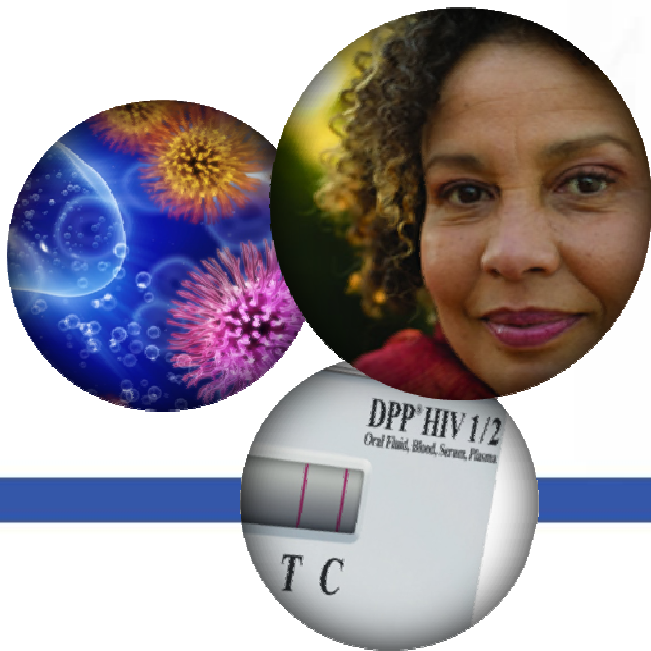




RAPID Tests for EARLIER Treatment



Investor Presentation

November 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

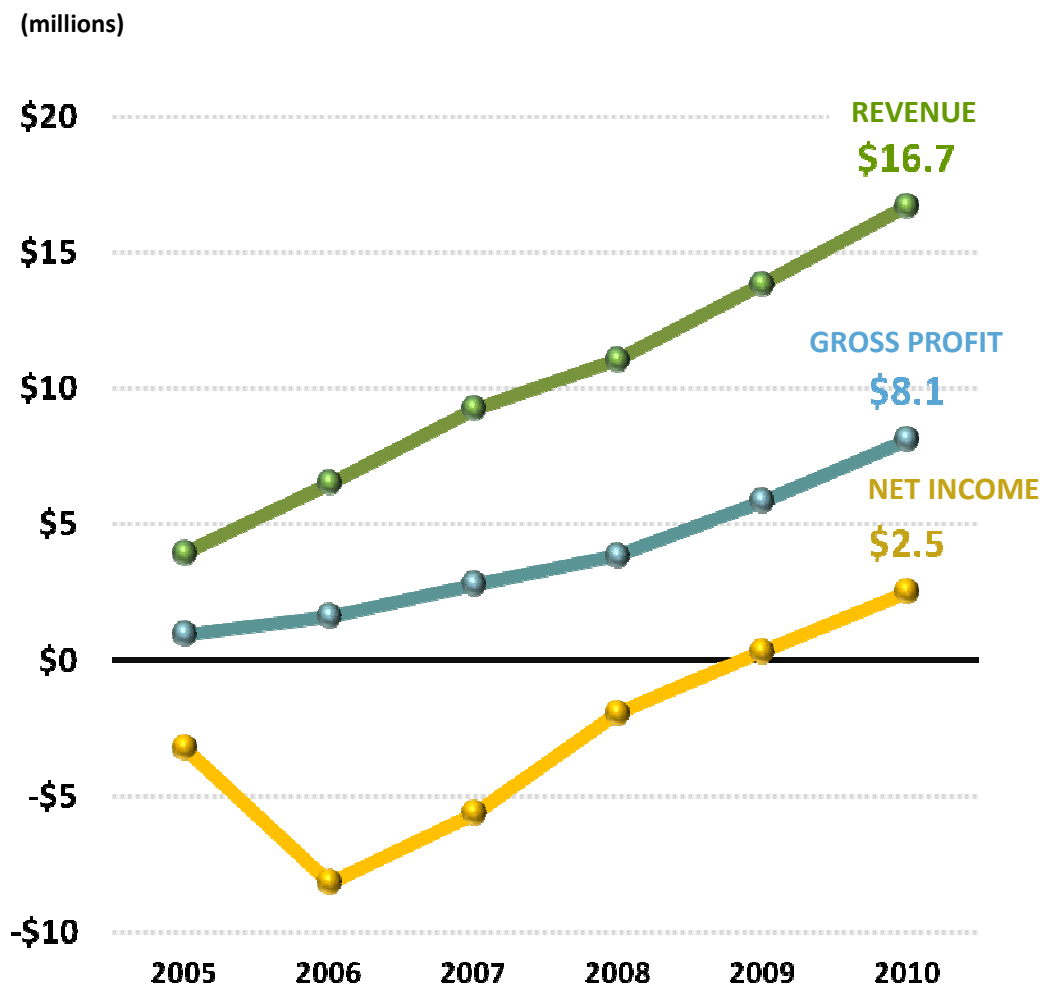
Chembio Overview

- Develops, Manufactures and Markets Rapid Point-of-Care Test (POCT) Products
 - Current POCTs for HIV, Syphilis & Other Infectious Diseases
 - Base Business Utilizes In-Licensed Lateral Flow Technology.
 - New Business Based On Chembio's Dual Path Platform (DPP®)
- Branded & Private Label (OEM) Strategy
 - Five DPP® POCTS Approved In Brazil 2010-11 Now Being Launched By Brazilian Ministry of Health through its affiliate Oswaldo Cruz Foundation, Chembio's OEM customer
- FDA PMA-Approved & USDA-Approved Facility in Medford, NY



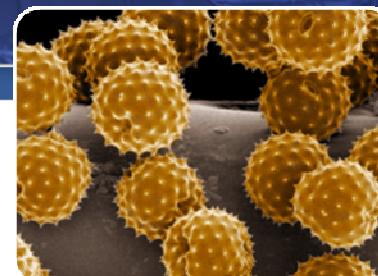
Financial Overview

- Five Year Compounded Annual Revenue Growth of 33%
- Gross Margin Expansion
 - Higher ASP's in US
 - Scale up Efficiencies
- Increased investment in R&D pipeline
 - DPP HIV Clinical Trials
- 2007 Recapitalization



POCTs - A Growing Global Market

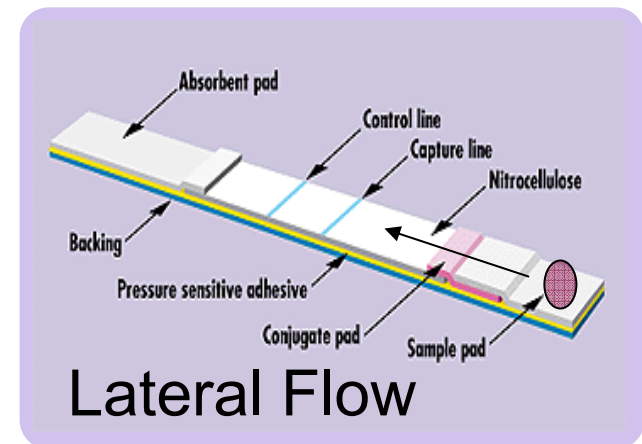
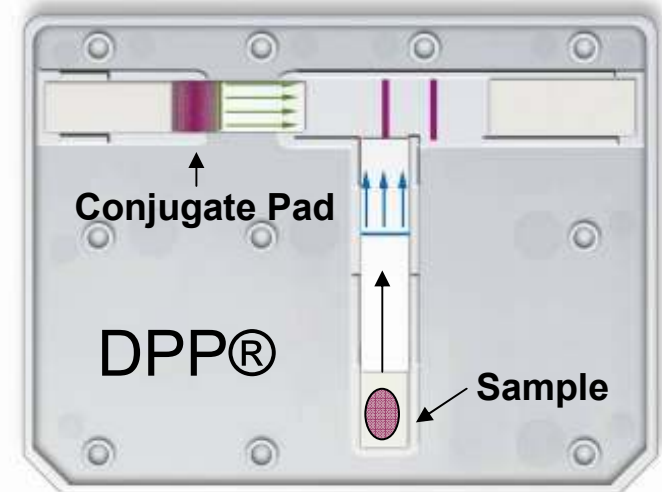
- \$7B Global Point-of-Care Test (POCT) Market
- Fastest Growing Segment of \$39.5B In-Vitro Diagnostics Market
- POCTs for HIV, Syphilis Serve Crucial Public Health Objectives
 - Professional US Rapid HIV Test Market Now ~7 Million Tests Annually; OTC Market Opportunity for Sure Check® HIV Test being pursued
 - Chembio's Unique Dual Band DPP® Syphilis Screen & Confirm, CE Marked October 2011



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
- Visual and/or Instrument Read-Out
- Patents issued in several global markets including U.S., UK, Australia, Eurasia and China
 - Additional DPP® Patents Pending in the U.S. and many foreign countries



Chembio-Branded Products Complemented by Current & Future OEM Programs

Current OEM Customers and Licensees

FIOCRUZ
(BRAZIL)

BIORAD, ALERE



Potential Future OEM/License Areas

INFECTIOUS
DISEASES

VETERINARY

DPP® HIV
SCREENING
TEST

DPP® SYPHILIS
SCREEN &
CONFIRM

SURE CHECK®
HIV OTC






SINGLE
PARAMETER &
MULTIPLEX
INFECTIOUS
DISEASE
PRODUCTS

Lateral Flow Rapid HIV Tests

- 25% of 1.1MM HIV+ individuals in U.S. not aware of their status
- Products sold in US professional market by Alere Inc. (NYSE:ALR) as Clearview® brand
 - 10-Year exclusive agreement through Sept. 2016 Based on ASP sharing
 - 9 Month Sales \$5.39 Million, a 52% increase YTD v. comparable 2010 period
- Ex-US under Chembio Brands (**STAT-PAK®** & **SURE CHECK®**)



U.S. Rapid HIV Test Market

| | Clearview Complete | Clearview STAT PAK | DPP HIVScreen | OraQuick | Uni-Gold |
|--|---|---|---|---|---|
| |  |  |  |  |  |
| Manufacturer | Chembio | Chembio | Chembio | Orasure Technologies, Bethlehem PA | Trinity Biotech, Dublin Ireland |
| Current or Planned Distribution | Private Label for Alere Direct & Distribution | Private Label for Alere Direct & Distribution | Direct & Distributors | Direct sales force | Direct sales force & distributors |
| FDA Approval Date | 2006 | 2006 | Clinical trials 90% Completed | 2003 | 2003 |
| Technology | Lateral Flow | Lateral Flow | Dual Path Platform (DPP®) | Lateral Flow | Lateral Flow |
| Est. US Market Shr. | 8% | 12% | N/A | 65% | 15% |
| FDA Sensitivity | 99.7% | 99.7% | TBD | 99.3%OF/99.6% WB | 100% |
| FDA Specificity | 99.9% | 99.9% | TBD | 99.8%OF/100% WB | 99.7% |
| Features | | | | | |
| Sample Types | All Blood Matrices | All Blood Matrices | Blood & Oral Fluid Claims being pursued | Oral Fluid and all blood matrices except serum | All Blood Matrices |
| True IgG Control | Y | Y | Y | Y | N |
| Sample Size (in microliters) | <5 | <5 | <5 | <5 | 40 |
| HIV-2 | Y | Y | | Y | N |

Pipeline: Chembio-Branded Products Anticipated Timelines – US Market

| Product | CLINICAL TRIALS/REGULATORY SUBMISSIONS | | REGULATORY APPROVAL OR CLEARANCE/COMMERCIAL SALES |
|---|---|--|--|
| | 2011 | 2012 | Est. Current/Potential U.S. Market Size |
| DPP® HIV Screen | Anticipated Completing Clinical Trials December; PMA Module I submitted and responded. PMA Module II submitted October | Respond to Module II & Submit Module III Q1. FDA Approval, CLIA waiver, US Market Launch | \$70MM/\$150MM US POCT Market Developed into 7MM Unit Market since 2003 |
| DPP® Syphilis Screen & Confirm | CE Marking Granted October Establishing EU Distribution Clinical Trials Commenced for US FDA 510(K) Submission | Launch in EU Complete clinical trials in US & Submit 510(K) to FDA for Clearance & US Market Launch | NA/\$70MM 69MM Syphilis tests performed in US; 50MM Clinical; Assumes 20% convert to POCT |
| Sure Check® HIV OTC | Product Already Approved for Professional Use which is Pre-requisite | Complete Pre-IDE Requirements and Begin Phase II Clinical Trials | NA/\$150MM Assumes \$30 OTC Test |

Pipeline: OEM Contracts with FIOCRUZ Brazil

Anticipate Minimum of \$3MM in 2011 Revenues v. \$.6MM in 2010

| Contract | 2010 | 2011 | 2012 |
|---|-----------------------------------|--------------------------------------|------------------|
| DPP® HIV Screening | Approved, Commercial Sales | Commercial Sales | Commercial Sales |
| DPP® HIV Confirmatory | Approved | Commercial Sales | Commercial Sales |
| DPP® Syphilis Treponemal | Agreement Signed December 2010 | Approved Q1 '11, Commercial Sales | Commercial Sales |
| DPP® Syphilis Treponemal/ Non-Treponemal | | Submission, Approval | Commercial Sales |
| DPP® Canine Leishmaniasis | Submitted | Approved Q1'11, Commercial Sales | Commercial Sales |
| DPP® Leptospirosis | | Approved Q3'11 | Commercial Sales |

Pipeline: Other Projects

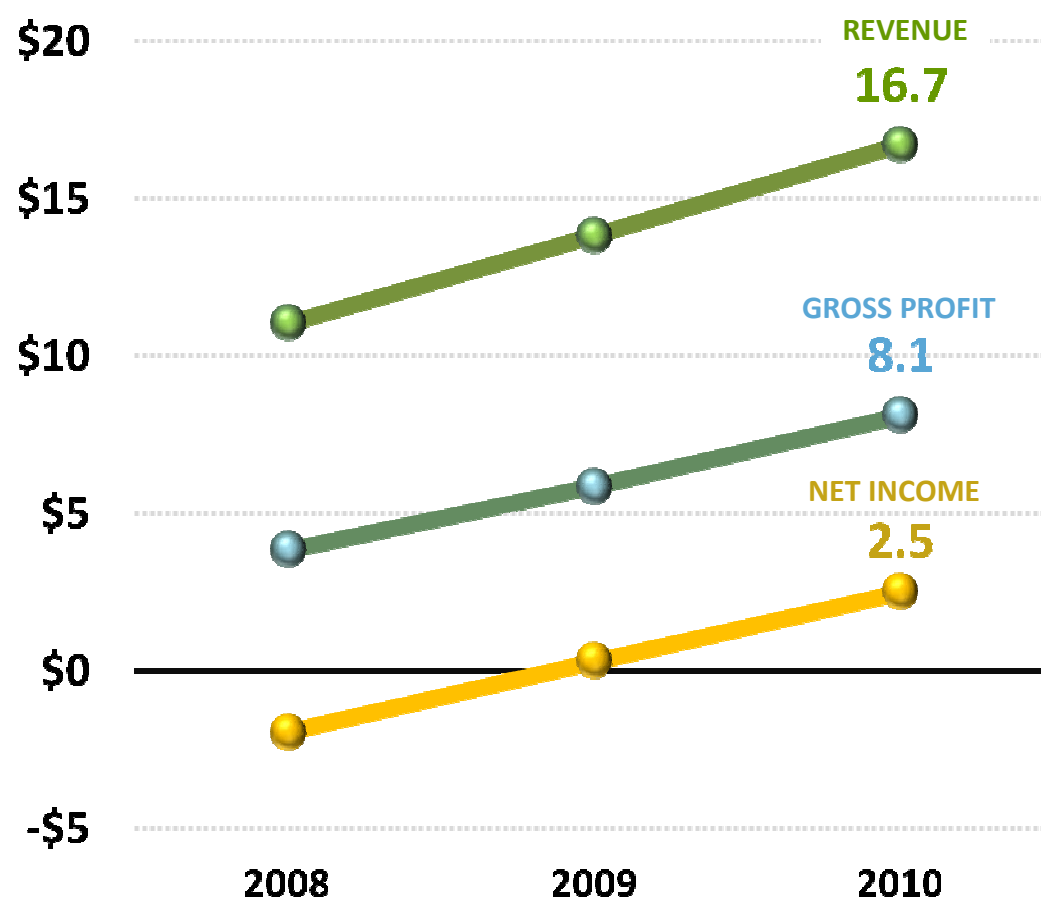
| Project | Activity |
|--|--|
| Multiplex DPP® Product Developed for & Licensed to Bio-Rad Laboratories, Inc. | Development completed. Anticipate CE Mark EOY 2011 – Launch EU Fall 2012. Manufacturing by Bio-Rad. Royalties to Chembio upon Commercial Sales |
| Multiplex DPP® Influenza Immune Status Product Developed for Battelle/CDC | Prototype Development Completed; Prototype products being evaluated at CDC . Additional development work Q4 2011-Q1 2012 |
| New DPP® OEM Applications | Veterinary |
| Potential New DPP® Branded Products | Infectious Diseases, Women’s Health, Cervid Veterinary TB |
| DPP® Platform Enhancements | Buffer Integration and “Dual DPP®” projects in progress |
| NIH Phase II Grants – Leptospirosis & Tuberculosis | <p>DPP® Leptospirosis - \$2.9MM 3 Year Grant awarded 6/2009. Prototype developed. Further reagent discovery underway. Approximately \$1MM funding remaining as of 10/1/2011. Chembio is principal grantee.</p> <p>DPP® Tuberculosis - \$2.4MM, 3 Year Grant Awarded Effective 3/1/2011. Prototype Developed. Planning Multi-site Evaluations and Optimization, Validation and Commercialization. Chembio is principal grantee.</p> |

Financial Summary

FY2008-2010 Results

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

(millions)



2010 Full Year and Nine Month 2010 & 2011 Selected Financial Results

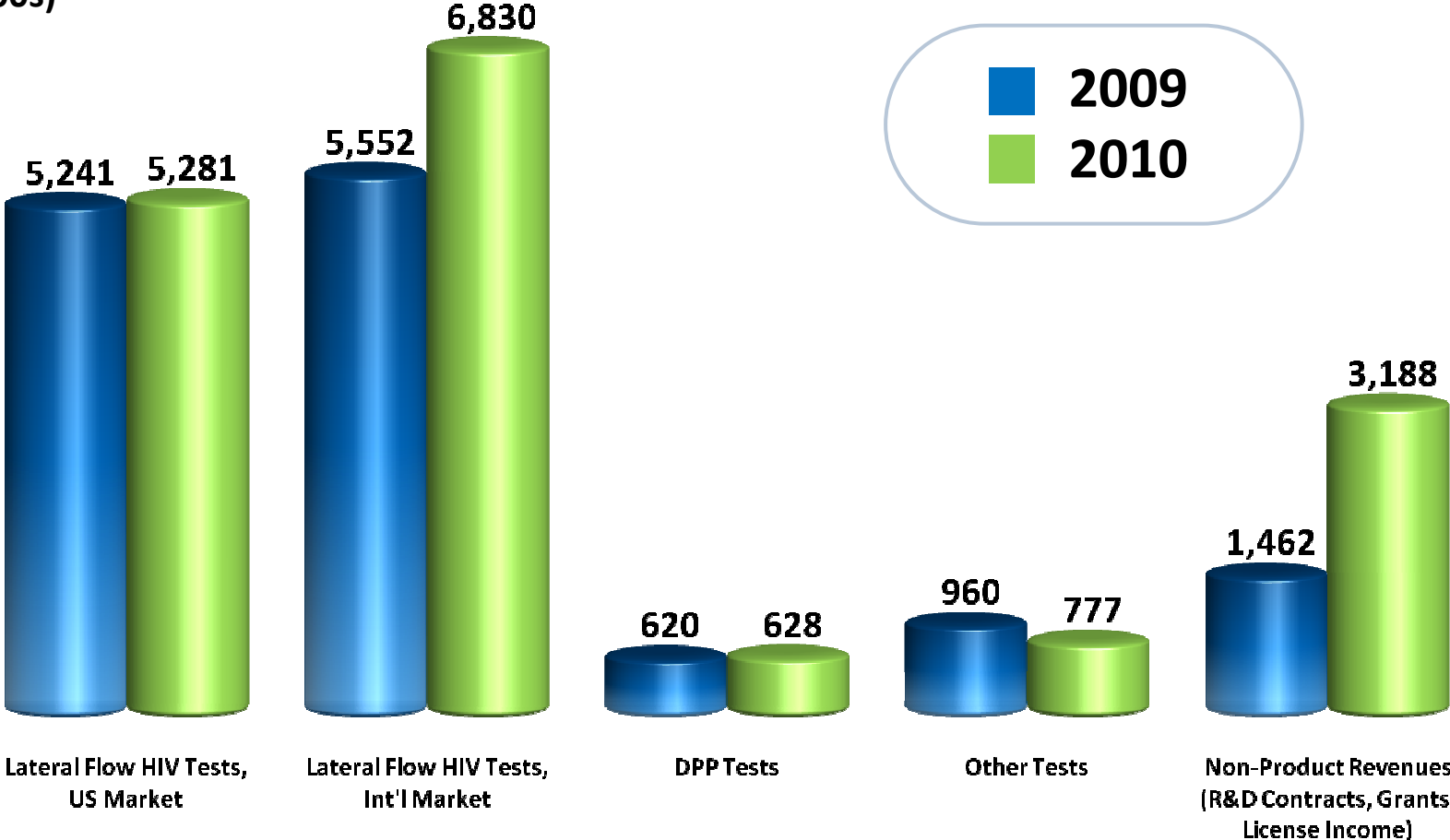
| | September 30, 2011-YTD | | September 30, 2010-YTD | | December 31, 2010 | |
|---|---------------------------|-----|---------------------------|-----|----------------------|-----|
| Net Product Revenues | \$11,516,325 | | \$8,337,133 | | \$13,516,359 | |
| Non-Product Revenues | 1,655,294 | | 2,700,728 | | 3,188,344 | |
| TOTAL REVENUES | 13,171,619 | | 11,037,861 | | 16,704,703 | |
| GROSS MARGIN | 6,647,353 | 50% | 5,609,841 | 51% | 8,100,699 | 48% |
| OPERATING COSTS: | | | | | | |
| Research and development expenses | 3,697,309 | 28% | 2,822,455 | 26% | 2,586,308 | 15% |
| Selling, general and administrative expense | 2,412,867 | 18% | 2,143,715 | 19% | 2,940,721 | 18% |
| | 6,110,176 | | 4,966,170 | | 5,527,029 | |
| INCOME FROM OPERATIONS | 537,177 | | 643,671 | | 2,573,670 | |
| OTHER INCOME (EXPENSES): | (9,030) | | (11,103) | | (60,326) | |
| NET INCOME | 528,147 | 4% | 632,568 | 6% | 2,513,344 | 15% |

Three Months September 2010 & 2011 Selected Financial Results

| | 3 MOS Sept 30, 2011 | 3 MOS Sept 30, 2010 |
|---|------------------------|------------------------|
| Net Product Revenues | \$5,526,883 | \$3,786,572 |
| Non-Product Revenues | 394,904 | 718,431 |
| TOTAL REVENUES | 5,921,787 | 4,505,003 |
| GROSS MARGIN | 2,670,733 45% | 2,208,501 49% |
| OPERATING COSTS: | | |
| Research and development expenses | 1,242,295 21% | 1,230,100 27% |
| Selling, general and administrative expense | 949,237 16% | 801,854 18% |
| | 2,191,532 | 2,031,954 |
| INCOME FROM OPERATIONS | 479,201 | 176,547 |
| OTHER INCOME (EXPENSES): | (3,596) | (8,571) |
| NET INCOME | 475,605 8% | 167,976 4% |

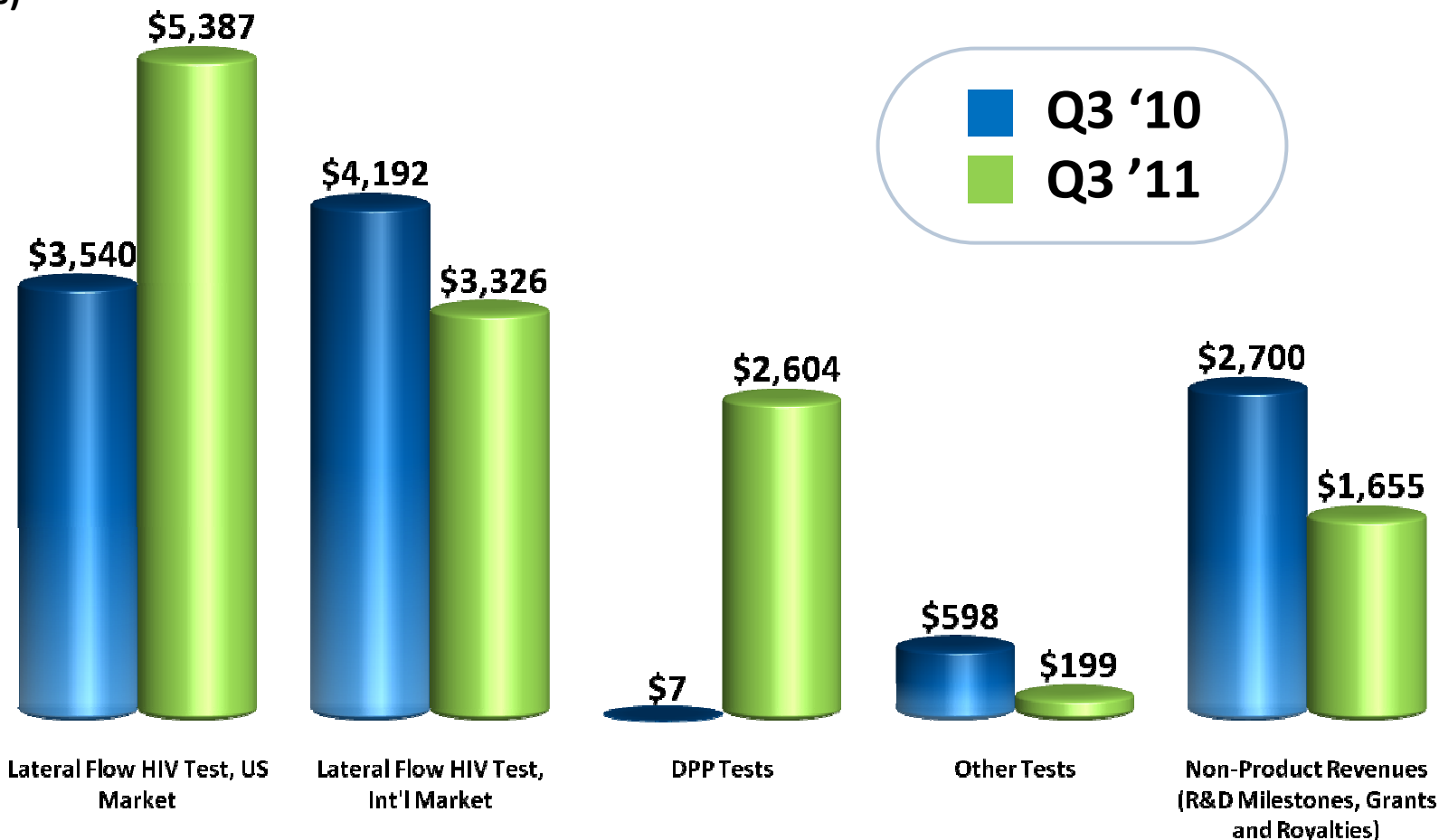
Revenue Growth by Category: 2009 vs. 2010

(\$000s)



Revenue Growth by Category: Q3-2011 vs. Q3-2010

(\$000s)



Selected Balance Sheet Data

| (\$ in millions) | Sept'11 | Dec. '10 | Dec. '09 |
|--|------------------|-----------------|-----------------|
| Cash | \$ 3,045 | \$ 2,136 | \$ 1,068 |
| Accounts Receivable | 2,658 | 3,946 | 1,776 |
| Inventories | 2,588 | 1,349 | 1,556 |
| Total Current Assets | 8,480 | 7,637 | 4,667 |
| Net Fixed Assets | 849 | 813 | 580 |
| Other Assets | 770 | 636 | 1,068 |
| Total Assets | \$ 10,099 | \$ 9,086 | \$ 6,315 |
| Total Current Liabilities | 3,199 | 3,076 | 3,173 |
| Total Liabilities | 3,345 | 3,277 | 3,227 |
| Total Equity | 6,754 | 5,809 | 3,088 |
| Total Liabilities & Stockholders Equity | \$ 10,099 | \$ 9,086 | \$ 6,315 |

Anticipated Milestones 2012

Clinical & Regulatory Programs for Branded Products

- Submit Module III for DPP® HIV PMA, Receive FDA PMA Approval and CLIA waiver
- Complete Syphilis Screen & Confirm Clinical Trials, Submit to FDA for 510(K) Clearance, Receive Clearance
- Complete Sure Check HIV OTC Pre-IDE, Commence Phase II Clinical Trials
- New Claims for Veterinary TB

Product Revenues & Operating Results

- Full Year of New Products Launched in Brazil through FIOCRUZ
- Launch of DPP® Syphilis Screen & Confirm in Europe
- Continued US Lateral Flow HIV Test Market Share Gains
- Potential New International Market Opportunities for Lateral Flow and DPP® Products

Research & Development

- New Branded Products to Replenish Pipeline
- New OEM Development Agreements

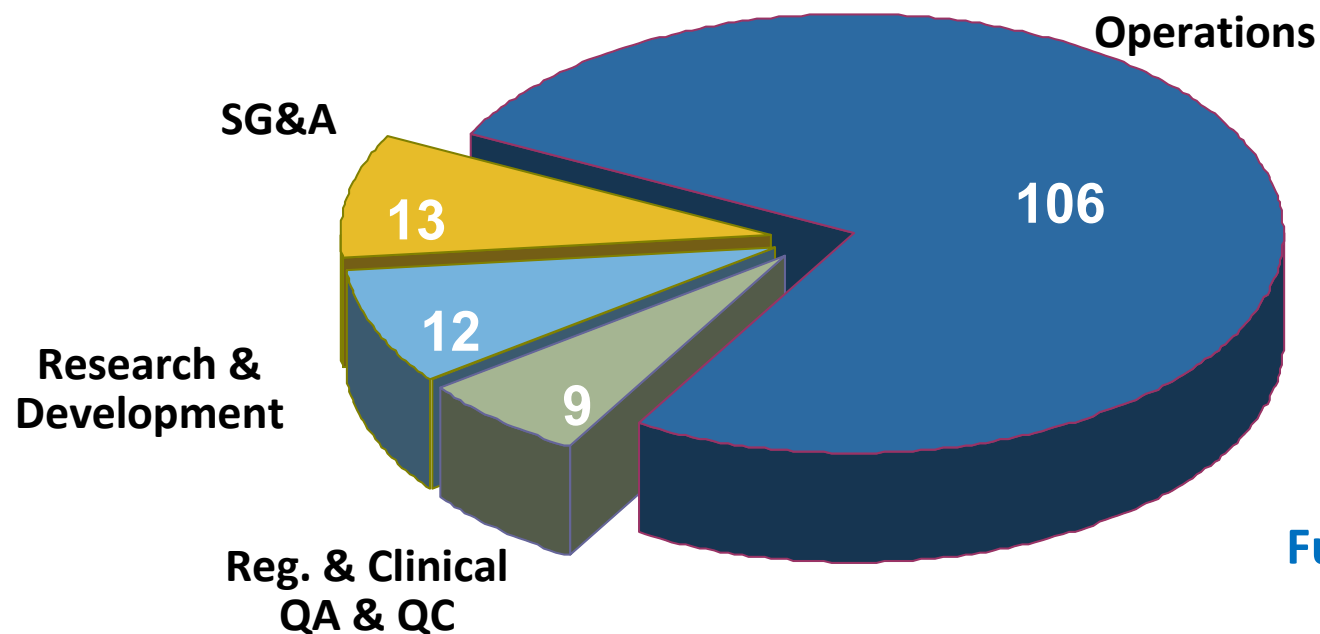
Leadership

| Executive | | Joined Company* |
|------------------|--------------------------------|------------------------|
| Lawrence Siebert | Chairman & CEO | 2002 |
| Richard Larkin | CFO | 2003 |
| Javan Esfandiari | SVP R&D | 2000 |
| Tom Ippolito | VP Regulatory, Clinical, QA/QC | 2005 |
| Rick Bruce | VP Operations | 2000 |

| Independent Directors | Joined Board |
|------------------------------|---------------------|
| Gary Meller, MD, MBA | 2005 |
| Kathy Davis, MBA | 2007 |
| Barbara DeBuono, MD MPH | 2011 |
| Peter Kissinger, Ph.D | 2011 |

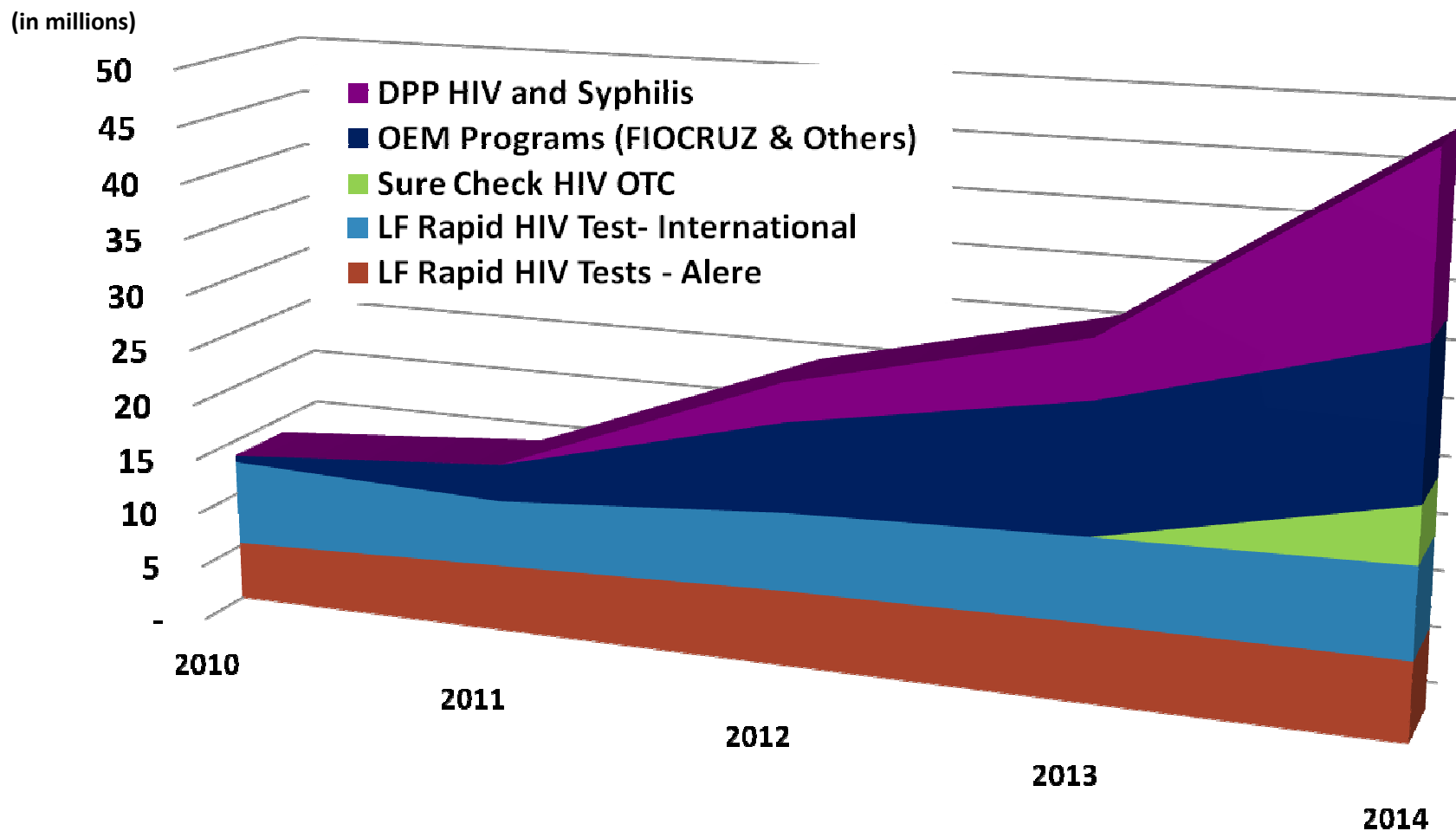
Organization & Facility

TOTAL EMPLOYMENT
Approx. 140



Fully Integrated FDA & USDA Approved Development & Manufacturing in 24,000 S/F Leased Facility in Medford, NY

Potential Impact of OEM & Branded Products on Revenue*



**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*

CEMI Selected Share Data

(in millions except per share data)

| | |
|--------------------------------|----------------|
| Ticker Symbol (OTC:QB) | CEMI |
| Price 10/31/11 | \$0.45 |
| 52 Week High | \$0.580 |
| 52 Week Low | \$0.210 |
| Outstanding Shares (MM) | 63.3 |
| Market Capitalization (MM) | \$28.5 |
| Fully Diluted (FD) Shares (MM) | 69.6 |
| Management Holding (MM)-FD | 12.4 |
| Average Daily Volume (3 Mos) | 50,000 |

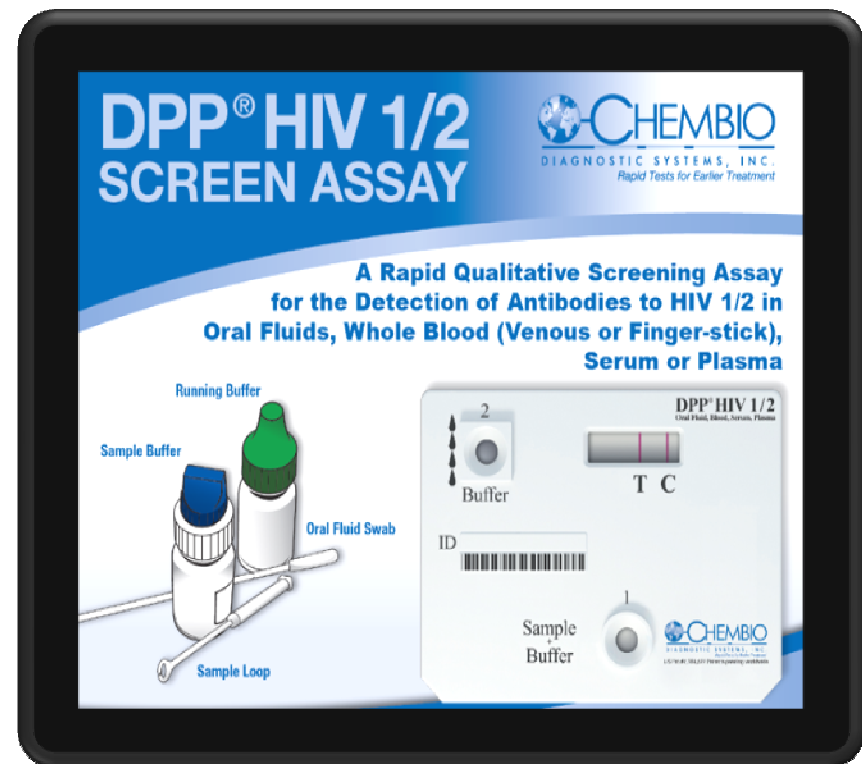
| Options and Warrants | Amt. | Avg. Ex. Price |
|--|-------------|----------------|
| Options (4.64MM held by mgmt. & board) | 6.19 | \$0.213 |
| Warrants (Expire by 2/15/12) | 0.07 | \$0.810 |
| Total Options & Warrants | 6.26 | \$0.220 |

CEMI price performance



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

- Submitted PMA Module I in Q2 2011
- Submitted PMA Module II October 2011 US
- Clinical Trials Being Completed Q-4 2011 for Submission of Module III Q1 2012
- Anticipated FDA PMA Approval, CLIA waiver and Product Launch in 2012



DPP® Syphilis Screen & Confirm

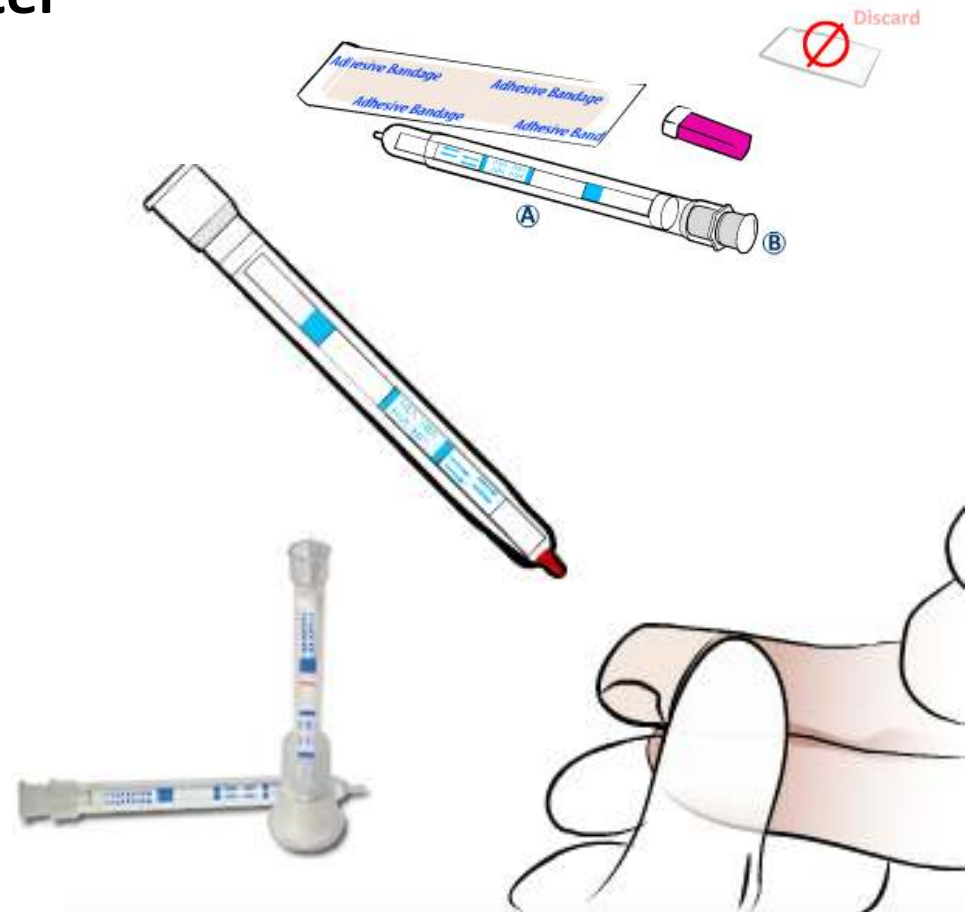
- First POCT in US for Syphilis
- All Pregnant Women Tested for Syphilis
- Current Laboratory Tests Inadequate
- Enables Confirmation & Treatment At POC
- CE Marked October 2011, Distribution being Established
- US 510(K) Clinical Trials Commenced
- Anticipate FDA Clearance in 2012



SURE CHECK[®] HIV OTC

Pre-IDE Studies 2011, Q1-2012 with “Phase II” Clinical Trials Beginning Thereafter

- Patented All-In-One Barrel Device
- Increasing Market Acceptance in Professional Market (Clearview Complete by Alere)
- IDE, Clinical Trials 2012-13
- Anticipated Approval 2014



Comparative Selected Operating Results 2005-2010

| | Dec-10 | | Dec-09 | | Dec-08 | | Dec-07 | | Dec-06 | | Dec-05 | |
|--|--------|-------------------|--------|-------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|
| REVENUES: | | | | | | | | | | | | |
| Net sales | \$ | 13,516,359 | \$ | 12,372,493 | \$ | 10,355,768 | \$ | 8,764,877 | \$ | 6,294,012 | \$ | 3,359,532 |
| Research grant income | | 3,188,344 | | 1,461,755 | | 693,803 | | 466,071 | | 208,468 | | 581,198 |
| TOTAL REVENUES | | 16,704,703 | | 13,834,248 | | 11,049,571 | | 9,230,948 | | 6,502,480 | | 3,940,730 |
| Cost of sales | | 8,604,004 | | 7,973,843 | | 7,197,850 | | 6,435,239 | | 4,894,208 | | 2,996,082 |
| GROSS PROFIT | | 8,100,699 | 48% | 5,860,405 | 42% | 3,851,721 | 35% | 2,795,709 | 30% | 1,608,272 | 25% | 944,648 |
| OVERHEAD COSTS: | | | | | | | | | | | | |
| Research and development expenses | | 2,586,308 | 15% | 2,883,696 | 21% | 2,605,343 | 24% | 1,906,653 | 21% | 1,401,472 | 22% | 1,364,898 |
| Selling, general and administrative expenses | | 2,940,721 | 18% | 2,659,382 | 19% | 3,317,046 | 30% | 3,765,220 | 41% | 4,786,993 | 74% | 2,877,737 |
| | | 5,527,029 | | 5,543,078 | | 5,922,389 | | 5,671,873 | | 6,188,465 | | 4,242,635 |
| INCOME (LOSS) FROM OPERATIONS | | 2,573,670 | | 317,327 | | (2,070,668) | | (2,876,164) | | (4,580,193) | | (3,297,987) |
| OTHER INCOME (EXPENSES): | | | | | | | | | | | | |
| Other income (expense) | | (3,923) | | (6,696) | | 95,812 | | 120,862 | | (57,464) | | 21,867 |
| Interest income | | 4,147 | | 9,032 | | 34,403 | | 145,289 | | 29,532 | | 39,803 |
| Interest expense | | (14,727) | | (10,603) | | (8,317) | | (16,879) | | (386,895) | | (15,683) |
| | | (14,503) | | (8,267) | | 121,898 | | 249,272 | | (414,827) | | 45,987 |
| INCOME (LOSS) BEFORE INCOME TAXES | | 2,559,167 | | 309,060 | | (1,948,770) | | (2,626,892) | | (4,995,020) | | (3,252,000) |
| Income taxes | | 45,823 | | - | | - | | - | | - | | - |
| NET INCOME (LOSS) | | 2,513,344 | 15% | 309,060 | 2% | (1,948,770) | -18% | (2,626,892) | -28% | (4,995,020) | -77% | (3,252,000) |
| NET INCOME (LOSS) ATTRIBUTABLE TO COMMON STOCKHOLDERS | \$ | 2,513,344 | 15% | \$ 309,060 | 2% | \$ (1,948,770) | -18% | \$ (8,272,202) | -90% | \$ (8,205,066) | -126% | \$ (6,769,022) |
| Basic income (loss) per share | \$ | 0.04 | | \$ 0.00 | | \$ (0.03) | | \$ (0.57) | | \$ (0.80) | | \$ (0.88) |
| Diluted income (loss) per share | \$ | 0.04 | | \$ 0.00 | | \$ (0.03) | | \$ (0.57) | | \$ (0.80) | | \$ (0.88) |
| Weighted average number of shares outstanding, basic | | 62,102,861 | | 61,946,435 | | 61,266,954 | | 14,608,478 | | 10,293,168 | | 7,705,782 |
| Weighted average number of shares outstanding, diluted | | 70,920,915 | | 75,041,932 | | 61,266,954 | | 14,608,478 | | 10,293,168 | | 7,705,782 |