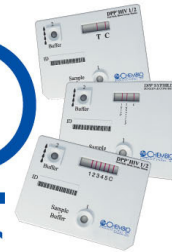




DIAGNOSTIC SYSTEMS, INC.

*Rapid Tests for Earlier Treatment*



# Investor Presentation

## August 2009



# 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 – FDA (PMA), USDA and ISO 13.485 certified manufacturer of point of care tests
- Growing base business of rapid tests for HIV marketed in the US and globally based on lateral flow technology
- 24% 5-Year CAGR of Sales – Achieved Profitability Q2-09  
– 108% YTD Increase in Rapid HIV Test Sales
- New Product Pipeline Enabled by Patented DPP® Point of Care Platform



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

# Point of Care Test Market

- **\$5B+ 2008 Global Point of Care Test Market**
  - 11% Compounded Annual Growth Rate (CAGR)
  - Part of >\$38B IVD Market
- **Provide Immediate Information**
  - Simply, Accurately, Cost Effectively
- **Enable Improved Outcomes**
  - Earlier Detection, Earlier Treatment
  - Lower Overall Cost of Care



# Organization & Management Team

**Lawrence Siebert, President**

**Richard Larkin, CFO**

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

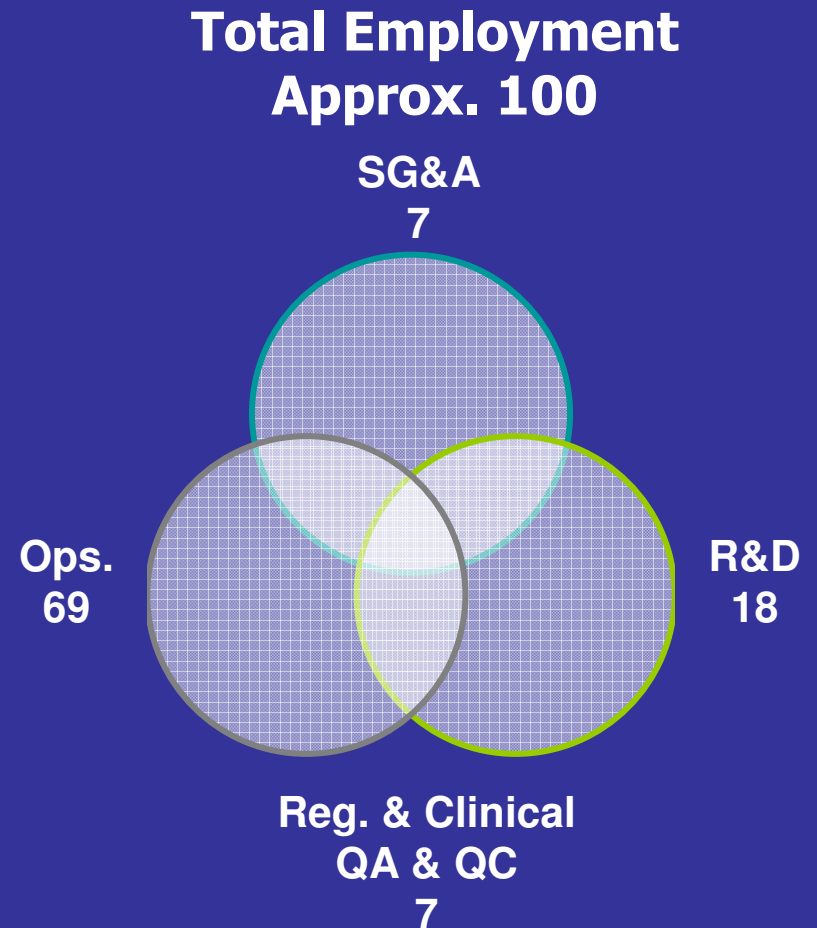
**Rick Bruce, VP Operations**

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

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

**Dr. Gary Meller, Director**

**Katherine Davis, Director**



# 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**



# FDA Approved Rapid HIV Tests

- **108% US Market Revenue Growth YTD**
  - Estimated 10-15% Market Share
  - Gains Based Upon Competitive Features & Increasing Adoption of CDC Recommendations for Routine HIV Testing
- **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

- Ideally suited for field and point-of-care testing
- Minimal sample size (5ul) – fingerstick or venous whole blood, serum or plasma

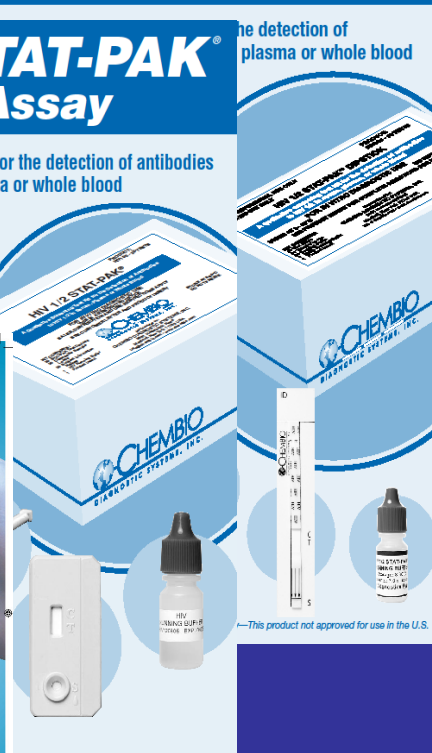
the detection of  
plasma or whole blood

### SURE CHECK® HIV

Collect • Process • Analyze  
**3 in 1**



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



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

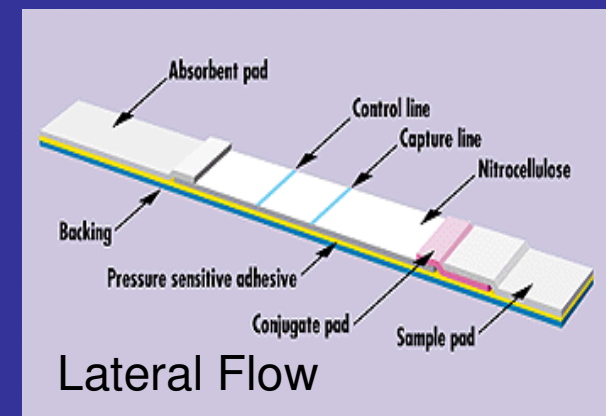
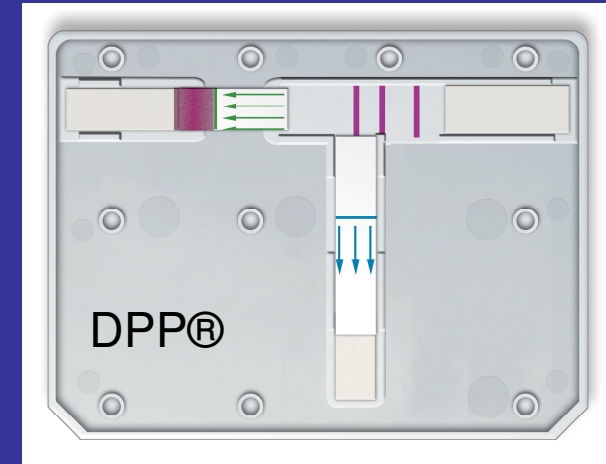
- Approved for Procurements by UN,WHO, CDC/USAID (PEPFAR)
- Registered/Approved in several countries in South America, Asia, and Africa
- CE Mark Pending



# DPP® DUAL PATH PLATFORM

## 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



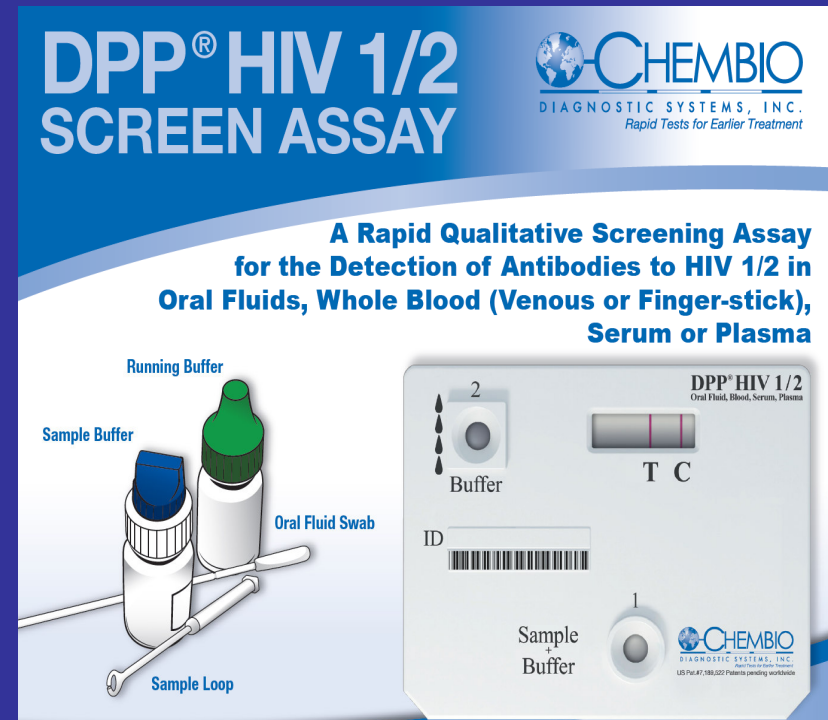
# Products & Pipeline



	R&D	Pre-Clinical	Validation	Clinical Testing	Commercial Product(s)	Est. US Mkt Size	# of U.S. Compet.
HIV and Other Lateral Flow Rapid Tests; Contract R&D	CEMI lateral flow product revenues of \$5.0 MM @6/30 YTD include \$2MM in U.S. rapid HIV tests					\$15MM (blood)	1
<b>DPP® Product Pipeline</b>							
3 OEM Products for Brazil MOH	→				Est. \$12MM Min. Purchases 2009-2012	NA	n/a
HIV Oral Fluid	→					\$35 MM (oral fluid)	1
Syphilis Screen & Confirm	→					\$50 MM	0
Hepatitis -C (HCV) & Combo HIV/HCV	→					\$50 MM	0
Influenza	→					\$250 MM	6
Global Health Products	→				Donor Funded Demand		n/a

# DPP<sup>®</sup> HIV 1/2 Screen Assay

- Designed for Use with Oral Fluid & Blood
- \$50MM/5MM Unit US Market Growing 15-20%/Year
- Opportunity to Gain Market Share from Sole Competitor
- US Clinical Trials Commencing Q4 2009



**DPP<sup>®</sup> 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**

Running Buffer  
Sample Buffer  
Oral Fluid Swab  
Sample Loop

DPP<sup>®</sup> HIV 1/2  
Oral Fluid, Blood, Serum, Plasma

2  
Buffer  
T C

ID

Sample Buffer

**CHEMBIO**  
DIAGNOSTIC SYSTEMS, INC.  
US Pat. #7,188,022 Patent pending worldwide

The image shows the product packaging for the DPP HIV 1/2 Screen Assay. It includes a box with the product name and logo, and a detailed diagram of the assay components. The diagram labels a 'Running Buffer' bottle, a 'Sample Buffer' bottle, an 'Oral Fluid Swab', and a 'Sample Loop'. The assay itself is shown as a small device with a 'Buffer' reservoir (labeled '2') and a 'Sample Buffer' reservoir (labeled '1'). The device has a 'T C' window for results and an 'ID' window with a barcode. The Chembio logo and name are also present on the device.

# DPP® Syphilis Screen & Confirm

- First POCT for Syphilis in US Developed with US CDC
- Comparable to US HIV Market Dynamic
- FDA Pre-IDE Submission Q3 to Confirm Clinical Plan for 510(K)
- Better Indication of Active Syphilis Disease
- Enables Confirmation & Treatment at POC

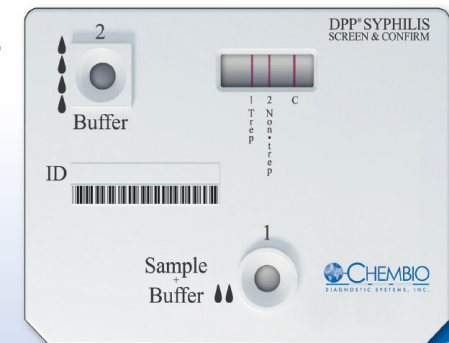
**DPP® SYPHILIS  
SCREEN & CONFIRM**

**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**

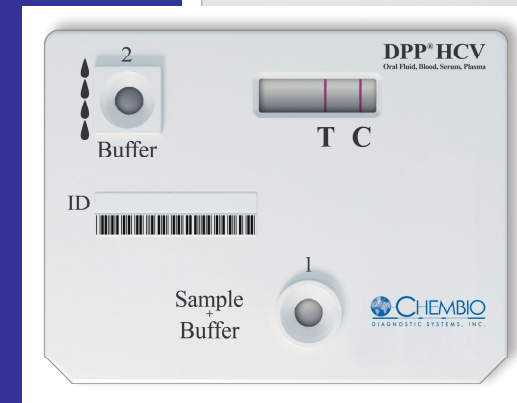
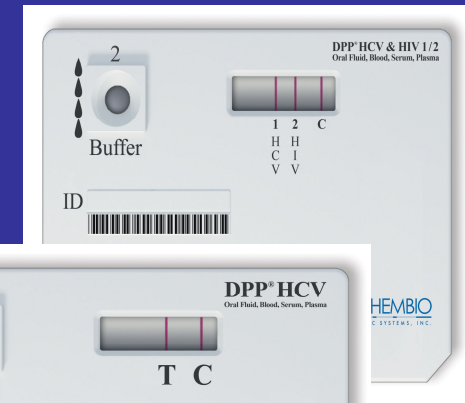
- FDA Clearance & CLIA waiver anticipated 2010
- No Return Visits for 2nd Test Needed
- Enables treatment at Point of Care
- Optional Portable Reader Available



**CHEMBIO**  
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Rapid Tests for Earlier Treatment

# Hepatitis-C (HCV)

- Estimated 3MM 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 Point of Care Test in US
- Chembio Participating in Pre-Clinical CDC Study

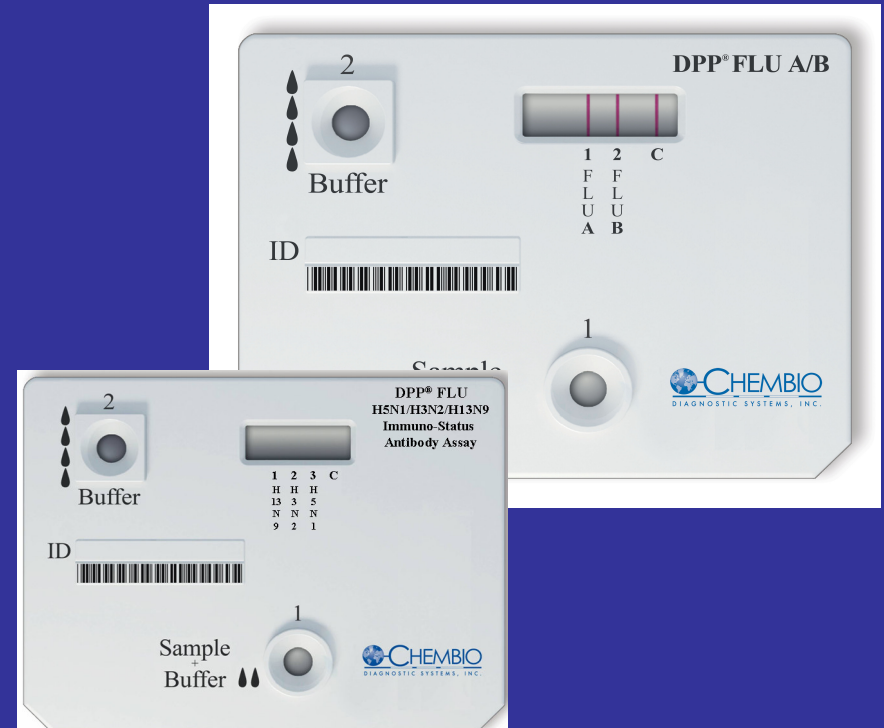




# INFLUENZA

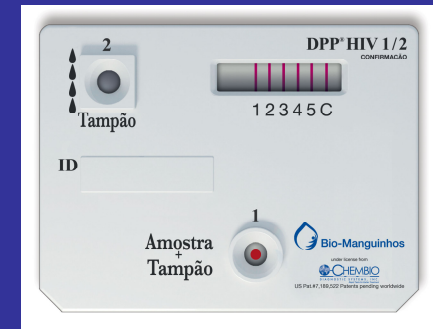
## ANTIGEN & IMMUNITY TESTS

- Current Lateral Flow Rapid Tests Need Improvement
- Initial Data Show Improved Performance with DPP®
- Multiplex Immune Status Serology Test Project with CDC



# DPP® Global Health Products

- Five Band POC Confirmatory Test Being Launched in Brazil
- Three Year \$3MM NIH SBIR Phase II Grant for Human Leptospirosis



DPP® Point of Care Test	Collaborating Organization
Tuberculosis	FIND
Malaria	FIND
HIV 1/2 Confirmatory Test	FIOCRUZ
Neglected Diseases: Leishmaniasis, Chagas, Leptospirosis, Leprosy	IDRI, NIH, FIOCRUZ

# Portable Readers with DPP<sup>®</sup>

- Hand Held & Desktop Models
- Sharper Test Results with DPP<sup>®</sup> improve reader performance
- Eliminates Interpretation Errors
- Multiplex Test Results recorded and printed
- USB connection for Data export. A/C and Rechargeable Battery Power



# Specialty Veterinary Products

- Companion Animals
  - Canine Leishmaniasis - Brazil
- Research Laboratory Applications
- Veterinary TB
  - Two USDA Approved
  - Cervid TB Pending USDA Approval



## VetTB STAT-PAK™

**A family of tests for the rapid and accurate detection of TB**

### CervidTB STAT-PAK® Assay\*

**Accurate Detection of Tuberculosis (TB) in Cervids in < 20 Minutes**

*Use ChemBio's CervidTB STAT-PAK, a rapid and convenient animal side test for the detection of TB antibodies*

Prevalent in today's farmed and wild cervid populations, bovine TB is caused by *Mycobacterium bovis*. It can be a serious and dangerous threat to both captive and wild cervid populations. The disease is able to spread quickly within and across species posing a threat to not only cervids but also to humans, other domestic livestock (e.g., cattle) and other wildlife.

Current TB testing of cervids relies on the use of intradermal tuberculin skin testing based on the bovine PPD test. Numerous reports suggest that relying on just the skin test to screen cervids for TB lacks both the sensitivity and specificity to make it a reliable assay for culling animals. Skin testing may yield both false positive and negative results. In addition, capturing the animal to administer the test and recapturing again in 5 days to read the results is often traumatic and sometimes fatal for the animal.

ChemBio's CervidTB STAT-PAK is based on lateral flow technology, a simple screening assay with highly sensitive and highly specific results. CervidTB STAT-PAK detects TB infection earlier and more accurately, producing results in 20 minutes. The complete test is easy and convenient to administer and is less traumatic to the animals.

When used alone or in combination with tuberculin skin testing, ChemBio's CervidTB STAT-PAK helps reduce TB transmission.

**ChemBio's CervidTB STAT-PAK; a significant improvement in cervid TB testing**

#### Rapid and Reliable Results

- Results in 20 minutes
- Highly Sensitive – Range of 80-90%\*
- Highly Specific – Range of 92-100%\*

#### Easy Testing and Early Detection

- Simple, two-step procedure
- Minimal sample size required – 30 µl of serum, plasma, or whole blood
- Detects both IgM and IgG antibodies
- Easy to interpret qualitative results
- Requires no special laboratory instrumentation
- Built-in procedural control
- Adaptable to use with a quantitative reader for data archiving

#### Convenient and Cost Effective Process

- Room temperature storage
- Long shelf life – 12 months at room temperature storage
- Easily adaptable for field testing – "trap-test-cull" approach
- Easier to collect samples with less trauma to the animal
- Animals need only be handled once to complete the test.

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

US Veterinary License No. 645, US Patent No. 7,167,721  
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\* CervidTB STAT-PAK (USA) license pending.



...chnology  
...d IgG antibodies from a wide  
...a, plasma, or whole blood  
...ve, wild and exotic host species  
...and zoo species  
...l personnel

# Selected Comparative Historical Financial Results

\$(000s)	For the Years Ended			
	2008	2007	2006	2005
Total Revenues	\$ 11,050	\$ 9,231	\$ 6,503	\$ 3,941
Cost of sales	7,198	6,435	4,894	2,996
Gross Profit	3,852	2,796	1,609	945
	34.9%	30.3%	24.7%	24.0%
R&D Expense	2,605	1,907	1,402	1,365
SG&A Expense	3,317	3,765	4,787	2,878
Operating Income (Loss)	(2,071)	(2,876)	(4,580)	(3,298)
Other Inc. (Expense)	122	249	(415)	46
Net Income (Loss)	(1,949)	(2,627)	(4,995)	(3,252)
Pref. Stock Expenses	-	5,645	3,210	3,517
Net Income (Loss)	\$ (1,949)	\$ (8,272)	\$ (8,205)	\$ (6,769)
Net Income (Loss)/Share	\$ (0.032)	\$ (0.566)	\$ (0.797)	\$ (0.879)
Avg. No. Shares (MM)	61.267	14.608	10.293	7.705
Working capital	\$ 1,664	\$ 3,229	\$ 5,113	\$ 4,708
Total assets	5,915	6,585	7,907	7,075
Total liabilities	3,338	2,322	2,297	1,964
Equity (Deficit)	2,577	4,263	(940)	1,053





# Selected Comparative Historical Financial Results

\$(000s)	Three Mos Ended		Six Mos Ended	
	Jun-09	Jun-08	Jun-09	Jun-08
Total Revenues	\$ 3,374	\$ 2,718	\$ 5,919	\$ 5,083
Cost of sales	2,012	1,706	3,558	3,238
Gross Profit	1,362	1,012	2,361	1,845
	40.4%	37.2%	39.9%	36.3%
R&D Expense	703	567	1,350	1,194
SG&A Expense	542	810	1,218	1,828
Operating Income (Loss)	117	(365)	(208)	(1,177)
Other Inc. (Expense)	(7)	2	(7)	16
Pref. Stock Expenses	-	-	-	-
Net Income (Loss)	\$ 110	\$ (363)	\$ (215)	\$ (1,161)
Net Income (Loss)/Share	\$ 0.002	\$ (0.006)	\$ (0.003)	\$ (0.019)
Avg. No. Shares (MM))	61.945	60.616	61.945	60.577
Working capital	\$ 1,601	\$ 1,827	\$ 1,601	\$ 1,827
Total assets	6,167	6,219	6,167	6,219
Total liabilities	3,714	2,894	3,714	2,894
Equity (Deficit)	2,453	3,325	2,453	3,325



# Selected Balance Sheet Data

(\$000s)

Balance Sheet Data	June '09	Dec. '08
Cash	1,859	1,212
Accts. Receivable	611	809
Inventories	1,653	1,819
Other Current Assets	247	225
<b>Total Current Assets</b>	<b>4,370</b>	<b>4,066</b>
Net Fixed Assets	704	881
Other Assets	1,093	968
<b>Total Assets</b>	<b>6,167</b>	<b>5,915</b>
Total Current Liab.	2,769	2,402
Total Other Liab.	945	936
<b>Total Liabilities</b>	<b>3,714</b>	<b>3,338</b>
<b>Total Equity</b>	<b>2,453</b>	<b>2,577</b>
<b>Total Liabilities &amp; Shareholders Equity</b>	<b>\$ 6,167</b>	<b>\$ 5,915</b>



# Selected Share Data



<b>Ticker Symbol</b>	<b>CEMI</b>
<b>Price 8/14/09</b>	<b>\$0.16</b>
<b>52 Week High</b>	<b>\$0.23</b>
<b>52 Week Low</b>	<b>\$0.08</b>
<b>Outstanding Shares</b>	<b>61.9MM</b>
<b>Market Capitalization</b>	<b>9.9MM</b>
<b>Fully Diluted Shares</b>	<b>66.9MM</b>
<b>Management Holding</b>	<b>8.8MM</b>
<b>Average Volume (3 Mos)</b>	<b>52,803</b>



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

