



Corporate Presentation

Nasdaq: PLXP

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Forward-looking Statements

This presentation includes or incorporates by reference statements that constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements relate to future events or to our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These statements include, but are not limited to information or assumptions about expenses, capital and other expenditures, financing plans, capital structure, cash flow, liquidity, management's plans, goals and objectives for future operations and growth. In some cases, you can identify forward-looking statements by the use of words such as "may," "could," "expect," "intend," "plan," "seek," "anticipate," "believe," "estimate," "predict," "potential," "continue," or the negative of these terms or other comparable terminology. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors which are, in some cases beyond our control and which could cause actual performance or results to differ materially from those expressed in or suggested by forward-looking statements.

Important factors that could cause such differences include, but are not limited to (i) our ability to bring both VAZALORE™ 81 mg and VAZALORE 325 mg to market-readiness; (ii) our ability to maintain regulatory approval of VAZALORE 325 mg or obtain and maintain regulatory approval of VAZALORE 81 mg and any future product candidates; (iii) the benefits of the use of VAZALORE; (iv) our ability to successfully commercialize our VAZALORE products, or any future product candidates; (v) the rate and degree of market acceptance of our VAZALORE products or any future product candidates; (vi) our ability to scale up manufacturing of our VAZALORE products to commercial scale; (vii) our ability to successfully build a specialty sales force and commercial infrastructure or collaborate with a firm that has these capabilities; (viii) our ability to compete with companies currently producing NSAIDs and other products; (ix) our reliance on third parties to conduct our clinical studies; (x) our reliance on third-party contract manufacturers to manufacture and supply our product candidates for us; (xi) our ability to retain and recruit key personnel, including development of a sales and marketing function; and (xii) our ability to obtain and maintain intellectual property protection for our VAZALORE products or any future product candidates.

Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We do not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

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OUR MISSION

PLx Pharma is focused on improving the performance of established therapeutic agents with its proprietary PLxGuard™ targeted drug delivery platform

We are driven to transform the standard of care for millions of patients

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PLxGuard™ – Innovative Drug Delivery Platform

Improves drug absorption and reduces risk of stomach erosions and ulcers

Novel mechanism of action enables strong patent life for multiple APIs

Our Lead Product is VAZALORE™



First and only liquid-filled aspirin capsule for over 40 million patients at risk for vascular events

Faster and more reliable platelet inhibition overcoming the limitations of the current standard of care enteric-coated (EC) aspirin*

Fewer gastric erosions and ulcers than immediate release (IR) aspirin**

Large OTC opportunity with a \$10 billion retail market

World-renowned Scientific Advisory Board chaired by Drs. Deepak Bhatt & Dominick Angiolillo

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* Clinically shown on VAZALORE 325 mg after 3 days of treatment

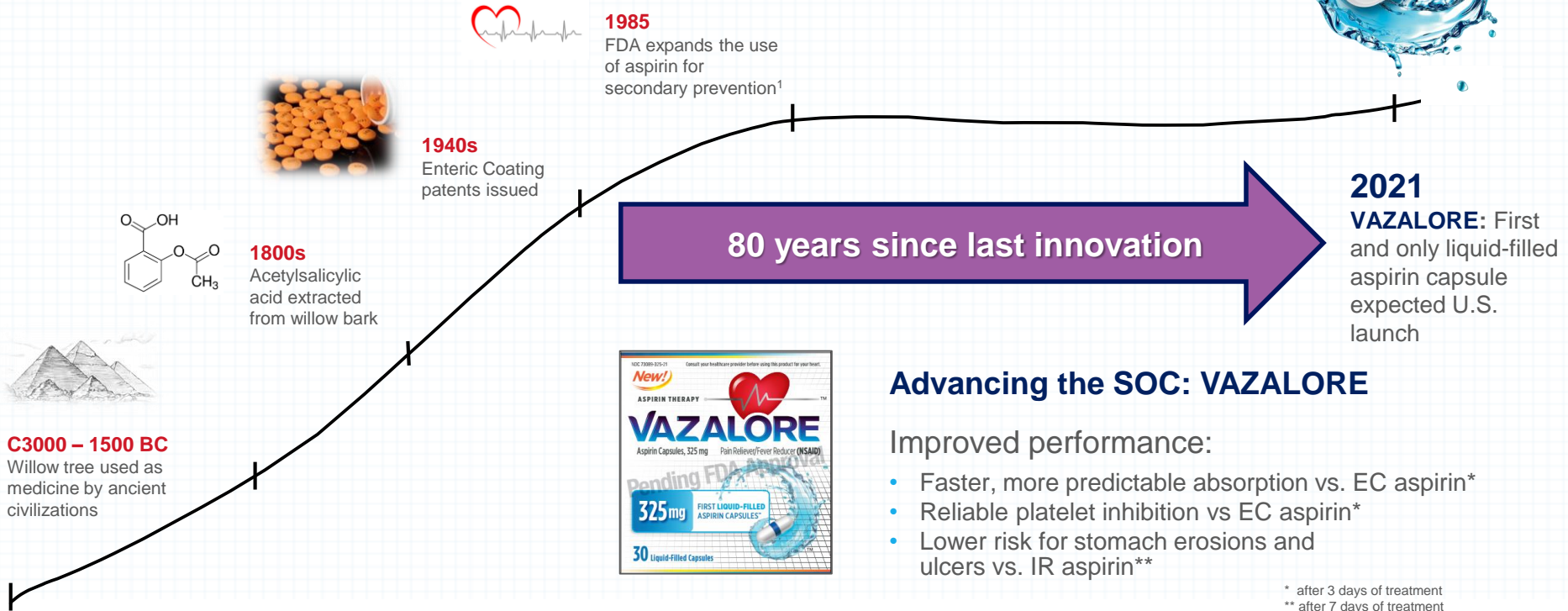
** Clinically shown on VAZALORE 325 mg after 7 days of treatment



Advancing the Standard of Care

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History of Aspirin Innovation



Advancing the SOC: VAZALORE

Improved performance:

- Faster, more predictable absorption vs. EC aspirin*
- Reliable platelet inhibition vs EC aspirin*
- Lower risk for stomach erosions and ulcers vs. IR aspirin**

* after 3 days of treatment

** after 7 days of treatment

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VAZALORE Novel Mechanism of Delivery

VAZALORE is a liquid-filled aspirin capsule

1 Helps Protect the Stomach

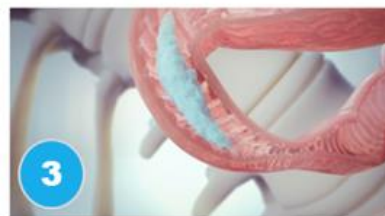
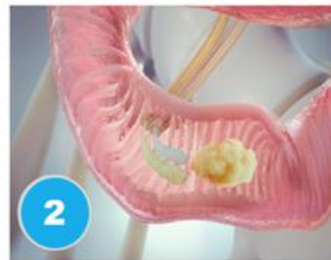
Capsule rapidly dissolves and releases the lipid-aspirin complex which stays intact in the stomach

2 Targeted Release in the Duodenum

- Higher pH dissociates complex
- Aspirin is free for absorption

3 Fast and Reliable Absorption

Predictable bioavailability as confirmed by two separate clinical studies ^{1,2}



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Comparative Antiplatelet Effect of Aspirin Formulations¹

Objectives:

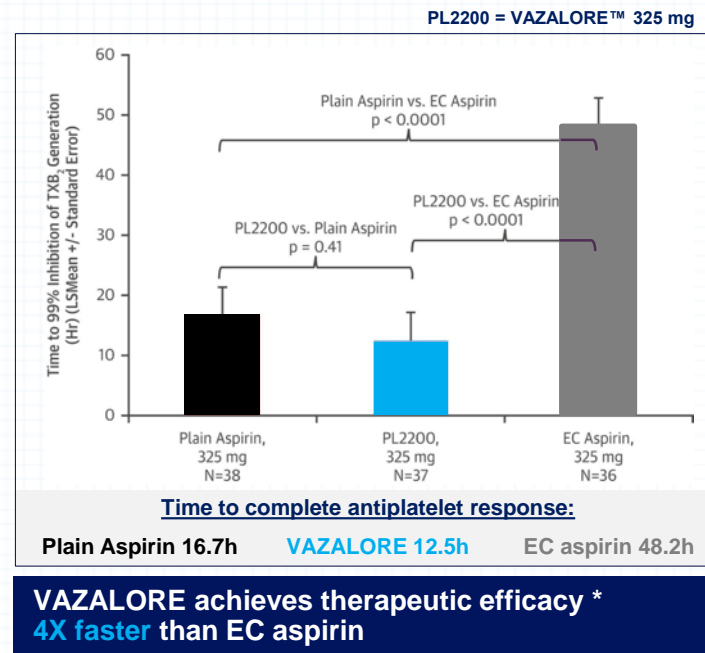
- Determine whether formulation dependent bioavailability mediates aspirin non-responsiveness

Methods:

- Randomized, blinded, triple crossover study
40 diabetic patients receiving 3 daily doses of:
 - Plain aspirin 325 mg
 - VAZALORE 325 mg
 - EC aspirin 325 mg

Primary Endpoint:

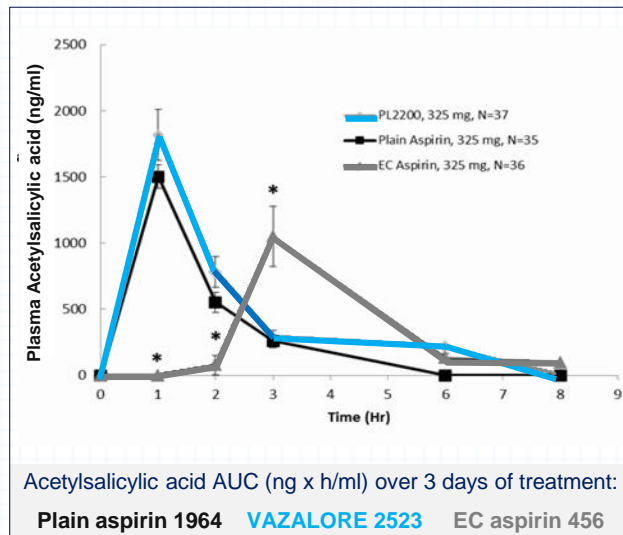
- Time to >99% Thromboxane B2 inhibition



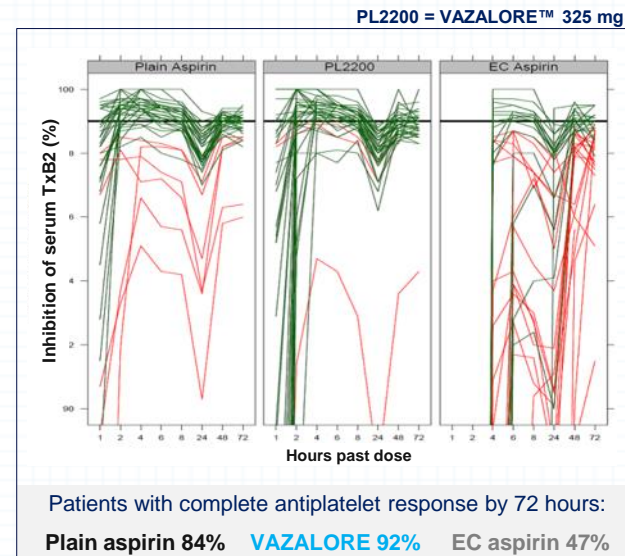
* As measured by TxB₂ Inhibition

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PK/PD Comparison of IR, EC & VAZALORE: Implications for Aspirin Efficacy¹



VAZALORE has up to 5X greater absorption than EC aspirin



VAZALORE delivers 2X better platelet response than EC aspirin

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Endoscopic Assessment of Aspirin Formulations: Implications for Gastric Ulcer Risk¹

Objectives:

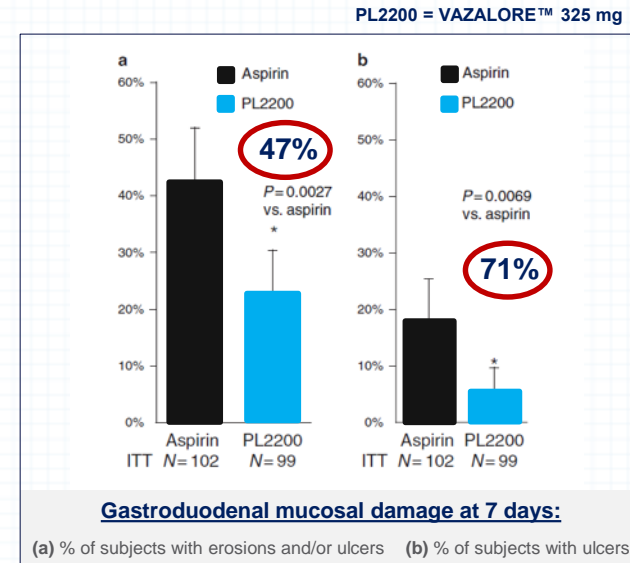
- Determine whether a novel, lipid-based aspirin formulation can reduce gastric erosions and ulcers

Methods:

- Randomized, blinded, multi-center study in 204 healthy volunteers:
 - 7 days of either aspirin or VAZALORE 325 mg
 - Endoscopy performed at Baseline and Day 7
 - Centralized, blinded endoscopic adjudication

Primary Endpoint:

- Incidence of gastroduodenal erosions or ulcers at 7 days



VAZALORE vs. IR aspirin:
47% lower risk of erosions or ulcers (NNT 5)
71% lower risk of ulcers (NNT 8)

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VAZALORE: Realizing Aspirin's Full Potential

As Seen in Clinical Trials for 325 mg



Achieves therapeutic efficacy **4X faster** than EC aspirin

Up to **5X higher** absorption than EC aspirin*

2X better platelet response than EC aspirin*

71% lower risk of ulcers than IR aspirin**

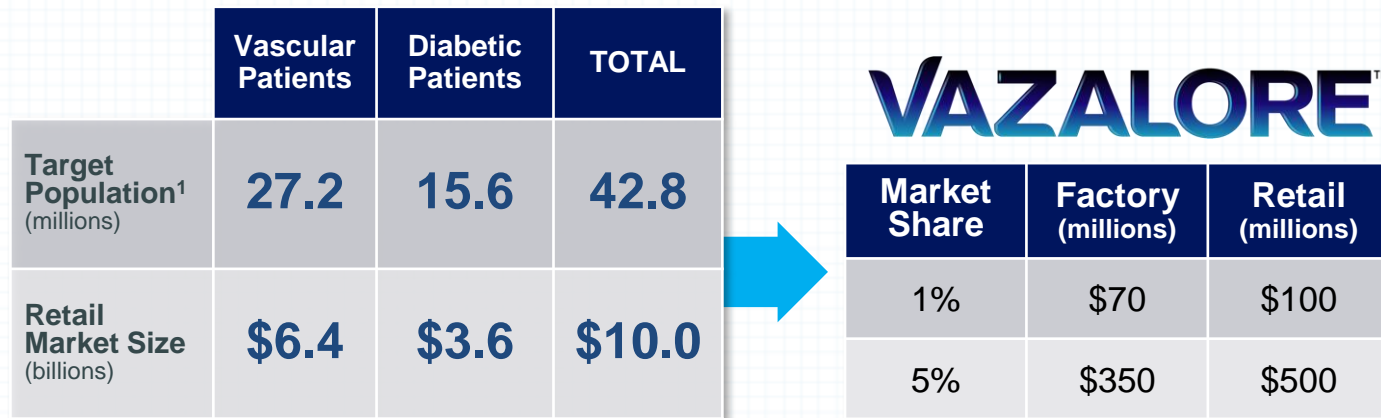
VAZALORE delivers fast, reliable and safe aspirin therapy

* after 3 days of treatment

** after 7 days of treatment

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VAZALORE U.S. Market Opportunity: \$10 Billion



- Vascular Patients: patients with Atherosclerotic Cardiovascular Disease (ASCVD) defined by having a previous event such as heart attack or stroke or a previous procedure such as cardiac stent, bypass operation, carotid operation or who have imaging evidence of significant vascular disease such as ultrasound, angiogram, etc.
- Diabetic Patients: Patients with diabetes but without evidence of ASCVD who are candidates for aspirin therapy.

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VAZALORE Commercial Strategy



PROFESSIONAL

- Engage cardiology community
- Generate awareness of New Standard of Care

VAZALORE™



TRADE

- Inject new life & premium \$'s to aspirin category
- Establish broad marketplace distribution



CONSUMER

- Drive awareness/education of new aspirin therapy
- Increase compliance

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Driving Professional, Consumer & Trade Awareness

Doctor is Driver of Therapy

Consumers are directed by doctors to begin aspirin therapy

Over 80% of specialists intend to prescribe VAZALORE based on quantitative and qualitative research¹

Surrounding the HCP & Consumer

With consistent messaging

HCP
Peer to Peer



Public
Relations

Consumer is Purchaser of Product

They make the final purchase decision at retail shelf

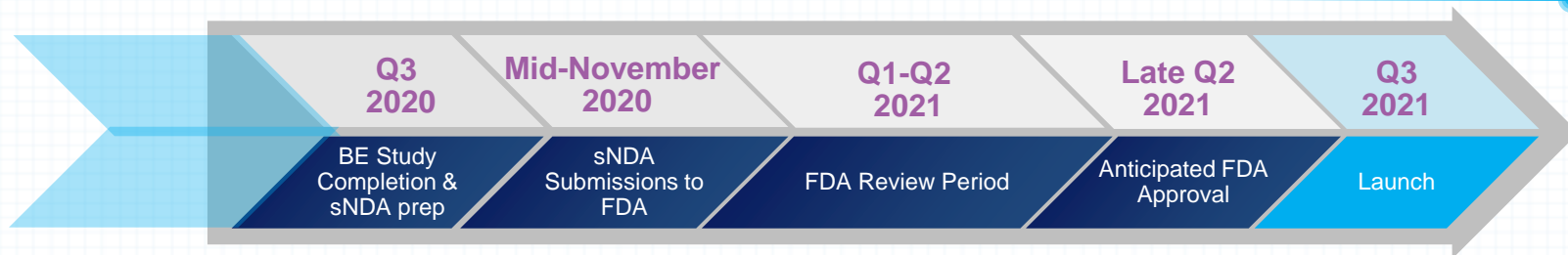
Media

Medical
Conferences

Accelerates awareness through consumer education **and** broad retail **accessibility**, prompting dialog with HCP

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Launch Timeline



Regulatory:

- Bioequivalence study on track with top-line data demonstrating bioequivalence to immediate release aspirin
- Finalizing supplemental New Drug Applications (sNDA) filings for VAZALORE 325 mg and 81 mg dose strengths to be submitted to the FDA mid-November 2020
- Targeting launch of both VAZALORE 325 mg and 81 mg dose strengths for third quarter of 2021, assuming FDA approval, adequate capital funding and no COVID-related delays

Financing:

- Cash balance as of 6/30/20 = \$13.3 million
- Plan to obtain additional financing upon submission of sNDA to fund pre-launch marketing spending and commercial inventory build

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Pipeline Leverages PLxGuard Platform Technology

PLxGuard applicable to a <i>variety of APIs</i>			Pre-Clinical	Phase 1	Phase 2	Phase 3
Product Candidate	Type	Size				
PL2200 Aspirin (VAZALORE) Chronic Pain & Other Vascular Indications*	OTC	42.8M Patients at High Risk for Vascular Events	325 mg Approved			
PL1200 Ibuprofen, 200 mg* Pain, Inflammation and Fever	OTC	25.3M Suffer Daily Chronic Pain				
Other NSAIDs e.g. Indomethacin**, Diclofenac**	OTC & Rx	25.3M Suffer Daily Chronic Pain				
National Cancer Institute Grant PLx Formula in test with Colorectal Cancer Patients**	OTC & Rx	1.3M Impacted by Colorectal Cancer				

Clinical (*) and pre-clinical (**) proof-of-concept studies

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PLx Pharma Management Team

Name	Experience
 <p>Mike Valentino <i>Executive Chairman of the Board</i></p>	<p>35+ years CEO and senior management with successful OTC and Rx brands (OTC brand, Mucinex®: \$2.3 billion exit in 4.5 years)</p> <div>     </div>
 <p>Natasha Giordano <i>President and CEO</i></p>	<p>25+ years CEO and senior management commercialization experience</p> <div>        </div>
 <p>Rita O'Connor, CPA <i>Chief Financial Officer Head of Mfg & Supply Chain</i></p>	<p>25+ years finance leadership in public and private Rx and OTC companies</p> <div>    </div>
 <p>Steven Valentino <i>VP, Trade Sales</i></p>	<p>25+ years in OTC and consumer healthcare including Rx-to-OTC switches, brand management, trade sales</p> <div>     </div>
 <p>Joanne Cotignola <i>VP, Marketing</i></p>	<p>25+ years in OTC healthcare brand management at public and private companies</p> <div>     </div>









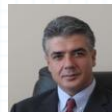


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Independent Board of Directors & Scientific Advisory Board

Board of Directors

Director	Experience
 <p>Gary S. Balkema</p>	<ul style="list-style-type: none"> Former global head of Bayer Healthcare LLC and Worldwide Consumer Care Division Prior VP and General Manager for American Cyanamid Co.'s Lederle Consumer Health Division
 <p>Tony Bartsh</p>	<ul style="list-style-type: none"> Portfolio manager and partner at Park West Asset Management Former investment analyst at Emrose Capital and Crosslink Capital
 <p>Kirk Calhoun</p>	<ul style="list-style-type: none"> Former audit committee chair, Adams Respiratory Former partner, Ernst & Young LLP
 <p>Bob Casale</p>	<ul style="list-style-type: none"> Former Adams Respiratory COO (Mucinex®, Adams' IPO and \$2.3 billion sale) Former senior manager at Pfizer, Warner Lambert and CEO of Scerene Healthcare
 <p>John W. Hadden II</p>	<ul style="list-style-type: none"> SVP of Operations Secura Bio, Inc. Former CEO of IRX Therapeutics and former healthcare investment banker at JP Morgan & Co.

Scientific Advisory Board

 <p>Deepak L. Bhatt, MD, MPH, FACC, FAHA, FSCAI, FESC Executive Director of Interventional CV Programs Brigham and Women's Hospital Heart & Vascular Center Professor of Medicine, Harvard Medical School Boston, MA, USA</p>	 <p>Dominick J. Angiolillo, MD, PhD, FACC, FESC, FSCAI Program Director, Interventional Cardiology Fellowship Professor of Medicine, Director, Cardiovascular Research University of Florida College of Medicine-Jacksonville Jacksonville, FL, USA</p>	 <p>P. Gabriel Steg, MD, FESC, FACC Director of the Coronary Care Unit, Hôpital Bichat-Claude Professor of Cardiology, Univ. Paris VII - Denis Diderot Professor at the National Heart and Lung Institute, Imperial College, London, UK Paris, FRANCE</p>	 <p>Roxana Mehran, MD, FACC, FACP, FCCP, FESC, FAHA, FSCAI Professor of Medicine and Director of Interventional Cardiovascular Research and Clinical Trials at the Zena and Michael A. Wiener Cardiovascular Institute at Mount Sinai School of Medicine</p>	 <p>Byron Cryer, MD Associate Dean for Faculty Diversity and Development Professor of Medicine, UT Southwestern Medical School Dallas, TX, USA</p>	
 <p>James M. Scheiman, MD David Stone Prof. of Internal Medicine Chief, Division of Gastroenterology and Hepatology Digestive Health Service Line Medical Director, University of Virginia Health System, University of Virginia Charlottesville, VA, USA</p>	 <p>Mark J. Alberts, MD Physician-in-Chief Ayer Neuroscience Institute Hartford HealthCare Chief of Neurology Hartford Hospital, Professor of Neurology UConn School of Medicine</p>	 <p>Jayne Prats, PhD Elysis Medical Scientific Solutions Boston, MA, USA</p>	 <p>Efthymios N. Deligiorgis, MD, FACC, FESC, FSCAI Chief Medical Officer CytoSorbents Corporation Monmouth Junction, NJ</p>	 <p>Carey Kimmelstiel, MD, FACC, FACP, FSCAI Director, Catheterization Laboratory and Interventional Cardiology, Tufts Medical Center Professor of Medicine, Tufts University School of Medicine Boston, MA, USA</p>	 <p>Todd K. Rosengart, MD Professor and Chairman, DeBakey-Bard Chair of Surgery Michael E. DeBakey Department of Surgery Baylor College of Medicine Houston, TX, USA</p>

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Thank You

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