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): April 30, 2014

MATINAS BIOPHARMA HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware	333-193455	**46-3011414**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer ID Number)**

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

Registrant's telephone number, including area code: (908) 443-1860

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))

Item 7.01 Regulation FD Disclosure.

Matinas BioPharma Holdings, Inc. (the "Company") intends to use a slide presentation with certain investors during a conference held on April 30, 2014. The slide presentation is attached hereto as Exhibit 99.1.

In accordance with General Instruction B.2 of Form 8-K, the information in this Current Report on Form 8-K, including Exhibits 99.1, shall not be deemed "filed" for the 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 Exchange Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such a filing.

This Current Report on Form 8-K, including exhibit 99.1, contains "forward-looking statements" made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including those relating to 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 successfully complete research and further development and commercialization of MAT9001; 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 for MAT9001; 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. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this presentation. Matinas does not undertake any obligation to release publicly any revisions to such forward-looking statement to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Matinas BioPharma's lead product candidate MAT9001 is in a development stage and is not available for sale or use.

All forward-looking statements are expressly qualified in their entirety by this cautionary notice. You are cautions not to place undue reliance on any forward-looking statements, which speak only as of the date of this Current Report on Form 8-K. We have no obligation, and expressly disclaim any obligation, to update, revise or correct any of the forward-looking statements, whether as a result of new information, future events or otherwise.

Item 9.01. Financial Statements and Exhibits

Exhibit	Description
99.1	Slide Presentation, dated April 30, 2014.

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.

Date: April 30, 2014

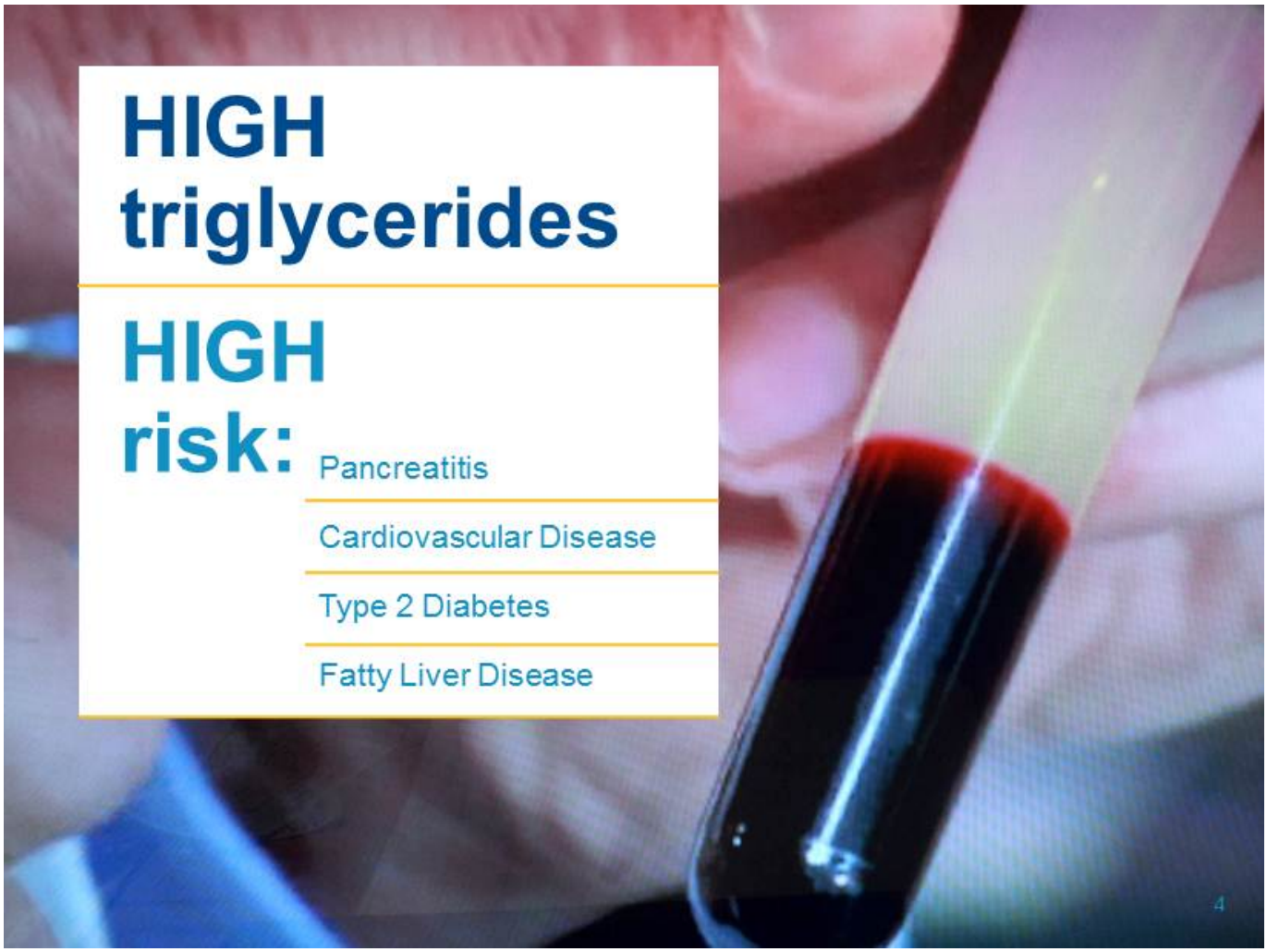
/s/ Roelof Rongen
Roelof Rongen, President and Chief Executive Officer


MATINAS
BIOPHARMA
Corporate Presentation

Forward Looking Statement

This presentation contains "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995, including those relating to 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 successfully complete research and further development and commercialization of MAT9001; 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 for MAT9001; 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. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this presentation. Matinas does not undertake any obligation to release publicly any revisions to such forward-looking statement to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Matinas BioPharma's lead product candidate MAT9001 is in a development stage and is not available for sale or use.


MATINAS
BIOPHARMA
Team out of Reliant Pharmaceuticals (Lovaza®) with strong development & commercialization track record
Unique and differentiating expertise in lipidomics and lipid chemistry
Historical lack of innovation/investment in lipid-based therapies
Initial focus on lower risk hypertriglyceridemia opportunity in a large and growing metabolic/CV disease arena

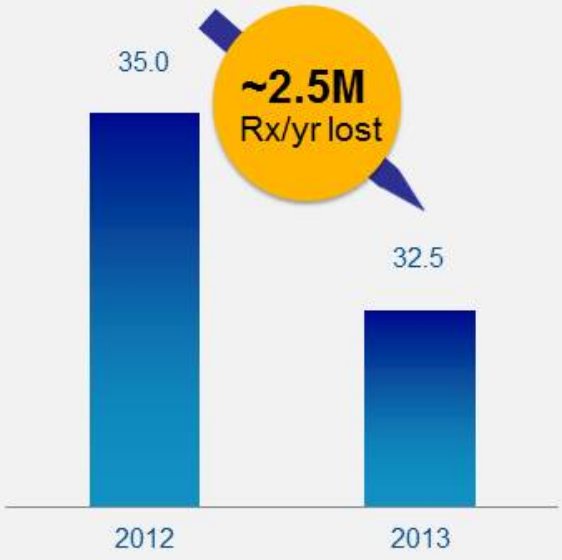

HIGH triglycerides
HIGH risk:
Pancreatitis
Cardiovascular Disease
Type 2 Diabetes
Fatty Liver Disease
4


HIGH
number of patients with high triglycerides
~65M
(TG≥150mg/dl)
~4M
(TG≥500mg/dl)

Lack of Good Prescription Options

US NON-LDL-LOWERING PRESCRIPTIONS – 2012 & 2013

Total Prescriptions TRx

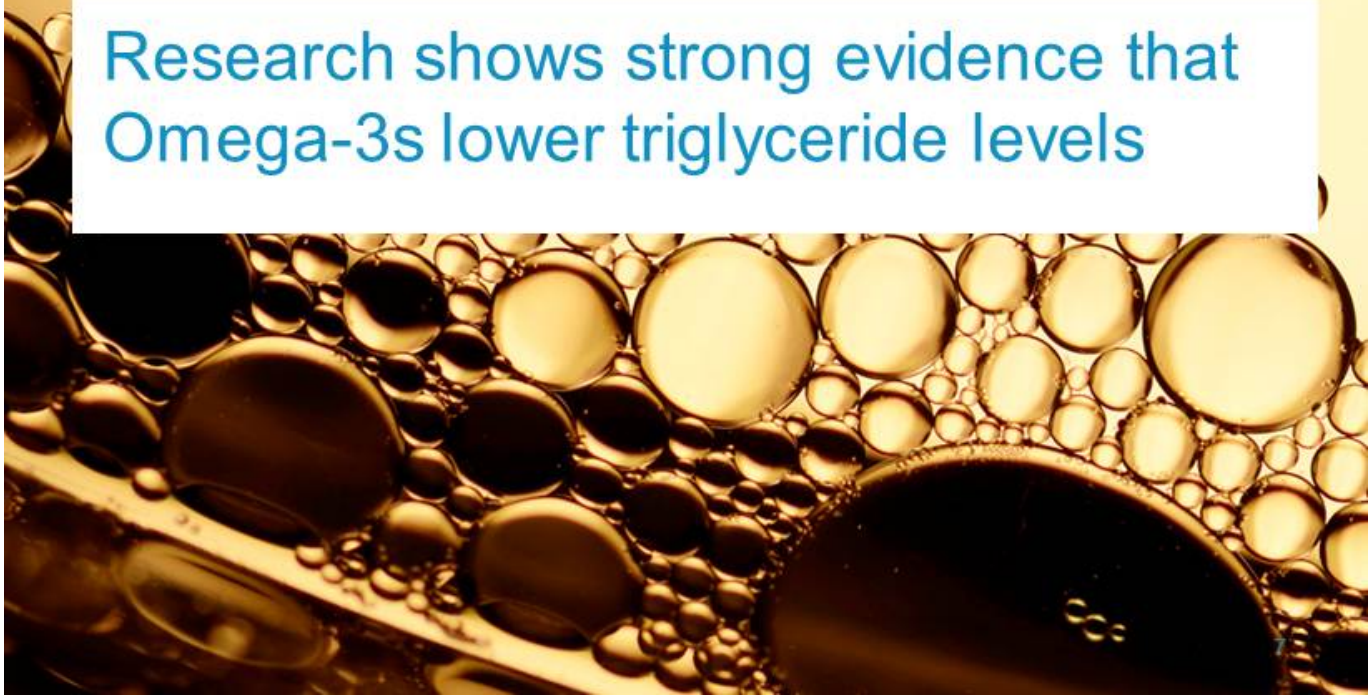


MATINAS BIOPHARMA

Source: IMS

The good news:

Research shows strong evidence that Omega-3s lower triglyceride levels



Not all Omega-3s are the same:

COMMON OMEGA-3S

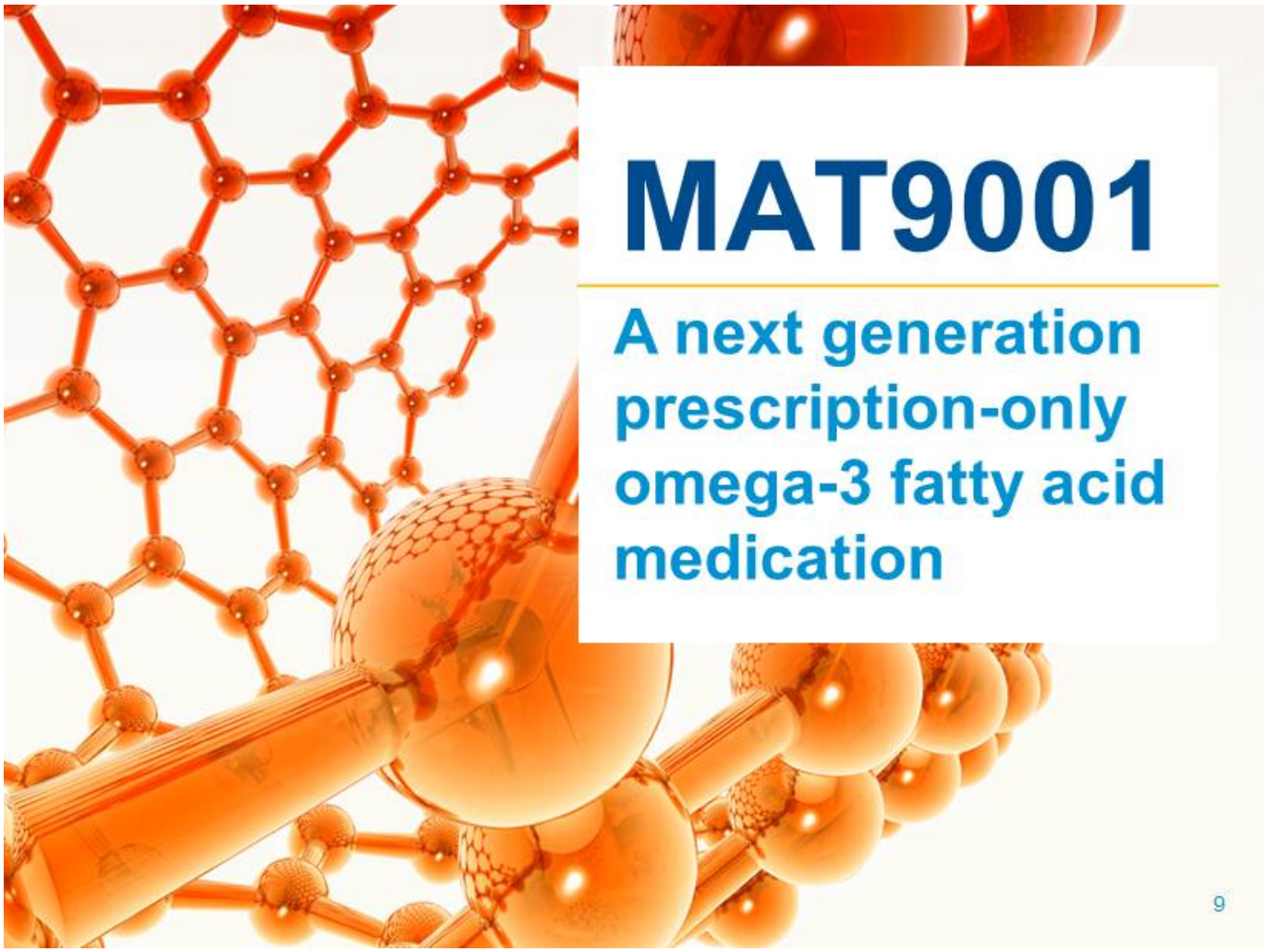
UNIQUE OMEGA-3S

Not all Rx Omega-3s are the same:

High DHA

DHA is associated with an increase in LDL cholesterol

Low DHA


MAT9001
A next generation prescription-only omega-3 fatty acid medication

MAT9001 – Unique engineered Omega-3 composition

- Severe Hypertriglyceridemia (≥500mg/dL)
- Highest potency
- Unique Mechanism of Action
- Trace amounts of DHA

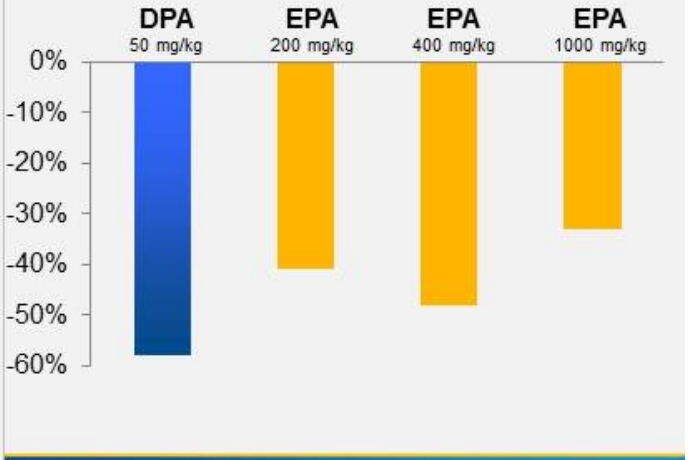
SPECIFICALLY DESIGNED TO TREAT DYSLIPIDEMIA

Quality by Design

Our targeted development activities and related clinical investigations may yield a stronger therapeutic profile compared to the currently-existing therapies.

FASTING TG REDUCTION IN "FATTY ZUCKER" RAT MODEL

Triglyceride Percent Reduction From Baseline – In Vivo



Percent reduction from baseline in "Fatty Zucker" rats after one week of dosing (n=8 per treatment group).

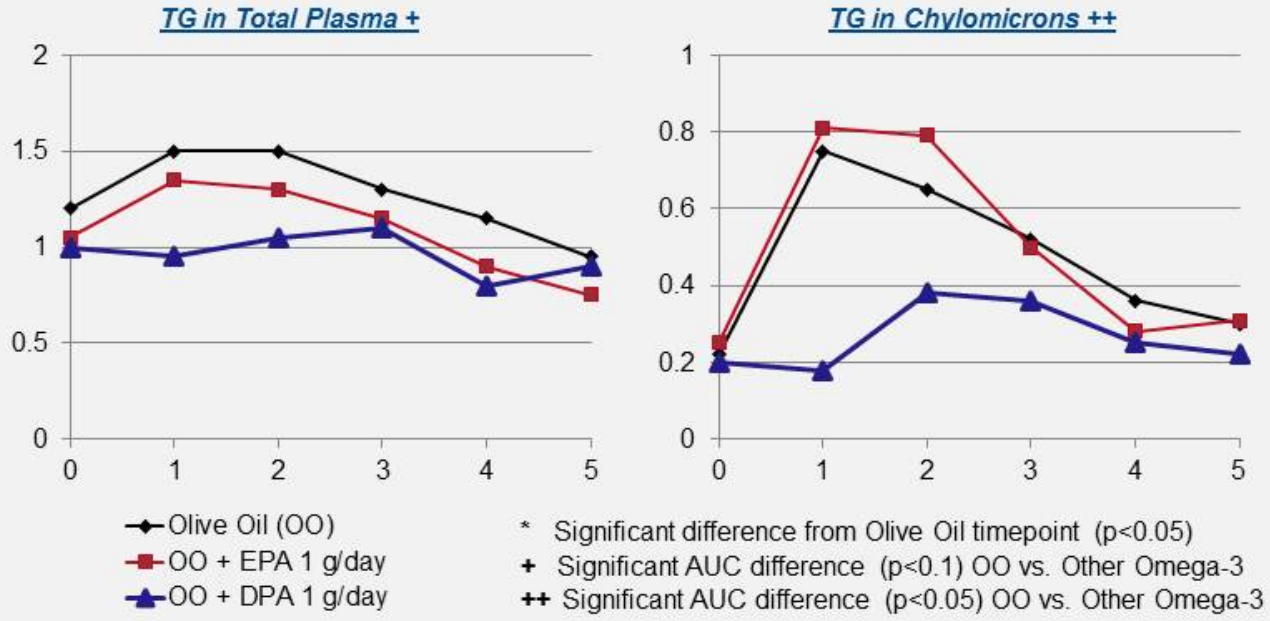
MATINAS BIOPHARMA

Source: Matinas BioPharma research, unpublished

Exploratory studies show potent effects on human triglyceride levels

DPA VERSUS EPA IN POSTPRANDIAL TG CONTROL IN HUMANS

Human Postprandial TG Levels (mmol/L) over 5 hours, after 7 days treatment (3-way cross-over, N=10)

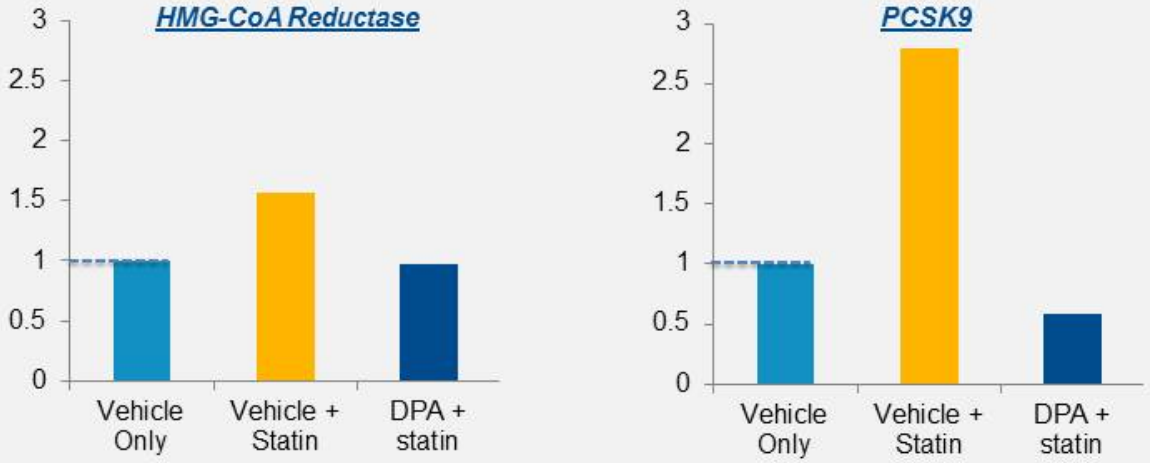


Source: Linderborg et al.; PLEFA (2013) 88, 313-319

Early data suggests synergy with statin usage

STATIN INDUCED GENE-EXPRESSION COMPENSATORY EFFECTS AND N-3 DOCOSAPENTAENOIC ACID (DPA)

Relative levels of mRNA for HMG-CoA Reductase and PCSK9 in Rat Liver – In Vivo

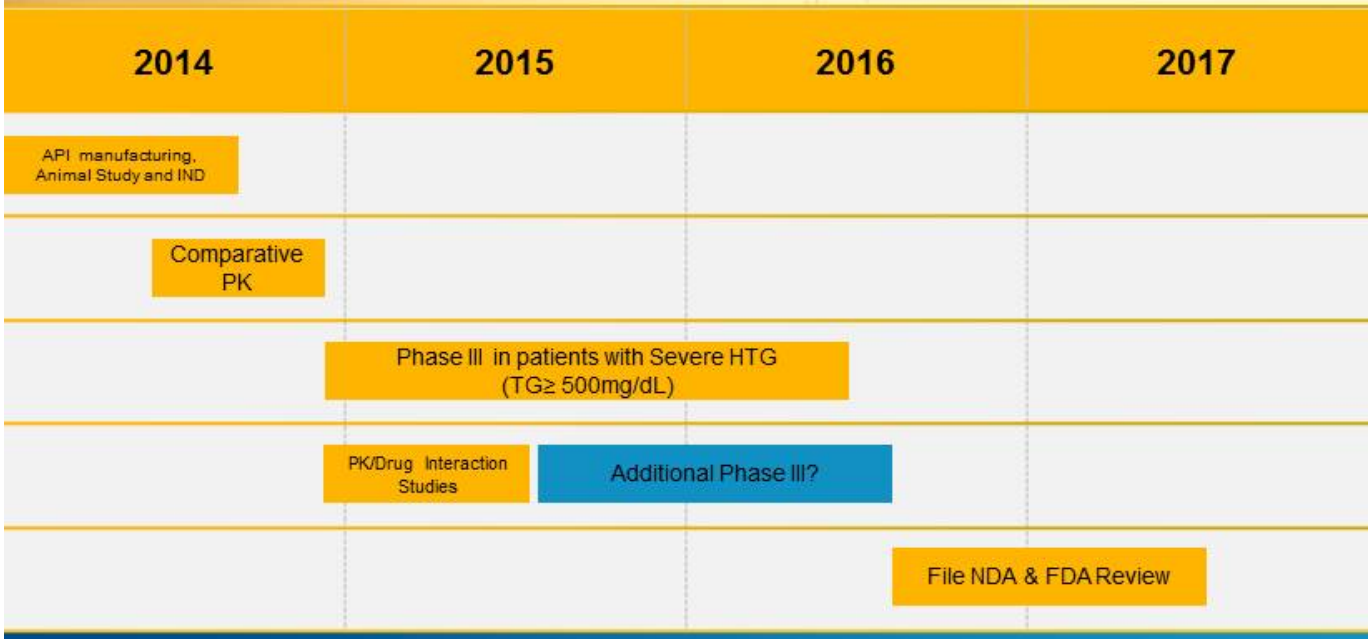


Relative mRNA expression levels in Rat liver after 4 weeks dosing (400 mg DPA/kg*day)

MATINAS BIOPHARMA

Source: Matinas BioPharma research, unpublished

MAT9001 Development Plan



SHORT TRACK TO PHASE III
Solid Safety Record with Omega-3 Products

Management by Design

Roelof Rongen
- President and CEO

George Bobotas, PhD
- Chief Scientific Officer

Abdel Fawzy, PhD
- EVP Pharmaceutical & Supply Chain Development

Gary Gaglione, CPA
- VP Finance, Acting CFO

Jerome Jabbour, JD
- Chief Business Officer & General Counsel

Reliant® PHARMACEUTICALS

LOVAZA® omega-3-acid ethyl esters

Acquired by GlaxoSmithKline for $1.65B in 2007

MATINAS BIOPHARMA

$16M raised to date

Board of Directors with Strong Pharma Experience

Herbert Conrad, Chairman

- Former President, Hoffmann LaRoche Pharmaceuticals
- Co-Founder/Director: Reliant Pharmaceuticals
- Chairman: Pharmasset, GenVec, Sapphire, Bone Care
- Director: Celldex, Reliant, Dura, Sicor, Savient

Stefano Ferrari, Director

- Murami Pharma, Bioseutica/KD-Pharma (leading manufacturer of omega-3 concentrates)
- Prospa, Societa Prodotti Antibiotici (developed first omega-3 based medication)

James Scibetta, Director

- Current CFO Pacira, Bioenvision/Genzyme, Merrimack
- Director: Labopharm, Nephros

Adam Stern, Director

- Aegis Capital Corp. / CEO, SternAegis Ventures
- Director: Organovo, InVivo Therapeutics, Prolor Biotech, LabStyle

Roelof Rongen, Director

- Reliant, Abbott/BASF Pharma, e-FAT, EPAX/Trygg Pharma, The Wilkerson Group, Arthur D. Little

We See…

AN ATTRACTIVE MARKET…	WITH A CLEAR NEED…	AND ATTRACTIVE ECONOMICS
~4 million adults with severe hypertriglyceridemia	**Lack of Satisfactory Rx Options**	**~$200/month** Lovaza/Vascepa pricing

Designed for Market Appetite

LOVAZA® omega-3-acid ethyl esters

$1.65B

Acquired by GSK from Reliant Pharmaceuticals Inc. in 2007

Omthera Pharmaceuticals

"Epanova"

$323M

Acquired by AstraZeneca in 2013 after completion of Phase III

Vascepa® (icosapent ethyl)

~$300M

Market cap

Also in our Omega-3 pipeline

MAT8800

– Proprietary Omega-3 Discovery Program

Treating Fatty Liver Disease

NAFLD

- Common: 30% of U.S. population

NASH

- A leading cause of cirrhosis
- **NO APPROVED TREATMENT OPTION**

MAT9001

Dyslipidemia & cardiovascular indications

- Heart disease is the #1 killer


HIGH
Need
+HIGH
Impact
= HIGH
Value
MATINAS
BIOPHARMA


MATINAS
BIOPHARMA
Thank You