UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 14, 2024

Metagenomi, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-41949**	**81-3909017**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**
5959 Horton Street 7th Floor Emeryville, California		**94608**
(Address of Principal Executive Offices)		**(Zip Code)**

Registrant's Telephone Number, Including Area Code: (510) 871-4880

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, $0.0001 par value per share	MGX	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Item 2.02 Results of Operations and Financial Condition.

On May 14, 2024, Metagenomi, Inc. (the "Company") announced its financial results for the quarter ended March 31, 2024 and additional business updates. A copy of the press release in connection with the announcement is being furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Current Report on Form 8-K (including Exhibit 99.1 attached hereto) is intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 7.01 Regulation FD Disclosure.

A copy of the Company's May 2024 corporate presentation is furnished as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

The information contained in this Item 7.01 (including Exhibit 99.2) is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section and shall not be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release Issued by Metagenomi, Inc. on May 14, 2024
99.2	Investor Presentation of Metagenomi, Inc. May 2024
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Metagenomi, Inc.

Date: May 14, 2024

By: /s/ Brian C. Thomas
Brian C. Thomas
Chief Executive Officer

Metagenomi

Metagenomi Presents Data at Scientific Conferences and First Quarter 2024 Financial Results

Late breaking presentation at World Federation of Hemophilia (WFH) World Congress on investigational development program in Hemophilia A; development candidate nomination anticipated in mid-year 2024; 12-month non-human primate durability data expected in 2H 2024

Presentation at American Society of Gene and Cell Therapy (ASGCT) Annual Meeting demonstrated MGX base editing systems expanded genome targetability by 5-fold compared to SpCas9 Base Editors

Presentation at ASGCT demonstrated MGX RNA-mediated integration system (RIGS) shows large gene integration of >900 base pairs in human cells

Recovered full rights to wholly-owned base editing and RIGS systems

Ended Q1 with cash, cash equivalents and available-for-sale marketable securities of $327.4 million; cash runway anticipated to support anticipated operating plans into 2027

Emeryville, CA, May 14, 2024 - Metagenomi, Inc. (Nasdaq: MGX), a precision genetic medicines company committed to developing curative therapeutics for patients using its proprietary, comprehensive metagenomics-derived gene editing toolbox, today reported financial results and business updates for the first quarter ended March 31, 2024.

“Our continued execution in the first quarter of 2024 furthers our mission to develop potentially curative genetic medicines by leveraging our extensive genome editing capabilities,” said Brian C. Thomas, Chief Executive Officer and Founder of Metagenomi. “We are excited by the reception of our presentation on our wholly-owned investigational development program in Hemophilia A at the World Federation of Hemophilia World Congress, which demonstrated Factor VIII expression in the therapeutic range in an ongoing NHP study. Furthermore, we see an opportunity to leverage our Hemophilia A program approach as a platform for additional indications requiring large gene integrations. Our updates regarding our base editing systems and RIGS at the American Society of Gene and Cell Therapy Annual Meeting exemplify our leadership in precision genome editing and complex, large genome corrections. In addition, we are thrilled to have recently regained full rights to our base editing and RIGS technology, and we plan to advance these technologies in indications with significant unmet need, such as Alpha-1 antitrypsin deficiency and Wilson’s disease, either on our own or in conjunction with potential partners.”

Anticipated Milestones in 2024:

Hemophilia A
We anticipate nominating a development candidate for our wholly-owned lead investigational development program in Hemophilia A in mid-year 2024.

We also plan to present 12-month durability data for Factor VIII expression in the ongoing non-human primate study in the second half of 2024. This data represents an important milestone in our pathway towards clinical development and creates a platform for additional large gene integrations.

We plan to demonstrate continued technology advancements at key scientific conferences throughout the remainder of 2024.

Recent Data Presentations:

WFH 2024 World Congress
Madrid, Spain, April 21 – 24, 2024

Late breaking session: Potentially Curative Gene Editing Approach for Hemophilia A
(link to presentation here)

ASGCT 2024 Annual Meeting
Baltimore, MD, May 7 – 11, 2024

Poster Title: *Novel CRISPR Effectors and Reverse Transcriptases Discovered from Metagenomics Enable Extensive Remodeling of the Human Genome*
(link to poster here)

Poster Title: *Novel and Efficient Base Editors Engineered to Comprehensively Target the Human Genome*
(link to poster here)

Corporate Updates:

On May 1, 2024, we announced that we regained full global rights to research, develop, manufacture, and commercialize our wholly-owned gene editing technologies, including base editors and RIGS, which were previously subject to exclusive rights granted to ModernaTX, Inc. In addition, we mutually agreed to terminate our collaboration on primary hyperoxaluria type 1 (PH1), and rights to develop the PH1 program, as well as all other rights granted under the collaboration, were returned as part of the termination. This announcement represents a renewed opportunity for us to advance curative genetic medicine through the translation of our broad toolbox of wholly-owned gene editing technologies, as well as a broadened ability to engage with partners in target-specific application of these technologies.

First quarter 2024 Financial Results:

Cash Position: Cash, cash equivalents, and available-for-sale marketable securities were $327.4 million as of March 31, 2024, which includes net proceeds of approximately $80.7 million from our IPO completed in February 2024.

R&D Expenses: Research and development (R&D) expenses were $31.4 million for the three months ended March 31, 2024, compared to $20.1 million for the three months ended March 31, 2023.

G&A Expenses: General and administrative (G&A) expenses were $8.8 million for the three months ended March 31, 2024, compared to $6.5 million for the three months ended March 31, 2023.

Condensed Financial Statements

Condensed Consolidated Balance Sheet Data
(Unaudited)

(in thousands)	March 31, 2024	December 31, 2023
Cash, cash equivalents and available-for-sale marketable securities	$ 327,405	$ 271,182
Total assets	$ 415,403	$ 364,842
Total liabilities	$ 139,770	$ 149,668
Redeemable convertible preferred stock	$ —	$ 350,758
Total stockholders' equity (deficit)	$ 275,633	$ (135,584)
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	$ 415,403	$ 364,842

Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended March 31,	
(In thousands, except share and per share data)	2024	2023
Collaboration revenue	$ 11,159	$ 8,657
Operating expenses:		
Research and development	31,439	20,130
General and administrative	8,752	6,465
Total operating expenses	40,191	26,595
Loss from operations	(29,032)	(17,938)
Other income (expense):		
Interest income	3,934	4,003
Other expense, net	(50)	(1)
Total other income, net	3,884	4,002
Net loss before provision for income taxes	(25,148)	(13,936)
Provision for income taxes	—	(2,197)
Net loss	$ (25,148)	$ (16,133)
Net loss per share attributable to common stockholders, basic and diluted	$ (1.19)	$ (4.74)
Weighted average common shares outstanding, basic and diluted	21,137,868	3,404,585

About Metagenomi

Metagenomi is a precision genetic medicines company committed to developing curative therapeutics for patients using its proprietary, comprehensive metagenomics-derived toolbox. Metagenomi is harnessing the power of metagenomics, the study of genetic material recovered from the natural environment, to unlock four billion years of microbial evolution to discover and develop a suite of novel editing tools capable of correcting any type of genetic mutation found anywhere in the genome. Its comprehensive genome editing toolbox includes programmable nucleases, base editors, and RNA and DNA-mediated integration systems (including prime editing systems and clustered regularly interspaced short palindromic repeat associated transposases). Metagenomi believes its diverse and modular toolbox positions the company to access the entire genome and select the optimal tool to unlock the full potential of genome editing for patients. For more information, please visit https://metagenomi.co.

Cautionary Note Regarding Forward-Looking Statements

This press release contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. Such statements, which are often indicated by terms such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “goal,” “intend,” “look forward to,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” and similar expressions, include, but are not limited to, any statements relating to our growth strategy and product development programs, including the timing for nominating a developmental candidate and presentation of feasibility data, statements concerning the potential of therapies and product candidates, statements related to our cash runway, and any other statements that are not historical facts. Forward looking statements are based on management’s current expectations and are subject to risks and uncertainties that could negatively affect our business, operating results, financial condition, and stock value. Factors that could cause actual results to differ materially from those currently anticipated include: risks relating to our growth strategy; our ability to obtain, perform under, and maintain financing and strategic agreements and relationships; risks relating to the results of research and development activities; risks relating to the timing of starting and completing clinical trials; uncertainties relating to preclinical and clinical testing; our dependence on third party suppliers; our ability to attract, integrate and retain key personnel; the early stage of products under development; our need for substantial additional funds; government regulation; patent and intellectual property matters; competition; as well as other risks described in “Risk Factors,” in our most recent Form 10-K and our most recent Form 10-Q on file with the Securities and Exchange Commission (the SEC), as well as subsequent filings we make with the SEC. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based, except as required by law, and we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

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Exhibit 99.2

Metagenomi

Unlocking 4 Billion Years of Microbial Evolution to Create Curative Genetic Medicines

Nasdaq listed (MGX)

Non-Confidential Investor Overview

Q2 2024

Forward Looking Statements

This presentation includes forward-looking statements, including forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts contained in this presentation are forward looking statements, including statements regarding our cash runway, strategy and plans, industry environment, potential growth opportunities, and the therapeutic potential of our programs. The words "believe," "may," "will," "estimate," "continue," "anticipate," " design," "expect," "could," "plan," "potential," "predict," "seek," "should," "would," or the negative version of these words and similar expressions are intended to identify forward-looking statements.
We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short and long term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including but not limited to, our ability to develop and advance our programs and product candidates, our ability to maintain and establish collaborations or strategic partnerships, our regulatory approvals and filings, and other risks, uncertainties and assumptions identified in our filings with the Securities and Exchange Commission (the "SEC"), including our Form 10-K filed with the SEC on March 27, 2024, our most recently filed Form 10-Q filed with the SEC, and any subsequent filings with the SEC.

Moreover, we operate in a very competitive and rapidly changing environment and it is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking statements and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations, unless required by law.

This presentation contains estimates and other information concerning our industry, our business and the markets for our products Information that is based on estimates, market research or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. These sources include government and industry sources. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable. Although we believe the industry and market data to be reliable as of the date of this presentation, this information could prove to be inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. While we believe our internal company estimates and research as to such matters is reliable and the market definitions are appropriate, neither such research nor these definitions have been verified by any independent source and no reliance should be placed on should be made on any information or statements made in this presentation relating to or based on such internal estimates and research.

Building the leading genetics medicine company

Anticipated 2024 Milestones

Lead wholly-owned program in **Hemophilia A:**

- **DC nomination** by mid-2024
- **12-month NHP durability data** in 2H 2024

Additional DC in late 2024

Continued technology advancements including RIGS & CAST

Anticipated Milestones by 2026

2 IND filings

At least **2 additional DCs**

In vivo proof of concept for **large gene integrations**

Additional BD

DC = development candidate
NHP = nonhuman primate

RIGS = RNA-mediated integration systems
CAST = CRISPR-associated transposases

IND = Investigational New Drug application
BD = business development

A highly differentiated genetic medicines platform

Genome Editing Toolbox

- High efficiency & precision
- Leader in large gene integrations
- Small systems for flexible delivery

Broad Pipeline

- Key NHP PoC
- Durable editing in disease model
- Saturating in vivo editing

Key Value Drivers

- Cash runway for 2 anticipated IND filings
- Anticipated 2 additional DC nominations by 2026
- PoC for large gene integrations

Translation Engine

- High speed translation
- High-throughput automation
- GMP manufacturing

Wholly-Owned IP

- Diverse enzymes with novel IP & unique characteristics
- Proprietary library

Enabling Partnerships

- Continued BD opportunities
- Technology access
- Development/commercial expertise

PoC = Proof of Concept

Metagenomics powers our discovery platform

Proprietary sampling

- Diverse climates & geographies
- Uncovering previously unknown organisms

AI-enabled, High-throughput screening

- AI-based cloud computing
- Proprietary algorithms
- Robotics & automation

Metagenomi Library

- Highly active & precise editing systems
- Modular engineering

>2.5 million
Nucleases

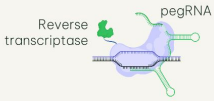
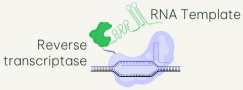
>3 million
Deaminases for
Base Editing

>5 million Reverse Transcriptases for
Prime Editing

>1,000 CRISPR Associated Transcriptases or
CASTs

~20,000 systems
are covered by our patents and patent applications

Metagenomi toolbox designed for any desired gene correction

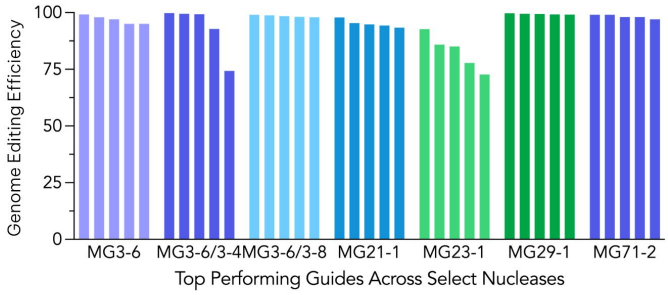
	MG Tool	Editing Approach	Tool Composition	Description
Small Edits	Programmable Nucleases, including ultra-small systems (SMART) (Knockdown, exon skipping)			• Knock out a disease-causing gene • Build on therapeutic value of antisense and siRNA therapeutics *Example: Transthyretin amyloidosis*
	Base Editors, including ultra-small systems (SMART) (Single nucleotide changes)			• Single nucleotide change to address diseases involving a point mutation *Example: Alpha-1-antitrypsin deficiency*
	Little RIGS (prime editing) (1-100 base pair replacement, insertion, or deletion)			• Small corrections, insertions, and deletions to address genetic diseases *Example: Phenylketonuria*
Large Integrations	Programmable Nuclease (Knock-in)			• Insert DNA into a safe harbor location *Example: Hemophilia A*
	Big RIGS (>100 base pair integrations)			• Gene integration using an all RNA based system - easy to deliver *Example: Wilson's disease*
	CAST (>10,000 base pair integrations)			• Site-specific integration of potentially very large pieces of DNA *Example: Duchenne muscular dystrophy, Cystic fibrosis*

MG= Metagenomi ABE= Adenine Base Editor CBE= Cytosine Base Editor SMART= Small Arginine-rich systems
RIGS= RNA-mediated integration system CAST= CRISPR-associated transposases

Highly efficient nucleases designed for any target in the human genome

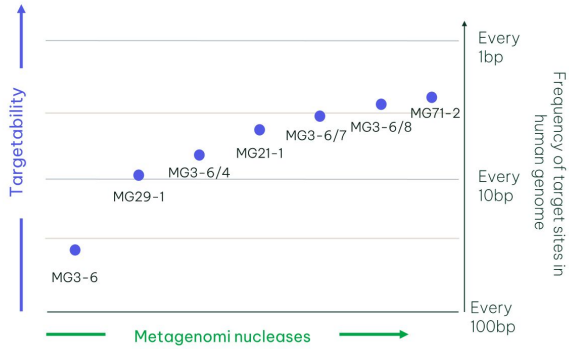
- **Efficiency:** MG nucleases are selected for their native high efficiency against controls
- **Precision:** MG nuclease library expands targeting options within genes of interest, potentially increasing precision
- **Broad targetability:** MG nucleases have the estimated potential to target every codon in the human genome

High editing efficiency in mammalian cells



* Editing efficiency was determined based on the frequency of InDels detected by next generation sequencing ("NGS") at genomic sites targeted by each nuclease.

Addressing **any codon in the human genome**



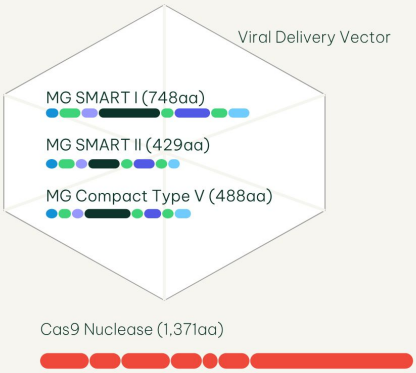
* Targetability is the average distance between nuclease target sites in the human genome.

Ultra small (SMART) systems expand in vivo delivery

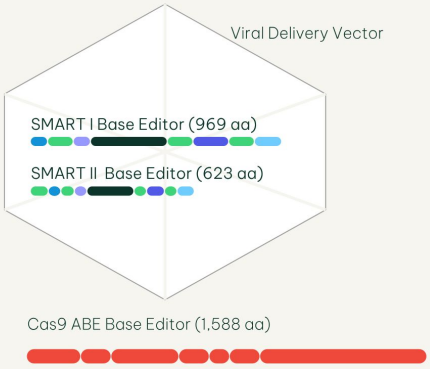
→ Our **SMART systems are ultra small** CRISPR nucleases and base editors that create potential advantages for safety, delivery, manufacturing and dosing

Published in *Nature Communications*, December 2022*

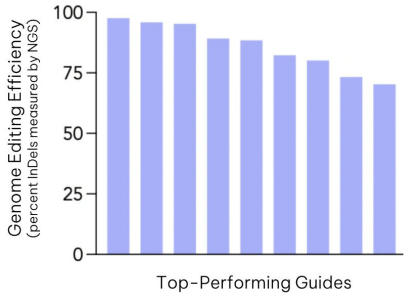
Size of Ultra small nucleases vs Cas9 Nuclease



Size of Small SMART base editors vs Cas9 ABE



High editing efficiency in mammalian cells, prior to optimization, with compact type V nuclease

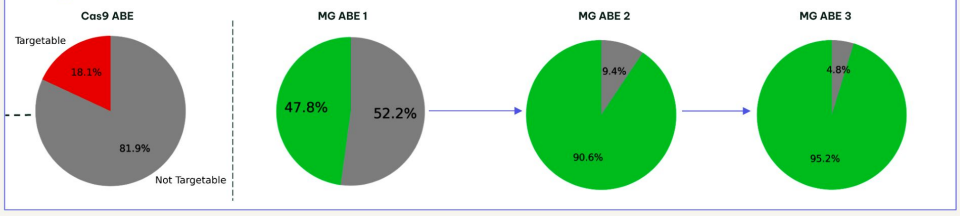


InDels are measured by NGS and Each bar represents a distinct guide
Source: Goltsman *et al* 2022 *Nature Communications*

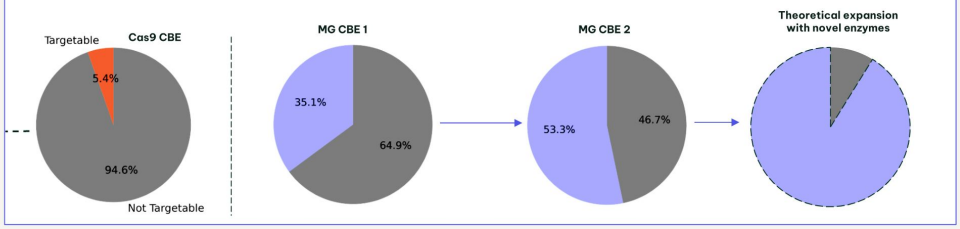
MGX Base Editors greatly expand genome targetability

- MGX base editors **increased the genome targetability by 5x** compared to SpCas9 base editors
- MGX base editors have broadened the targetability of base editors **without losing efficiency or specificity**
- Achieved by **swapping the PAM interacting domains** of highly active Type II enzymes

MG Toolbox of ABE have near complete coverage due to their wide targeting window and broad PAM preference



MG3-6 CBEs are broadly targetable, aided by the relaxed specificity of engineered deaminases

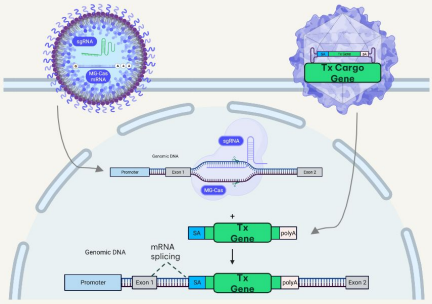


Source: Butterfield C. et al, *Novel and efficient base editors engineered to comprehensively target the human genome*; Poster presentation at ASGCT 2024

Multiple options for large, targeted genome integrations

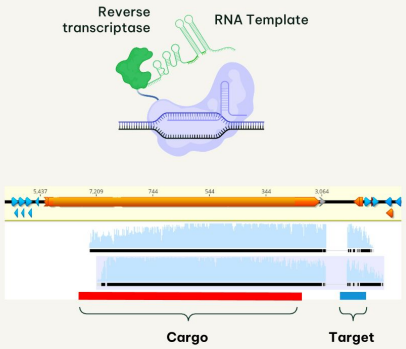
Knock-In via Nuclease:
Dual vector system

- ***Platform has achieved NHP PoC in Hemophilia A program***



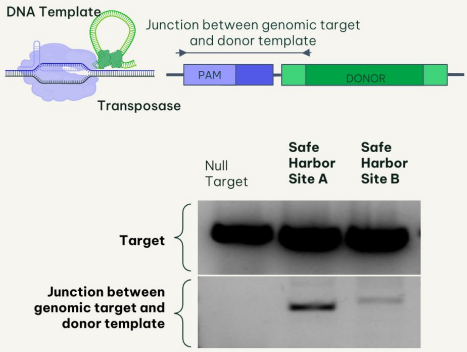
Big RIGS:
RNA-Mediated Integration Systems

- ***First-ever report of targeted integration of >900 bp with all-RNA delivery***

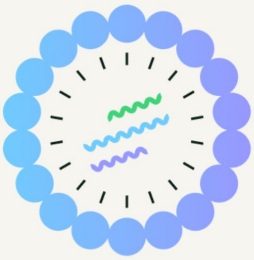


CAST:
DNA-Mediated Integration Systems

- ***We believe we are the first to demonstrate large targeted genome integration using compact CAST in human cells***

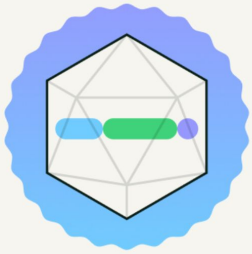


Flexibility in delivery expands targetable organs and disease areas



Non-Viral Delivery Vector

- MGX Toolbox designed to have **broad compatibility with viral and nonviral delivery technologies**
- Accomplished by **a variety of nuclease and gRNA structures**, which range in terms of their size and biochemistry
- Small guides for some type V Cas systems **streamline manufacturing** for delivery by lipid nanoparticle (LNP) approaches

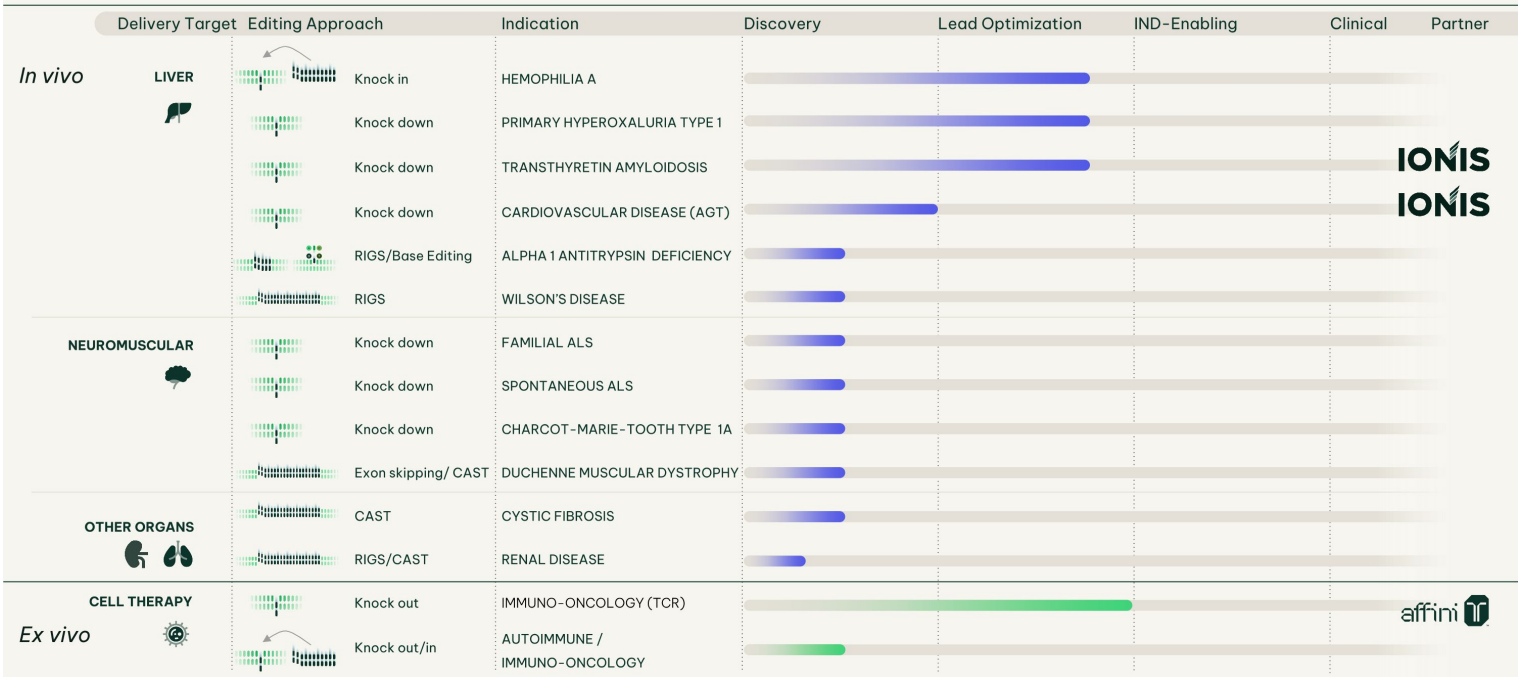


Viral Delivery Vector

- Our **SMART systems are small** enough to fit within the packaging limitations of adeno-associated viruses (AAV)
- We believe these features will facilitate delivery of our genome editing tools to **previously inaccessible tissue types and organ systems**

The ability to edit anywhere in the human genome, with high precision, tailored for each therapeutic indication

Therapeutic translation



Hemophilia A: A life-altering bleeding disease with possibility of cure through genome editing

Genome editing offers the potential for a lifelong cure for hemophilia A morbidity and mortality

- Estimated prevalence of nearly 30,000 hemophilia A patients in US*

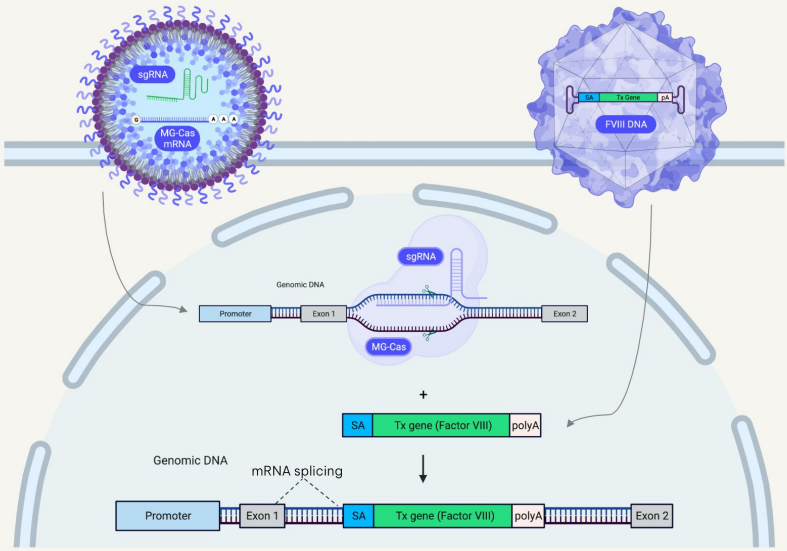
Genome editing approach

- MG nuclease creates highly efficient cut at safe harbor locus in albumin gene
- Factor VIII donor DNA is inserted at cut site
- Strength of albumin promoter provides high level of Factor VIII expression even at low integration rates

*Source: https://www.bleeding.org/bleeding-disorders-a-z/types/hemophilia-a

LNP delivers nuclease mRNA and guide targeting albumin site

AAV delivers Factor VIII gene (donor DNA)



A potentially curative gene editing approach for Hemophilia A

Expression at therapeutic levels in all 3 animals

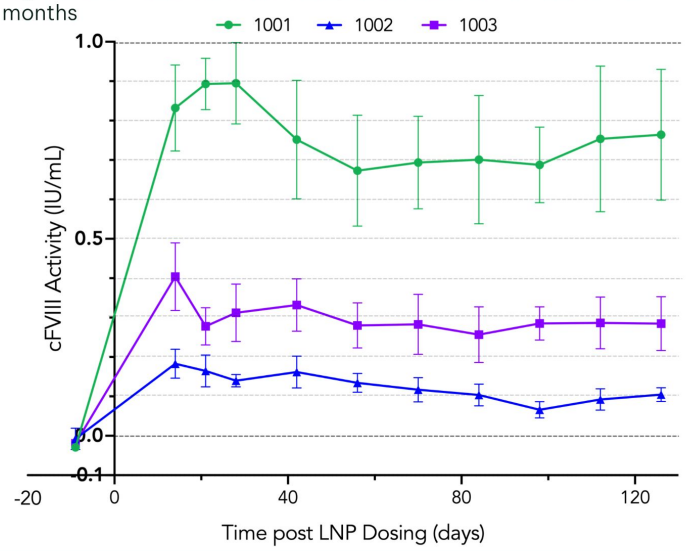
- Durable FVIII activity demonstrated out to 4.5 months
- DC nomination planned for mid 2024
- 12 month FVIII durability data to be presentedin 2H 2024

Table 1: Mean FVIII activity between 13-75% of normal is within the target therapeutic range of 10-150%

Animal ID	INDELS in liver (d7)	FVIII gene integration frequency # (copies per 100 genomes)	Mean FVIII activity % of normal (d14 to d126)
1001	45%	2.9%	75% +/- 9
1002	50%	0.7%	13% +/- 4
1003	55%	1.4%	29% +/- 5

INDELS and integration frequency measured in liver biopsy at day 7
Data-cut off at 4.5 months, study remains ongoing

Fig 1: All 3 animals maintain therapeutic levels of FVIII out to 4.5 months



Established platform for large gene integrations

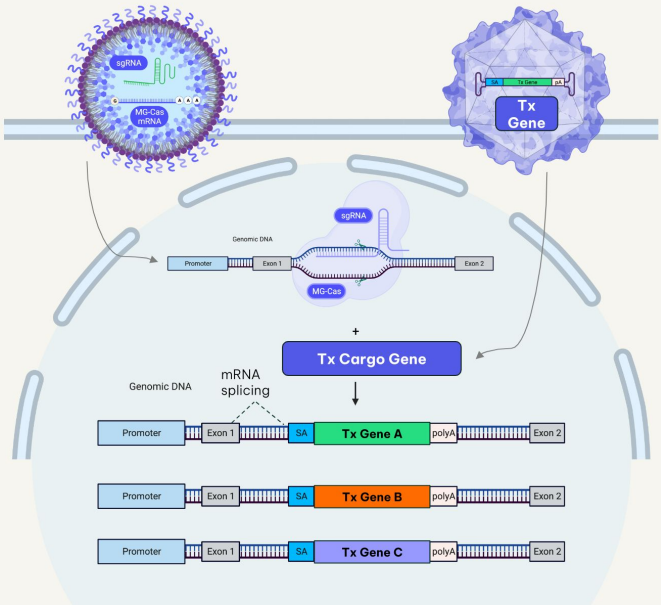
Leveraging Heme A experience to deliver and integrate a variety of target genes

- MG nuclease creates highly efficient cut at safe harbor locus
- The LNP component stays fixed and serves as a platform

→ **New programs can move quickly by simply substituting the donor DNA cargo within existing AAV**

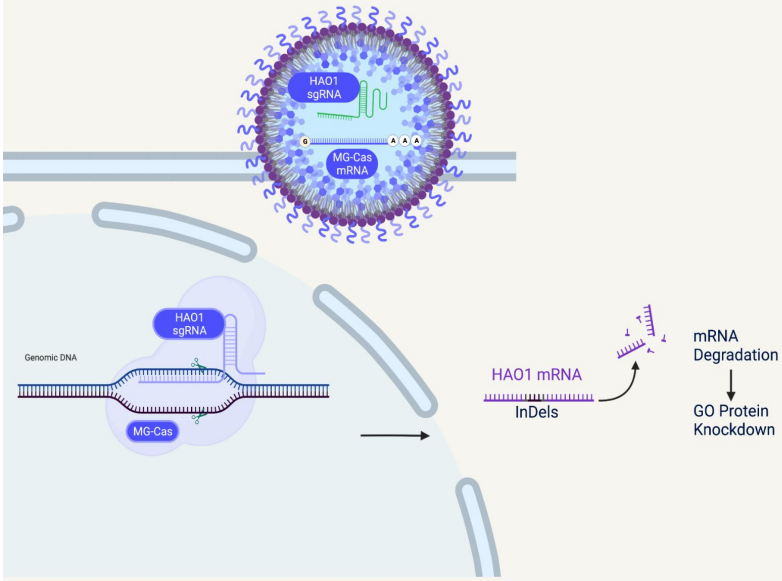
LNP delivers nuclease mRNA and guide targeting safe harbor locus

AAV delivers donor DNA template



Primary Hyperoxaluria, Type 1 (PH1)—a durable knockdown of HAO1 for substrate reduction therapy

Genome Editing Strategy for Targeting HAO1:



Goal: durably knock down HAO1 resulting in stable and permanent reduction of oxalate levels to effect a lifelong benefit

- PH1 is a serious disease that causes kidney failure
- PH1 is the most common of the primary hyperoxalurias with ~1,000-3,000 patients in both the US and Europe*

Genome Editing Strategy:

- Inactivate the HAO1 gene with a nuclease delivered via LNP
- Limits accumulation of oxalate by inhibiting the generation of its substrate
- Chronic inhibition of HAO1 via siRNA has been well tolerated in humans

*GO = glycolate oxidase

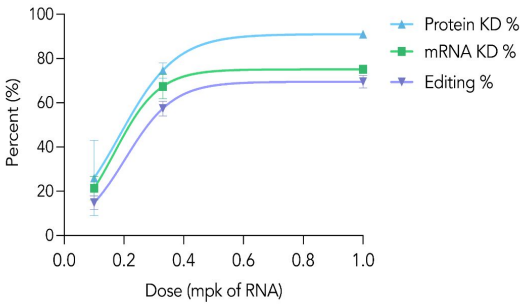
* Source: Clin Kidney J. 2022 May; Primary hyperoxaluria type 1 in developing countries: novel challenges in a new therapeutic era; Published online 2022 May 17. doi: 10.1093/ckj/sfab203

Mouse PoC shows 90% reduction of target GO protein

Demonstrated dose dependent **saturating levels of hepatocyte genome editing** of HAO1 in normal mice

- ➔ Up to 90% reduction of target GO protein
- ➔ Reduction of mRNA and protein > DNA editing because target gene is only expressed in hepatocytes
- ➔ Strong preclinical PoC

Dose Dependent Editing, mRNA Knockdown and Protein Knockdown of HAO1 in Normal Mice after a Single Administration of the Lead Nuclease mRNA and Lead Guide Encapsulated in a LNP with Tropism to the Liver



~70% editing in whole liver = ~100% editing in hepatocytes

Accelerating therapeutic translation

Liver Targets

Knock-in & knock-down:

- Hemophilia A
- Primary Hyperoxaluria Type I
- Transthyretin Amyloidosis IONIS
- Cardiovascular Indications (AGT) IONIS

Gene corrections & integrations:

- A1AT Deficiency
- Wilson's Disease

Neuromuscular + CNS Targets

Ultra small systems for Knock down/Exon skipping:

- Familial ALS
- Spontaneous ALS
- Charcot Marie-Tooth Type 1a
- Duchenne Muscular Dystrophy

Other Organs

Gene corrections & integrations:

- Cystic fibrosis
- Renal targets
- Cell therapy

Modular Genome Editing Platform

Early investment in automation & manufacturing

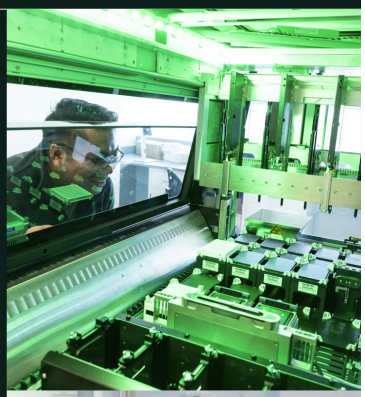
We aim to develop and characterize complex human gene editing components that are essential to pursue a successful regulatory pathway for genetic medicine development by investing in:

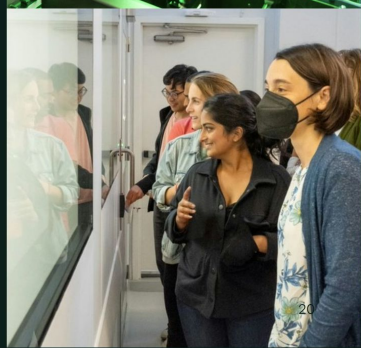
1. Integrated computational & high-throughput automated workstreams

2. Comprehensive characterization with state of the art assays

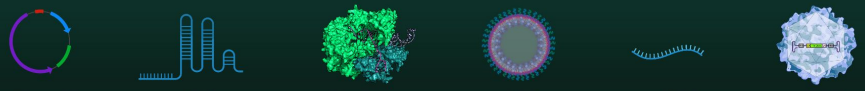
3. Optimizing genome editing components and delivery technology

4. CMC development and GMP manufacturing capabilities





Genome Editing Components



Leadership team

Brian Thomas, PhD
CEO & Founder

Prior to co-founding the company, Dr. Thomas spent more than 20 years in academic research helping to pioneer the field of metagenomics. Dr. Thomas has been cited over 16,000 times and listed as an inventor in 28 patent families.

Jian Irish, PhD, MBA
President & COO

Held biopharma executive leadership roles for nearly 20 years in drug development and global operations, and has helped launch several breakthrough medicines.

Sarah Noonberg, MD, PhD
CMO

Spent more than 20 years in translational and clinical development leadership roles with a track record of advancing therapeutic programs from discovery to commercialization.

Luis Borges, PhD
CSO

Spent over 27 years in the biotechnology industry in leadership roles overseeing the research and development of multiple therapeutic candidates including cell therapies.

Pamela Wapnick, MBA
CFO

Spent over 20 years in diversified financial leadership positions, spanning strategic and operational finance roles at public and private companies including life sciences and biotechnology companies.

Simon Harnest, MSc
CIO & SVP of Investor Relations

Held leadership roles in corporate finance and strategy in the life sciences sector, having raised over $1bn in public and private capital, including leading IPO and spin-out.

Alan Brooks, PhD
SVP of Preclinical

Worked on genetic medicines providing scientific leadership in translational research for more than 25 years. Dr. Brooks' research has led to 20 publications and numerous patent filings.

Chris Brown, PhD
VP of Discovery

Former scientist at the Jill Banfield lab and an expert in using metagenomics to discover novel microbial systems for use in genome editing. Dr. Brown's research has resulted in over 35 publications and over 20 patent family filings.

Join us on our journey to transform patients' lives

Strong Cash Position

- $327.4 million as of March 31, 2024
- Cash runway into 2027

Partners

IONIS affini

Anticipated 2024 Milestones

Lead wholly-owned program in **Hemophilia A**:

- **DC nomination** by mid-2024
- **12-month NHP durability data** in 2H 2024

Additional DC in late 2024

Continued technology advancements including RIGS & CAST

Anticipated Milestones by 2026

2 IND filings

At least **2 additional DCs**

In vivo proof of concept for **large gene integrations**

Additional BD

Metagenomi

Thank you

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