Corvidane

An Innovative Approach to Treating Heart and Liver Diseases

February 17th, 2023

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SUMMARY

- Targeting markets with large unmet needs – NASH & Atherosclerosis – 10's of millions in major markets
- A novel, patented mixture of Omega-7 and Omega-9 fatty acids with established safety profiles & health benefits
- Composition and Use patents granted (US/Japan)
  - Pending patents in multiple territories
- Preclinical data generated: improvement in atherosclerotic plaque, lipids, inflammation and insulin sensitivity
  - Abundant literature evidence for benefits of constituent fatty acids
- Constituent fatty acids are Generally Recognized as Safe (GRAS) by the FDA
- Experienced team assembled with fatty acid and disease area expertise
- Raised $366k from investors through our Crowdfunding campaign

Approach

Novel and innovative

Chemical Engineers theorized that industrial lipid management principals could be used to treat disease in humans by improving lipid metabolism and reducing inflammation.

This approach requires fatty acids with specific chemical properties and molecular structures that are also safe for humans and possess anti-inflammatory properties

Team

Management

Dr. Paresh Soni, MD, PhD – Chief Executive Officer & Chief Medical Officer

20+ years of executive pharmaceutical experience in Cardiovascular diseases and NASH that includes **Amarin**, Alexion, Pfizer and Albireo. Led the NDA submission and approval of **Vascepa®**, designed and launched the landmark **REDUCE-IT** study. Led Regulatory negotiations with the FDA, EMA and international medicines agencies from IND to label and NCE approvals.

Damion J. Boyer – Co-Founder & Chief Operating Officer

6 years experience as CEO of Corvidane. Responsible for initiating Corvidane's NASH program and forging strategic alliances in the U.S. and Europe, which includes UMC Utrecht and resulted in a non-dilutive subsidy from the Dutch government.

Patrice Binay, PhD – Vice President of Chemistry and Manufacturing

32 years of pharmaceutical Fine Chemistry experience. Synthesis and analytical characterization of Active Pharmaceutical Ingredients, Quality auditing, Industrial Transfer. Development of a new class of anti-inflammatory (H4 Receptor).

Menno Van Burken, PharmD – Vice President of Commercial Strategies

32 years of pharmaceutical experience that includes 17 years with Pfizer. Lead Cardiovascular and Metabolic therapeutic disease initiatives across R&D, Clinical Development, Medical Affairs, Regulatory and Commercial functions.

John M. Burke – Co-Founder

Inventor of Corvida™ with 46 years Chemical Engineering expertise

Unmet Need 1

Metabolic disease

NASH

An accumulation of excess liver fat accompanied by inflammation and liver cell damage, which can cause fibrosis and lead to cirrhosis and liver cancer.

#1 cause of liver transplants by 2021[5]

Affects **5%** of U.S. adults[6]

5) *"Nonalcoholic Fatty Liver Disease 2020: The State of the Disease"*, T.G. Cotter, M. Rinella, Gastroenterology, 2020 May;158(7):1851-1864 6) *"Global epidemiology of nonalcoholic fatty liver disease-Meta-analytic assessment of prevalence, incidence, and outcomes"*, Younossi ZM, Koenig AB, Hepatology 2016;64:73-84

Unmet Need 2

Cardiovascular disease

Atherosclerosis

Disease process in arterial walls driven by chronic inflammatory response to accumulated lipoproteins (LDL, IDL, VLDL remnants). Atherosclerotic plaques are the driver behind stable angina/revascularizations, heart attacks and ~ 90% of all strokes:

Heart Attack

#1 cause of death globally[1, 2]

9M lives lost annually[2]

Stroke

#2 cause of death globally[2,3]

6M lives lost annually[2]

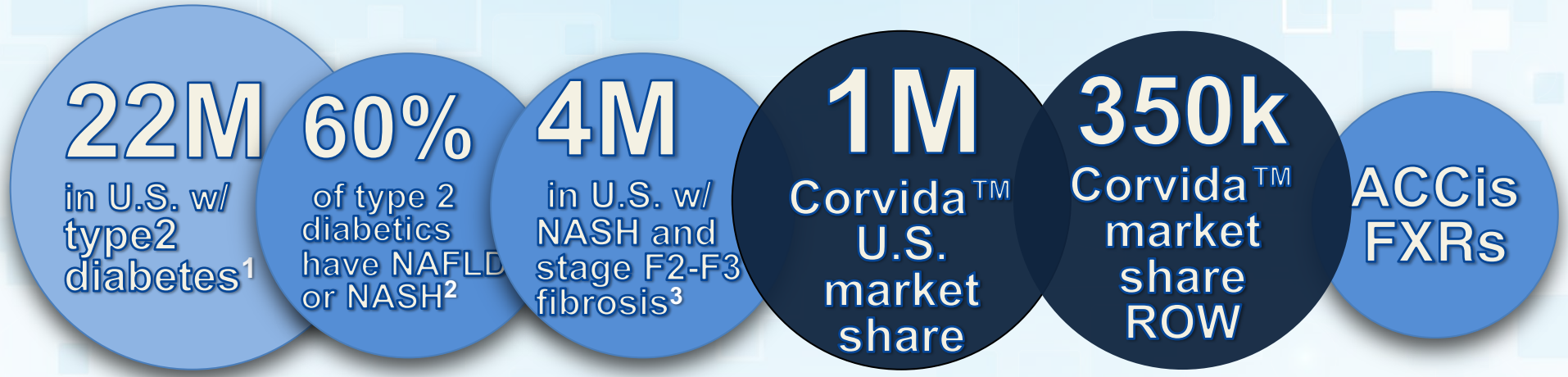
1) American Heart Association 2) World Heath Organization 3) America Stroke Association

Market Opportunity

NASH

Corvida™

Targeting Type2 Diabetes patients due to increased NASH/CV Risk. Additionally, in combination with other NASH drugs that increase Triglycerides (Acetyl CoA Carboxylase inhibitors) or LDL (Farnesoid X Receptor agonists)



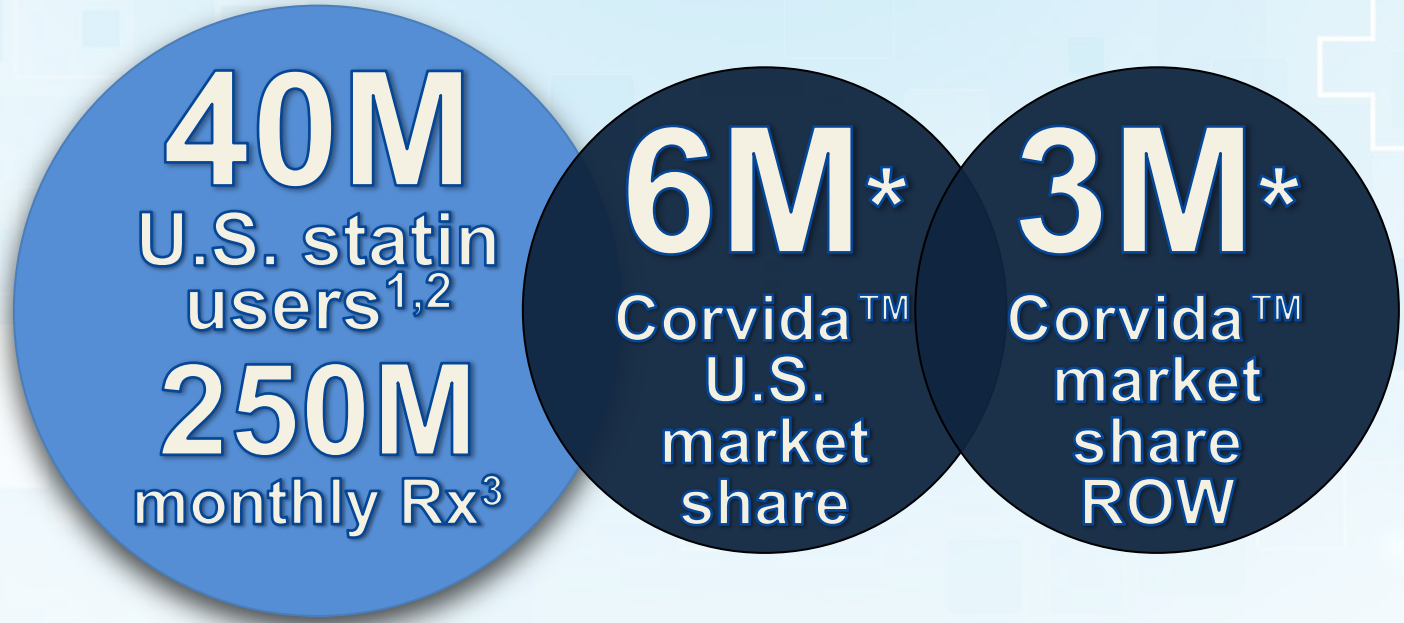
1) American Diabetes Association 2) *"NAFLD as a continuum: from obesity to metabolic syndrome and diabetes"*, A. Godoy-Matos, W. Silva Júnior, Diabetol Metabolic Syndrome 2020; 12: 60. PMCID: PMC7359287 3) *"Modeling NAFLD disease burden in China, France, Germany, Italy, Japan, Spain, United Kingdom, and United States for the period 2016–2030"*, C. Estes, Quentin Anstee, Joern Schattenberg, Journal of Hepatology, Volume 69, Issue 4, October 2018, Pages 896-904

Market Opportunity

Atherosclerosis

Corvida™

Targeting at-risk population actively using lipid management (statin) therapies.



*Patients with known atherosclerotic cardiovascular disease.

1) Centers for Disease Control and Prevention 2) American Heart Association 3) *"Medicine Use and Spending in the U.S.: A Review of 2018 and Outlook to 2023"*, IQVIA Institute Report, May 09, 2019

What Corvida™ is

Corvida™ is a novel, patented mixture of Omega-7 and Omega-9 fatty acids with established safety profiles, health benefits and anti-inflammatory properties.

- Palmitoleic Acid – (C16:1n7) is associated with preventing atherosclerosis, inversely associated with non-fatal myocardial infarctions[9,10,12], improves metabolic function of the liver and is associated with improved insulin sensitivity[7,14].
- Oleic Acid – (C18:1n9) is associated with low blood pressure, beneficial effects on autoimmune and inflammatory diseases[1,2].
- Both can be sourced from natural materials leading to effective and safe therapy. Both are FDA GRAS.

1) *"Oleic acid content is responsible for the reduction in blood pressure induced by olive oil",* S. Terés,* G. Barceló-Coblijn, Proc. Natl. Acad. Sci. U S A. 2008 Sep 16; 105(37): 13811–13816. 2) *"An overview of the modulatory effects of oleic acid in health and disease",* Helioswilton Sales-Campos, Patricía Reis de Souza, PMID: 23278117 Mini Rev Med Chem 2013 Feb;13(2):201-10. 7) *"Is Palmitoleic Acid a Plausible Nonpharmacological Strategy to Prevent or Control Chronic Metabolic and Inflammatory Disorders?"*, Camila O. de Souza,* Gretchen K. Vannice, DOI: 10.1002/mnfr.201700504, Mol. Nutr. Food Res. 2018, 62 9) *"Prevention of atherosclerosis by bioactive palmitoleate through suppression of organelle stress and inflammasome activation"*, Ismail Çimen, Begüm Kocatürk, Science Translational Medicine 28 Sep 2016: Vol. 8, Issue 358, pp. 358ra126 DOI: 10.1126/scitranslmed.aaf9087 10) "*Dietary Palmitoleic Acid Attenuates Atherosclerosis Progression and Hyperlipidemia in Low-Density Lipoprotein Receptor-Deficient Mice"*, Zhi-Hong Yang 1, Milton Pryor, Mol. Nutr. Food Res. 2019 Jun;63(12):e1900120 12) *"Adipose tissue palmitoleic acid is inversely associated with nonfatal acute myocardial infarction in Costa Rican adults",* D Luan, D Wang, Nutrition, Metabolism and Cardiovascular Diseases, PMID: 30207271 PMCID: PMC6136248 DOI: 10.1016/j.numecd.2018.05.004 14) "*Circulating palmitoleate strongly and independently predicts insulin sensitivity in humans",* Stefan N, Kantartzis K, (2010) Diabetes Care 33:405–407

What Corvida™ is not

Corvida™ is NOT **Omega-3** fatty acids:

- Eicosapentaenoic acid (EPA) like **Amarin's Vascepa®**
- Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) mixtures like **Epanova® (Astra Zeneca) or Lovaza® (GlaxoSmithKline)**
- Eicosapentaenoic acid (EPA) derivatives like **NorthSea Therapeutics' NST-4016**

A Novel Solution

Corvida™. One drug capable of improving the metabolic processing of lipids to treat NASH and Atherosclerosis.

NASH

Corvida™

Potentially Best-in-Class, orally administered therapeutic for the treatment of NASH with no worsening of liver fibrosis.

A monotherapy or in combination with other NASH agents and type 2 diabetes management that may reduce cardiovascular risk and improve insulin sensitivity in this population.

Atherosclerosis

Corvida™

Potentially Best-in-Class, orally administered therapeutic indicated to slow the progression of atherosclerosis.

By reducing atherosclerotic lipoproteins and inflammation, provide an adjunct to cholesterol-lowering drugs (statins) to address atherosclerotic plaque, which represents significant cardiovascular risk beyond cholesterol.

A Novel Solution

Differentiation From Other ASCVD Therapies

- Corvida™ also has potential to produce positive effects on insulin resistance and glycemic control
- Tremendous overlap between presence of ASCVD and/or NASH and insulin resistance/Prediabetes/Type 2 diabetes
- Positive effects would allow Corvida to differentiate from most other Lipid Modulating Therapies used to reduce ASCVD risk
  - Statins - worsen glycemic control, increase rates of new onset diabetes, modest effect on Triglycerides and no effect on HDL-C
  - Ezetimibe, Omega-3 fatty acids, PCSK9is – neutral effect
  - Fibrates – Adverse effects on renal and hepatic function

Research

A series of studies has demonstrated Corvida™'s potential as a new therapy for Cardiovascular and Metabolic diseases.

Completed Studies

- The Cleveland Clinic – Proof of Concept: Effects on Atherosclerosis in Rodents
- University of Hawaii – Proof of Concept: Effects on Atherogenic Lipids in Humans
- TNO – Proof of Concept: Effects on Atherogenic Lipids in Rodents
- CWRU – Improved metabolic processing of lipids

Research

Effects on Atherosclerosis in Rodents

The Cleveland Clinic

Mouse Atherosclerosis Progression Study

- Examined the effects Corvida™ (CCO) diet vs. Western Diet in ApoE-/- mice; a well established model for atherosclerotic progression
- Corvida™ diet replaced 20% standard Western diet fat with Corvida™:
  - Corvida™ increased HDL cholesterol by 77% compared to the control group
  - Corvida™ reduced triglycerides by 11% compared to control group
  - Corvida™ produced significant reductions in atherosclerosis
    - Effect on atherosclerosis versus atherogenic lipid suggests beneficial effects beyond lipids

Table 2. Aortic sinus lesion size (mm^2)		
	Control	Treatment
Corvida™	0.33 ± 0.09	0.18 ± 0.07**

Table 3. Aortic lesion (%)		
	Control	Treatment
Corvida™	9.63 ± 2.8	3.17 ± 1.6**
†Rosuvastatin (20mg/kg/day[2]	21.9 ± 2.9	11.9 ± 1.9*

Compared to the Control group, *P<0.05, **P<0.001

†Enomoto S, Sata M, Fukuda D, et al., "Rosuvastatin prevents endothelial cell death and reduces atherosclerotic lesion formation in ApoE-deficient mice.", Biome Pharmacotherapy. 2007

Research

Effects on Atherogenic Lipids in Humans
The University of Hawaii

Human Dietary Study

- Used macadamia nuts (high in oleic and palmitoleic acids) compared to typical Western diet
- Subjects were relatively healthy volunteers with well-controlled lipids at baseline (mean baseline LDL-C levels of 130 mg/dl; mean baseline TGs of 80 mg/dl)
- With macadamia nut diet:
  - LDL-C was 5.9 mg/dl lower than American diet ($p<0.05$)
  - TGs were 7.1 mg/dl lower than American diet ($p<0.05$)
  - Non-HDL-C is calculated to be 7.4 mg/dl lower than American diet
- Macadamia nut diet was safe and well-tolerated

Research

Effects on Atherogenic Lipids in Rodents
TNO

ApoE3* Leiden Mouse Model Lipids Study

- ApoE3*Leiden mouse model is a well-established and validated model for human dyslipidemia and progression of atherosclerosis
- Martek algae oil was tested to western diet. Specifically, 6% Martek algae oil replaced 6% of cacao butter in the Western diet (which is 15% cacao butter).
    - Martek algae oil is highly enriched in palmitoleic acid and palmitic acid
- As compared to Western diet, Martek algae oil at 4 weeks
    - Reduced total cholesterol by 37%
    - Reduced TGs by 44%

Research

Improved Metabolic Processing of Lipids

Case Western Reserve University

Study of Corvida™ in an Animal Model

Double blind, 8-week study of 18 Sprague Dawley rats receiving 50% of calories from fat to resemble typical American diet (40%-45% of calories from fat). Three arms of 6 rats each:

1. Corvida™ Diet
2. Saturated Fat Diet - Lauric acid (C12:0) and Myristic acid (C14:0)
3. Oleic acid (C18:1)

Lead Investigator: Dr. Charles Hoppel, M.D.

Results/Conclusions:

- Corvida™'s constituents absorbed into the blood and heart, liver and adipose tissue
- Corvida™ improves metabolic processing of lipids and glucose resulting in reduced liver fat accumulation and sustained liver function.

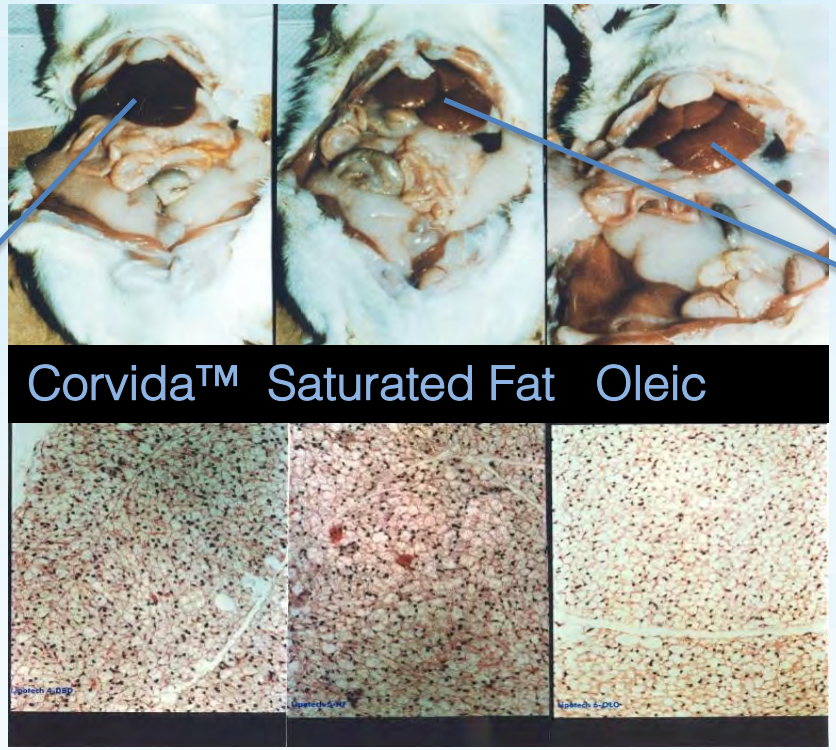
Research

Improved Metabolic Processing of Lipids

Case Western Reserve University

<u>Study of Corvida™ in an Animal Model</u>
Analysis reveals the statistical and physical evidence of Corvida™'s ability to improve metabolic function:

Corvida™ Group livers are pristine



SF and Oleic Groups Became PreDiabetic

Research

Planned Research

Studies done in collaboration with the University Medical Center Utrecht are an opportunity to confirm and better understand the anti-atherosclerosis effects of Corvida™

In Vitro study of Corvida™ in human tissues and cells

- Atheroscreen study can provide insights on the direct cellular mechanisms by which Corvida™ slows the progression of atherosclerosis observed in the In Vivo study.
- Will use transcriptomics to determine which drug-responsive genes are activated.

In Vivo study of Corvida™ in the LDLr-/- mouse model

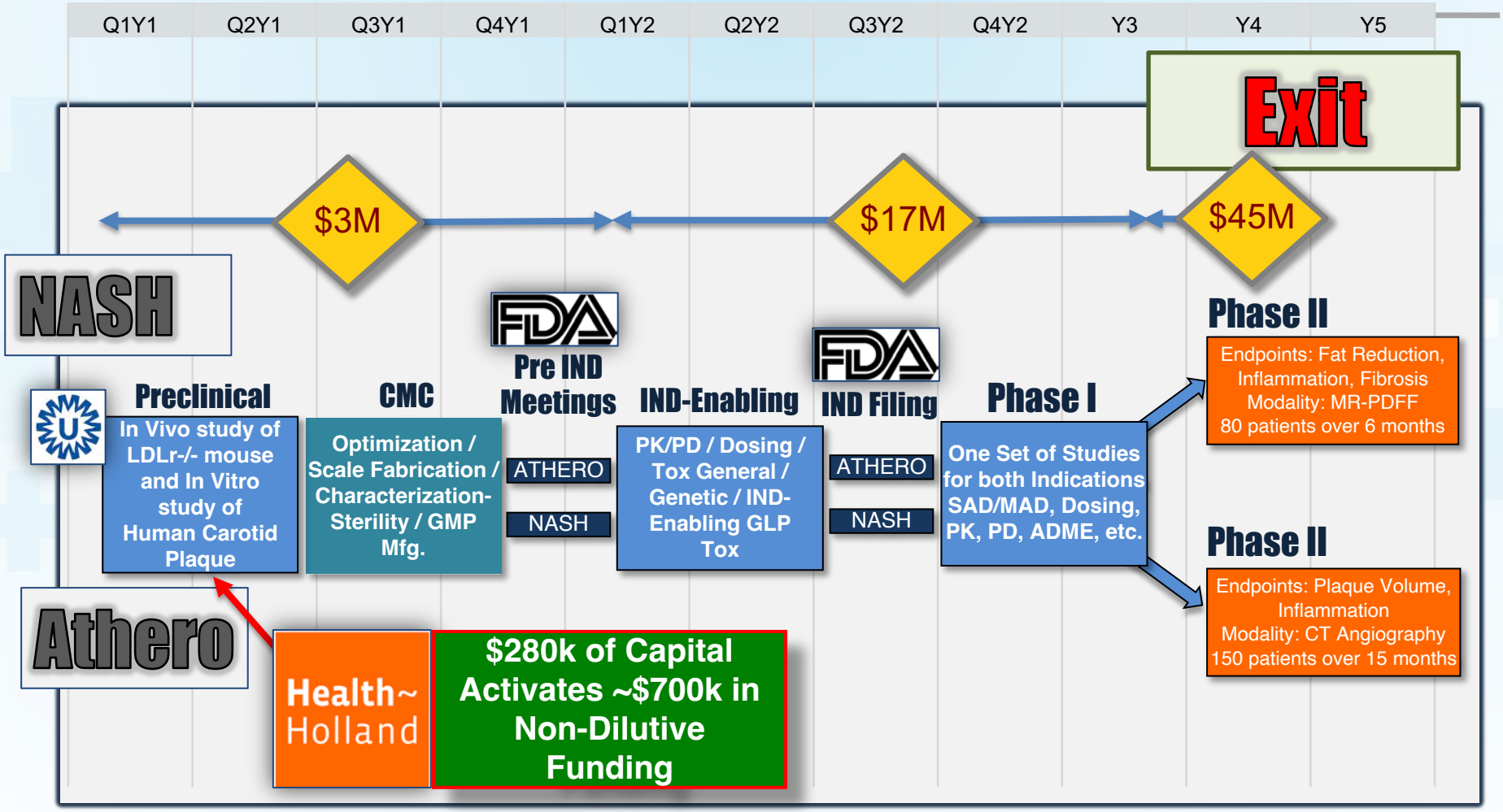
- Well-established model provides a second atherosclerosis model using Corvida™.
- In combination with Western Diet, the LDLr-/- model produces rapid and extensive atherosclerosis for testing anti-atherosclerosis therapies, particularly ones that are not solely dependent on LDLr activity to lower LDL-C. Statins, PSCK9s and Bempedoic Acid rely on LDLr for anti-Atherosclerosis effects and it is expected that Corvida™'s effects fall outside of the mechanism.
- This study can provide additional data on atherosclerosis (along with The Cleveland Clinic ApoE-/- model) at more precise doses to be used in later Preclinical development and ultimately humans.

Intellectual Property

Composition and Use patents Issued

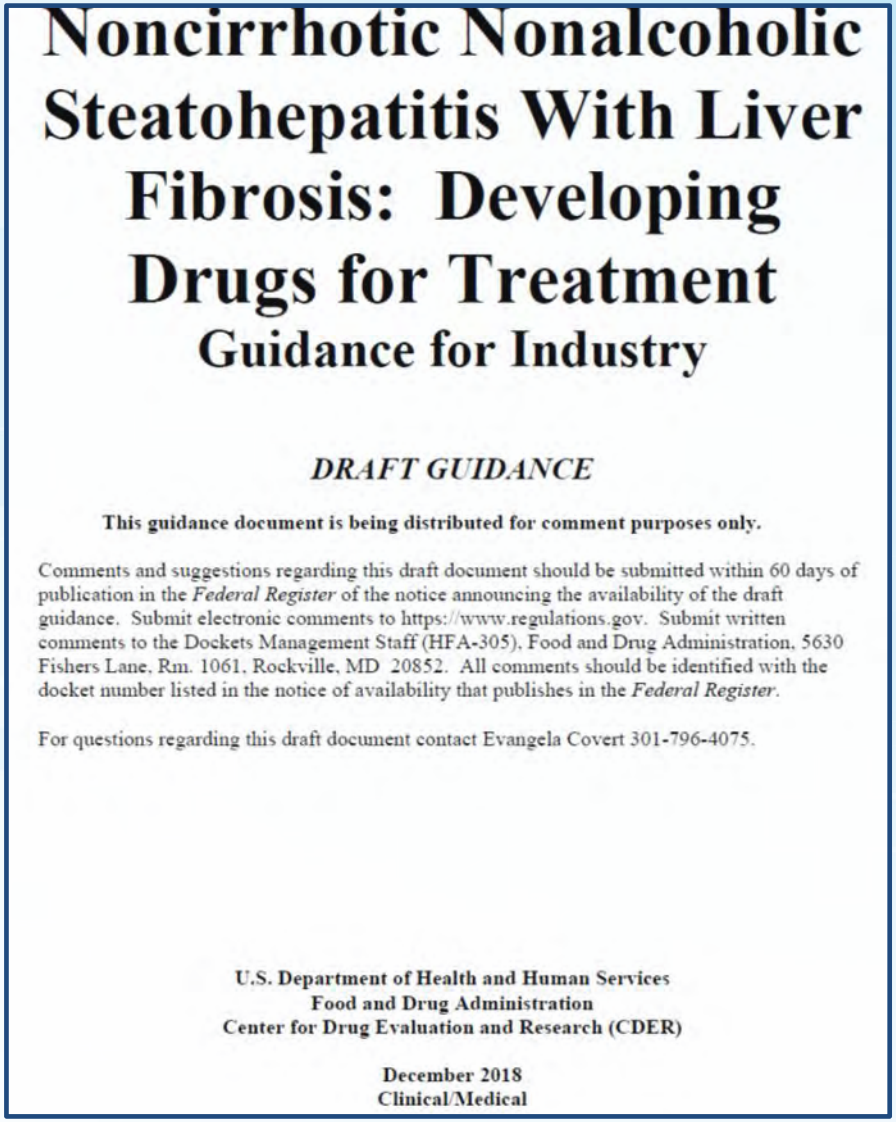
- Corvida™ patents for "…a method to treat Atherosclerosis…":
  - The United States
  - Japan
  - Brazil
- Atherosclerosis patent applications pending in The EU, China, India and Canada.
- NASH Provisional application filed in the U.S.

Corvida™ Development Plan



Forward-Looking Projections Cannot be Guaranteed

Development Plan: NASH



Noncirrhotic Nonalcoholic Steatohepatitis With Liver Fibrosis: Developing Drugs for Treatment

Guidance for Industry

DRAFT GUIDANCE

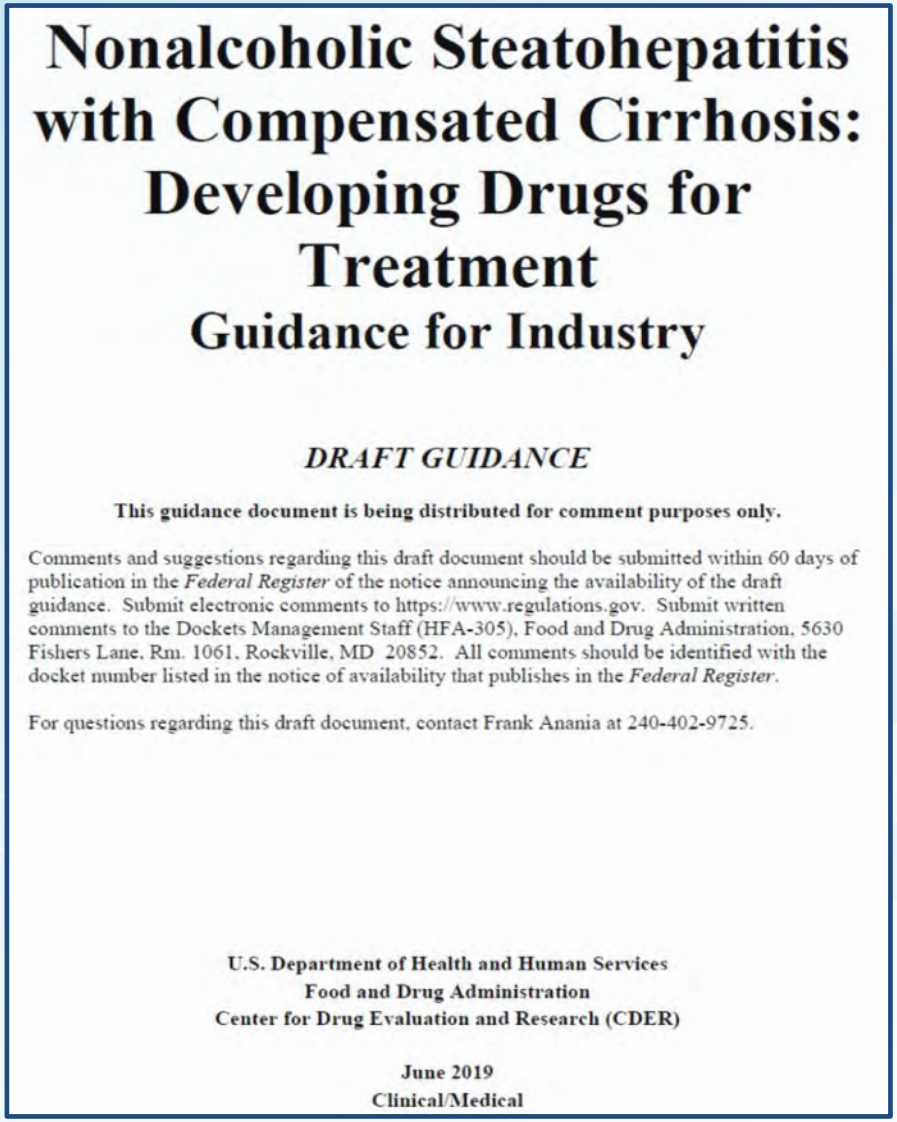
This guidance document is being distributed for comment purposes only.

Comments and suggestions regarding this draft document should be submitted within 60 days of publication in the *Federal Register* of the notice announcing the availability of the draft guidance. Submit electronic comments to https://www.regulations.gov. Submit written comments to the Dockets Management Staff (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852. All comments should be identified with the docket number listed in the notice of availability that publishes in the *Federal Register*.

For questions regarding this draft document contact Evangela Covert 301-796-4075.

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)

December 2018
Clinical/Medical



Nonalcoholic Steatohepatitis with Compensated Cirrhosis: Developing Drugs for Treatment

Guidance for Industry

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For questions regarding this draft document, contact Frank Anania at 240-402-9725.

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)

June 2019
Clinical/Medical

Development Plan: Atherosclerosis

Phase 1:

- Healthy Volunteers, Obese dyslipidemic patients – Pharmacokinetics (PK), Pharmacodynamics (PD), Absorption, Distribution, Metabolism and Excretion (ADME), dose frequency
- Use of subjects who are otherwise healthy but are obese & dyslipidemic in phase 1 MAD study will allow FIH initial detection of efficacy on lipid and other metabolic/inflammatory parameters.

Phase 2:

- Patients with Acute Coronary Syndrome (ACS)
- Coronary CT Angiography imaging at baseline & 12 months
- Measure coronary plaque volume: Low Attenuation Plaque, Fibro Fatty Plaque, Fibro Calcified Plaque, Dense Calcified Plaque
- Lipid changes with Corvida™: LDL-c, TG, HDL-c, ApoB, non-HDL-c
- Dose 1, dose 2, placebo N ~ 150

  Ref: *Matsumoto, Budoff et al, Clinical Cardiology 2016. VIA-2291 vs. placebo*

Propose plan to FDA: approval based on lipid biomarkers + imaging results

- CV Outcomes Trial as post approval to confirm outcomes benefit

Competitive Landscape

NASH

Northsea Therapeutics - Icosabutate

Derived from Eicosapentanoic Acid **(C20:5n3),** an Omega-3 Polyunsaturated Fatty Acid sourced from fish.

- Currently in Phase 2 studies targeting NASH with F2-F3 fibrosis
- Reduces Triglyceride-rich VLDL Cholesterol, but may increase LDL

Corvida™

Omega-9 and Omega-7 monounsaturated Fatty Acids **(C18:1n9 and C16:1n7)**, sourced from algae.

- Targets fat accumulation, inflammation and fibrosis while reducing Triglycerides and LDL-c
- MUFAs more capable of entering/improving endothelial cell function, improving cellular fluidity
- More stable, less susceptible to oxidize/polymerize due to 4 fewer double bonds

Competitive Landscape

Atherosclerosis

Amarin – Vascepa® (Icosapent Ethyl)

Derived from Eicosapentanoic Acid **(C20:5n3),** an Omega-3 Polyunsaturated Fatty Acid sourced from fish.

- Originally approved to lower Triglycerides
- The EVAPORATE study shows potential to treat Atherosclerosis
- Generic market entry in 2021

Corvida™

Omega-9 and Omega-7 Monounsaturated Fatty Acids **(C18:1n9 and C16:1n7)**, sourced from algae.

- Developed to target vulnerable, high risk plaques
- MUFAs more capable of entering/improving endothelial cell function, improving cellular fluidity
- Has the ability to treat both Atherosclerosis and NASH

M&A Activity

Promising Fatty Acid therapeutics have fueled significant business development activity.

Astra Zeneca acquired Omthera for $443M USD for their EPA/DHA (DocosaHexaenoic Acid) drug Epanova®.

GSK (Lovaza) acquired Reliant Pharmaceuticals for $1.7B USD for their EPA/DHA (DocosaHexaenoic Acid) drug Lovaza™.

Northsea Therapeutics licensed Pronova's EPA drug, raised €25M in 2017, €40M in January 2020 and $80M USD in December 2021.

Gilead included Amarin's Vascepa to neutralize the negative effects of their ACC NASH drug.

Pfizer enters into promotional agreement with HLS Therapeutics for Vascepa® in Canada

Forward-Looking Projections Cannot be Guaranteed

SUMMARY

- Targeting markets with large unmet needs - Atherosclerosis & NASH – 10's of millions in major markets
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- Preclinical data generated: improvement in atherosclerotic plaque, lipids, inflammation and insulin sensitivity
  - Abundant literature evidence for benefits of constituent fatty acids
- Constituent fatty acids are Generally Recognized as Safe (GRAS) by the FDA
- Experienced team assembled with fatty acid and disease area expertise
- Raised $366k from investors through our Crowdfunding campaign

Appendix

- What Corvida™ is (cont'd)
- A Novel Solution (cont'd)

What Corvida™ is (cont'd)

Corvida™ is a patented mixture of Monounsaturated fatty acids: Oleic Acid and Palmitoleic Acid. Both have established safety profiles and health benefits.

Palmitoleic Acid

In cell culture and rodent models:

- Prevention of atherosclerosis by bioactive palmitoleate through suppression of organelle stress and inflammasome activation[6, 7]
- Protective effects on cell viability in pancreatic β cells[8], stimulates insulin secretion by β cells and enhances whole body insulin sensitivity[7]
- Increases hepatic fatty acid oxidation[9]
- Improves the blood lipid profile[9]
- Alters macrophage differentiation[10]
- Improves Metabolic Functions in Fatty Liver by PPARα-Dependent AMPK Activation[11]

6) *"Prevention of atherosclerosis by bioactive palmitoleate through suppression of organelle stress and inflammasome activation"*, Ismail Çimen, Begüm Kocatürk, Science Translational Medicine 28 Sep 2016: Vol. 8, Issue 358, pp. 358ra126 DOI: 10.1126/scitranslmed.aaf9087 7) "*Dietary Palmitoleic Acid Attenuates Atherosclerosis Progression and Hyperlipidemia in Low-Density Lipoprotein Receptor-Deficient Mice"*, Zhi-Hong Yang 1, Milton Pryor, Mol. Nutr. Food Res. 2019 Jun;63(12):e1900120 8) "*Differential protective effects of palmitoleic acid and Camp on caspase activation and cell viability in pancreatic beta-cells exposed to palmitate",* H.J. Welters, E. Diakogiannaki, (2006) Apoptosis 11:1231–1238 9) *"Is Palmitoleic Acid a Plausible Nonpharmacological Strategy to Prevent or Control Chronic Metabolic and Inflammatory Disorders?"*, Camila O. de Souza,* Gretchen K. Vannice, DOI: 10.1002/mnfr.201700504, Mol. Nutr. Food Res. 2018, 62 10) *"Palmitate differentially regulates the polarization of differentiating and differentiated macrophages"*, Fangming Xiu, Li Diao, PMID: 26453839 PMCID: PMC4693883 DOI: 10.1111/imm.12543 11) *"Palmitoleic Acid Improves Metabolic Functions in Fatty Liver by PPARα-Dependent AMPK Activation",* Camila O. de Souza Alexandre A.S. Teixeira, J Cell Physiology, 2017 Aug;232(8):2168-2177

What Corvida™ is (cont'd)

Palmitoleic Acid

In cell culture and rodents:

- Prevention of Atherosclerosis in LDLr-/- mouse model[10]

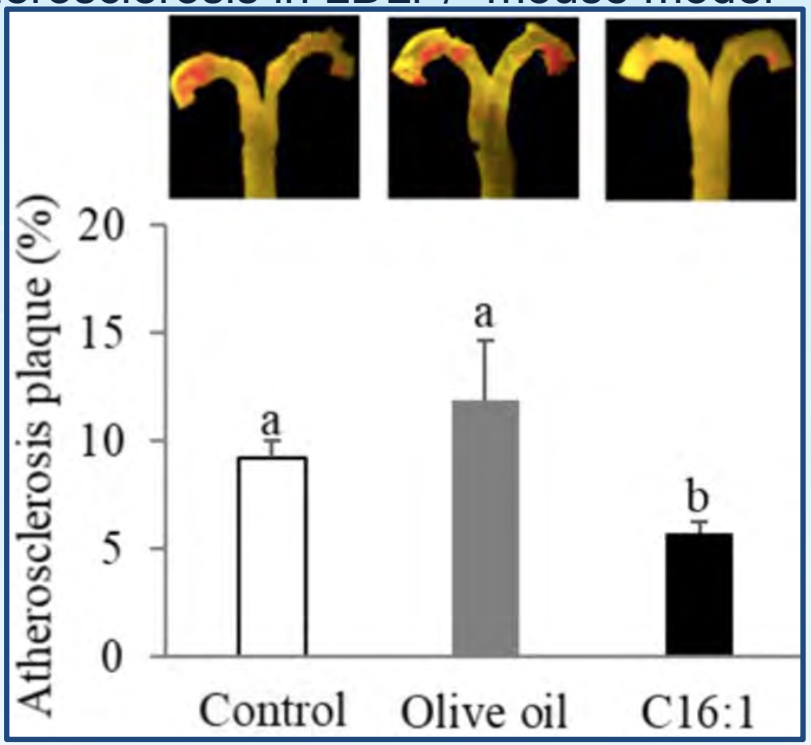


Figure 3. Effects of dietary palmitoleate on progression of atherosclerosis in LDLr-KO mice. Mice (n=15/group) were fed a Western diet supplemented with 5% Olive Oil, Palmitoleate concentrate (C16:1), or none (Control) for 12 weeks. Representative *en face* Sudan IV staining of aorta (upper panel) and quantitative analysis of Sudan IV-positive area of aorta (lower panel). Values represent the mean +/- SEM. Labeled means without a common letter differ ($p<0.05$)

10) "*Dietary Palmitoleic Acid Attenuates Atherosclerosis Progression and Hyperlipidemia in Low-Density Lipoprotein Receptor-Deficient Mice*", Zhi-Hong Yang 1, Milton Pryor, Mol. Nutr. Food Res. 2019 Jun;63(12):e1900120

What Corvida™ is (cont'd)

Palmitoleic Acid

In humans:

- Adipose tissue Palmitoleic Acid is inversely associated with Myocardial Infarction[12]

Table 3 Odds ratios for myocardial infarction according to quintiles of palmitoleic acid concentrations in adipose tissue of Costa Rican adults (n = 3656).

	Quintiles					*P* for trend
	1	2	3	4	5	
Palmitoleic acid levels in adipose tissue	3.65 ± 0.73[a]	5.28 ± 0.35	6.41 ± 0.33	7.64 ± 0.39	9.87 ± 1.30	
Unadjusted model[b]	1.0	1.00 (0.81, 1.24)	0.87 (0.71, 1.07)	1.01 (0.81, 1.24)	0.90 (0.72, 1.13)	0.4263
Adjusted model[c]	1.0	1.00 (0.80, 1.26)	0.86 (0.69, 1.08)	0.91 (0.72, 1.15)	0.81 (0.63, 1.04)	0.0612
Adjusted model[d]	1.0	0.90 (0.71, 1.14)	0.71 (0.56, 0.91)	0.68 (0.52, 0.89)	0.55 (0.41, 0.75)	<0.0001
Palmitoleic acid levels among men (n = 2684)	635	581	548	515	405	
Unadjusted model[b]	1.0	1.01 (0.80, 1.27)	0.92 (0.73, 1.16)	1.10 (0.87, 1.40)	0.90 (0.69, 1.18)	0.7181
Adjusted model[c]	1.0	1.00 (0.79, 1.30)	0.88 (0.69, 1.13)	0.98 (0.76, 1.27)	0.79 (0.59, 1.05)	0.1202
Adjusted model[d]	1.0	0.91 (0.70, 1.18)	0.76 (0.58, 0.99)	0.77 (0.57, 1.04)	0.57 (0.40, 0.81)	0.0013
Palmitoleic acid levels among women (n = 972)	95	151	183	217	326	
Unadjusted model[b]	1.0	0.83 (0.49, 1.42)	0.63 (0.37, 1.05)	0.69 (0.42, 1.15)	0.74 (0.44, 1.22)	0.3336
Adjusted model[c]	1.0	0.91 (0.50, 1.67)	0.76 (0.42, 1.37)	0.72 (0.41, 1.29)	0.78 (0.44, 1.38)	0.3593
Adjusted model[d]	1.0	0.83 (0.45, 1.54)	0.58 (0.31, 1.08)	0.50 (0.27, 0.94)	0.47 (0.25, 0.89)	0.0101

[a] Mean ± SD (all such values).
[b] Conditioned on age, sex, and area of residence.
[c] Adjusted for age, sex, area of residence, income, smoking status, history of diabetes, and history of hypertension.
[d] Adjusted for age, sex, area of residence, income, smoking status, history of diabetes, history of hypertension, adipose tissue oleic acid, adipose tissue linoleic acid, adipose tissue arachidonic acid, and adipose tissue alpha-linolenic acid.

12) *"Adipose tissue palmitoleic acid is inversely associated with nonfatal acute myocardial infarction in Costa Rican adults"*, D Luan, D Wang, PMID: 30207271 PMCID: PMC6136248 DOI: 10.1016/j.numecd.2018.05.004

What Corvida™ is (cont'd)

Oleic Acid

In rodent and human studies:

- Reduction of coronary heart disease risk[3,4]
- Beneficial effects on autoimmune and inflammatory diseases[1]
- Associated with reduced blood pressure[2]
- Regulates membrane lipid structure[2]
- Preventing deleterious effects of Saturated fats and high glucose on human pancreatic beta-cell turnover and function[5]

1) *"An overview of the modulatory effects of oleic acid in health and disease"*, Helioswilton Sales-Campos, Patricía Reis de Souza, PMID: 23278117 Mini Rev Med Chem 2013 Feb;13(2):201-10. 2) *"Oleic acid content is responsible for the reduction in blood pressure induced by olive oil",* S. Terés,* G. Barceló-Coblijn, Proc. Natl. Acad. Sci. U S A. 2008 Sep 16; 105(37): 13811–13816. 3) *"Olives and Olive Oil in Health and Disease Prevention 2010, Chapter 154 - Oleic Acid: The Main Component of Olive Oil on Postprandial Metabolic Processes",* Sergio Lopez, Beatriz Bermudez, 4) *"Monounsaturated fatty acids and cholesterol metabolism coronary heart disease"*, Scott M Grundy, MD, PhD 5) *"Monounsaturated fatty acids prevent the deleterious effects of palmitate and high glucose on human pancreatic beta-cell turnover and function"*, K. Maedler, J. Oberholzer, Diabetes 2003 Mar;52(3):726-33, doi: 10.2337/diabetes.52.3.726.

What Corvida™ is (cont'd)

Palmitoleic Acid

In humans:

- Increased cell membrane fluidity, reduced inflammation, protection of the cardiovascular system[13]
- Circulating palmitoleate strongly and independently predicts insulin sensitivity in humans[14] and robustly associated with multiple metabolic risk factors[15]

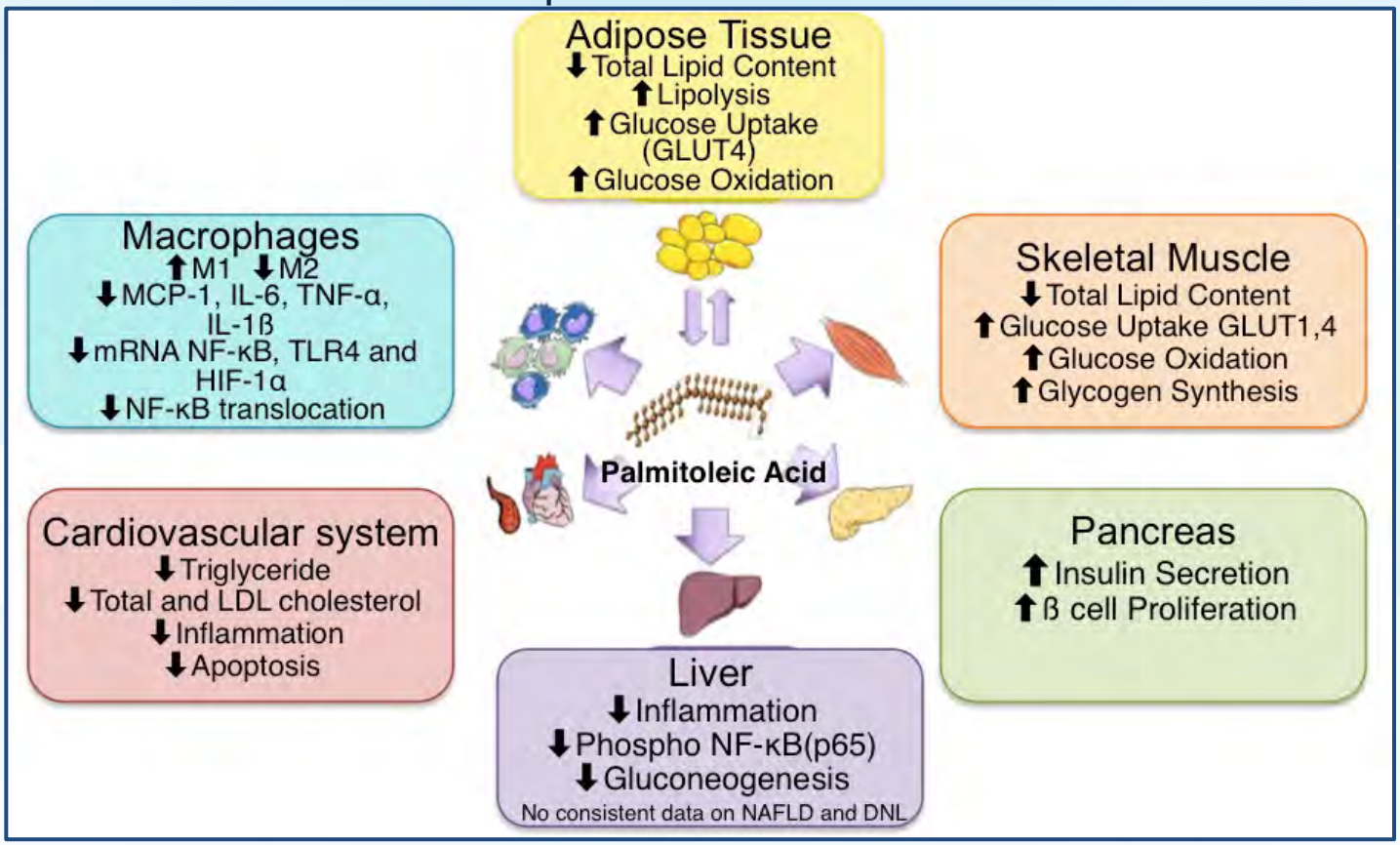
13) *"Biosynthesis and metabolic engineering of palmitoleate production, an important contributor to human health and sustainable industry"*, Y.M. Wu, R.Z. Li, (2012) Prog. Lipid Res. 51:340–349 14) "*Circulating palmitoleate strongly and independently predicts insulin sensitivity in humans",* Stefan N, Kantartzis K, (2010) Diabetes Care 33:405–407 15) *"Circulating palmitoleic acid and risk of metabolic abnormalities and new-onset diabetes"*, Mozaffarian D, Hotamisligil CS (2010), Am. J. Clin. Nutr. 92:1350–1358

A Novel Solution (Cont'd)

Palmitoleic Acid

In humans:

- Immune-metabolic effects of palmitoleic acid in different tissues [11]



11) *"Palmitoleic Acid Improves Metabolic Functions in Fatty Liver by PPARα-Dependent AMPK Activation"*, Camila O. de Souza Alexandre A.S. Teixeira, J Cell Physiology, 2017 Aug;232(8):2168-2177

Extraordinary Clinical and Commercial success awaits.

“We will meet the challenge.” – Dr. Oheneba Boachie-Adjei

Thank you.

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