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): January 30, 2023

MATINAS BIOPHARMA HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-38022**	**46-3011414**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer ID Number)**

1545 Route 206 South, Suite 302 **Bedminster, New Jersey** **(Address of principal executive offices)**	**07921** **(Zip Code)**

Registrant's telephone number, including area code: (908) 484-8805

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 (see General Instruction A.2. below):

□ 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	Name of Each Exchange on Which Registered
Common Stock	MTNB	NYSE American

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

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 7.01 Regulation FD Disclosure.

Matinas BioPharma Holdings, Inc. (the "Company") issued a press release providing a business update on each of its ongoing programs and discussing its strategic outlook for 2023. A copy of the press release is furnished as Exhibit 99. 1 hereto and incorporated herein by reference.

The Company also prepared an update presentation (the "Update Presentation"), which it intends to use for today's scheduled conference call and for future investor meetings. The Update Presentation is attached hereto as Exhibit 99.2 and incorporated herein by reference.

The information in this Item 7.01, including Exhibits 99.1 and 99.2 attached hereto, 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 such information be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 8.01. Other Events.

On January 30, 2023, the Company announced, among other things, that:

LNC Platform Internal Data Generated

- Developed multiple flow cytometry and florescence cell-based assays with compelling validations of intracellular uptake and gene expression with our LNC formulations.
- Successful delivery of multiple larger nucleic acids coded with reporter genes across multiple cell lines (HeLa, HEK293, A375, etc.).
- Multiple oligonucleotide formulations that have demonstrated strong gene expression potency at nanogram per well dosage level, comparable to industry standard Lipofectamine.
- Internal mRNA formulations that have shown excellent stability and remain biologically active over 10 weeks at 4^{o} C storage conditions.
- Multiple formulations have shown little to no cytotoxicity during in vitro cell viability evaluations supporting an anticipated favorable safety profile compared with other drug delivery technologies.

LNC Internal Pipeline Development

- Based on historical data with the LNC platform, along with recent learnings from internal work and its collaborations, the Company believes the greatest chance of success in developing our own pipeline of nucleic acid drug candidates is with smaller oligonucleotides like antisense oligonucleotides (ASOs) and small interfering or silencing RNA (siRNAs). The properties of these molecules are particularly suited for our LNC platform, and the Company believes that its technology can facilitate oral delivery and extrahepatic targeting – currently two of the greatest challenges in this developing area.
- The Company has commenced a research program focused on ASOs/siRNAs that it expects will generate *in vitro* delivery data early in the second quarter of this year, followed by multiple *in vivo* biodistribution and animal efficacy studies in the second half of 2023. If successful, the Company anticipates being in position to identify our next internal product candidate in late 2023. The Company believes success in these studies could position it to develop an entire pipeline of ASO and siRNA therapies.

MAT2203 (oral amphotericin B) Program

- In November 2022, the Biomedical Advanced Research and Development Authority (BARDA) announced an initiative seeking private sector partners developing late-stage, broad-spectrum antifungal drugs to treat high priority fungal infections, including aspergillus, mucormycosis, and certain forms of candidiasis. BARDA has solicited proposals from industry, and the Company believes MAT2203 is a strong candidate for funding based upon its oral, well-tolerated and broad-spectrum profile, along with its recent clinical success in Phase 2 with cryptococcal meningitis. The Company is scheduled to meet with BARDA during the first quarter of 2023 and has included all associated costs for full development for MAT2203 in its proposal. The Company believes pausing the start of its Phase 3 clinical trial in cryptococcal meningitis pending the outcome of BARDA's evaluation of MAT2203 is the best possible course for this life-saving drug. In 2021, BARDA funding for vaccines stood at $36.9 billion, therapeutics at $14.1 billion, and diagnostics at $51 million.

- The Company is preparing to submit a formal Meeting Request to the U.S. Food and Drug Administration (FDA) to discuss plans for a second Phase 3 study to assess the efficacy, safety, and tolerability of MAT2203 in patients with serious, life-threatening invasive fungal infections with limited treatment options. The protocol synopsis currently includes the treatment of four invasive fungal infections: invasive aspergillosis, invasive candidiasis, chronic coccidioidomycosis (Valley Fever), and invasive Mucormycosis. The Company's strategy is to leverage the success and data from EnACT to limit the required size of this study. The Company currently plans to enroll approximately 100 patients in a single arm design with no head-to-head active comparator, which it believes should be acceptable given historical precedent and the challenges associated with the target patient population to be evaluated. The Company anticipates meeting with FDA in the second quarter of 2023 to discuss its proposed design and strategy for approval. The Company believes that FDA guidance on this Phase 3 study is critical to its BARDA proposal as well as to prospective domestic and global partners currently evaluating MAT2203, based on feedback received to date.

- The success of MAT2203 in the EnACT Phase 2 clinical trial in cryptococcal meningitis has attracted the attention of clinicians and patients without viable options for the treatment of a variety of fungal infections for which amphotericin B may be suitable, except for significant concerns relating to the toxicity of the currently available intravenous formulations of amphotericin B. Currently, there are four (4) patients who have been approved by FDA to receive MAT2203 on an emergency use basis since August of 2022, including one patient suffering from both mucor and aspergillosis. Overall, these patients have responded well to treatment with notable clinical improvements. The Company will continue to evaluate opportunities to provide MAT2203 on an emergency basis for patients as it believes these are opportunities to showcase the safety and efficacy of MAT2203 outside clinical trial settings which represent important additional patient data for both FDA and prospective partners to review.

Financial Outlook

- The Company's preliminary estimate of cash, cash equivalents and marketable securities at December 31, 2022, is approximately $28.8 million, subject to completion of the audit of the Company's consolidated financial statements for the year ended December 31, 2023, compared to $49.6 million at December 31, 2021. This amount may differ from the amount that will be reflected in the Company's audited 2022 financial statements. Additional information and disclosures are required for a more complete understanding of the Company's financial position and results of operations as of December 31, 2022. Based on current projections, the Company believes that cash on hand is sufficient to fund planned operations into the second quarter of 2024.

Forward- Looking Statements

This Current Report on Form 8-K contains certain 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 and Private Securities Litigation Reform Act, as amended, including those relating to the Company's business activities, the Company's strategy and plans, collaborations with National Resilience and BioNTech SE, the potential of its LNC platform delivery technology, and the future development of its product candidates, the Company's ability to identify and pursue development, licensing and partnership opportunities for its products or platform delivery technology on favorable terms, if at all, and the ability to obtain required regulatory approval and other statements that are predictive in nature, that depend upon or refer to future events or conditions. All statements other than statements of historical fact are statements that could be forward-looking statements. Forward-looking statements include words such as "expects," "anticipates," "intends," "plans," "could," "believes," "estimates" and similar expressions. These statements involve known and unknown risks, uncertainties and other factors which may cause actual results to be materially different from any future results expressed or implied by the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties, including, but not limited to, the Company's ability to obtain additional capital to meet its liquidity needs on acceptable terms, or at all, including the additional capital which will be necessary to complete the clinical trials of its product candidates; its ability to successfully complete research and further development and commercialization of its product candidates; the uncertainties inherent in clinical testing; the timing, cost and uncertainty of obtaining regulatory approvals; the Company's ability to protect its intellectual property; the loss of any executive officers or key personnel or consultants; competition; changes in the regulatory landscape or the imposition of regulations that affect the Company's products; and the other factors listed under "Risk Factors" in our filings with the SEC, including Forms 10-K, 10-Q and 8-K. Investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this release. Except as may be required by law, the Company does not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Matinas BioPharma's product candidates are all in a development stage and are not available for sale or use.

Item 9.01 Financial Statements and Exhibits.

Exhibit No.	Description
99.1	Press Release, dated January 30, 2023.
99.2	2023 Business Update and Strategic Outlook Presentation, January 30, 2023.
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.

MATINAS BIOPHARMA HOLDINGS, INC.

Dated: January 30, 2023

By: */s/ Jerome D. Jabbour*
Name: Jerome D. Jabbour
Title: Chief Executive Officer

Exhibit 99.1

Matinas BioPharma Provides Business Update and 2023 Strategic Outlook

2022 Success Has Increased Confidence to Focus LNC Delivery Platform on the Future of Medicine - Delivering Genes

Prioritization on Building External Partnerships and an Internal Pipeline Centered on Gene Therapies and Nucleic Acids

Collaborations with BioNTech (mRNA Partner) and National Resilience (Nucleic Acid Platform Partner) Expected to Generate Initial In Vivo Data in 1H 2023

Seeking BARDA Financial Support and FDA Feedback on Phase 3 Study in Invasive Fungal Infections of MAT2203 Prior to Commencing Phase 3 Program

Ended 2022 with Approximately $28.8 Million, Sufficient to Fund Planned Operations into Q2 2024

Conference Call and Live Audio Webcast Scheduled Today, January 30 at 4:30 p.m. ET

BEDMINSTER, NJ, Jan. 30, 2023 –Matinas BioPharma (NYSE AMER: MTNB, Matinas), a clinical-stage biopharmaceutical company focused on redefining the intracellular delivery of nucleic acids and small molecules with its lipid nanocrystal (LNC) platform technology, today is providing a business update on its ongoing programs and discussing its strategic outlook for 2023.

"In 2022 we successfully demonstrated that MAT2203, our lead asset based on our lipid nanocrystal (LNC) delivery platform, could safely and effectively deliver unprecedented survival outcomes, with an oral therapy, for patients suffering from deadly fungal infections," commented Jerome D. Jabbour, Chief Executive Officer of Matinas. "Our success with smaller molecules increased our confidence in the platform and empowered us to focus on what we believe is the real future of medicine – the ability to safely and effectively deliver therapies that affect the genetic mechanisms underlying disease. We are striving to create an internal and external pipeline of product candidates in the nucleic acid and gene therapy space that take advantage of the unique and proprietary nature of our delivery technologies. Our ongoing collaborations with BioNTech and, recently, National Resilience, have aligned Matinas with two of the world's leading companies in the gene therapy space. These collaborations were designed to accelerate the overall development of our LNC platform and maximize the value we can obtain from third parties while providing us with critical data and information necessary to establish and develop an internal pipeline of nucleic acid therapies."

Jabbour added, "During these uncertain economic times, we remain cognizant of our cash resources and have chosen to prioritize those activities which we believe will create the greatest shareholder value. Through these strategic choices, we have extended our cash runway into the second quarter of 2024, well beyond potential value-creating catalysts and near-term opportunities for non-dilutive funding from LNC partners and/or BARDA. We could not be more excited about what we are building at Matinas, and we believe that 2023 will be a great year for the Company and its shareholders."

Key Program Updates and Anticipated Upcoming Milestones

LNC Platform Internal Data Generated

- During 2022 and early 2023, the Company has generated the following key data in our strategic focus areas of nucleic acids and gene therapies:

  (a) Developed multiple flow cytometry and florescence cell-based assays with compelling validations of ***intracellular uptake and gene expression*** with our LNC formulations.

  (b) ***Successful delivery of multiple larger nucleic acids*** coded with reporter genes ***across multiple cell lines*** (HeLa, HEK293, A375, etc.).

  (c) Multiple oligonucleotide formulations that have ***demonstrated strong gene expression potency*** at nanogram per well dosage level, comparable to industry standard Lipofectamine.

  (d) Internal mRNA formulations that have ***shown excellent stability*** and ***remain biologically active over 10 weeks at 4^{o} C storage conditions***.

  (e) Multiple formulations with ***little to no cytotoxicity*** during *in vitro* cell viability evaluations supporting an anticipated favorable safety profile compared with other drug delivery technologies.

LNC Internal Pipeline Development

- Based on historical data with the LNC platform, along with recent learnings from internal work and its collaborations, the Company believes the greatest chance of early success in developing our own pipeline of nucleic acid drug candidates is with smaller oligonucleotides like antisense oligonucleotides (ASOs) and small interfering or silencing RNA (siRNAs). The properties of these molecules are particularly suited for our LNC platform, and the Company believes that its technology can facilitate oral delivery and extrahepatic targeting – currently two of the greatest challenges in this developing area.

- The Company has commenced a research program focused on ASO/siRNAs that it expects will generate *in vitro* delivery data early in the second quarter of this year, followed by multiple *in vivo* biodistribution and animal efficacy studies in the second half of 2023. If successful, the Company anticipates being in position to identify our next internal product candidate in late 2023. The Company believes success in these studies could position it to develop an entire pipeline of ASO and siRNA therapies.

LNC Platform Collaborations

- ***BioNTech*** – Signed Exclusive Research Collaboration in April 2022, including $4.25 million in funding from our partner. The parties are preparing for *in vivo* studies (biodistribution and disease) during the first quarter of 2023, with data expected in the second quarter of 2023.

- ***National Resilience*** – In January 2023, the parties entered into a Material Transfer and Evaluation Agreement focused on exploring the potential for oral delivery of identified nucleic acids. The parties are closely collaborating on a comprehensive research program comprising the design, formulation, optimization, and *in vitro* and *in vivo* testing of these nucleic acid formats in combination with Matinas' proprietary LNC platform, with initial data expected in the second and third quarters of 2023, respectively.

- ***Genentech*** – Genentech recently extended this collaboration for another year through 2023.

- ***NIAID/Gilead*** – While the series studies performed with LNC remdesivir were successful in demonstrating reduced viral lung titers, improved lung congestion scores and reduced COVID-associated weight loss, Gilead has informed Matinas that it has focused its development efforts on its internal oral nucleoside prodrug of remdesivir.

MAT2203 (oral amphotericin B) Program

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Financial Outlook

The Company's preliminary, unaudited estimate of cash, cash equivalents and marketable securities at December 31, 2022, is approximately $28.8 million, subject to completion of the audit of the Company's consolidated financial statements for the year ended December 31, 2022. This compares to $49.9 million at December 31, 2021. Based on current projections, the Company believes that cash on hand is sufficient to fund planned operations into the second quarter of 2024.

Conference Call and Webcast Details

The Company will host a live conference call and webcast to discuss this corporate update and 2023 business outlook today, Monday, January 30 at 4:30 p.m. ET. To participate in the call, please dial (877) 407-5976 or (412)-902-0031. The live webcast will be accessible on the Investors section of Matinas BioPharma's website, www.matinasbiopharma.com, and archived for 90 days.

About Matinas BioPharma

Matinas BioPharma is a biopharmaceutical company focused on improving the intracellular delivery of nucleic acids and small molecules with its lipid nanocrystal (LNC) platform technology. The Company is developing its own internal portfolio of products as well as partnering with leading pharmaceutical companies to develop novel formulations that capitalize on the unique characteristics of the LNC platform.

Preclinical and clinical data have demonstrated that this novel technology can provide solutions to many of the challenges in achieving safe and effective intracellular delivery, for both small molecules and larger, more complex molecules, such as mRNA, DNA plasmids, antisense oligonucleotides, and vaccines. The combination of a unique mechanism of action and flexibility with formulation and route of administration (including oral), positions Matinas' LNC technology to potentially become the preferred next-generation intracellular drug delivery vehicle with distinct advantages over both lipid nanoparticles and viral vectors.

For more information, please visit www.matinasbiopharma.com.

Matinas Forward-looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including those relating to our business activities, our strategy and plans, our collaborations with National Resilience and BioNTech SE, the potential of our LNC platform delivery technology, and the future development of its product candidates, the Company's ability to identify and pursue development, licensing and partnership opportunities for its products or platform delivery technology on favorable terms, if at all, and the ability to obtain required regulatory approval and other statements that are predictive in nature, that depend upon or refer to future events or conditions. All statements other than statements of historical fact are statements that could be forward-looking statements. Forward-looking statements include words such as "expects," "anticipates," "intends," "plans," "could," "believes," "estimates" and similar expressions. These statements involve known and unknown risks, uncertainties and other factors which may cause actual results to be materially different from any future results expressed or implied by the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties, including, but not limited to, our ability to obtain additional capital to meet our liquidity needs on acceptable terms, or at all, including the additional capital which will be necessary to complete the clinical trials of our product candidates; our ability to successfully complete research and further development and commercialization of our product candidates; the uncertainties inherent in clinical testing; the timing, cost and uncertainty of obtaining regulatory approvals; our ability to protect the Company's intellectual property; the loss of any executive officers or key personnel or consultants; competition; changes in the regulatory landscape or the imposition of regulations that affect the Company's products; and the other factors listed under "Risk Factors" in our filings with the SEC, including Forms 10-K, 10-Q and 8-K. Investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this release. Except as may be required by law, the Company does not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Matinas BioPharma's product candidates are all in a development stage and are not available for sale or use.

Investor and Media Contacts

Ankit Bhargava, MD
Allele Communications, LLC
815.721.4912
matinas@allelecomms.com

Source: Matinas BioPharma Holdings, Inc.

Exhibit 99.2

2023 Business Update and Strategic Outlook

January 30, 2023

Forward Looking Statements

This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including those relating to the our business activities, our strategy and plans, our collaborations with BioNTech and National Resilience, the potential for our LNC platform delivery technology, the Company's product development, clinical and regulatory timelines, market opportunity, cash flow and other statements that are predictive in nature, that depend upon or refer to future events or conditions. All statements other than statements of historical fact are statements that could be forward-looking statements. Forward-looking statements include words such as "expects," "anticipates," "intends," "plans," "could," "believes," "estimates" and similar expressions. These statements involve known and unknown risks, uncertainties and other factors which may cause actual results to be materially different from any future results expressed or implied by the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties, including, but not limited to, our ability to obtain additional capital to meet our liquidity needs on acceptable terms, or at all, including the additional capital which will be necessary to complete the clinical trials of our product candidates; our ability to successfully complete research and further development and commercialization of our product candidates; the uncertainties inherent in clinical testing; the timing, cost and uncertainty of obtaining regulatory approvals; our ability to protect the Company's intellectual property; the loss of any executive officers or key personnel or consultants; competition; changes in the regulatory landscape or the imposition of regulations that affect the Company's products; and the other factors listed under "Risk Factors" in our filings with the SEC, including Forms 10-K, 10-Q and 8-K. Investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this release. Except as may be required by law, the Company does not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Matinas BioPharma's product candidates are all in a development stage and are not available for sale or use.

Agenda

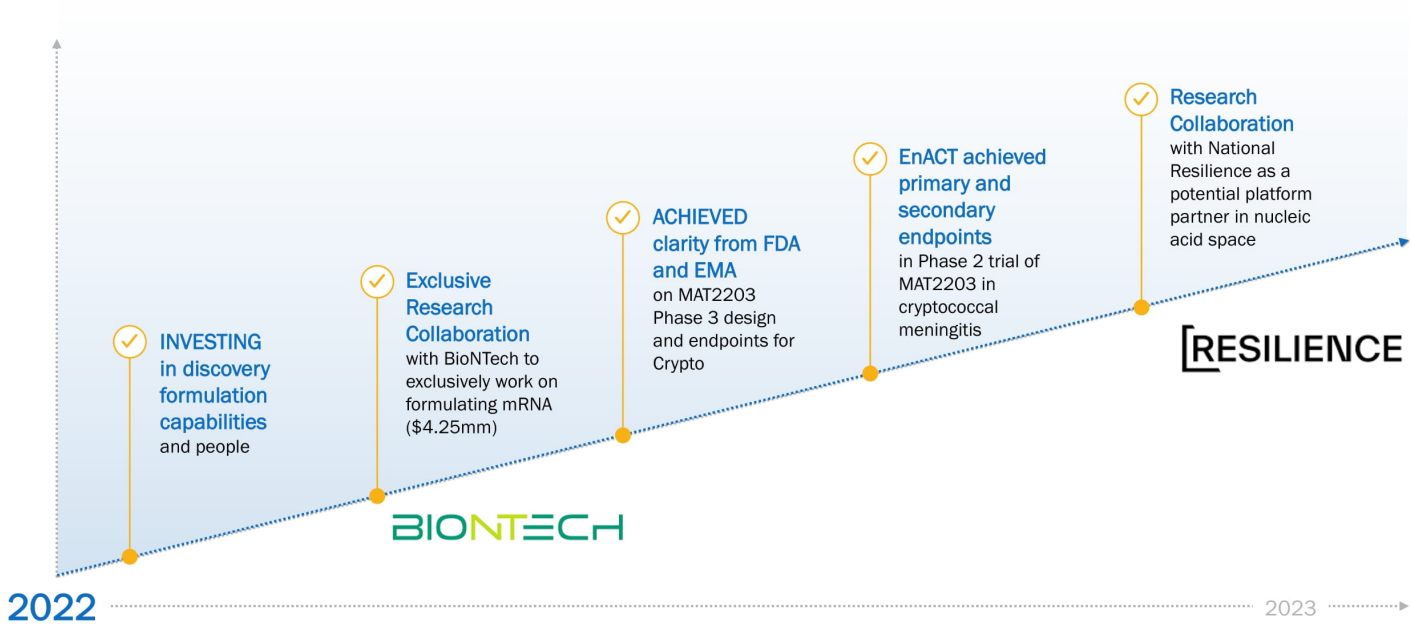
2022 In Review

LNCs and The Future of Medicine

MAT2203 Update

Matinas Investment Thesis and Upcoming Catalysts

2022 Success Increased Confidence in LNC Platform Potential



The Future of Medicine is Delivering Therapies Affecting Genetic Mechanisms

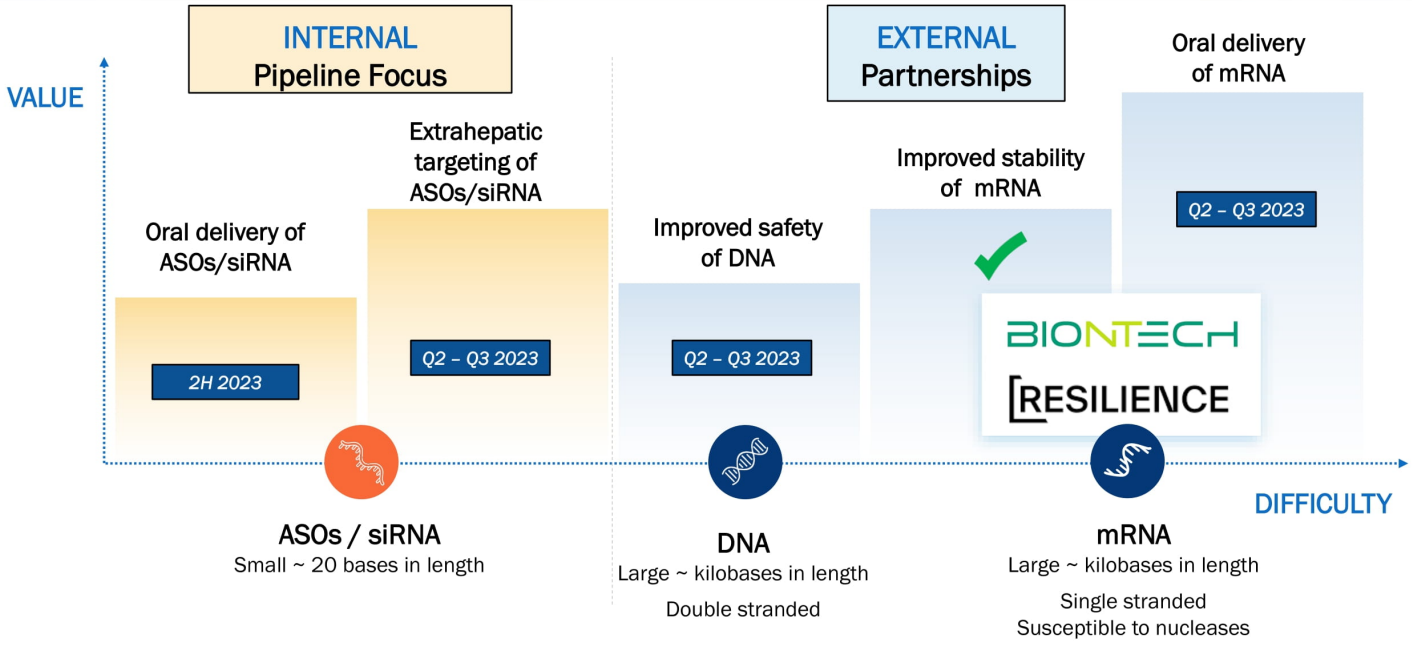
	mRNA	DNA
MODALITY CONSIDERATIONS	**Shorter term expression** without need for genome integration	**Long term expression** but concerns over genome integration
DELIVERY ISSUES	• Not orally available • Currently delivered via **LNPs** • Very susceptible to degradation • Stability issues (max 30 days at 2-8° C) • Other than vaccines, little ability to target beyond the liver	• Not orally available • Currently delivered via **AAVs** • Numerous trials have been stopped due to significant safety concerns/deaths • Immunogenicity limits initial dosing and redosing • AAVs are expensive to manufacture and difficult to manage from a regulatory perspective

Potential LNC opportunities

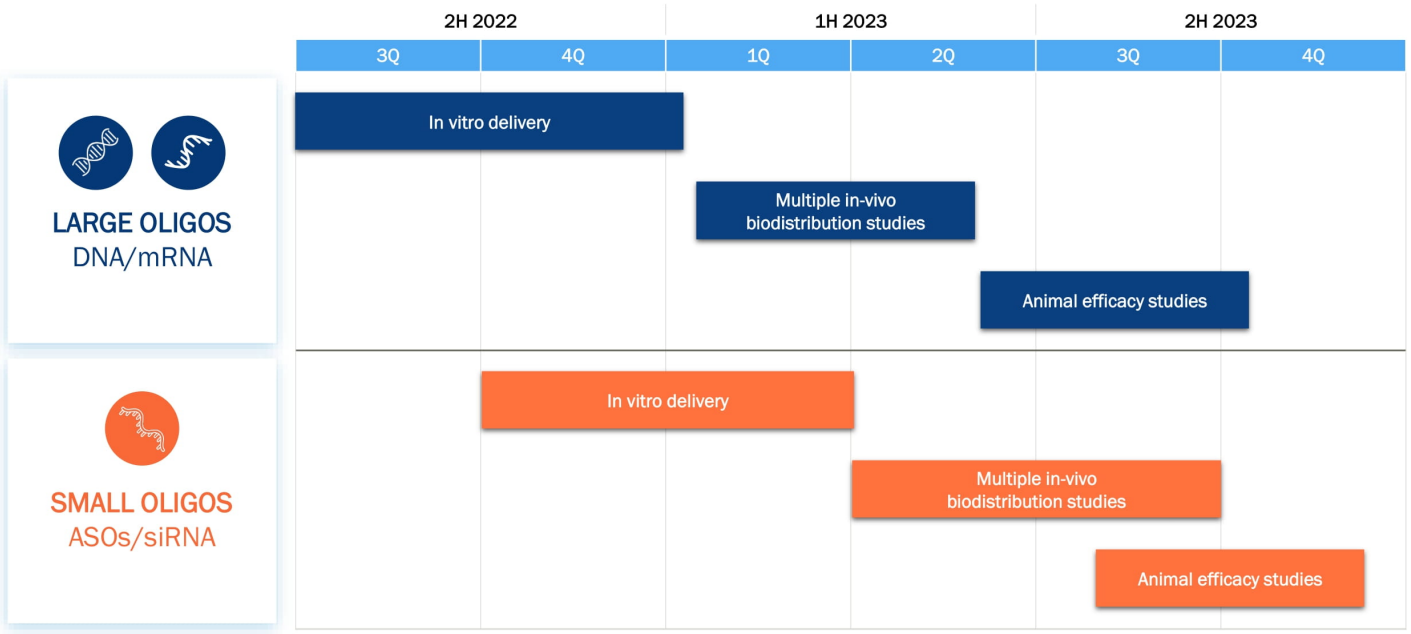
Oral delivery	Extrahepatic targeting	Improved stability	Reduced immunogenicity	Reduced cost and complexity

LNCs Provide Significant Flexibility And Can Deliver the Future of Medicine

LNCs Have the Potential to Disrupt Gene/Nucleic Acid Delivery

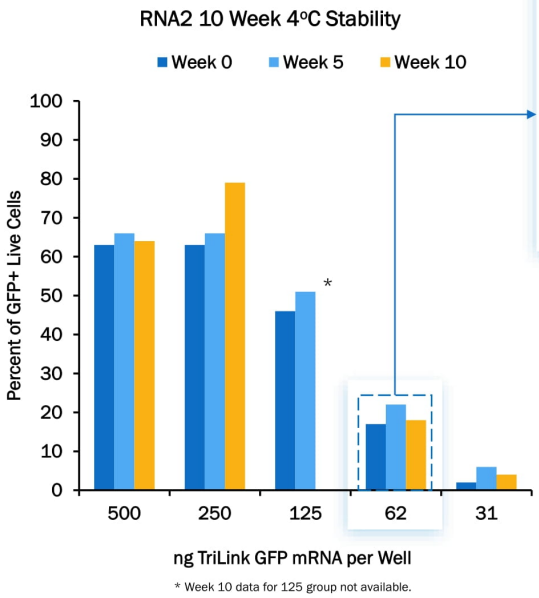


Matinas Is Driving Forward with Both Small and Large Oligo Delivery

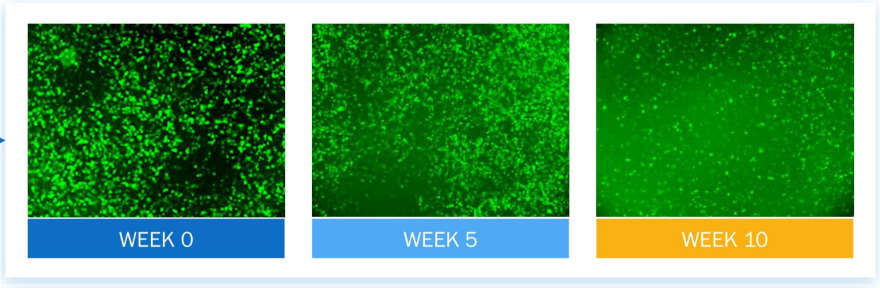


LNC-mRNA Formulations Remain Biologically Active for at least 10 weeks at 4°C

Evaluation at later time points ongoing



* Week 10 data for 125 group not available.



62ng mRNA | 18 hrs post incubation | HeLa cells

LNP mRNA COVID vaccine stability at 2-8° C

- **Moderna:** up to 30 days
- **Pfizer/BNT:** up to 5 days or 31 days (EMA)

MATINAS BIOPHARMA

Advancing MAT2203 Through Non-Dilutive Dollars

PARTNER(s)

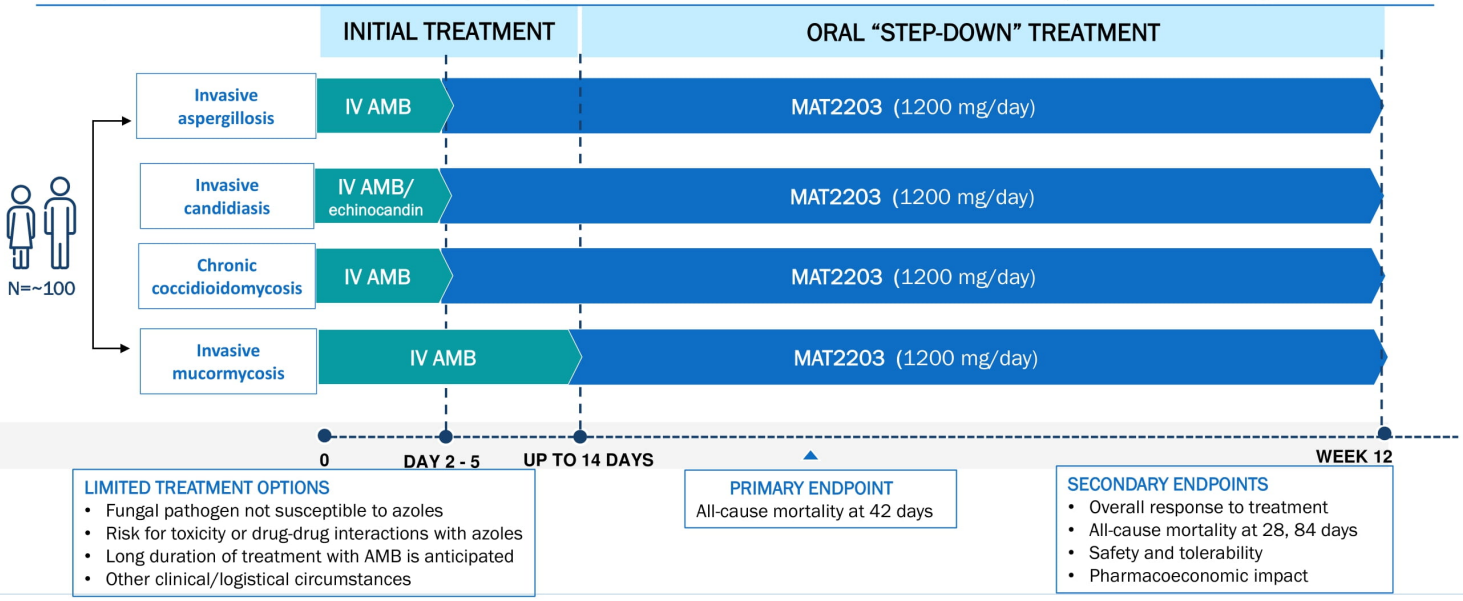
- Greatest commercial opportunity is focused on IFI pathway
- Additional focus on COGs and projected sales margins
- Phase 3 crypto data of lower interest except for regulatory advantages in streamlining IFI study
- Regulatory exclusivities remain extremely important

BARDA *New Initiative Announced November 2022*

- Seeking private sector partners developing late-stage, broad-spectrum, next-generation antifungal drugs to treat high priority fungal infections
- Correlates to WHO Priority Pathogens List
- Potential contract awards cover development, regulatory, infrastructure, NDA readiness and pre-launch activities
- MAT2203 is an **ideal** candidate for significant funding
- Meeting Scheduled with Barda/HHS Leadership Q1 2023

Phase III IFI Study – Preliminary Design

- To assess the efficacy, safety and tolerability of MAT2203 in patients with serious, life-threatening IFIs and limited treatment options
- All patients will receive oral MAT2203 as "step down" treatment after initial treatment with IV AMB (or an echinocandin)



LIMITED TREATMENT OPTIONS
- Fungal pathogen not susceptible to azoles
- Risk for toxicity or drug-drug interactions with azoles
- Long duration of treatment with AMB is anticipated
- Other clinical/logistical circumstances

PRIMARY ENDPOINT
All-cause mortality at 42 days

SECONDARY ENDPOINTS
- Overall response to treatment
- All-cause mortality at 28, 84 days
- Safety and tolerability
- Pharmacoeconomic impact

2023 Activities Position MAT2203 For Partnering and Commercial Success

2022

Strong Phase 2 EnACT cryptococcal meningitis data

2023

Important Compassionate Use Cases

De-risk indications beyond cryptococcal meningitis

Process Improvements to Reduce COGs

Improved economics & ability to access more countries

FDA feedback on Invasive Fungal Infections Phase 3 Study

Clarity on timelines and potential indication(s)

Matinas Investment Thesis

~$28.8 Million Cash at 12/31/22 – Cash Runway EXTENDS into Q2 2024

Substantial UPSIDE

LNCs Disrupting Nucleic Acid Delivery

And

Establishing Internal and External Pipelines

Solid Value "FLOOR"

created by MAT2203

2023 Milestones & Catalysts

- Q2 – *In vivo* biodistribution data with mRNA from BioNTech Collaboration
- Q2 – Potential BioNTech License Agreement & expansion of established research collaboration
- Q2 – *In vitro* Data from National Resilience Collaboration
- Q2 – *In vitro* Data from Internal ASO/siRNA program
- Q2 – FDA Meeting and Feedback on Invasive Fungal Infection Phase 3
- Q2/Q3 – Potential BARDA Grant for MAT2203 Development
- Q2/Q3 – Potential MAT2203 Domestic/Global Partnership
- Q3 – *In vivo* Data from National Resilience Collaboration
- Q3 – Animal Efficacy Study Data from Internal ASO/siRNA program
- Q2 – Q4 – Potential additional platform collaborations

Matinas BioPharma Holdings
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