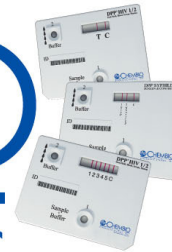




DIAGNOSTIC SYSTEMS, INC.

*Rapid Tests for Earlier Treatment*



# Investor Presentation

August 4, 2010



# 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





- Medford, NY Manufacturer of Point-of-Care Rapid Diagnostic Tests
- Five Year Revenue CAGR of 33%
- 2009 Total Revenues of \$13.8MM - \$309K Net Income v. \$11.0MM Rev. - \$1.9MM Net Loss in 2008
  - 2010 Six Mos. YTD Revenues \$6.5MM and \$464K Net Income vs. \$5.9MM and \$(215K) in 2009
- Revenues from FDA Approved Rapid HIV Tests Marketed in U.S. by Alere (formerly Inverness Medical) Increased 148% in 2009 to \$5.2MM
  - 22% in Six Months Ended 6/30/2010 to \$2.5MM
- \$739K & \$1.243MM YTD in License and R&D Revenues Related to Chembio's Patented DPP® Technology

# Organization & Management Team



**Lawrence Siebert, CEO & Chairman**

**Richard Larkin, CFO**

**Javan Esfandiari, Sr. VP R&D**

**Rick Bruce, VP Operations**

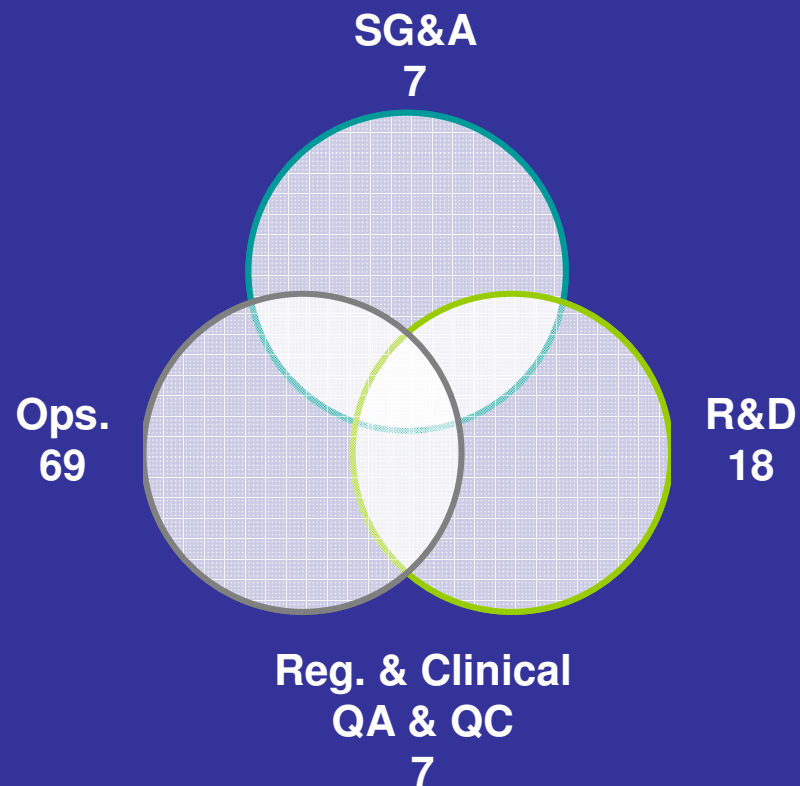
**Tom Ippolito, VP Reg., QA/QC**

**Sandy Speer, Dir. Client Serv.**

**Dr. Gary Meller, Director**

**Katherine Davis, Director**

**Total Employment  
Approx. 100**



# Regulatory Approvals Provide Access to Large, Diverse & Global POCT Markets



**U.S. Food and Drug Administration**  
CENTER FOR BIOLOGICS EVALUATION AND RESEARCH



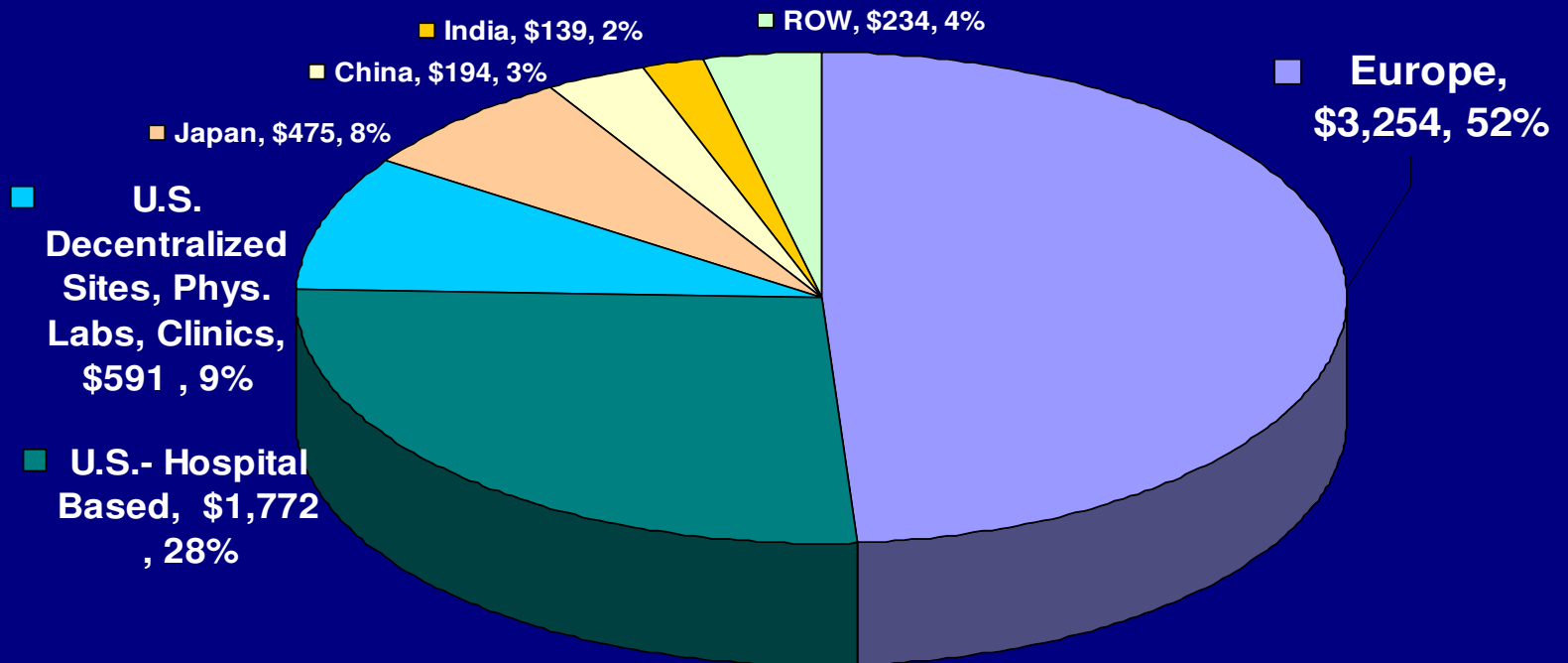
**Two FDA-Approved  
PMA's**

**USDA-Approved  
Facility & Product**

**Licenses  
ISO Certified for  
Global Markets**

# \$7B Global Point-of-Care Test (POCT) Market

## Worldwide Distribution of POCT Sales (in \$ Millions) and Worldwide Market Shares



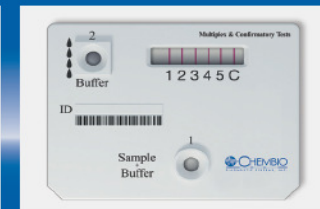
At 7% Projected Increases, even with Large Low-Growth Segments (e.g., Glucose), Global POCT Market is Fastest Growing Segment of \$39.5B In-Vitro Diagnostics Market, Projected to Reach \$8.8B by 2012

Source: Independent Market Research Report



# POCT Market Drivers

- Reduce Patient Stays and Costs, Improve Patient Outcomes with Prompt & Early Diagnosis
  - Improve Therapeutic Intervention
  - Prevent Needless Admissions
  - Simplify Testing Procedures to Reduce Testing Costs
  - Avoid Delays from Central Lab Batching
  - Eliminate Need for Return Visit (s)

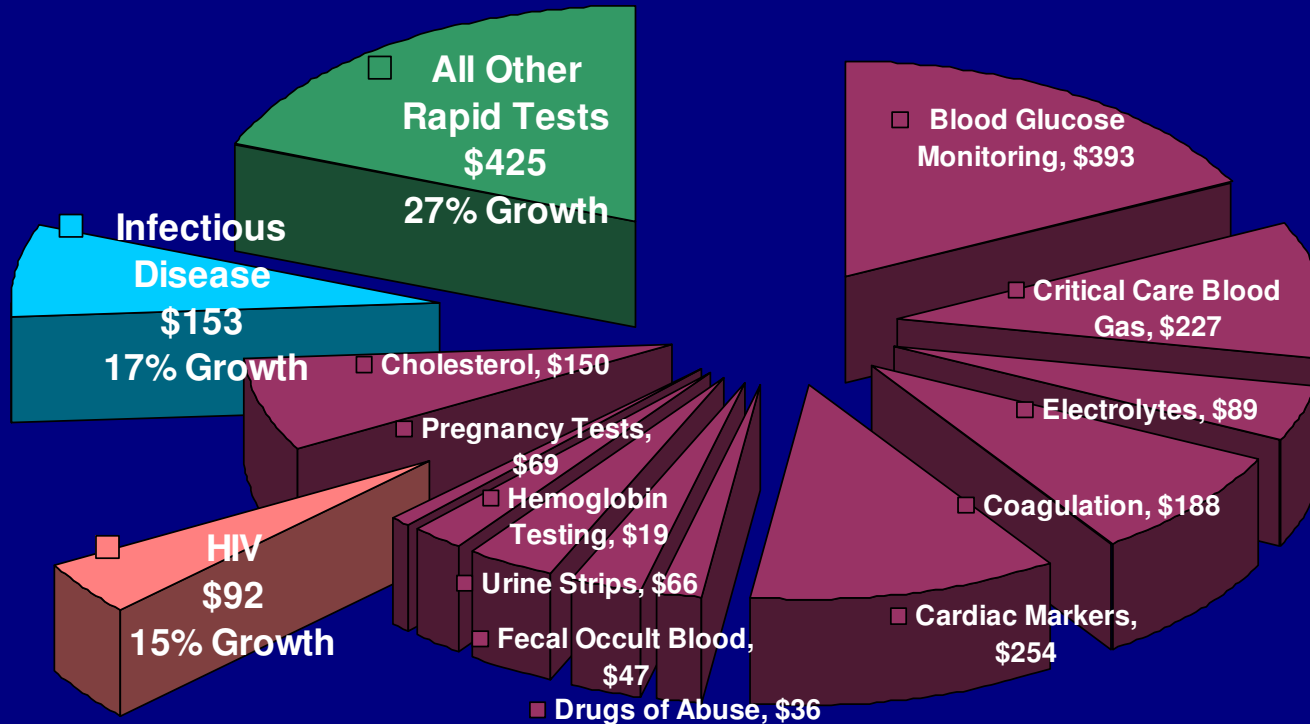


Point of Care Single and Multiplex Test Development, Manufacturing, & Licensing

# Our Current LF and Planned DPP® Products Participate in Large & Growing U.S. POCT Market Segments



## Market Segments & Annual Sales Near Term Growth Rates for Selected Markets

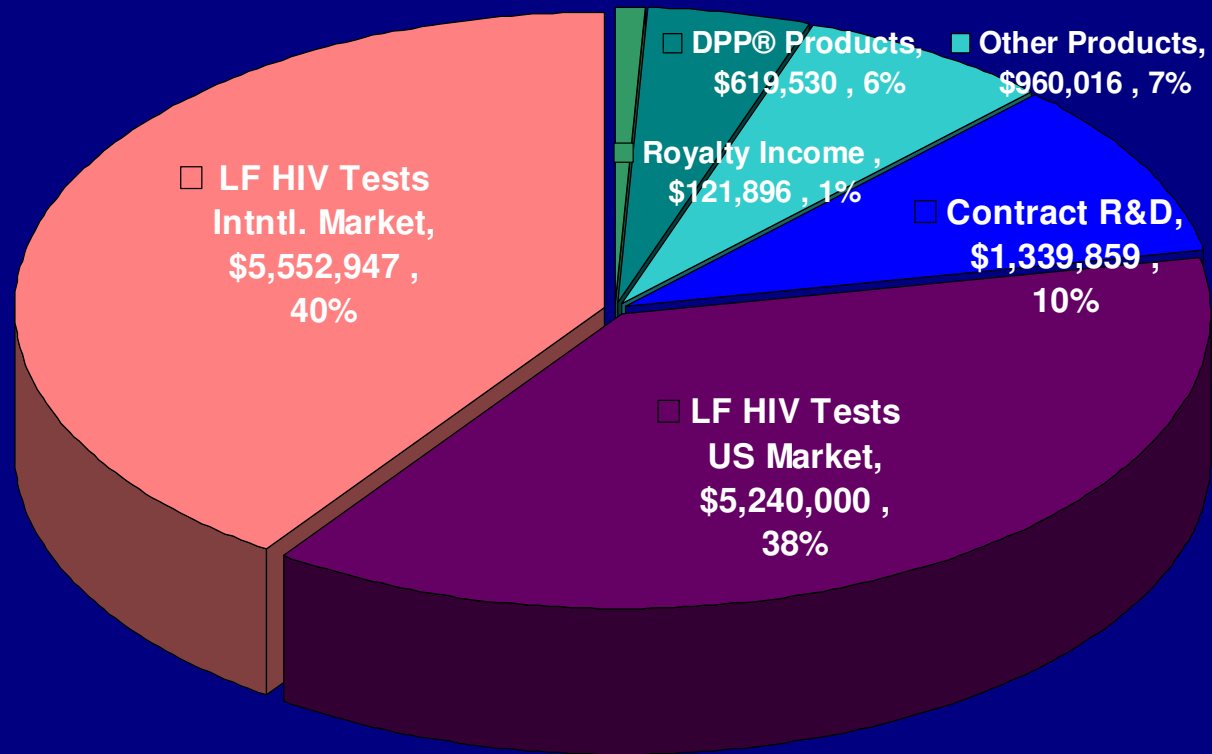


Source: Independent Market Research Report



# 2009 Revenue Composition

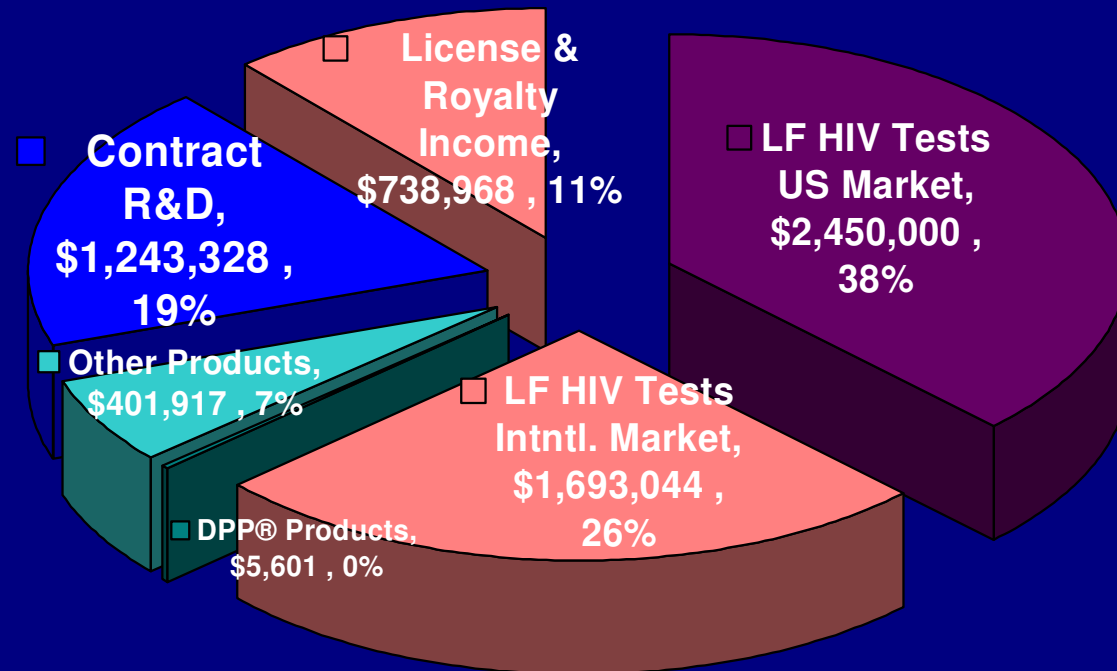
2009 Total Revenues \$13,834,248



# 2010 YTD Revenue Composition

UNAUDITED

June 2010 YTD Total Revenues \$6,532,858



# FDA Approved Rapid HIV Tests

Distributed in US Exclusively by Alere (formerly Inverness Medical)

- **148% Revenue Increase in 2009 - \$5.3MM v. \$2.1MM in 2008; 22% 2010 Six Months YTD**
  - Gains Based Upon Market Expansion and Increased Market Share; New National HIV Strategy Announced July 2010 to Increase Knowledge of HIV Status
- **Competitive Features**
  - CLIA Waived
  - Two Formats
  - 99.7% Sensitivity; 99.9% Specificity
  - Proprietary Formulation Enables 24 Month Stability
  - Strong Marketing Partner



# Chembio's Rapid HIV Tests are Distributed Globally



## HIV 1/2 STAT-PAK™ Dipstick Rapid Assay

### HIV 1/2 STAT-PAK® Rapid Assay

A rapid qualitative screening assay for the detection of antibodies to HIV 1 & 2 in human serum, plasma or whole blood

Convenient and Cost Effective

the detection of  
plasma or whole blood

### SURE CHECK® HIV



Collect • Process • Analyze

3 in 1

- Sample collection, processing and analysis in one device
- Individually packaged for use as needed
- Fingertick sample
- Uses only 3µl of whole blood
- On-site results in minutes
- Room temperature storage



—This product not approved for use in the U.S.

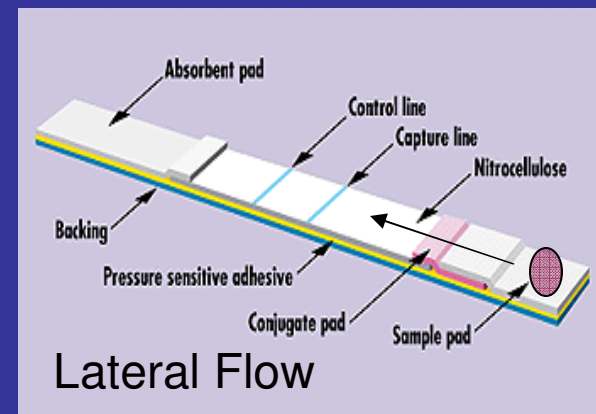
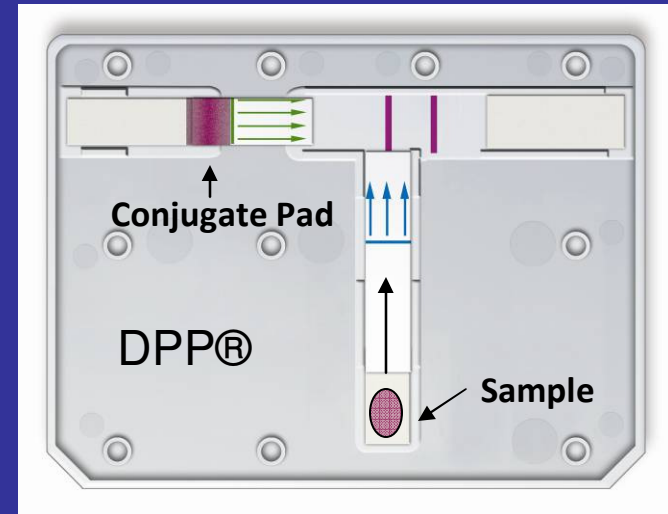
- Approved for Procurements by UN, WHO, CDC/USAID (PEPFAR)
- Registered/Approved in several countries in South America, Asia, and Africa
- Projected 2010 Intl. HIV Rev. Increase of 25% to \$4.25MM

# PATENTED DUAL PATH PLATFORM (DPP®)

KEY DESIGN AND PERFORMANCE ADVANTAGES vs. LATERAL FLOW



- Independent Sample Flow Path Enables Improved Sensitivity & Use of More Challenging Sample Types
- Improved Multiplexing Facilitated by Direct Binding, Uniform Delivery of Samples
- US Patent #7,189,522. Patent Protection Pending Worldwide





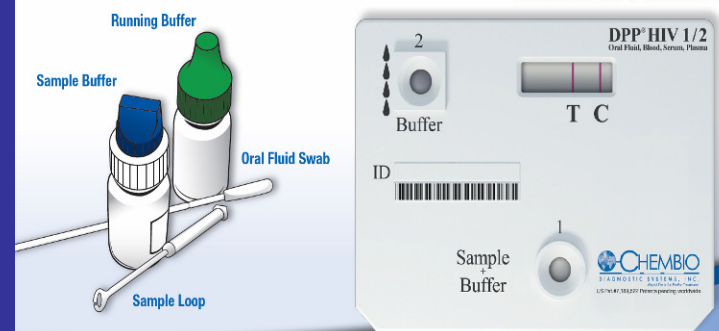
# DPP® HIV 1/2 Oral Fluid Assay

- \$60MM/6MM Unit US Market Growing ~15%/Year
- International Studies Completed in 2009
- US Clinical Trials Commenced Q1 2010
- Anticipate PMA approval late-2011
- OTC Opportunity

## DPP® HIV 1/2 SCREEN ASSAY

**CHEMBIO**  
DIAGNOSTIC SYSTEMS, INC.  
Rapid Tests for Earlier Treatment

**A Rapid Qualitative Screening Assay  
for the Detection of Antibodies to HIV 1/2 in  
Oral Fluids, Whole Blood (Venous or Finger-stick),  
Serum or Plasma**





# DPP<sup>®</sup> Syphilis Screen & Confirm

- First POCT For Syphilis In US – Estimate \$30MM Market
- Provides Better Indication Of Active Disease
- Enables Confirmation & Treatment At POC
- Pre-natal Testing
- International Evaluation Ongoing
- Anticipate 510(K) Clearance in Mid-2011

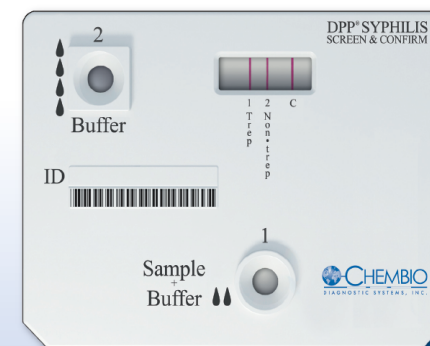
**DPP<sup>®</sup> SYPHILIS  
SCREEN & CONFIRM**

**CHEMBIO**  
DIAGNOSTIC SYSTEMS, INC.  
*Rapid Tests for Earlier Treatment*

*The Only Assay to Detect Both Disease Markers  
Simply at the Point of Care*

**A rapid assay for the detection of non-treponemal and treponemal antibodies to syphilis in whole blood (venous or fingerstick), serum or plasma**

- FDA Clearance & CLIA waiver anticipated 2010
- No Return Visits for 2nd Test Needed
- Enables treatment at Point of Care
- Optional Portable Reader Available



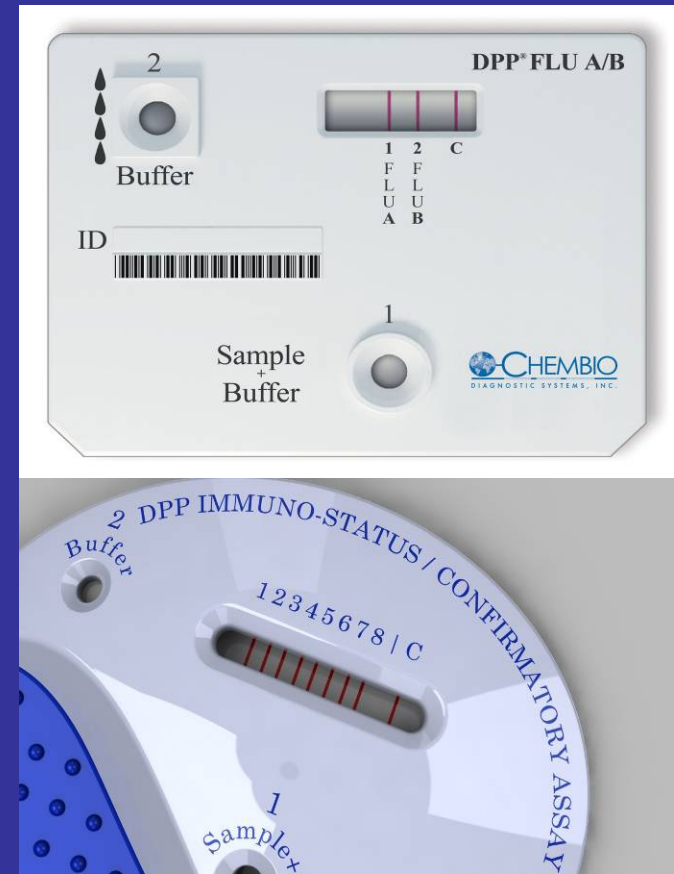
**Developed in collaboration  
with the U.S. Centers for  
Disease Control**

**CHEMBIO**  
DIAGNOSTIC SYSTEMS, INC.  
*Rapid Tests for Earlier Treatment*

# In Development: DPP<sup>®</sup> INFLUENZA

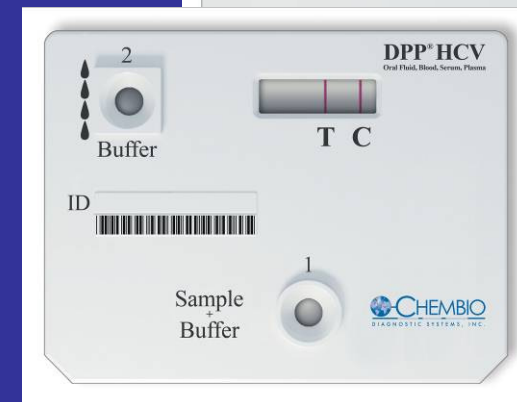
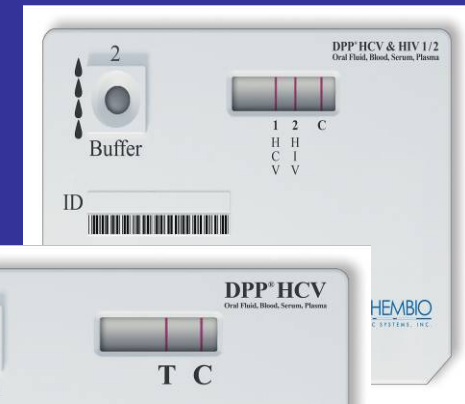
Multiplex Flu A & B Test & 6 Strain Immunity Test

- Large Established Market for Flu A&B tests
- Chembio's First Antigen Detection Test with DPP
- Prototype Shows Improved Performance v. Established Tests
- In Addition: \$900,000 Contract signed Dec. 2009 with CDC Contractor for 6-band Multiplex Immune Status Test



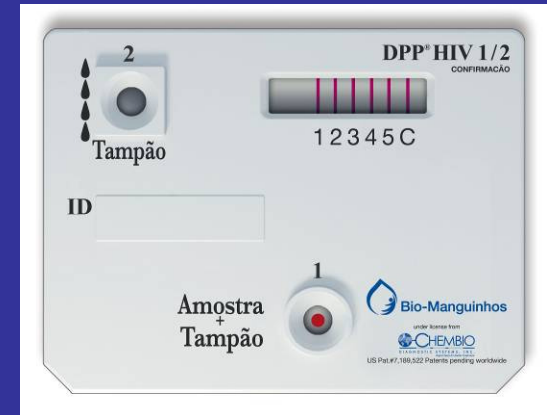
# In Development: Hepatitis-C (HCV) & HIV/HCV Comb. Oral Fluid

- **Estimated 3MM HCV Infections in US**
  - Only 22% Diagnosed
  - 25% Co-infection with HIV
  - Major Cause of Liver Disease
  - New therapeutics from Vertex, etc. will drive demand for Dx
- **No HCV Point-of-Care Test in US**
- **Chembio Participating in Pre-Clinical CDC Study with both prototypes – Expect Data in First Half 2010**



# OEM Contracts with FIOCRUZ

- Four Products Under OEM Agreements with FIOCRUZ
  - Based on Successful \$8MM Tech. Transfer Program Completed 2004-2009
- Anticipate Regulatory Approval in Brazil of Four Products in 2010
  - Potential Total Revenues of \$12MM in 2010-2013



# OEM Products Overview



	2009	2010	2011
<b>FDA Approved LF HIV Tests - Inverness</b>	<b>\$5.3MM Revenues (148% Incr. v. 2008)</b>	<b>Exclusive Agreement with Inverness Medical through 2016 for US Market</b>	
<b>LF HIV Test - Brazil</b>	<b>Completed 5 Year, \$8MM Program; Began royalty phase</b>	<b>Royalties phase</b>	
<b>4 DPP® OEM Products for Brazil</b>	<b>2 Submitted for Regulatory Approval</b>	<b>Anticipated Approval of 4 Products &amp; Initial OEM Product Revenues</b>	<b>OEM Product Sales</b>
<b>Multiplex Influenza Immune Status Test - CDC</b>	<b>Contract signed Dec. 2009</b>	<b>Product Development</b>	<b>TBD</b>
<b>Multiplex DPP Product - Bio-Rad</b>	<b>Entered License Agreement &amp; Phase II of Development</b>	<b>Development to be completed mid-2010</b>	<b>regulatory phase</b>

**Three Year, \$3MM Phase II NIH Grant for Leptospirosis Awarded June 2009. Several Other Grants Active and Additional Grant Applications Pending**

# Chembio Branded Products Pipeline



	2009	2010	2011
<b>DPP® HIV Oral Fluid Rapid Test</b>	International Studies Completed	US Clinical Studies & FDA PMA Filing; International launch	U.S. Launch
<b>DPP® Syphilis Screen &amp; Confirm</b>	International Studies Commenced	US Clinical Studies & FDA 510(k) Submission	U.S. Launch
<b>DPP® Influenza A/B</b>	Initial Development	Complete Development	Regulatory & Commercial
<b>DPP® Hepatitis C</b>	Prototype		Timelines TBD

Completion of HIV & Syphilis Clinical Studies to achieve 2011 Launch will require additional capital



# Our Target Markets

## U.S. Market Estimates for Current and Future Chembio Rapid Tests

Market estimates based on sales value to end users (e.g., health professionals or consumers)

	Est. of U.S. Annual Market Size	Growth Rate	Current POCTs in U.S.	Chembio Products in Market	DPP® Products in Development	Comments	Companies w/ Competitive Rapid Tests in U.S. Market	Notes
<b>Existing Markets</b>								
HIV Tests - Professional Market	\$60,000,000	15%	4	2	1	Oral Fluid test in clinical trials	OSUR, TRIB	1
Influenza A-B Antigen Detection	\$140,000,000	20%	4	0	1	In development	IMA, BD, QDEL	2
<b>New Markets</b>								
Syphilis	\$30,000,000	unknown	0	0	1	Clinicals to start in Q3	None	3
HIV Tests - OTC Market	\$80,000,000	unknown	0	0	2	Whole blood "barrel" test could start FDA trials now; oral fluid needs FDA PMA approval first (2011)	OSUR in Trials	4
Hepatitis-C	\$45,000,000	unknown	0	0	2	In development	OSUR in Trials	5

### Notes to Market Estimates

- 1 Based on estimate of 6 million tests @ \$10 ASP\*. Market growth at 10-20%/annum; Chembio's current products marketed exclusively by
- 2 Analyst Report
- 3 Based on estimate of 3 million tests @ \$10 ASP\*
- 4 Based on estimate of 4 million tests @ \$20 ASP\* (15% of analyst estimate)
- 5 Based on estimate of 3 million tests @ \$15 ASP\*

\* ASP - Average Selling Price

Completion by Chembio of development, regulatory approval and commercial launch subject to several conditions as set forth in Chembio's SEC filings



# Selected Comparative Historical Financial Results



\$(000s)	For the Years Ended			
	2009	2008	2007	2006
<b>Total Revenues</b>	\$ 13,834	\$ 11,050	\$ 9,231	\$ 6,503
<b>Cost of sales</b>	7,974	7,198	6,435	4,894
<b>Gross Profit</b>	5,860	3,852	2,796	1,609
	42.4%	34.9%	30.3%	24.7%
<b>R&amp;D Expense</b>	2,884	2,605	1,907	1,402
<b>SG&amp;A Expense</b>	2,659	3,317	3,765	4,787
<b>Operating Income (Loss)</b>	317	(2,071)	(2,876)	(4,580)
<b>Other Inc. (Expense)</b>	(8)	122	249	(415)
<b>Net Income (Loss) - Stkhldrs</b>	309	(1,949)	(2,627)	(4,995)
<b>Pref. Stock Expenses</b>	-	-	5,645	3,210
<b>Net Loss</b>	\$ 309	\$ (1,949)	\$ (8,272)	\$ (8,205)
<b>Net Income (Loss) - per Share</b>	\$ 0.00	\$ (0.03)	\$ (0.57)	\$ (0.80)
<b>Avg. No. Shares (Millions)</b>	61.946	61.267	14.608	10.293
<b>Working capital</b>	\$ 1,494	\$ 1,664	\$ 3,229	\$ 5,113
<b>Total assets</b>	6,315	5,915	6,585	7,907
<b>Total liabilities</b>	3,227	3,338	2,322	2,297
<b>Equity (Deficit)</b>	3,088	2,577	4,263	(940)

# Selected Comparative Historical Financial Results



	<u>For the three months ended</u>		<u>For the six months ended</u>	
	<u>June 30, 2010</u>	<u>June 30, 2009</u>	<u>June 30, 2010</u>	<u>June 30, 2009</u>
Net product sales	\$2,335,665	\$3,051,385	\$4,550,562	\$5,320,801
License and royalty income	\$717,472	\$52,322	\$738,968	\$52,322
Research grant income	\$696,305	\$269,817	\$1,243,328	\$545,999
<b>Total Revenues</b>	<b>\$3,749,442</b>	<b>\$3,373,524</b>	<b>\$6,532,858</b>	<b>\$5,919,122</b>
<b>Gross Profit</b>	<b>\$2,094,966</b>	<b>\$1,361,945</b>	<b>\$3,401,340</b>	<b>\$2,360,634</b>
Research and development	\$791,596	\$702,986	\$1,592,354	\$1,350,358
SG&A	\$680,014	\$542,449	\$1,341,862	\$1,218,262
Income (loss) from operations	\$623,356	\$116,510	\$467,124	(\$207,986)
Net income (loss)	\$621,917	\$109,939	\$464,591	(\$215,294)
Basic earnings (loss) per share	\$0.01	\$0.00	\$0.01	(\$0.00)
Diluted earnings (loss) per share	\$0.01	\$0.00	\$0.01	(\$0.00)
Weighted average number of shares outstanding, basic	62,070,736	61,944,901	62,028,450	61,944,901
Weighted average number of shares outstanding, diluted	70,614,048	74,814,205	71,340,820	61,944,901

# Selected Balance Sheet Data



	June 30, 2010 (UNAUDITED)	December 31, 2009
<b>CURRENT ASSETS:</b>		
Cash	\$746,848	\$1,068,235
Accounts receivable, net of allowances	1,817,284	1,776,327
Inventories	1,849,708	1,555,903
Other current assets	300,790	266,637
<b>TOTAL CURRENT ASSETS</b>	<b>4,714,630</b>	<b>4,667,102</b>
<b>NET FIXED ASSETS</b>	<b>853,181</b>	<b>580,213</b>
<b>OTHER ASSETS</b>		
Deposits on manuf. equipment	52,824	338,375
License agreements and other assets	686,226	729,560
	<b>\$6,306,861</b>	<b>\$6,315,250</b>
<b>TOTAL CURRENT LIABILITIES</b>	<b>\$2,378,665</b>	<b>\$3,173,132</b>
<b>TOTAL OTHER LIABILITIES</b>	<b>241,460</b>	<b>54,204</b>
<b>TOTAL LIABILITIES</b>	<b>2,620,125</b>	<b>3,227,336</b>
<b>TOTAL STOCKHOLDERS' EQUITY</b>	<b>3,686,736</b>	<b>3,087,914</b>
	<b>\$6,306,861</b>	<b>\$6,315,250</b>

# CEMI Selected Share Data



<b>Ticker Symbol (OTCBB)</b>	<b>CEMI</b>		
<b>Price 7/30/10</b>	<b>\$0.260</b>		
<b>52 Week High</b>	<b>\$0.390</b>		
<b>52 Week Low</b>	<b>\$0.122</b>		
<b>Outstanding Shares (MM)</b>	<b>62.0</b>		
<b>Market Capitalization (MM)</b>	<b>\$16.1</b>		
<b>Fully Diluted (FD) Shares (MM)</b>	<b>70.6</b>		
<b>Management Holding (MM)-FD</b>	<b>11.4</b>		
<b>Average Volume (3 Mos)</b>	<b>61,769</b>		
<b>Options and Warrants (MM)</b>			<b>Avg. Ex. Price</b>
<b>Options (MM) (4.11MM held by mgmt. &amp; board)</b>	<b>5.96</b>		<b>\$0.166</b>
<b>Warrants (MM) - Exp. Dates</b>			
	<b>10/6/2011</b>	<b>2.64</b>	<b>\$0.482</b>
	<b>2/5/2012</b>	<b>0.07</b>	<b>\$0.810</b>
<b>Total Warrants (MM)</b>	<b>2.71</b>		
<b>Total Options &amp; Warrants (MM)</b>	<b>8.67</b>		



# CHEMBIO

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[www.chembio.com](http://www.chembio.com)