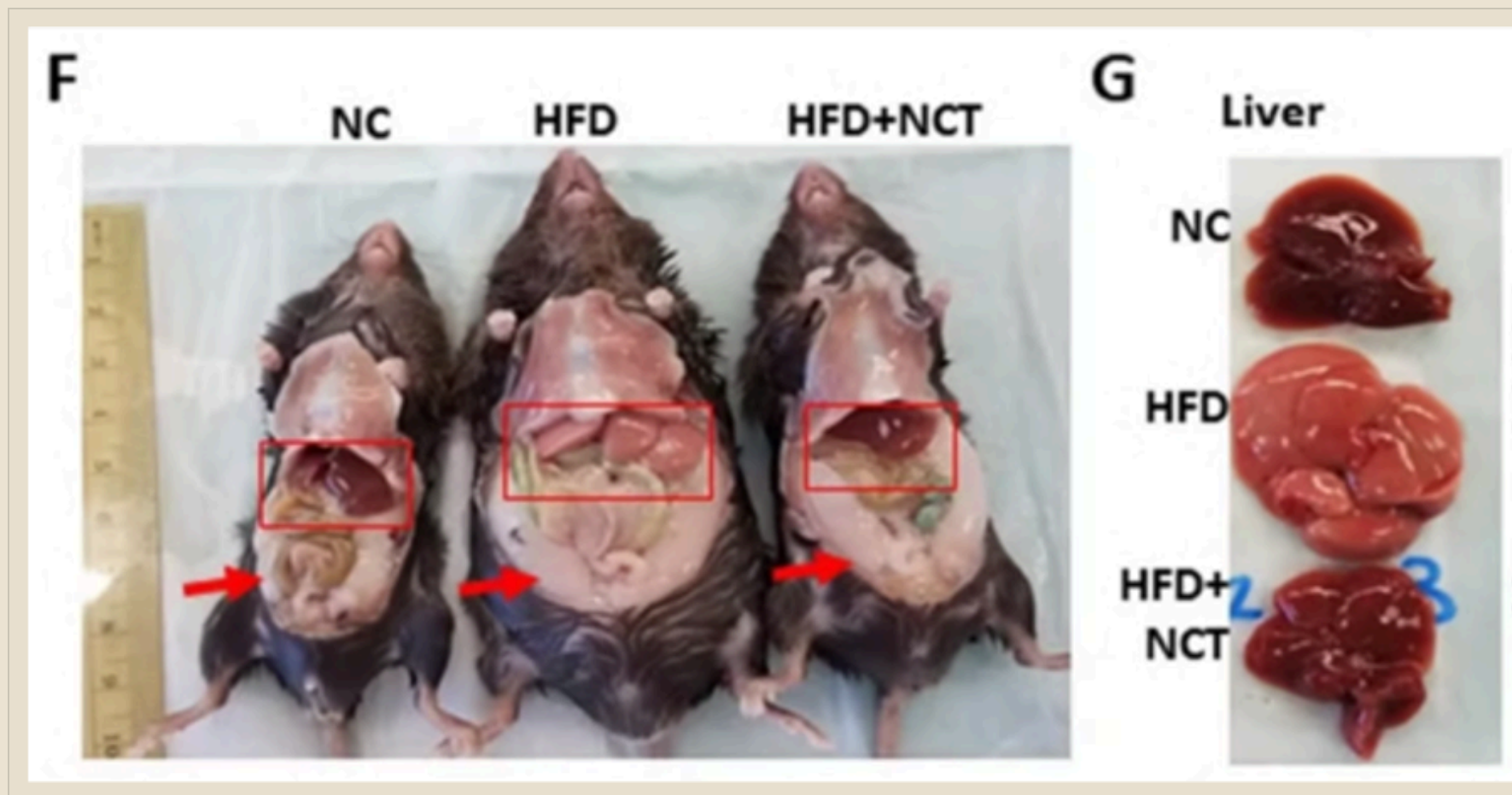
Why this is different
than GLP-1s?

Addresses the root: how the body
burns stored fat.

NASDAQ : EXOZ

Measurable metabolic results *without diet restriction.*

GLP-1 works by caloric restriction. NCT by fat utilization.



30 -40%

BODY WEIGHT REDUCTION

Less weight gain on identical high-fat diet with equal caloric intake.

MITOCHONDRIAL SURGE

Significant increases in key mitochondrial biomarkers and respiratory capacity.

LIVER FAT CLEARANCE

Dramatic reduction in liver fat accumulation and improved lipid profiles.

Veeriah, V., Lee, S.H. & Levine, F. *Cell Death Dis* 13, 89 (2022).

One molecule. *Multiple billion-dollar markets.*

Measurable metabolic results in pre-clinical and early clinical studies – without diet restriction across multiple conditions.

01
Obesity

02
Type 2 Diabetes

03
Fatty Liver (*MASH*)

04
Aging & Inflammation

Combined addressable markets: hundreds of billions of dollars – and pharma is actively hunting these mechanisms in the GLP-1 era.

Only we can make
NCT at high purity
& scale.

Exists in nature at 0.0014%. Existing methods cap at yield, purity, and cost. We cleared all three. At industrial scale. Outside-validated.

100L

SCALE-UP ACHIEVED WITH PARTNER

>99%

REACTION YIELD AT PILOT SCALE

99.6%

PHARMA-GRADE PURITY (535G ISOLATED)

Tech transfer to a third-party CMO already executed. Enzymes, conditions, protocols – all transferred clean.

Multiple revenue opportunities *within NCT.*

PATH A • NEAR-TERM REVENUE

OTC nutraceutical with supplement marketers.

Q4 2026 Tech transfer to GMP CMO complete by 2026.

OFF-TAKE Kg-scale offtake discussions with global supplement brands.

LAUNCH Initial OTC product launch targeted in 2027.

PATH B • PHARMA UPSIDE

Engineered NCT analogs into pharma pipelines.

ANALOGS New-to-nature analogs as monotherapy or with GLP-1s.

MARKETS Multiple billion-dollar drug targets across obesity, T2D, MASH.

STATUS Active biotech & pharma partner conversations.

Nutraceuticals: a *\$683B* global opening.

\$683B

MARKET IN 2026

7.7%

CAGR 2026-2033

\$1.15T

BY 2033

Market figures: Grand View Research, Nutraceuticals Market Size & Share Report, 2026-2033.

People are now focused on health span and the market is hungry for products that actually work.

NCT is different. It's built on established biology with emerging data that supports its potential.

12-16

months

from OTC launch.

Milestone 01

Production-ready tech transfer package to CMO in 2026.

Milestone 02

Distributor offtake locked in as scale becomes guaranteed.

Pure NCT is just the start.

We can engineer it into better medicines.

STAGE 01

α

Pure natural compound.

>99% purity. GMP-grade. Commercial quantities.

STAGE 02

β

Engineered analogs.

BioClick chemistry creates new-to-nature variants. Expected to be more potent. Patentable.

STAGE 03

γ

Drug candidates.

Pharma takes analogs into trials. Solo or with GLP-1s.

Same playbook synthetic chemistry ran on aspirin and penicillin.

Enzymatic toolkit to create analogs to boost bioavailability, increase potency, or optimize for specific disease targets.

Cannabinoids are next.

We're now producing rare and new-to-nature cannabinoids. Regulatory tailwinds create a unique timely opportunity.

Cannabinoid receptors are present on nearly every cell in the body. We've just opened the door to targeting them properly.

APPLYING OUR PLATFORM TO CANNABINOIDS

- 01 Validated activity across metabolic, inflammatory, and neurological pathways.
 - 02 Non-intoxicating. Hard-to-make. High-impact.
 - 03 Engineerable into powerful therapeutics.
-

GW Pharma proved CBD works.

Single platform *powering two programs.*

Programs Share

Cell-free platform

Enzyme-engineering capabilities

Go-to-market playbook

Each aids in validating the model – together, platform scalability is demonstrated.

Targeted value-creating events on the horizon.

Two platforms run in parallel add optionality. No binary events required.

NCT

- 2026 Tech-transfer package to GMP contract manufacturer.
- 2026 - 2027 Commercial partnerships with nutritional supplement brands.
- 2026 - 2027 Pharma partnering on new-to-nature NCT analogs into clinical trials.
- 2026 + NCTx team build-out and product-roadmap execution.

CANNABINOIDS & BEYOND

- 2026 - 2027 Pharma partnerships on novel non-intoxicating cannabinoids.
- 2026 + Library expansion of rare cannabinoid variants only the platform can produce.
- 2026 + Licensing and JV deals with pharma for specific indications.
- 2026 + Flavonoid and other natural-compound program launches.

Capital-efficient by design. *This raise gets us to commercial proof.*

\$15M

RAISED AT NASDAQ IPO
(NOV 2024)

\$17M

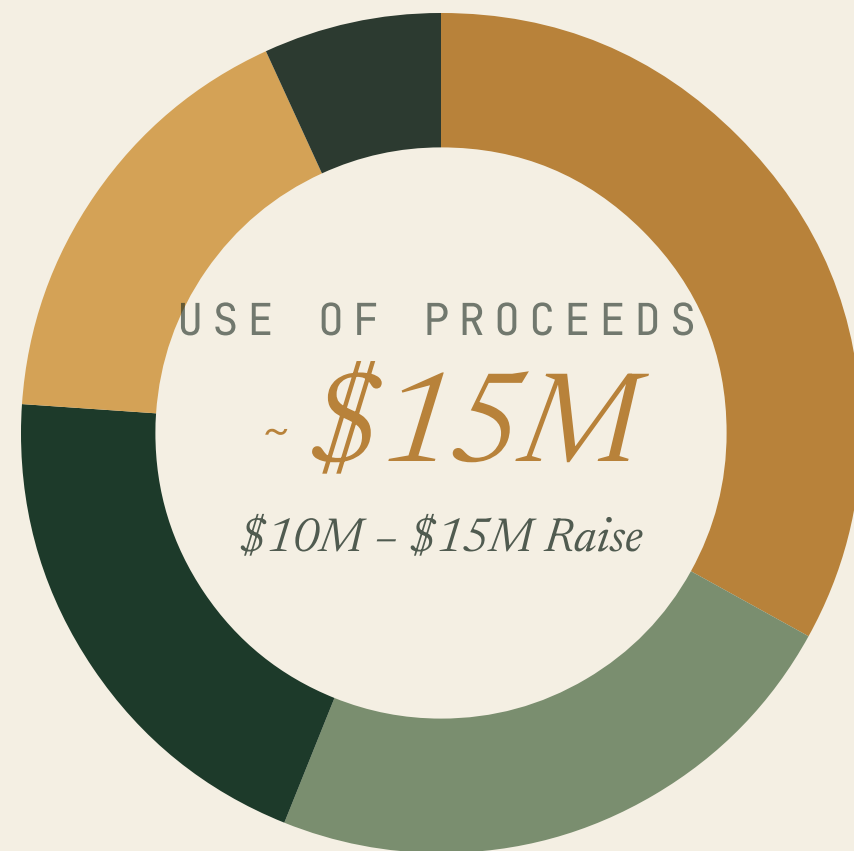
GRANT FUNDING TO DATE
FOR PLATFORM R&D

~\$10M

ANNUAL OPERATING
EXPENSES

100x

PILOT SCALE, PARTNER-
VALIDATED



■ NCT Commercialization & Scale-Up	~\$5.0M	33%
■ Working Capital & Operations	~\$3.5M	23%
■ Cannabinoids & Next-In-Line Products	~\$3.0M	20%
■ G&A, BD, Legal & Compliance	~\$2.5M	17%
■ Core Platform R&D & AI Engineering	~\$1.0M	7%
TOTAL	~\$15.0M	100%

Why *eXoZymes*. Why now.

01

Health-span: a large, growing category.

Same platform unlocks a multitude of molecules with multiple health-span benefits.

02

Near-term commercial revenue.

OTC nutraceutical launch targeted 2027 through global supplement partners.

03

Blockbuster drug pipeline.

Creating NCT analogs positioned for pharma evaluation across therapeutic areas of significant industry interest in the GLP-1 era. Cannabinoid analogs in development behind it.

Offering *Summary.*

OFFERING SIZE \$10M – \$15M

PRICING TBD

NASDAQ TICKER EXOZ

TAX TREATMENT Management believes the offering qualifies for Section 1202 / QSBS exclusion.*

*You should consult your own tax, legal and accounting advisors before engaging in any transaction.

Thank you.

Indications of interest welcome.

CONTACT

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NASDAQ : EXOZ

A.

Appendix.

Supporting information, IP, validation, and Q&A.

WHAT'S INSIDE

- 01 How we create value with IP.
- 02 Grants & scientific publication validation.
- 03 Scale-up validation & manufacturing partners.
- 04 Why this is huge – the statin precedent.
- 05 AI as a game changer for cell-free systems.
- 06 Why eXoZymes leads.
- 07 Terpenes & flavonoids – the next opportunity.

How we create value *with IP.*

Our IP strategy compounds value across four dimensions – methods to make natural compounds, composition-of-matter on novel molecules and enzymes we engineer, and trade secrets on the systems integration. Each layer protects a different business advantage.

Layer 01

Methods to make natural compounds.

Patented enzymatic routes to manufacture rare natural molecules – NCT, cannabinoids, and the broader natural-product library. Anyone wanting commercial-scale access to these compounds at pharma purity goes through us.

Layer 02

Composition-of-matter on new molecules.

New-to-nature analogs we create via BioClick chemistry and engineered enzymes – molecules that don't exist in any plant. Each novel analog is its own composition-of-matter claim with full pharma-style protection.

Layer 03

Composition-of-matter on engineered enzymes.

The exozymes themselves – AI-designed, stabilized variants of natural enzymes – are patentable molecular entities. The catalysts that build the products are protected, not just the products.

Layer 04

Trade secrets on systems integration.

Reaction conditions, enzyme cocktails, cofactor regeneration, and process controls live as trade secrets. A decade of cell-free know-how no competitor can reverse-engineer from a patent filing.

Grants and peer review.

\$17M in non-dilutive grant funding to date from federal agencies – and a body of peer-reviewed publications, including a Genetic and Biological Engineering cover story – independently support the science behind our cell-free platform.

GRANT FUNDING • \$17M

DOE / ARPA - E Cell-free biomanufacturing platform development.

NSF Enzyme engineering and pathway design.

DOE BETO Sustainable bioproduct production.

NIH / SBIR Therapeutic-relevant compound synthesis.

DOD / BIOMADE On-demand biomanufacturing.

SCIENTIFIC PUBLICATIONS

Genetic Engineering and Biotechnology News – *Cover Story.*

Featured eXoZymes' cell-free platform as a defining advance in next-generation biomanufacturing.

PEER-REVIEWED CORPUS

Multi-step enzymatic synthesis of complex natural products.

AI-guided enzyme stabilization for cell-free systems.

Scaling cell-free biocatalysis beyond conventional limits.

Cofactor regeneration in cell-free metabolic systems.

Third-party validation *at pilot scale.*

The platform runs in someone else's hands.

The ultimate test of a biomanufacturing platform is whether someone else can run it. Cayman Chemical executed our NCT process at 100× pilot scale – validating not just the science, but the transferability of the full system.

Cayman Chemical executed the full eXoZymes process – enzymes, conditions, downstream – in their Ann Arbor, Michigan facility, on schedule and to spec.

CAYMAN CHEMICAL • THIRD-PARTY VALIDATION ✓

100×

SCALE-UP

99.6%

PHARMA-GRADE PURITY

>99%

REACTION YIELD

535g

NCT ISOLATED • 100L
PILOT

Natural Product Success Story: *From Fungus to Pharmaceutical Class.*

Mevastatin isolated from Penicillium citrinum led to development of the statin drug class for cholesterol management.

HISTORICAL DEVELOPMENT TIMELINE & COMMERCIAL OUTCOMES

YEAR	MILESTONE	SIGNIFICANCE
1976	Mevastatin discovered in fungus	First HMG-CoA reductase inhibitor from natural source.
1987	Lovastatin approved (<i>Mevacor</i>)	First commercial statin drug enters market.
1991 – 2003	Synthetic analogs developed	Zocor, Lipitor, Pravachol, Crestor approved.
Present	Established therapeutic class	Four major drugs generated \$336B+ in lifetime sales.

This precedent demonstrates how natural products can serve as starting points for therapeutic development. Modern enzymatic tools may enable similar discovery and optimization pathways for novel therapeutic targets.

AI collapsed the timeline *for* *building cell-free systems.*

Cell-free biomanufacturing requires enzymes that work outside the cell – stable, active, compatible with each other in multi-step pathways. Building each enzyme used to take years of trial-and-error. AI changed that.

BEFORE AI

Years per enzyme. Failed pathways.

Manual screening of thousands of enzyme variants.

Trial-and-error stabilization for non-cellular conditions.

Multi-step pathways often took 5+ years to assemble.

Most candidate molecules abandoned before pilot.

WITH AI AT EXOZYMES

Months per pathway. New molecules unlocked.

AI-guided design of stable, active exozyme variants.

Predictive screening before any wet-lab work.

NCT: concept to 100× pilot scale in <12 months.

New-to-nature analogs designed and produced on demand.

A decade of cell-free. *No one else is close.*

Cell-free isn't a feature you bolt on – it's an entire engineering discipline. We've spent ten years building the enzymes, the systems integration, and the methods IP that turn a cell-free reaction into an industrial process. That lead is hard to compress.

01

Decade of cell-free R&D.

Spun out of UCLA's Big Ideas Lab in 2019, with foundational research dating back nearly a decade. No competitor has comparable depth.

04

Core IP in methods.

Patented enzymatic routes to natural compounds. Composition-of-matter on novel analogs and engineered enzymes. Trade-secret process know-how.

02

Novel enzyme creation.

Hundreds of engineered exozymes — AI-designed, stabilized, characterized. The library that builds the products.

05

Proven repeatability.

NCT, then cannabinoids, then flavonoids and beyond — each compound class deployed faster than the last on the same platform.

03

Systems engineering for scale.

Multi-enzyme cocktails, cofactor regeneration, downstream integration — solved at industrial scale, not just at the bench.

06

First-mover commercial proof.

Cayman Chemical tech transfer executed. Pharma and supplement partner conversations active. Public-market access via NASDAQ.

Two additional compound families *our technology enables us to create.*

Each with a multi-decade evidence base.

FAMILY 01 • TERPENES & TERPENOIDS

CLASS	FLAGSHIP	USE
Monoterpenes	Menthol, limonene	Analgesic topicals; antimicrobials; flavor & supplement market.
Sesquiterpenes	Santalene	Fragrance industry standard; anticancer and antimicrobial bioactives in early research.
Diterpenes	Paclitaxel (Taxol)	Major chemotherapy; semi-synthetic taxanes are blockbusters.
Triterpenes	Squalene, ginsenosides	Antioxidants, hepatoprotective, antiviral candidates.

Same playbook: make the core molecule at scale, engineer better analogs, partner across nutraceutical and pharma channels.

FAMILY 02 • FLAVONOIDS

CLASS	FLAGSHIP	USE
Flavonols	Quercetin, kaempferol	Immune & vascular support; anti-inflammatory drug candidates.
Flavan-3-ols	EGCG, procyanidins	Cardiovascular, anticancer, neuroprotective; tea/cocoa extracts.
Anthocyanins	Cyanidin, delphinidin	Eye & vascular health; antidiabetic, chemopreventive activity.
Isoflavones	Genistein, daidzein	Hormone-related cancers, bone health, menopausal symptoms.

Beyond NCT and cannabinoids, we have demonstrated platform capability on terpenes and flavonoids — two of the most studied natural-product families in medicine. Each subclass has a flagship molecule already in clinical or commercial use, and a long list of analogs the industry has been unable to access at scale.

Four partnership tracks. One coordinated path to anticipated commercial success.

We don't manufacture, sell, or run trials alone. Our model is partnership-driven across every stage of the value chain – from CMOs who scale our compounds, to supplement brands who reach consumers, to clinical teams who validate our analogs, to pharma companies who commercialize them as drugs.

01 • Manufacturing

Contract manufacturers who scale our compounds.

We design the cell-free process and transfer it to qualified CMOs. Cayman Chemical executed our NCT process at 100× pilot scale. There are multiple domestic and European CMOs who can do it.

02 • Consumer Reach

Supplement makers who reach consumers.

Validated natural compounds — NCT first, then flavonoids, terpenes — reach consumers through global supplement brands. We supply pure GMP material; they brand and distribute.

03 • Clinical Validation

Clinical teams who validate our analogs.

Engineered new-to-nature analogs need clinical work to prove improved potency, bioavailability, or selectivity. CROs and academic groups run the studies that de-risk analogs for pharma.

04 • Pharma Handoff

Pharma companies who put compounds in the clinic.

Validated analogs move to pharma partners for clinical development and commercialization. Value capture: licensing, milestones, royalties, JV equity — without funding clinicals ourselves.