

The HDL Company

Corporate presentation – January 2017



This document has been prepared by Cerenis Therapeutics (the "Company") and is for information purposes only.

The information and opinions contained in this document are provided as of the date of this document only and may be updated, supplemented, revised, verified or amended, and thus such information may be subject to significant changes. The Company is not under any obligation to update the information or opinions contained herein which are subject to change without prior notice.

The information contained in this document has not been subject to independent verification. No representation, warranty or undertaking, express or implied, is made as to the accuracy, completeness or appropriateness of the information and opinions contained in this document. The Company, its subsidiaries, its advisors and representatives accept no responsibility for and shall not be held liable for any loss or damage that may arise from the use of this document or the information or opinions contained herein.

This document contains information on the Company's markets and competitive position, and more specifically, on the size of its markets. This information has been drawn from various sources or from the Company's own estimates. Investors should not base their investment decision on this information.

This document contains certain forward-looking statements. These statements are not guarantees of the Company's future performance. These forward-looking statements relate to the Company's future prospects, developments and marketing strategy and are based on analyses of earnings forecasts and estimates of amounts not yet determinable. Forward-looking statements are subject to a variety of risks and uncertainties as they relate to future events and are dependent on circumstances that may or may not materialize in the future. Forward-looking statements cannot, under any circumstance, be construed as a guarantee of the Company's future performance and the Company's actual financial position, results and cash flow, as well as the trends in the sector in which the Company operates, may differ materially from those proposed or reflected in the forward-looking statements contained in this document. Even if the Company's financial position, results, cash-flows and developments in the sector in which the Company's financial position, results, cash-flows and developments cannot be construed as a reliable indication of the Company's future results or developments. The Company does not undertake any obligation to update or to confirm projections or estimates made by analysts or to make public any correction to any prospective information in order to reflect an event or circumstance that may occur after the date of this document.

This document does not constitute an offer to sell or subscribe or a solicitation to purchase or subscribe for securities in France, the United States or any other jurisdiction. Securities may not be offered or sold in the United States absent registration under the US Securities Act of 1933, as amended, or an exemption from registration thereunder. No public offering of securities may be conducted in France or abroad prior to the delivery by the French Autorité des marchés financiers (Financial Markets Authority) of a visa on a prospectus that complies with the provisions of Directive 2003/71/CE as amended. No offering of securities is contemplated in France or any jurisdiction outside France.





Jean-Louis DASSEUX, PhD, MBA

Founder and CEO

- More than 25 years of experience in the pharmaceutical industry (Pfizer, Esperion Therapeutics, Fournier Laboratories)
- A leading world expert in lipid metabolism, atherosclerosis and cardiovascular diseases
- Inventor of more than 60 patent families relating to HDL and the treatment of cardiovascular diseases



Cyrille TUPIN, CPA

CFO

- Audit Director at Sygnatures, the largest private auditing and consulting company in Toulouse, France
- More than 7 years at PWC working on high-profile business transactions





CER-001: major potential in the treatment of patients post-ACS

- 1. A therapy targeting the 2/3 of patients who are poorly served with available medical treatments
- 2. Advanced and promising clinical developments currently in Phase II (CARAT)
- 3. Compelling to big pharma (e.g., OMTHERA \$443 m; Esperion \$1.3 bn; KOS \$3.7 bn)¹
- 4. A manufacturing process validated on an industrial level with proven clinical safety and tolerability

In the short term: CER-001, a drug for treating orphan diseases

- 1. A potential of value creation in the short term, currently in Phase III (TANGO)
- 2. A major unmet medical need
- 3. Application for marketing approval before 2018

CER-209: major potential in the treatment of patients with atherosclerosis and NAFLD/NASH

- 1. A significant unmet medical need
- 2. CER-209, a highly specific P2Y13 receptor agonist promoting lipid elimination
- 3. Launch of a phase 1 study with CER-209 in NASH/NAFLD in Q1 2017

A LISTED COMPANY WITH SUBSTANTIAL POTENTIAL IN HDL THERAPY

 Press releases, OMTHERA: http://www.astrazeneca.com/Media/Press-releases/Article/20130528-omthera Esperion: http://www.bloomberg.com/apps/news?pid=newsarchive&sid=apU2qcYCmkO4&refer=us KOS: http://www.bloomberg.com/apps/news?pid=newsarchive&sid=af_8tglk4fHE



Fundamental role of HDL in removing cholesterol

- At each LDL level, it is the HDL level that determines the cardiovascular risk
- An HDL therapy that increases the number of HDL particles is one of the best approaches for treating atherosclerosis
- No HDL medical treatment that can treat or eliminate atherosclerosis is yet available

A major epidemiological study on HDL¹

Incidence of cardiovascular events (per 1,000) over 10 years



CERENIS IS THE COMPANY THAT OFFERS ONE OF THE MOST COMPREHENSIVE INNOVATIVE HDL SOLUTIONS FOR TREATING ATHEROSCLEROSIS

1. PROCAM: 7,152 men aged 35 to 65 406 coronary events over 10 years



Leading cause of death in the world

- 1 out of 3 deaths worldwide (source: WHO)
- The disease category with the greatest health expenditure:
 - \$107 bn in the United States, in 2010
 - \$110 bn in Europe, in 2009

A primary cause: atherosclerosis

• Atherosclerosis: accumulation of cholesterol plaque in the arteries

Only 1/3 of cardiovascular patents receive benefit from the best current treatments



ONLY ONE REAL SOLUTION: ELIMINATE CHOLESTEROL PLAQUE WITH CERENIS

CerenisTM 10 years of R&D to achieve one of the world's most advanced HDL solutions



3 TARGETED INDICATIONS: ACS, FPHA AND NAFLD/NASH/ATHEROSCLEROSIS

1. Familial Primary Hypoalphalipoproteinemia 2. Proof of Concept

THERAPEUTIC

Cerenis^M HDL therapy: one of the most promising treatments for removing cholesterol

LDL APPROACH: reduces bad cholesterol



AVAILABLE DRUGS:

Statins: inhibit cholesterol synthesis Resins and Inhibitors: limit intestinal absorption of cholesterol Fibrates: reduce the level of triglycerides containing l

Fibrates: reduce the level of triglycerides containing LDL cholesterol

Indirect long-term effect with no direct action on plaque: only 1/3 of patients get <u>benefit</u>





Reduces atherosclerotic plaque

NO DRUGS YET AVAILABLE: CER-001: Cerenis HDL mimetic candidate that reduces atherosclerotic plaque

Rapid direct effect: reduction in atherosclerotic plaque

LDL DRUGS HAVE A LIMITED EFFICACY ON PLAQUE REDUCTION



Tremendous market opportunity for HDL-focused therapies

Cardiovascular disease



NO HDL DRUG IS CURRENTLY AVAILABLE FOR ALMOST 3 MILLION PATIENTS

Cerenis^M **HDL therapy is the only solution for post-ACS**



- 12%² of patients relapse during the 12 months following an ACS, 2/3 of them during the first 2 months
- 19-26% ³ of patients over age 45 die during the 12 months that follow a cardiovascular event
- ACS hospitalization costs: \$20,000 \$60,000 per patient per event

HDL THERAPY IS THE ONLY SOLUTION ADDRESSING THE CRITICAL 2-MONTH POST-ACS PERIOD



Phase I showed:

Mobilization of HDL cholesterol

- Increase in HDL cholesterol: +700% for 45 mg/kg dose
- Mobilization observed beginning with the 2 mg/kg dose
- No patient safety issues

Concentration of HDL cholesterol following the infusion of CER-001



A PROVEN SAFETY PROFILE AT ALL DOSES

$S^{\tilde{}}$ Compelling clinical results: proof of efficacy in Phase II

CHI SQUARE: Phase II post-ACS study

Cerer

Effects on plaque

- Significant regression in the volume of atherosclerosis plaque, substantially better than existing treatments
- Rapid action in just 2 months vs. at least 2 years for other treatments

Change in the percentage atherosclerosis volume (PAV)



An independent analysis (SAHMRI) showed:

• A significant reduction in atherosclerotic plaque compared with the placebo

CER-001 IS THE MOST EFFICIENT OF ALL TREATMENTS

Nissen S and al. N Engl J Med 2006;354:1253-1263.
 Tardif J and al. Circulation 2004;110:3372-3377.
 Nissen S and al. JAMA 2006;295 (13):1556-1565
 Nissen S and al. JAMA 2004;292: 2217–2225.
 Nissen S and al. JAMA 2004; 291:1071–1080

Cerenis^{**} Compelling clinical results: identification of the optimal dose for treatment

Conclusions of CHI-SQUARE, the 1st Phase II study:

- Cholesterol mobilization by CER-001 at every dose level
- Demonstrated patient safety profile
- Primary endpoint (reduction in plaque at 12 mg/kg dose vs. placebo) not achieved
- Reduction in the total volume of atherosclerosis vs. baseline was statistically significant at 3 mg/kg

An independent analysis (SAHMRI) confirmed the optimal dose² :

Change in the percentage atherosclerosis volume (PAV) Patients with PAV ≥30 at baseline

Parameter	Placebo	3 mg/kg	6 mg/kg	12 mg/kg
	(n=69)	(n=58)	(n=78)	(n=66)
PAV	-0.259	-0.963	-0.619	+0.177
P value		0.038 ¹	0.287	0.587

- Too high a concentration of HDL induces a down-regulation of ABCA1 transporter, which is necessary for cholesterol efflux. The 12 mg/kg dose caused such a down-regulation whereas 3 mg/kg did not resulting in the highest efficacy
- The optimal dose enabling a maximization of the plaque regression vs. placebo: 3 mg/kg
- Next study: number of infusions

THE OPTIMAL DOSE HAS BEEN IDENTIFIED THE OPTIMAL NUMBER OF INFUSIONS STILL NEEDS TO BE DETERMINED

- 1. Statistically significant result
- Greater regression of coronary atherosclerosis with the pre-beta high-density lipoprotein mimetic CER-001 in patients with more extensive plaque burden American Heart Association sessions 2015, S. Nicholls et al.





The publication highlights CER-001 preclinical positive results:

• CER-001 mimics native HDL



Dose-response mechanism follows a U-shaped curve

- At high dose see strong down-regulation of the ABCA1 transporter, the cellular gatekeeper for eliminating excess tissue cholesterol
- Confirmation of the optimal 3mg/kg dose of the Phase II CARAT clinical trial in the post-ACS indication

Decrease percentage of an atherosclerotic plaque within carotids ¹



CONFIRMATION OF OPTIMAL DESIGN FOR CARAT AND TANGO STUDIES

1 PLOS ONE: Tardy et al. September 3, 2015, DOI: 10.1371/journal.pone.0137584

of peer-reviewed

Cerenis^M **CER-001 targets plaque: LOCATION clinical study**

The LOCATION study provides the first evidence of

- CER-001's ability to:
 - Penetrate atherosclerotic plaques
 - Preferentially target atherosclerotic plaques
- CER-001's capacity to increase cholesterol efflux





Increased cholesterol efflux capacity is a predictive marker of a reduction in cardiovascularrelated morbidity and mortality :

Association between cardiovascular risk and cholesterol efflux capacity*



* Source : Lancet Diabetes Endocrinol 2015, Danish Saleheen, Robert Scatt, Sundas Javad, Wei Zhao, Amrith Rodrigues, Antonino Picataggi, Daniya Lukmanova, Megan L Mucksavage, Robert Luben, Jeff ery Billheimer, John J P Kastelein, S Matthijs Boekholdt, Kay-Tee Khaw, Nick Wareham, Daniel J Roder

Cholesterol efflux capacity



* Source: 17th SYMPOSIUM INTERNATIONAL DE L'ATHEROSCLEROSE (IAS), 23 au 26 mai 2015 à Amsterdam, Erik Stroes et al., Academic Medical Center of Amsterdam, The Netherlands

THE LOCATION CLINICAL STUDY SUPPORTS CER-001'S PROOF OF CONCEPT



A prestigious steering committee for the CARAT trial

- Dr. John Kastelein
- Dr. Béla Merkely
- Dr. Stephen Nicholls, Principal Investigator
- Dr. Steven Nissen

- Dr. Kausik Ray
- Dr. Gregory Schwartz
- Dr. Stephen Worthley

"

I'm particularly enthusiastic about collaborating with Cerenis Therapeutics for the future Phase II CARAT clinical study of CER-001. On the basis of our convincing analyses of the Phase II CHI-SQUARE study highlighting the efficacy of the optimal 3mg/kg dose, I'm highly confident regarding the potential success of this important clinical step to establish CER-001 as the market benchmark in HDL mimetic."

Professor Stephen Nicholls





Last Patient Dosed in CARAT Phase II Study with CER-001 in Post-Acute Coronary Syndrome Patients

The CARAT study should show:

- A significant reduction in the percentage atherosclerosis volume vs. placebo
- The superior efficacy of an increase in the number of doses

Study led by the South Australian Health and Medical Research Institute Limited (SAHMRI)



IDENTIFICATION OF THE OPTIMAL TREATMENT AND ENROLLMENT OF PATIENTS WITH SUBSTANTIAL ATHEROSCLEROSIS PLAQUE

Cerenis The key advantage of HDL therapy for FPHA

FPHA: a rare syndrome of severe HDL deficiency

- Caused by mutations in the genes responsible for HDL synthesis/maturation
- Characterized by accelerated atherosclerosis

CER-001 treatment

- CERENIS' solution restores the blood's ability to mobilize cholesterol into HDL to facilitate its elimination
- Two Orphan Drug designations obtained
 - HDL deficiency (no apoA-I synthesis)
 - Tangier disease (absence of ABCA1)





CERENIS: A THERAPEUTIC SOLUTION TO MEET THE UNMET FPHA MEDICAL NEED

1. Company: SAMBA study

Confirmed universal proof of concept amongst those deficient in HDL

The Phase II SAMBA study:

Cerenis[™]



IN THE BODY, CER-001 RESULTED IN A STATISTICALLY SIGNIFICANT REDUCTION OF PLAQUE IN THE CAROTID ARTERY VESSEL WALL



The TANGO study should show:

- A reduction in coronary plaque in the carotid and aorta
- Enrollment began in December 2015



THE TARGET OBJECTIVE IS TO OBTAIN MARKETING APPROVAL IN THE TWO IDENTIFIED GENETIC DEFECTS (APOA-I DEFICIENCY / TANGIER DISEASE)



Cerenis A safe and industrializable natural mimetic solution

	<u>CERENIS</u>	<u>The Medicines</u> <u>Company</u>	<u>CSL</u>
Product specificity	Only mimetic with the biological properties of natural HDL	Mutant protein produced in an <i>E. coli</i> bacteria	Protein extracted from plasma
Composition of the nanoparticle	Natural HDL mimetic	Mutant form	Multiple forms of A-I apolipoprotein
Purity	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	\checkmark	×
Mobilization of cholesterol / Efficacy	~ ~ ~	✓	\checkmark
Side effects/Toxicity	$\checkmark \checkmark \checkmark$	×	×
Intellectual property	~ ~ ~	×	×
Composition	$\checkmark\checkmark\checkmark$	\checkmark	\checkmark
Manufacturing process	$\checkmark \checkmark \checkmark$	\checkmark	\checkmark



HDL therapy enables to address atherosclerosis and NAFLD/NASH

- Atherosclerosis is frequently observed in patients with NASH, thus presenting high cardiovascular risk, in addition to steatohepatitis and liver inflammation
- Current treatments based on lipid-lowering drugs attempt to reduce LDL cholesterol but they often increase liver enzymes, thereby limiting the benefits for treating NASH patients
- Other treatments currently under development for NASH, such as targeting the nuclear receptor PPAR as well as FXR agents, may face problems associated with their multiple effects

CER-209 increases HDL elimination by the liver...

- A new mechanism of action that involves the last steps of the RLT pathway
- Agonist activity of CER-209 on the liver P2Y13 receptors facilitates elimination of mature HDL particles loaded with lipids such as cholesterol, through better HDL liver recognition and increased bile secretion

...by stimulating the activity of HDL receptors



FDA IND APPROVAL TO BEGIN PHASE 1 STUDY WITH CER-209 IN NAFLD AND NASH IN Q1 2017

STUDY DESIGN NEARING COMPLETION



Experimental positive results for CER-209 presented at the 25th Conference of the APASL (ASIAN PACIFIC ASSOCIATION FOR THE STUDY OF THE LIVER)



CER-209, an agonist of the P2Y13, decreases both atherosclerosis and liver steatosis



Regression of liver steatosis after highcholesterol diet and treatment with CER-209*



CER-209 HAS A STRONG POTENTIAL FOR THE TREATMENT OF NASH AND NAFLD

* P2Y13 receptor agonist CER-209 decreases both atherosclerosis and liver steatosis in vivo: Rudi Baron, Marine Goffinet, Nadia Boubekeur, Claudine Tardy, Guy Cholez, Daniela C. Oniciu, Narendra D. Lalwani, Jean-Louis H. Dasseux and Ronald Barbaras



• 9 patent families protecting the products, indications and manufacturing / diagnostic methods

PRODUCT	INDICATION	MANUFACTURING/DIAGNOSTIC
Family 1: Formulation of CER-001 and its u	Ise	Family 2: Manufacturing methods for reconstituted HDL particles and
Family 6: HDL mimetic peptide including CER-522	Family 4: Treatment of dyslipidemias	highly-homogenous resulting populations of HDL particles
Family 7: P2Y13 receptor agonists (CER-209	9)	Family 3: Companion diagnostics and dosage of CER-001
Family 8: PPAR agonists (CER-002)		Family 5: Synthetic sphingomyelin synthesis / production methods
		Family 9: Carrier particles for administering drugs

NO COMPETITOR CAN REPRODUCE THE CHARGED NANOPARTICLE, EVEN PARTIALLY



		Indications	Preclinical	Phase I	Phase II	Phase III
Products du	e to enter a ne	w development phase				
	Recombinant	Post-ACS	,			
CER-001	HDL	FPHA: Orphan disease ApoA-I and ABCA1 deficiency				
CER-209	Stimulation of HDL	Dyslipidemia with low HDL	•			
	receptors	Non-alcoholic steatohepatitis (NASH/NAFLD/atherosclerosis)				
Products in	the portfolio			Future g	rowth drivers	
CER-522 (back-up)	Peptide HDL mimetic	Aortic valve stenosis		-•		
		Dyslipidemia with low HDL		•		
CER-002	Specific PPAR delta agonist	Non-alcoholic steatohepatitis (NASH)				
		Systemic lupus erythematosus (SLE)				

Cerenis[™] Solid near- and medium-term news flow



WEALTH CREATION PERSPECTIVE IN BOTH THE NEAR AND MEDIUM TERM

Consolidated accounts (IFRS)

BALANCE SHEET	31/12/2015	30/06/2016
€ thousands		
ASSETS		
Total non-current assets	446	340
Total current assets	45,661	37,152
Total assets	46,107	37,492
LIABILITIES		
Total shareholders' equity	33,198	22,359
Total non-current liabilities	7,120	7,082
Total current liabilities	5,790	8,051
Total liabilities	46,107	37,492

- Gross cash position of:

 €7.8 m on December 31, 2014
 €43.0 m on December 31, 2015
 €37.2 m on June 30, 2016
 €28.7 m on September 30, 2016
 - Of which €6.6 m is linked to Bpifrance (OSEO) advance payment
 - Of which €6.8 m is trade payables

INCOME STATEMENT	31/06/2015	30/06/2016
€ thousands		
Operational income	0	0
Marketing and Admin. costs	(1,064)	(3,828)
R&D costs	(5,239)	(10,213)
Operating profit / loss	(6,303)	(14,041)
Financial profit / loss	(760)	(626)
Net profit / loss	(7,062)	(14,662)

- Enrollment of clinical studies: CARAT, TANGO and LOCATION
- Affected by non-cash elements: -IFRS treatment of the BPI repayable advances

* Unaudited



CASH FLOW TABLE	30/06/2015	30/06/2016
€ thousands		
Cash flow from operations	(6,079)	(11,018)
Cash flow from investments	(25)	(2)
Cash flow from financing	48,924	940
Change in cash position	42,820	10,079
Cash position at start of period	7,843	42,951
Currency effect	(3)	0
Cash position at end of period	50,660	32,872





CER-001: major potential in the treatment of patients post-ACS

- 1. A therapy targeting the 2/3 of patients who are poorly served with available medical treatments
- 2. Advanced and promising clinical developments currently in Phase II (CARAT)
- 3. Compelling to big pharma (e.g., OMTHERA \$443 m; Esperion \$1.3 bn; KOS \$3.7 bn)¹
- 4. A manufacturing process validated on an industrial level with proven clinical safety and tolerability

In the short term: CER-001, a drug for treating orphan diseases

- 1. A potential of value creation in the short term, currently in Phase III (TANGO)
- 2. A major unmet medical need
- 3. Application for marketing approval before 2018

CER-209: major potential in the treatment of patients with atherosclerosis and NAFLD/NASH

- 1. A significant unmet medical need
- 2. CER-209, a highly specific P2Y13 receptor agonist promoting lipid elimination
- 3. Launch of a phase 1 study with CER-209 in NASH/NAFLD in Q1 2017

A LISTED COMPANY WITH SUBSTANTIAL POTENTIAL IN HDL THERAPY

In Press releases, OMTHERA: http://www.astrazeneca.com/Media/Press-releases/Article/20130528-omthera Esperion: http://www.bloomberg.com/apps/news?pid=newsarchive&sid=apU2qcYCmkO4&refer=us KOS: http://www.bloomberg.com/apps/news?pid=newsarchive&sid=af_8tglk4fHE