



RAPID
TESTS
FOR
**EARLIER
TREATMENT™**

August 9, 2017

NASDAQ: CEMI

Forward-Looking Statement

Statements contained herein that are not historical facts are forward-looking statements within the meaning of the Securities Act of 1933, as amended. Those statements include statements regarding the intent, belief or current expectations of Chembio and its management. Such statements reflect management's current views, are based on certain assumptions, and involve risks and uncertainties. Actual results, events, or performance may differ materially from the above forward-looking statements due to a number of important factors, and will be dependent upon a variety of factors, including, but not limited to, Chembio's ability to develop, manufacture, market and finance new products and the demand for Chembio's products. Chembio undertakes no obligation to publicly update these forward-looking statements to reflect events or circumstances that occur after the date hereof or to reflect any change in Chembio's expectations with regard to these forward-looking statements or the occurrence of unanticipated events. Other factors that may impact Chembio's success are more fully disclosed in Chembio's most recent public filings with the U.S. Securities and Exchange Commission.

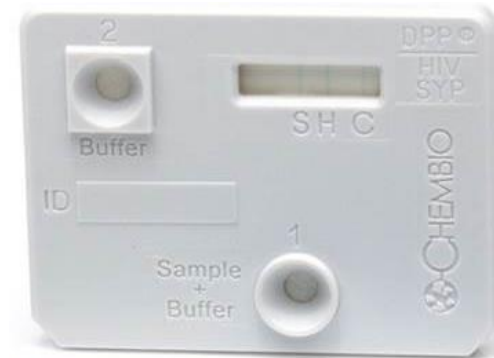
Investment Highlights

- **A global leader in point-of-care (POC) infectious disease**
 - Sales & marketing organization in U.S., Europe, Africa, APAC and LATAM
 - Manufacturing operations in the U.S. (Medford, NY) and Southeast Asia (Malaysia)
- **Groundbreaking patented DPP[®] technology platform**
 - Superior sensitivity and specificity vs. traditional lateral flow technology
 - Multiple tests from a tiny (10 μ L) drop of fingertip blood (multiplexing)
- **Robust pipeline of new DPP[®] POC assays in development**
 - DPP[®] HIV-Syphilis Combination Assay (U.S. version)
 - DPP[®] Fever Assays (Malaria, Dengue, Zika, Chikungunya, Ebola, Lassa, + others)
 - DPP[®] Technology Collaborations (Traumatic Brain Injury, Cancer, Bovine TB)
- **Multiple high-value collaborations**
 - U.S. Government:
 - HHS/ASPR/BARDA: Zika (option: Zika/Dengue/Chikungunya);
 - CDC: Malaria, Ebola, Zika, Zika/Dengue/Chikungunya
 - Paul G. Allen Ebola Program: Fever Panel - Africa, Zika
 - Bill & Melinda Gates Foundation: Malaria Oral Fluid/Saliva
 - FIND: Fever Panel - Asia

Chembio's Dual Path Platform (DPP®) Technology

Next-Generation Point-of-Care Technology Platform

- Patented POC technology platform
- Improved sensitivity vs. lateral flow technology
- Multiplex capability - multiple test results from a single patient sample
- Adapts to multiple sample types (blood, oral fluid)
- Application across a range of diseases and markets
- Unique sample collection device: SampleTainer®



Chembio's Dual Path Platform (DPP®) Technology

Leveraging Our Technology Platform to Enter New Markets

THREE AREAS OF STRATEGIC FOCUS

STD
Business

Fever
Portfolio

Technology
Collaborations

DPP® TECHNOLOGY PLATFORM

HIV Continues to be a Global Health Crisis

U.S. Syphilis Cases Increase Risk of HIV-Syphilis Co-Infection

United States (HIV)

~1.2 million
living with HIV/AIDS

~50,000
new HIV infections/year

~1 in 8
unaware of HIV infection

Global (HIV)

~36.7 million
living with HIV/AIDS (2015)

~1.1 million
died of AIDS-related illnesses (2015)

United States (SYP)

~63,000
new infections (2014)

Global (SYP)

~12 million
new infections/year

“Between 2014 and 2015, the number of reported primary and secondary (P&S) cases in the United States increased by 19%. In the United States, approximately half of men who have sex with men (MSM) with primary and secondary (P&S) syphilis were also living with HIV. In addition, MSM who are HIV-negative and diagnosed with P&S syphilis are more likely to be infected with HIV in the future.”

Chembio Lateral Flow HIV Tests

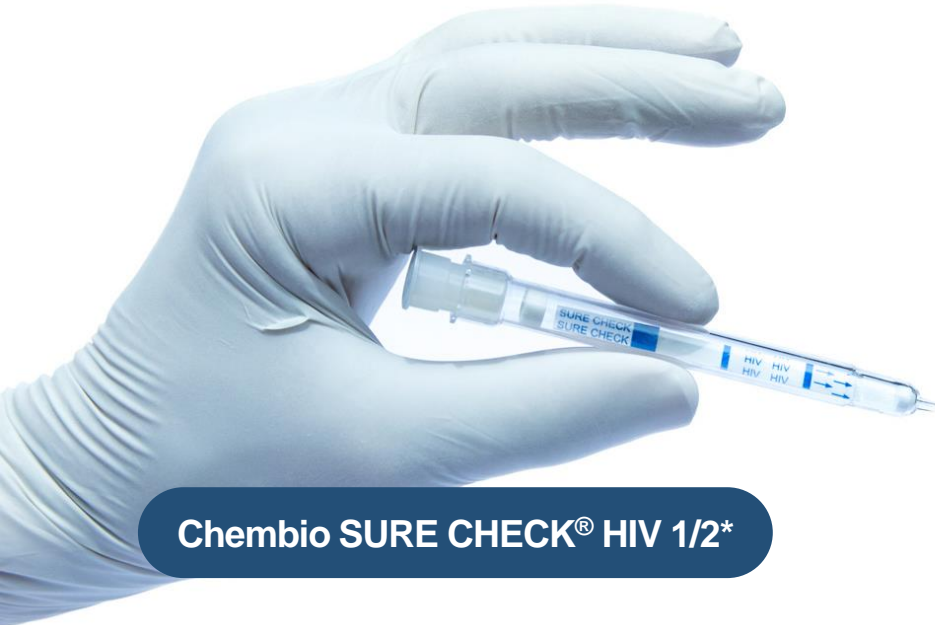
Foundational HIV Product Suite

■ Product Features & Benefits

- FDA (PMA) approved, CLIA-waived
- CE marked, WHO pre-qualified
- 2.5 - 5.0 μ L blood sample
- 15 - 20 minute test time
- Specificity: 99.9%, Sensitivity: 99.7%



Chembio HIV 1/2 STAT-PAK®



Chembio SURE CHECK® HIV 1/2*

■ Commercialization

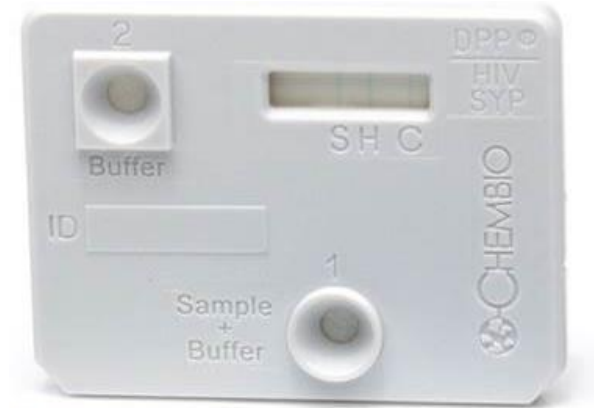
- High quality brands, marketed globally since 2007
- Sold to public health clinics, POLs, hospitals, self test (EU)
- Distribution partners -
US: Fisher, McKesson/PSS, H. Schein, Medline
Caribbean: Isla Lab

Chembio DPP[®] HIV-SYP and DPP[®] HIV 1/2 Assays

Strengthening our HIV/STD Portfolio

■ DPP[®] HIV-Syphilis Combo Assay

- Chembio has a history of leadership
 - First to receive USAID, ANVISA, Cofepris approval
 - First to market/sell in Latin America
- Global screening opportunity:
 - Pregnant women
 - MSM (up to 70% HIV-Syphilis co-infection)
- Received CE mark (Q1 2017)
- U.S. clinical trial for FDA PMA submission to be completed during Q4'17



■ DPP[®] HIV 1/2 Assay

- FDA-approved (2013), CLIA-waived (2014) (blood and oral fluid)
- Superior performance vs. competitors (sensitivity)
- Patented SampleTainer[®] sample collection system



Chembio's Dual Path Platform (DPP®) Technology

Leveraging Our Technology Platform to Enter New Markets

THREE AREAS OF STRATEGIC FOCUS

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graph TD; A[THREE AREAS OF STRATEGIC FOCUS] --> B[STD Business]; A --> C[Fever Portfolio]; A --> D[Technology Collaborations]; E[DPP TECHNOLOGY PLATFORM] --> B; E --> C; E --> D;
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**STD
Business**

**Fever
Portfolio**

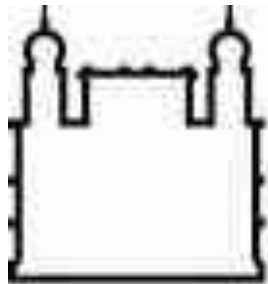
**Technology
Collaborations**

DPP® TECHNOLOGY PLATFORM

Fever Disease - Product Development

Chembio is Collaborating with World Leading Organizations

BILL & MELINDA
GATES foundation



Ministério da Saúde

FIOCRUZ

Fundação Oswaldo Cruz



THE PAUL G. ALLEN FAMILY FOUNDATION

DPP[®] Fever Disease - Product Development

Malaria, Dengue, Zika, Chikungunya, Ebola, Lassa, Marburg

DPP[®] Fever Panel - Africa

Collaborator: The Paul G. Allen Family Foundation (PGAFF)

DPP[®] Malaria-Ebola Assay

Collaborator: CDC

DPP[®] Ebola Assay

Collaborator: CDC

DPP[®] Fever Panel - Asia

Collaborator: FIND

DPP[®] Malaria OF/Saliva Assay

Collaborator: Bill & Melinda Gates Foundation (BMGF)

DPP[®] Zika Assay

Collaborators: HHS/BARDA & The Paul G. Allen Family Foundation (PGAFF)

DPP[®] Zika/Dengue/Chik Assay

Collaborator: HHS/BARDA

DPP[®] Dengue Assay

ChemBio Internal Development

DPP[®] Chikungunya Assay

ChemBio Internal Development

Fever Diseases - A Growing Global Concern

Malaria, Dengue, Zika, Chikungunya, Ebola, Lassa, Marburg

■ Mosquito-Borne Illnesses

- Mosquito → world's deadliest animal
- Responsible for 725,000 deaths/year
- Global geographic coverage

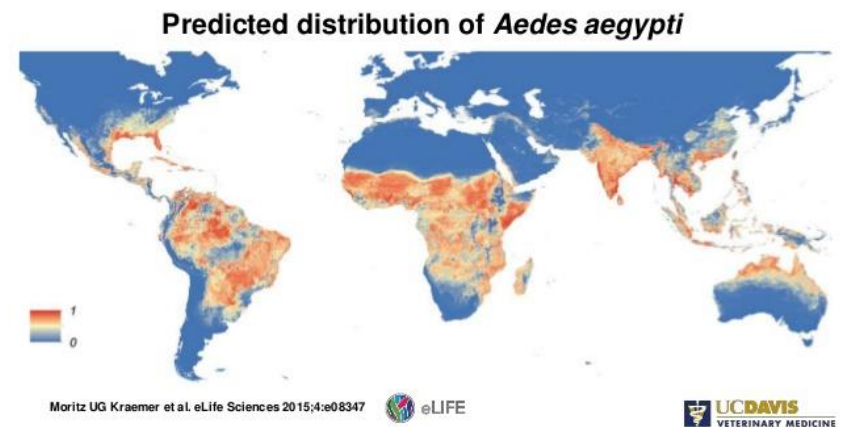
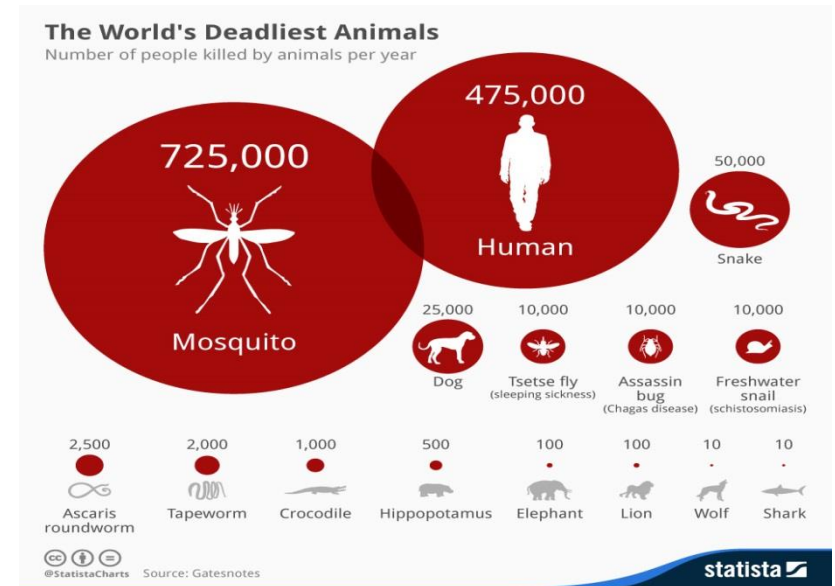
■ Established Fever Markets:

- Malaria: >200 million annual infections
- Dengue: ~300 million annual infections

■ Emerging Fever Markets:

- Zika
- Chikungunya
- Ebola
- Lassa
- Marburg

■ What Crisis Will We Face Next?



Chembio is Well-Positioned to Address Zika Virus

■ Local Zika Transmission

- 2015 (Brazil) → 2017 (~60 countries)

■ Who Needs to Be Tested?

- Pregnant women
- Travelers to/from endemic areas
- Others?

■ Molecular (MDx) Test Limitations

- Laboratory test, venous sample
- Detects acute infections only - not antibodies
- No immediate results
- High cost

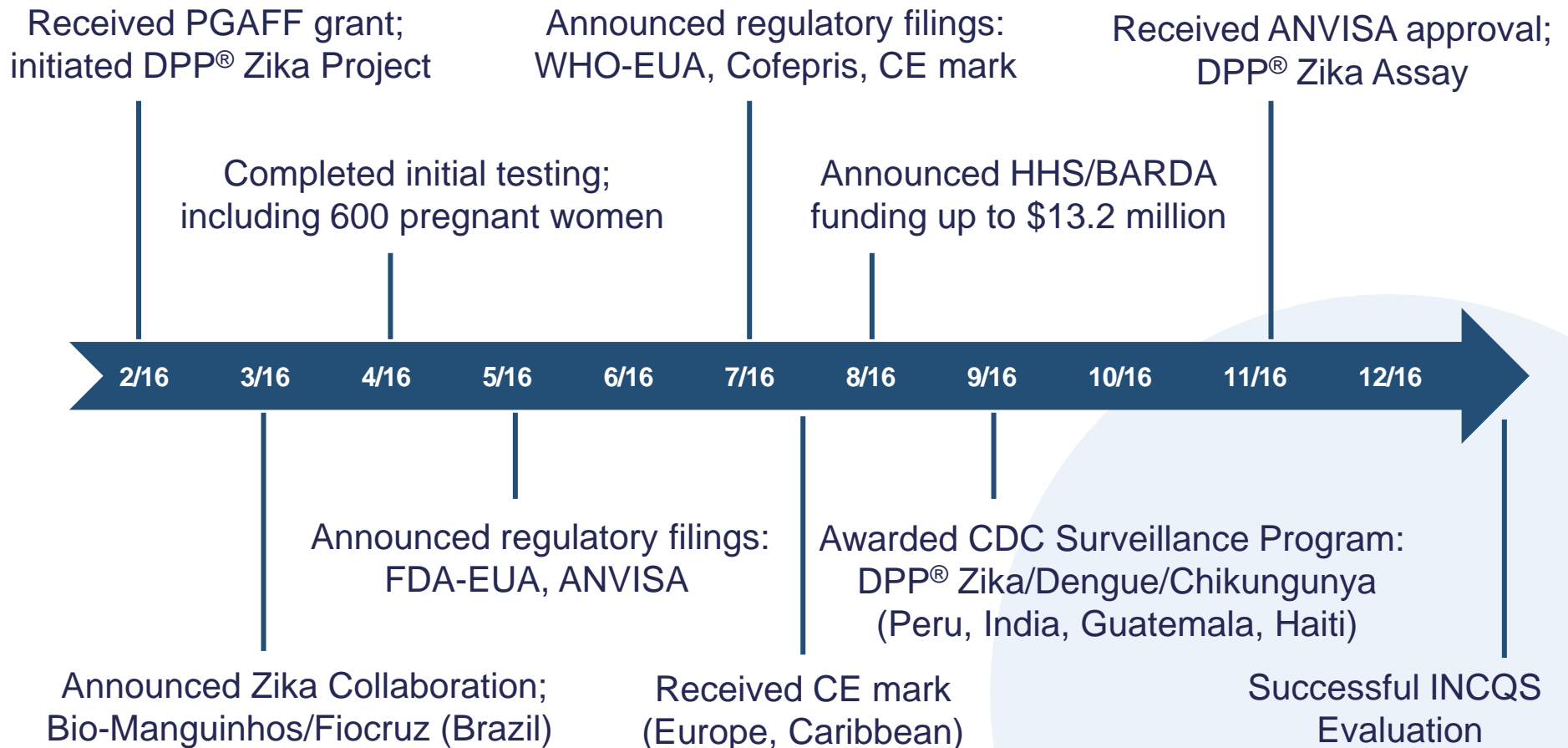
■ Chembio Zika Test Advantage

- Convenience: POC test; fingerstick sample
- Detects antibodies (IgM/IgG)
- Time to result: 15 minutes
- Low cost compared to MDx tests



DPP[®] Zika/Dengue/Chikungunya - Development Demonstrates Expertise, Efficiency and Dedication

■ DPP[®] Zika IgM/IgG Development/Commercialization Timeline



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DPP® TECHNOLOGY PLATFORM

Technology Collaborations: Bio-Rad (NYSE: BIO) and opTricon (Berlin, Germany)

■ Bio-Rad Geenius™ System: HIV-1 and HIV-2 Confirmation

- Multiplex DPP® Assay
- Developed by Chembio
- Licensed to Bio-Rad
- Marketed/sold by Bio-Rad (ex-Brazil)



■ Chembio DPP® Micro Reader: Quantitative Results & Data Management

- Improves DPP® performance
- Provides quantitative results
- Standardizes result interpretation
- Data capture, storage, transmission
- Key features: simple, palm-sized, battery-operated, cost-effective



Chembio's Dual Path Platform (DPP®) Technology

Leveraging Our Technology Platform to Enter New Markets

■ DPP® Cancer Assay

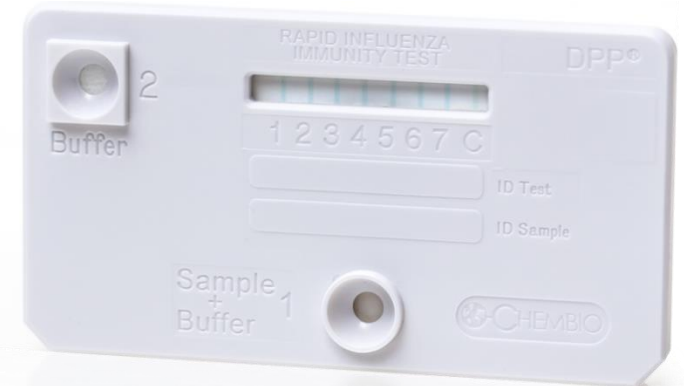
- Undisclosed partner
- Biomarkers to detect specific form of cancer
- 10µL blood sample, 20 minute test
- Quantitative result
- In development phase

■ DPP® TBI/Concussion Assay

- Perseus Science Group, LLC
- Biomarker to detect TBI/Concussion
- 10µL blood sample, 20 minute test
- Quantitative result
- In development phase

■ DPP® BovineTB

- U.S. Department of Agriculture (USDA)
- Biomarker to detect bovine tuberculosis
- 20 minute test results
- In development phase



Chembio's Global Commercial Organization

Shift from Product Supply Model to Direct Sales Model

- Regained control of U.S. HIV products (2014 – 2016)
 - Terminated prior U.S. distribution agreements (HIV 1/2 STAT-PAK[®] and SURE CHECK[®] HIV 1/2)
- Developed internal commercialization structure (2014 – 2016)
 - Direct sales of DPP[®] HIV 1/2, HIV 1/2 STAT-PAK[®], and SURE CHECK[®] HIV 1/2 products in the U.S. market
- Established geographic coverage model in U.S. (2014 – 2016)
 - Established agreements with U.S. distributors (e.g., McKesson, H. Schein, Fisher, Medline)
- Hired Experienced and Accomplished Leadership (Q4 2016)
 - Robert Passas, Ph.D. – President, EMEA and APAC Regions
 - Trinity Biotech; The Binding Site; Abbott, Quidel
 - Sharon Klugewicz - President, Americas Region
 - Chembio COO (since 2012); Pall Corporation
- Hired international sales executives to build commercial channels in Latin America, Africa and Asia Pacific (Q4 2016 – Q1 2017)

Manufacturing Capabilities

Expanding Global Manufacturing and Distribution



Medford, NY

Kuala Lumpur, Malaysia



- **Acquired RVR Diagnostics (January 2017)**
- **RVR Diagnostics, a subsidiary of Chembio Diagnostics**
 - International base of operations and existing sales revenue
 - Cost effective manufacturing operations, ISO 13485 certification
 - Strategic location in Southeast Asia provides access to new markets
 - Regulatory access in Southeast Asia market
- **Combined Manufacturing Operations**
 - High volume manufacturing capabilities; current capacity 25MM tests
 - 65,000 sq. ft. leased facilities (Medford, NY and Malaysia)
 - Robust quality management system (Medford, NY)
 - Full compliance with regulatory requirements (i.e., FDA, USDA, WHO, ISO)
 - Expertise in manufacturing scale up, process validation and cGMP
 - Total number of employees: ~165

Selected Financial Highlights

	Quarter Ended (in 000's)	
	June 30, 2017	June 30, 2016
Net Product Revenues	\$2,893	\$2,034
Total Revenues	\$4,115	\$3,266
Gross Margin	\$1,911	\$1,580
Loss from Operations	(\$2,181)	(\$2,386)
Net Loss	(\$2,173)	(\$8,347)*
Accounts Receivable Net	\$4,672	\$3,384
Cash (as of end of period)	\$3,692	\$1,440

* The net loss in the 2016 period includes a tax provision for the recording of a valuation allowance on the Company's deferred tax asset of \$5,801,000.

Experienced Executive Leadership Team

EXECUTIVE	JOINED CHEMBIO	PREVIOUS EXPERIENCE
John Sperzel III President & CEO	2014	2011-2013, President and CEO of ITC/Accriva; 1987-2011 Axis Shield, Bayer Diagnostics, Instrumentation Laboratory and Boehringer Mannheim
Sharon Klugewicz, M.S. acting CEO, President, Americas Region	2012	2009-2012, Sr. VP Scientific & Laboratory Services of Pall Corporation; 1991-2009 Pall Corporation
Richard Larkin, CPA Chief Financial Officer; Executive Vice President	2003	2000-2003, CFO of Visual Technology Group; 1987-2000 CFO of Protex International Corp.
Javan Esfandiari, M.S. Chief Science & Technology Officer; Executive Vice President	2000	1997-2000, Co-Founder of Sinovus Biotech AB (Sweden), acquired by Chembio in 2000; 1993-1997 R&D Director of On-Site Biotech
Robert Passas, Ph.D. President, EMEA & APAC Regions	2016	2015-2016, VP, Worldwide Marketing and International Sales of Trinity Biotech; 1993-2015 The Binding Site, Abbott, Trinity Biotech, Quidel
Thomas Ippolito VP Regulatory & Clinical Affairs	2005	2000-2005, VP Quality & Regulatory of Biospecific Technologies Corp.; 1984-2000 United Biomedical Inc., Analytab Products Inc. and Eastern LI Hospital
Paul Lambotte VP Product Development	2014	2009-2014, President of PLC Inc.; 2009-2012, Chief Science Officer of Axxin Pty Ltd.; 2000-2009, VP of R&D and Business Development Quidel, Inc.
David Gyorke VP Manufacturing Operations	2017	2011-2016, VP Operations of Nanomix; 1983-2011, NeoVista, Farallon Medical, Inc., Cholestech Corporation, Bio-Rad