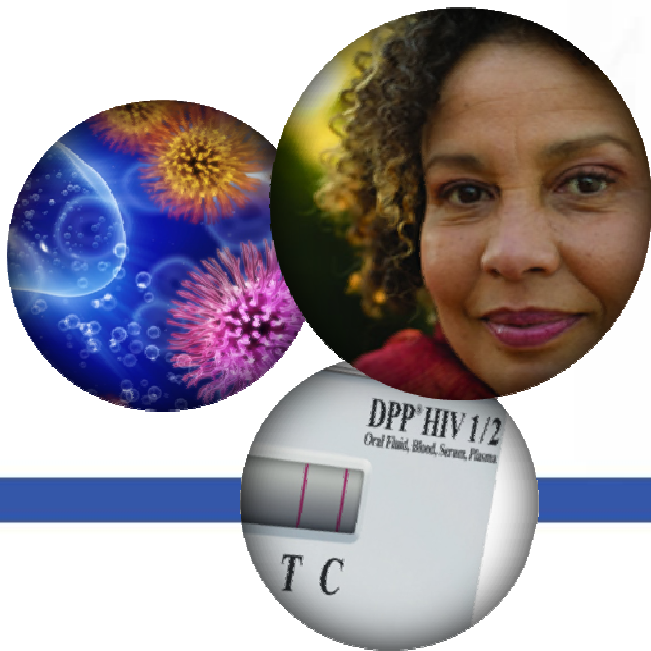




RAPID Tests for EARLIER Treatment



Investor Presentation

May 2011

Forward Looking Statements

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 obtain additional financing 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. 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

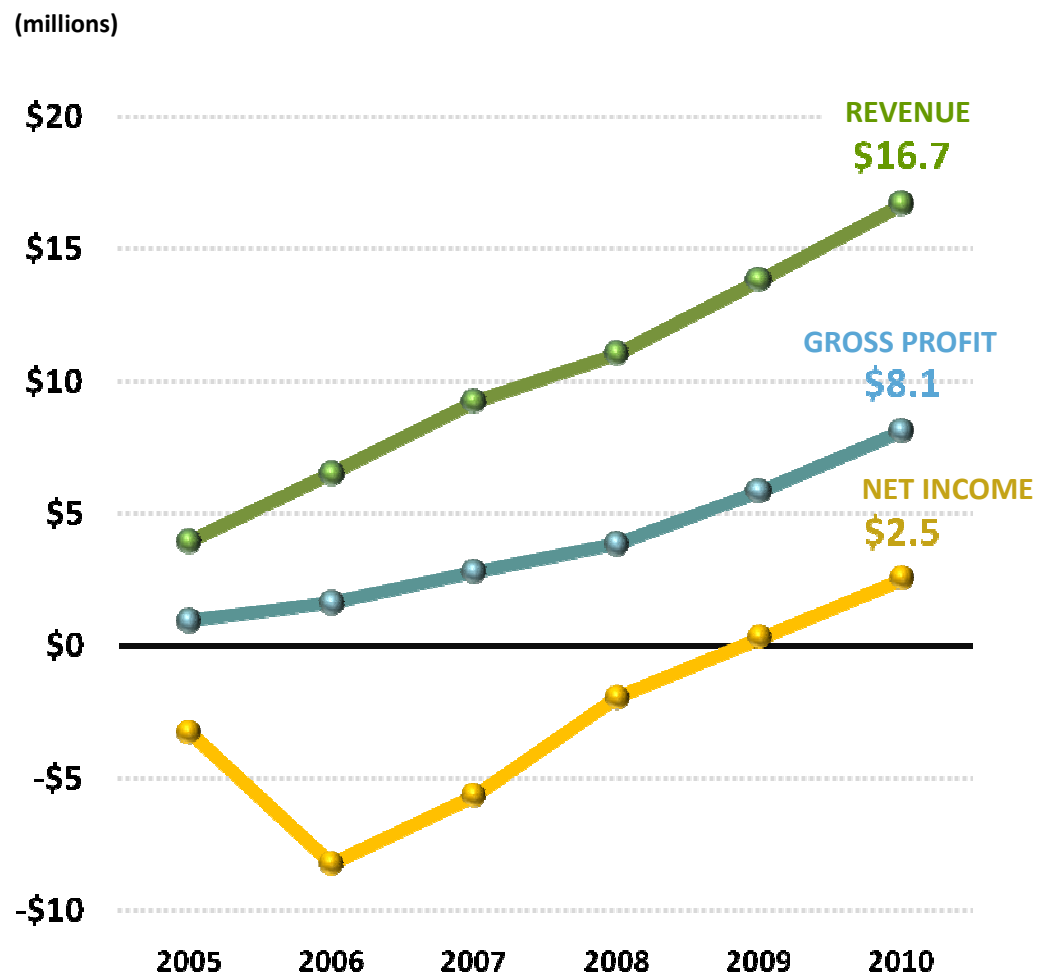
Chembio Overview

- Develops, Manufactures and Markets Rapid Point-of- Care Test (POCT) Products
- Markets Served: Public Health, Women's Health, Infectious Diseases
- Diverse & Growing Pipeline of Proprietary Products
- Fully Integrated FDA Approved Manufacturing Facility in Medford, NY
- Record Financial Results in 2009 & 2010



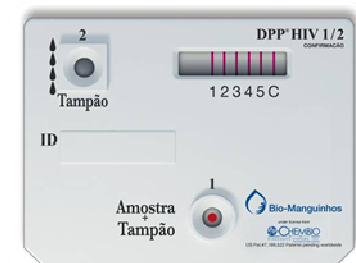
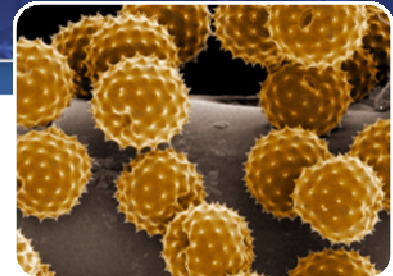
Financial Overview

- Five Year Compounded Annual Revenue Growth of 33%
- Simplified Capital Structure 12/2007
- Retired ~\$2MM Debt Jan 2009 – Jan 2011
- Record Results Year after Year
- Near and Long-Term Growth Catalysts



POCTs - A Growing Global Market

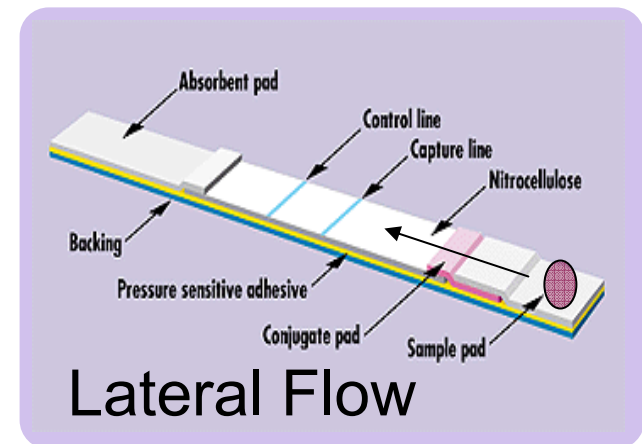
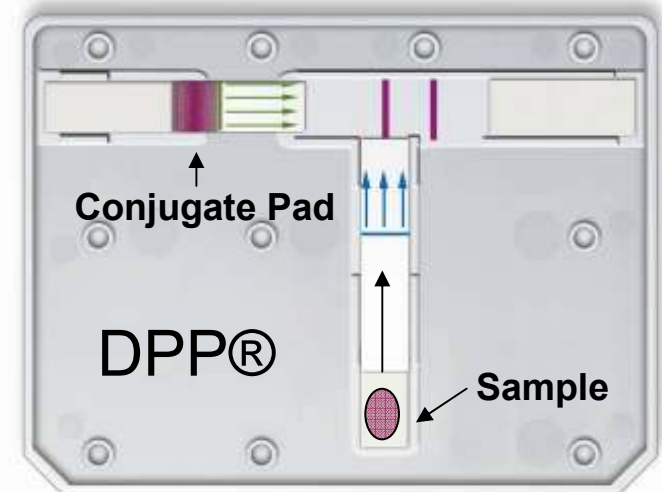
- \$7B Global Point-of-Care Test (POCT) Market
- Fastest Growing Segment of \$39.5B In-Vitro Diagnostics Market
- POCTs for HIV, Syphilis, HCV and other STDs Serve Crucial Public Health Objectives
- Other Important POCT Markets
 - Infectious Diseases, Cardiac Markers, Companion Animal, OTC, Allergy



DUAL PATH PLATFORM (DPP®)

Chembio's Proprietary POCT Technology

- Independent Sample Flow Path Enables Improved Sensitivity & Use of More Challenging Sample Types
- Improved Multiplexing Facilitated by Direct Binding, Uniform Delivery of Samples
- U.S. patents, and patents in China, Malaysia, Eurasia, Mexico, Singapore, and the U.K.
 - Additional DPP® Patents Pending in the U.S. and many foreign countries
 - Patents have also been filed on extensions to the DPP® product line



Chembio-Branded Public Health Base Complemented by OEM and License Programs

Current OEM/
Licensees

FIOCRUZ
(BRAZIL)

BIORAD



Anticipated
OEM/License Areas

INFECTIOUS
DISEASES

VETERINARY

HIV
SCREEN

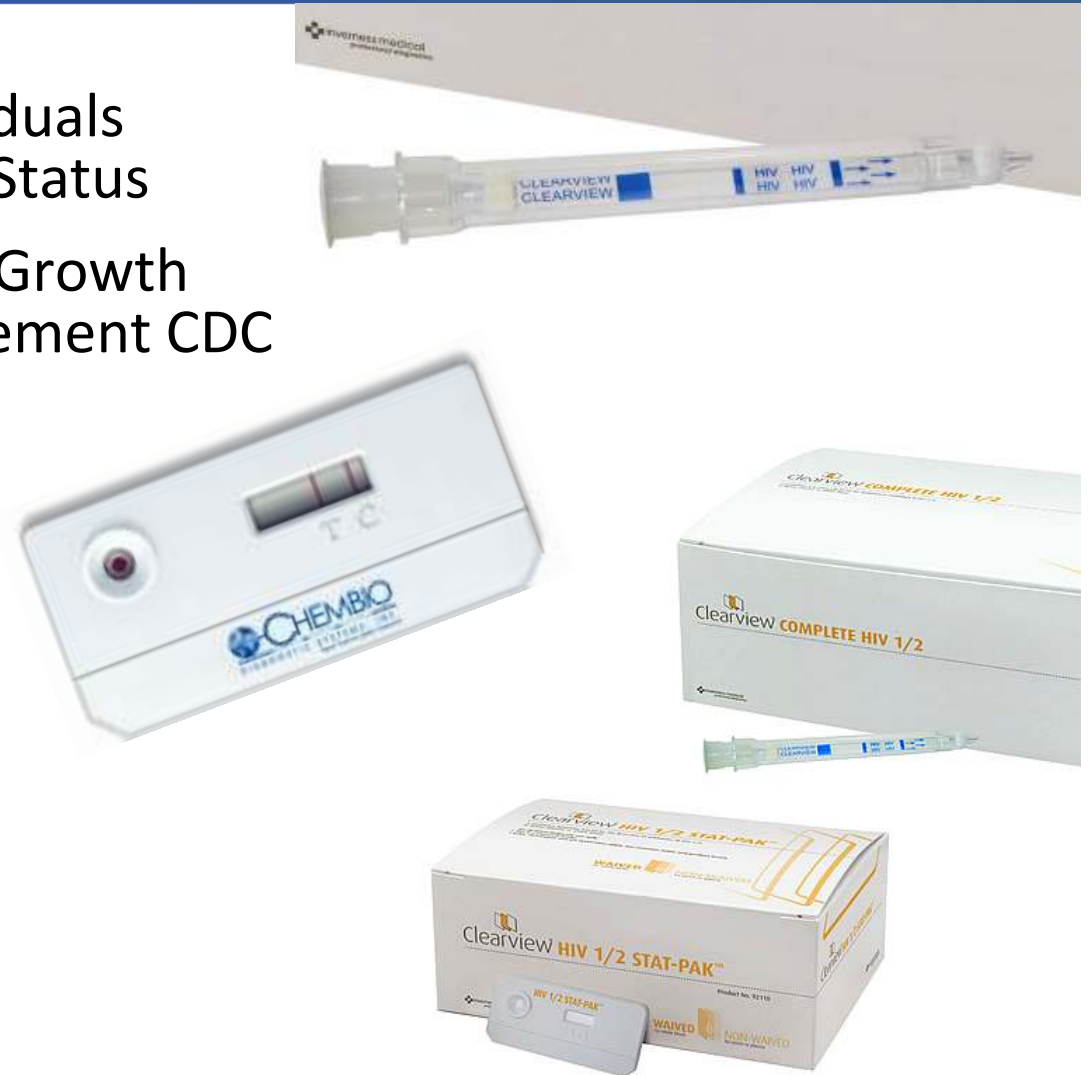
HCV AB-AG
DUAL DPP

SYPHILIS

INFLUENZA

Lateral Flow Rapid HIV Tests

- 25% of 1.1MM HIV+ Individuals in U.S. Not Aware of their Status
- US Rapid HIV Test Market Growth Continuing as States Implement CDC Testing Recommendation
- Only Two Other CLIA-waived Products
- Products Sold Under Chembio Brands (STAT PAK® & SURE CHECK®) ex-US and by Alere, Inc. (formerly Inverness) in US.



Pipeline: Chembio-Branded DPP® Products Anticipated Timelines – US Market

R&D

CLINICAL TRIALS

APPROVALS/CLEARANCE

	2011	2012	Est. U.S. Market Size
DPP® HIV Oral Fluid	Clinical Trials Commenced 2010, Completing Q1 & 2; Modular Submissions in Q1, 2 & 3	FDA Approval, CLIA waiver, US Market Launch	\$70MM
DPP® Syphilis Screen & Confirm	Completing Validation Q1; Clinical Trials Q2-4	FDA Clearance & US Market Launch – Q1-2	\$30MM
Dual DPP® HCV Ag/Ab	R&D	R&D	TBD
DPP® Influenza A/B Antigen Detection	Completing R&D Q1, Validation Q2; Clinical Trials Q3-4	FDA Clearance & US Market Launch – Q1-2	\$200MM

Significant International Market Opportunities As Well

Pipeline: OEM Contracts with FIOCRUZ Brazil Anticipated Timelines

CLINICAL TRIALS

APPROVALS/CLEARANCE

Contract	2010	2011	Minimum Product Sales Req. to Complete Tech Transfer*
DPP® HIV Screening	Approved, Commercial Sales	Commercial Sales	\$8.8MM
DPP® HIV Confirmatory	Approved	Commercial Sales	\$4.7MM
DPP® Syphilis Treponemal	Agreement Signed December 2010	Approval, Commercial Sales	\$7.4MM
DPP® Syphilis Treponemal/ Non-Treponemal		Submission, Approval	
DPP® Canine Leishmaniasis	Submitted	Approved Q1'11, Commercial Sales	\$2.1MM
DPP® Leptospirosis	Submission pending	Submission, Approval, Commercial Sales	\$0.4MM

**Not a guaranteed minimum except for purposes of technology transfer*

Pipeline: Other Projects

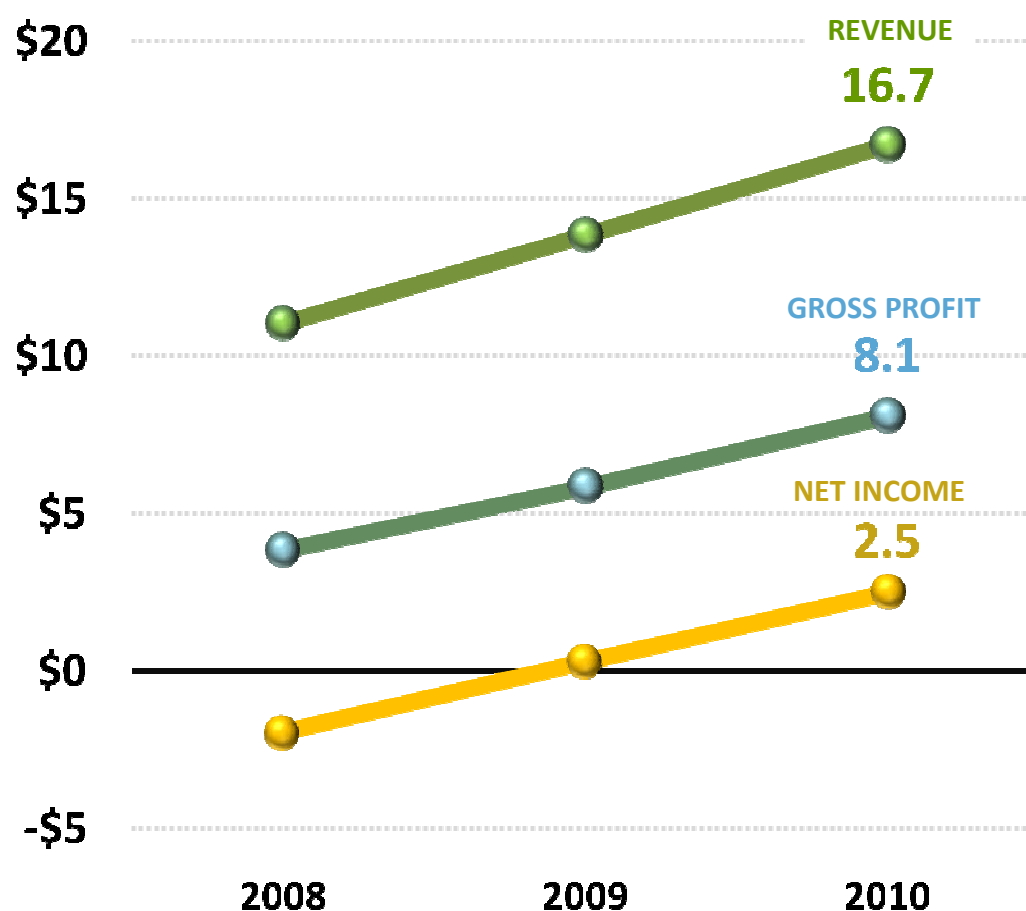
Project	Activity
Multiplex DPP® Product Developed for & Licensed to Bio-Rad Laboratories, Inc.	Development completed. Anticipate CE Mark EOY 2011 – Launch EU early 2012. Manufacturing by Bio-Rad. Royalties Upon Commercial Sales
Multiplex Influenza Immune Status Product Developed for Battelle/CDC	Prototype Development Completed; Prototype products being evaluated at CDC . Additional development work under consideration.
NIH Phase II Grant – Leptospirosis	\$2.9MM 3 Year Grant awarded 6/2009. Prototype developed. Further reagent discovery underway. Approximately \$1.7MM funding remaining in 2011 and 2012 if renewed as anticipated. Chembio is principal grantee.
NIH Phase II Grant – Tuberculosis	\$2.9MM, 3 Year Grant Awarded Effective 3/1/2011. Prototype Developed. Planning Multi-site Evaluations and Optimization, Validation and Commercialization. Chembio is principal grantee.
Veterinary Diagnostic Applications	Preliminary Discussions
Platform Enhancements	Buffer Integration and “Dual DPP®” projects in progress

Financial Summary

FY2008-2010 Results

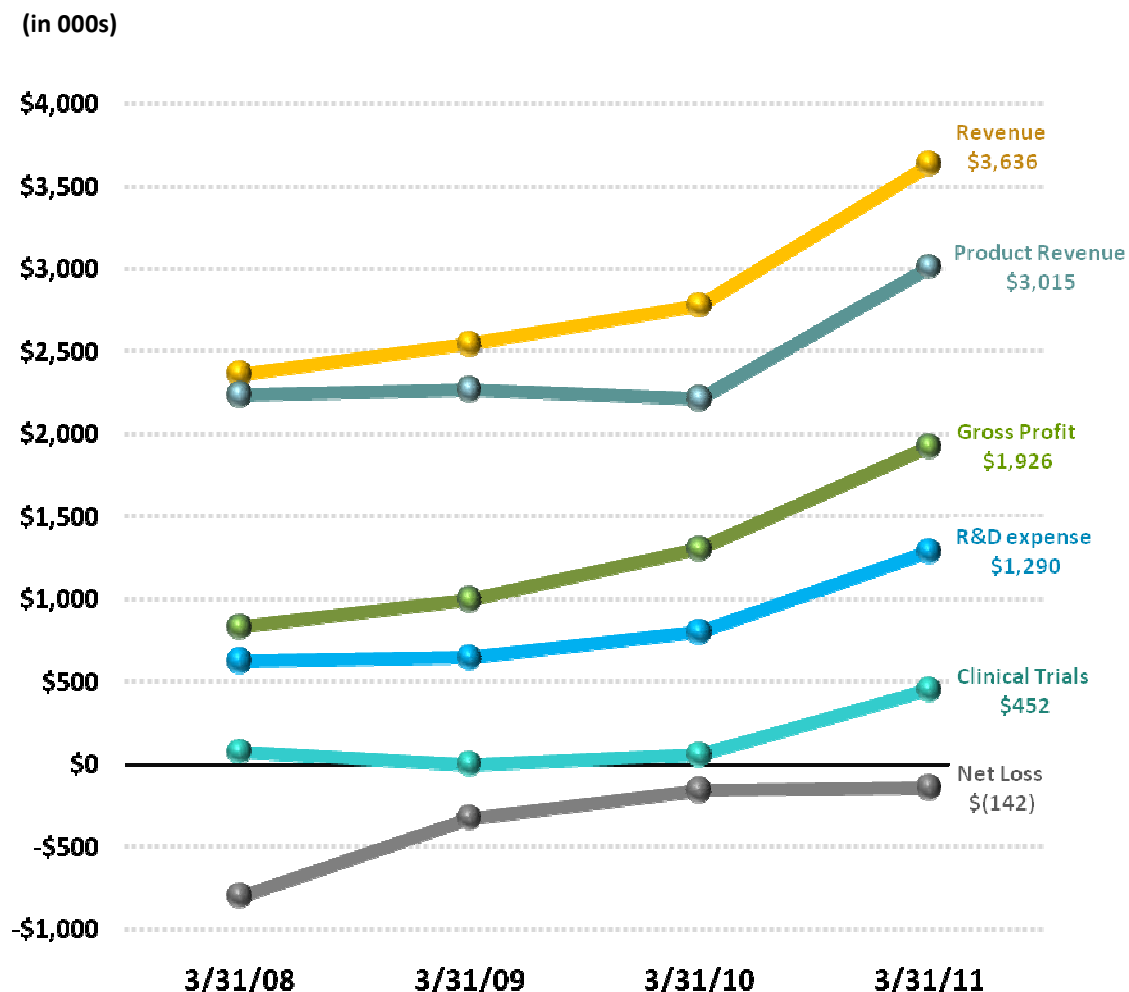
- Record Revenues and Earnings
- Improving Gross Margins
- Controlled Operating Expenses
- Operating Cash Flow Strengthened Balance Sheet

(millions)

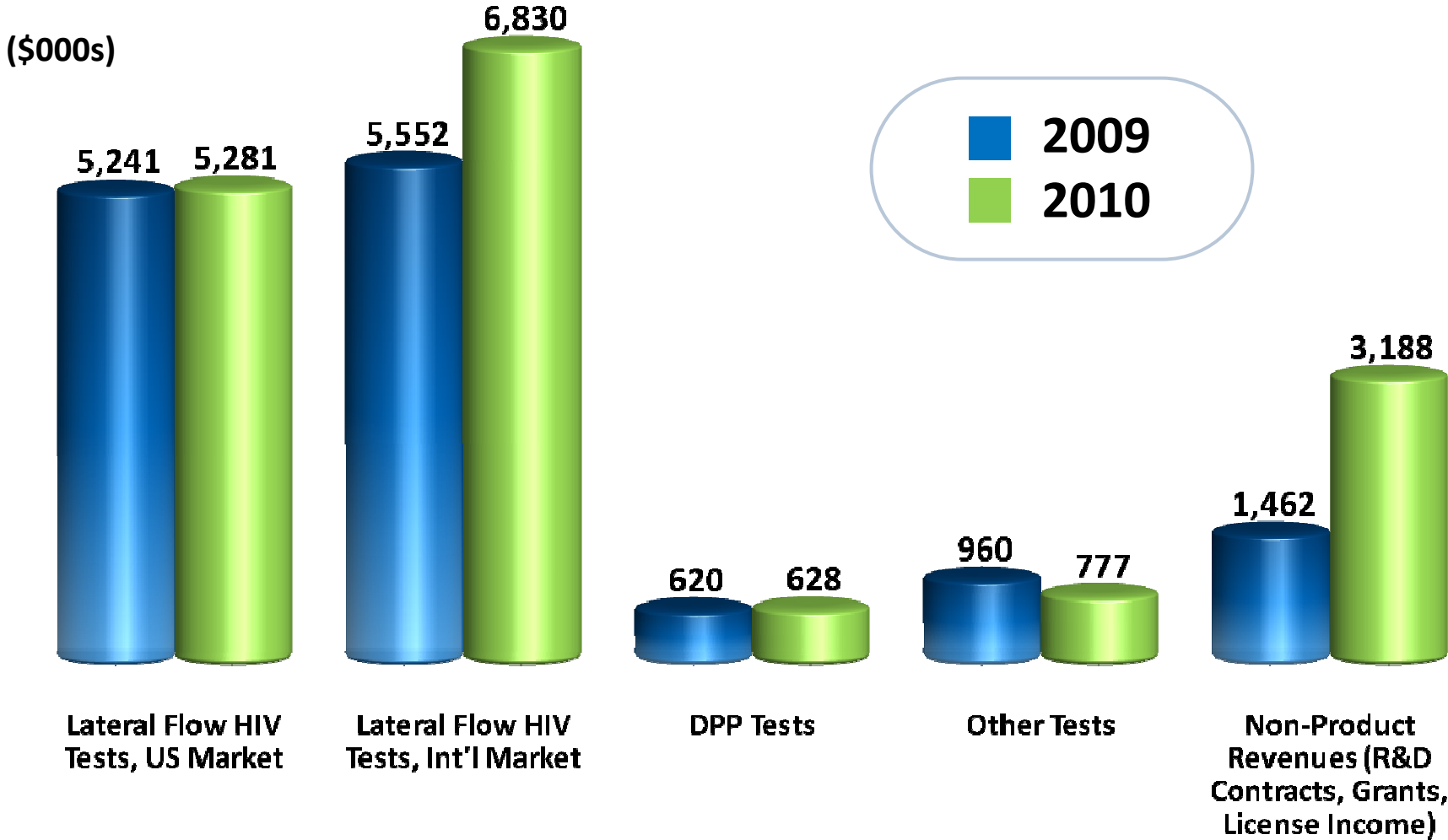


Financial Summary – First Quarter 2008 - 2011

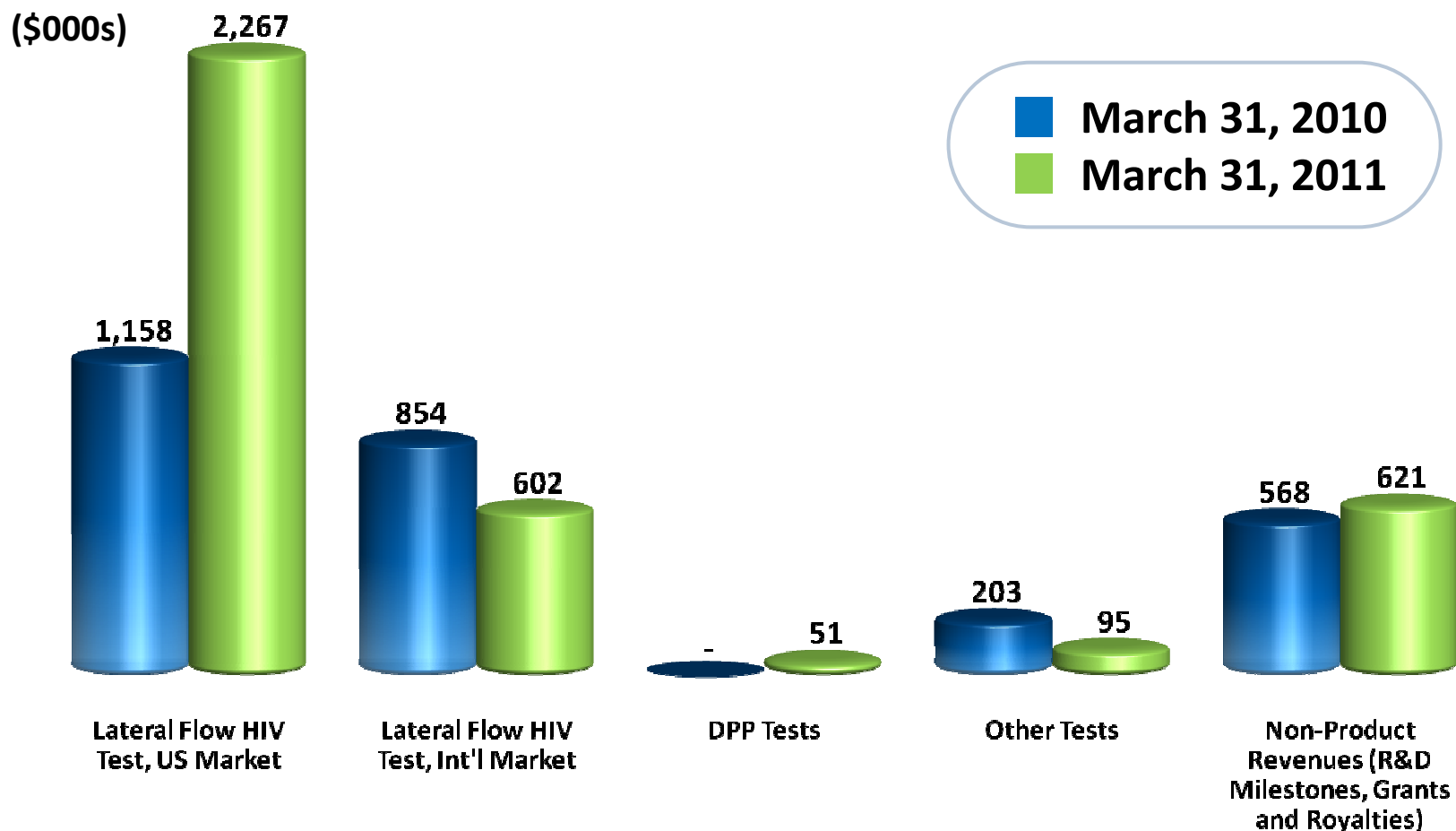
- Steady increases in Revenue and Gross Profit
- Increased R&D expense in Q1'11 driven partially by increased Clinical Trials expense
- Steadily improving net loss in Q1



Revenue Growth by Category: 2009 vs. 2010



Revenue Growth by Category: Q1'10 vs. Q1'11



Selected Balance Sheet Data

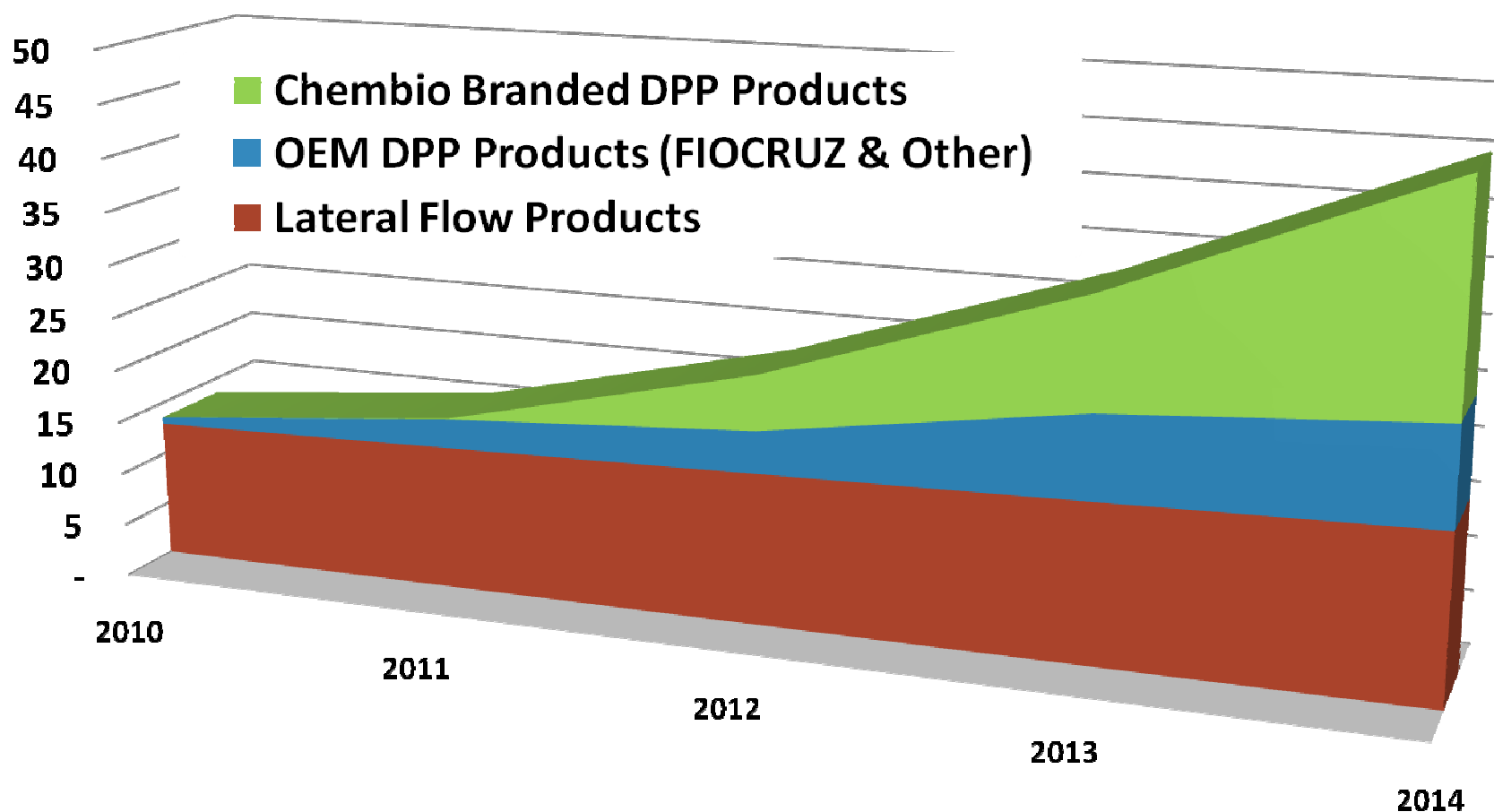
(\$ in millions)	Mar'11	Dec. '10	Dec. '09	Dec. '08
Cash	\$ 2,797	\$ 2,136	\$ 1,068	\$ 1,212
Accounts Receivable	1,727	3,946	1,776	809
Inventories	1,592	1,349	1,556	1,819
Total Current Assets	176	205	4,667	4,068
Net Fixed Assets	772	813	580	881
Other Assets	611	636	1,068	968
Total Assets	\$ 7,675	\$ 9,086	\$ 6,315	\$ 5,915
Total Current Liabilities	1,760	3,076	3,173	2,402
Total Liabilities	1,939	3,277	3,227	3,338
Total Equity	5,736	5,809	3,088	2,577
Total Liabilities & Stockholders Equity	\$ 7,675	\$ 9,086	\$ 6,315	\$ 5,915

Anticipated Milestones 2011

- Clinical & Regulatory Programs for Branded Products
 - HIV PMA Modular Submissions
 - Syphilis Clinical Trials
 - Influenza Clinical Trials
- Four OEM Product Approvals for and Product Sales to FIOCRUZ
- New R&D & OEM Product Agreements
- Continued US Lateral Flow HIV Test Market Share Gains & Potential New International Market Opportunities

Potential Impact of OEM & Branded Products on Revenue*

(in millions)



**This portrays one scenario of the potential impact of new products. It is based on a number of assumptions, including but not limited to regulatory approvals, market demand, market share, sales and marketing, and pricing, of which there can be no assurance*

Organization & Management Team

Lawrence Siebert, CEO & Chairman

Richard Larkin, CFO

Javan Esfandiari, Sr. VP R&D

Rick Bruce, VP Operations

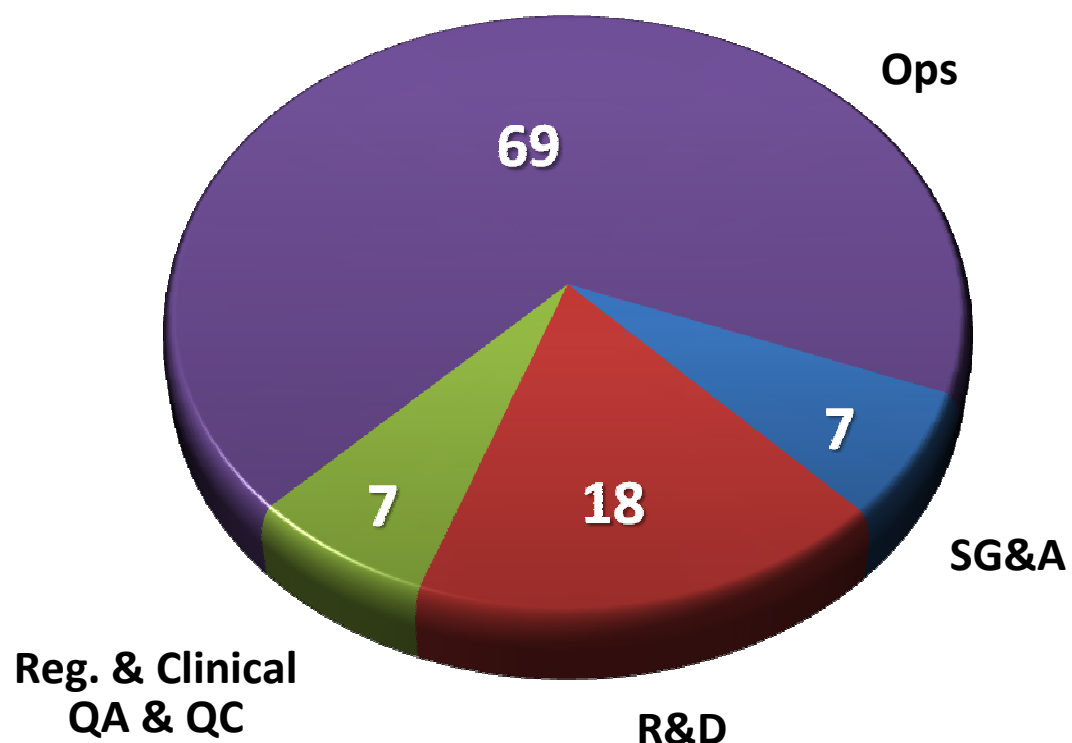
Tom Ippolito, VP Reg., QA/QC

Sandy Speer, Dir. Client Serv.

Dr. Gary Meller, Director

Katherine Davis, Director

TOTAL EMPLOYMENT
Approx. 100



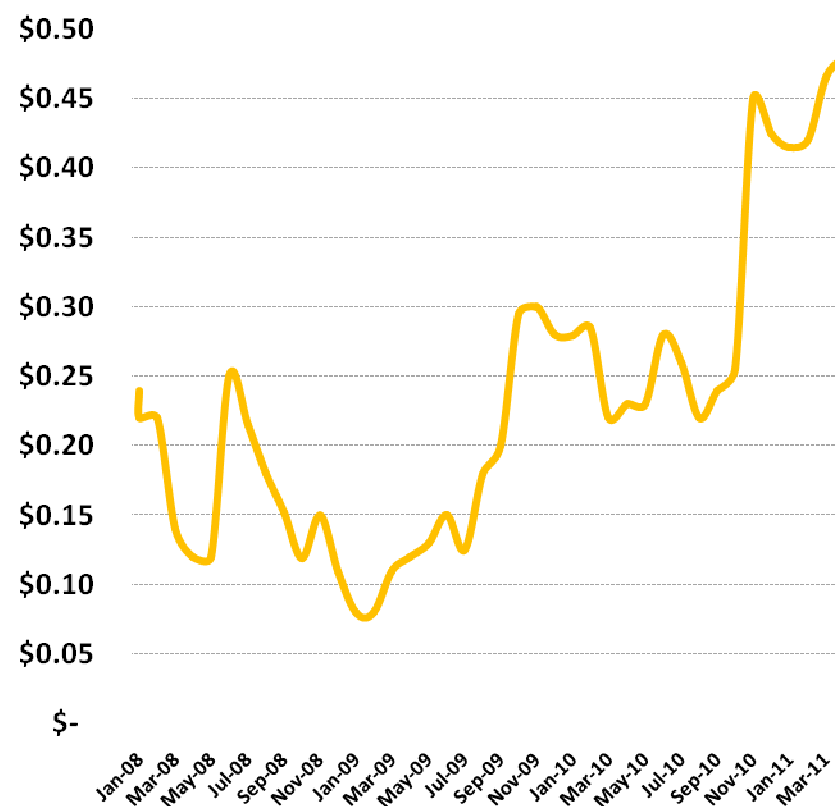
CEMI Selected Share Data

(in millions except per share data)

Ticker Symbol (OTC-QB)	CEMI.QB
Price 4/29/2011	\$0.480
52-Week High	\$0.580
52-Week Low	\$0.159
Outstanding Shares	63.1
Market Capitalization	\$36.6
Fully Diluted Shares	70.2
Management Holding	11.2
Average Daily Volume (3 months)	105,000

Options and Warrants	Amt.	Avg. Ex. Price
Options (3.64 MM held by mgmt. & board)	5.21	\$0.166
Warrants (1.75 MM expire 10/2011)	1.83	\$0.503
Total Options & Warrants	7.03	\$0.254

CEMI price performance

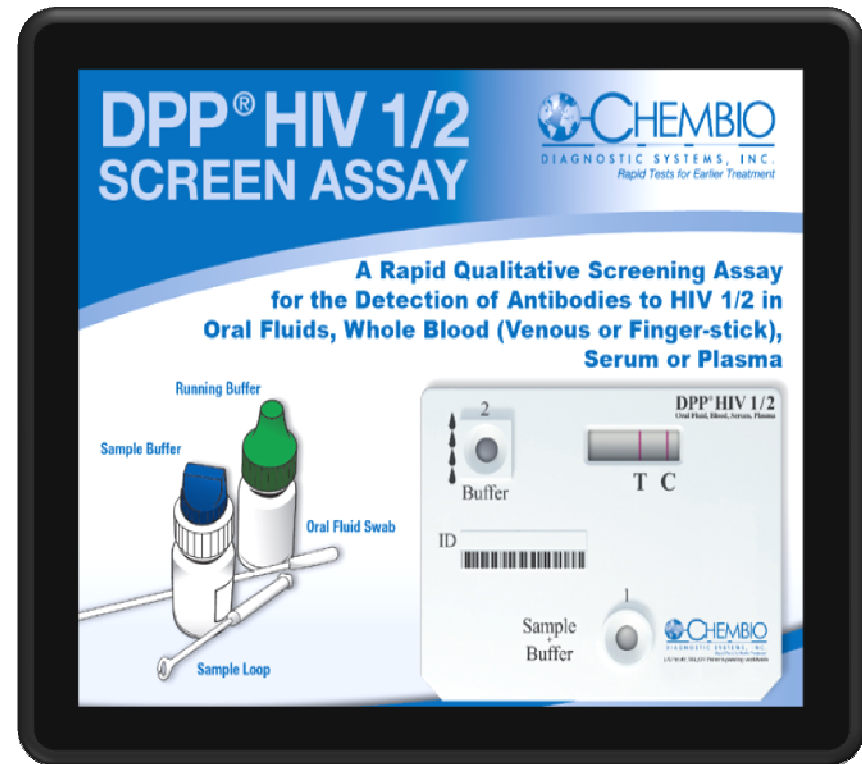


Additional Slides (Appendix)

	March 31, 2011		March 31, 2010		December 31, 2010		December 31, 2009		December 31, 2008	
TOTAL REVENUES	\$ 3,635,681		\$ 2,783,415		\$ 16,704,703		\$ 13,834,248		\$ 11,049,571	
GROSS MARGIN	1,926,342	53%	1,306,374	47%	8,100,699	48%	5,860,405	42%	3,851,721	35%
OPERATING COSTS:										
Research and development expenses	1,290,142	35%	800,758	29%	2,586,308	15%	2,883,696	21%	2,605,343	24%
Selling, general and administrative expense	775,371	21%	661,848	24%	2,940,721	18%	2,659,382	19%	3,317,046	30%
	<u>2,065,513</u>		<u>1,462,606</u>		<u>5,527,029</u>		<u>5,543,078</u>		<u>5,922,389</u>	
INCOME (LOSS) FROM OPERATIONS	(139,171)		(156,232)		2,573,670		317,327		(2,070,668)	
OTHER INCOME (EXPENSES):	(3,126)		(1,094)		(60,326)		(8,267)		121,898	
NET INCOME (LOSS)	(142,297)		(157,326)		2,513,344		309,060		(1,948,770)	
		-4%		-6%		15%		2%		-18%

DPP® HIV Screening Assay For Use with Oral Fluid or Blood Samples

- Improved Performance vs. Only Oral Fluid Test Based on Multiple Studies
- US Clinical Trials Being Completed Q1-2 2011
 - Modular PMA Submission in Q1,2,3
 - Anticipated Approval 2012
- OTC Opportunity



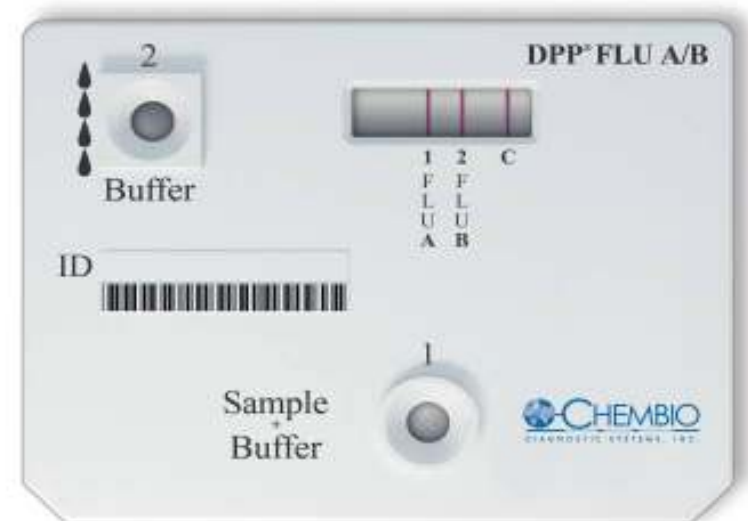
DPP[®] Syphilis Screen & Confirm

- First POCT in US for Syphilis
- All Pregnant Women Tested for Syphilis
- Current Laboratory Tests Inadequate
- Enables Confirmation & Treatment At POC
- International Evaluation Ongoing in China
- Anticipate FDA Clearance in early 2012



DPP® INFLUENZA Multiplex Flu A & B Test

- Large Established Market for Flu A&B tests
- Chembio's First Antigen Detection Test with DPP®
- Prototype Shows Improved Performance vs. Established Tests
- Anticipate FDA Clearance mid-2012



Hepatitis-C (HCV)

- Estimated 3MM HCV Infections in US
- No HCV Point-of-Care Test in US Testing for Antigen (indicating active disease)
- Chembio Participating in Various Studies to Assess Prototype Performance
- R&D Continuing in 2011

