#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-Q

Mark one

| X     | QUARTERLY REPORT PURS                                 | SUANT TO SECTION          | N 13 OR 15(d) OF THE SEC               | CURITIES EXCHANGE ACT OF 1934   |  |  |  |  |  |
|-------|---|---------------------------|--|---|--|--|--|--|--|
| For t | or the quarterly period ended October 31, 2012        |                           |  |   |  |  |  |  |  |
|       |   |                           | or                                     |   |  |  |  |  |  |
|       | TRANSITION REPORT PURS                                | UANT TO SECTION           | N 13 OR 15(d) OF THE SEC               | URITIES EXCHANGE ACT OF 1934  |  |  |  |  |  |
|       | For ti  |                           | ssion File Number 001-09974            |   |  |  |  |  |  |
|       |   |                           | BIOCHEM, IN                            |   |  |  |  |  |  |
|       |   | (Exact name o             | f registrant as specified in its chart | er)   |  |  |  |  |  |
| New   | York  |                           |  | 13-2866202  |  |  |  |  |  |
| `     | te or Other Jurisdiction corporation or Organization) |                           |  | (IRS. Employer Identification No.)  |  |  |  |  |  |
| 527   | Madison Ave, New York, New York                       |                           |  | 10022   |  |  |  |  |  |
| (Add  | ress of Principal Executive office)                   |                           | <u> </u>                               | (Zip Code)  |  |  |  |  |  |
| 212-  | 583-0100  |                           |  |   |  |  |  |  |  |
| (Reg  | gistrant's telephone number, including ar             | rea code)                 |  |   |  |  |  |  |  |
| the p |   |                           |  | 3 or 15(d) of the Securities Exchange Act of 1934 during and (2) has been subject to such filing requirements for     |  |  |  |  |  |
|       |   |                           | Yes ⊠ No □                             |   |  |  |  |  |  |
| be s  |   | 45 of Regulation S-T (§   |  | e Web site, if any, every Interactive Data File required to<br>e preceding 12 months (or such shorter period that the |  |  |  |  |  |
|       |   |                           | Yes ⊠ No □                             |   |  |  |  |  |  |
|       | eate by check mark whether the registronange Act).    | rant is a large accelerat | ed filer, an accelerated filer, or a   | non-accelerated filer (as defined in Rule 12b-2 of the  |  |  |  |  |  |
| Larg  | e accelerated filer □ Acc                             | celerated filer ⊠         | Non-accelerated filer □                | Smaller reporting company □   |  |  |  |  |  |
| Indic | ate by check mark whether the registrar               | nt is a shell company (as | defined in Rule 12b-2 of the Exch      | ange Act.)  |  |  |  |  |  |
|       |   |                           | Yes □ No ⊠                             |   |  |  |  |  |  |
| As o  | f December 1, 2012 the Registrant had                 | approximately 39,279,40   | 0 shares of common stock outstar       | ding.   |  |  |  |  |  |
|       |   |                           |  |   |  |  |  |  |  |

#### ENZO BIOCHEM, INC. FORM 10-Q October 31, 2012

#### <u>INDEX</u>

#### PART I - FINANCIAL INFORMATION

| Item 1.           | <u>Financial Statements</u>   | 3  |
|-------------------|---|----|
|                   | Consolidated Balance Sheets - October 31, 2012 (unaudited) and July 31, 2012 (audited)                                  | 3  |
|                   | Consolidated Statements of Operations for the three months ended October 31, 2012 and 2011 (unaudited)                  | 4  |
|                   | Consolidated Statements of Comprehensive Income (Loss) for the three months ended October 31, 2012 and 2011 (unaudited) | 5  |
|                   | Consolidated Statement of Stockholders' Equity for the three months ended October 31, 2012 (unaudited)                  | 6  |
|                   | Consolidated Statements of Cash Flows for the three months ended October 31, 2012 and 2011 (unaudited)                  | 7  |
| Item 2.           | Management's Discussion and Analysis of Financial Condition and Results of Operations                                   | 15 |
| Item 3.           | Quantitative and Qualitative Disclosures About Market Risk  | 25 |
| Item 4.           | Controls and Procedures   | 25 |
|                   | Part II – OTHER INFORMATION   |    |
| Item 1.           | Legal Proceedings   | 26 |
| Item 1A.          | Risk Factors  | 26 |
| Item 6.           | <u>Exhibits</u>   | 26 |
| <u>Signatures</u> |   | 26 |
|                   | 2   |    |

#### ENZO BIOCHEM, INC. C ONSOLIDATED BALANCE SHEETS (Dollars in thousands, except share data)

|  | October 31,<br>2012<br>(unaudited) |           |    | July 31,<br>2012<br>(audited) |
|--|------------------------------------|-----------|----|-------------------------------|
| ASSETS   |                                    |           |    |                               |
| Current assets:  |                                    |           |    |                               |
| Cash and cash equivalents  | \$                                 | 13,401    | \$ | 15,076                        |
| Accounts receivable, net of allowances   |                                    | 14,003    |    | 14,135                        |
| Inventories  |                                    | 8,671     |    | 8,800                         |
| Prepaid expenses   |                                    | 2,102     |    | 2,357                         |
| Total current assets   |                                    | 38,177    |    | 40,368                        |
| Property, plant and equipment, net   |                                    | 9,505     |    | 9,116                         |
| Goodwill   |                                    | 7,452     |    | 7,452                         |
| Intangible assets, net   |                                    | 11,420    |    | 11,780                        |
| Other  |                                    | 451       |    | 407                           |
| Total assets   | \$                                 | 67,005    | \$ | 69,123                        |
| LIABILITIES AND STOCKHOLDERS' EQUITY   |                                    |           |    |                               |
| Current liabilities:   |                                    |           |    |                               |
| Accounts payable – trade   | \$                                 | 7,871     | \$ | 9,020                         |
| Accrued liabilities  | Ψ                                  | 11,700    | Ψ  | 9,818                         |
| Other current liabilities  |                                    | 264       |    | 118                           |
|  |                                    | 20.       |    |                               |
| Total current liabilities  |                                    | 19,835    |    | 18,956                        |
| Deferred taxes   |                                    | 739       |    | 938                           |
| Other liabilities  |                                    | 719       |    | 128                           |
| Commitments and contingencies  |                                    |           |    |                               |
| Stockholders' equity: Preferred Stock, \$.01 par value; authorized 25,000,000 shares; no shares issued or outstanding                      |                                    | _         |    | _                             |
| Common Stock, \$.01 par value; authorized 75,000,000 shares; shares issued: 39,495,975 at October 31, 2012 and 39,495,475 at July 31, 2012 |                                    | 395       |    | 395                           |
| Additional paid-in capital   |                                    | 304,500   |    | 304,358                       |
| Less treasury stock at cost: 216,556 shares at October 31, 2012 and July 31, 2012  |                                    | (3,074)   |    | (3,074)                       |
| Accumulated deficit  |                                    | (257,874) |    | (254,183)                     |
| Accumulated other comprehensive income   |                                    | 1,765     |    | 1,605                         |
| Total stockholders' equity   |                                    | 45,712    | _  | 49,101                        |
| Total liabilities and stockholders' equity   | \$                                 | 67,005    | \$ | 69,123                        |
| . Sai habilito and stockholder squity  | Ψ                                  | 07,000    | Ψ  | 00,120                        |

## ENZO BIOCHEM, INC. CONSOLIDATED STATEMENTS OF OP ERATIONS (UNAUDITED)

(Dollars in thousands, except per share data)

|   | Three Mon<br>Octob |            |
|---|--------------------|------------|
|   | 2012               | 2011       |
| Revenues:                                       |                    |            |
| Clinical laboratory services                    | \$ 15,177          | \$ 14,187  |
| Product revenues                                | 8,434              | 9,704      |
| Royalty and license fee income                  | 2,019              | 1,862      |
| Total revenues                                  | 25,630             | 25,753     |
| Operating expenses:                             |                    |            |
| Cost of clinical laboratory services            | 9,710              | 8,814      |
| Cost of product revenues                        | 4,184              | 5,137      |
| Research and development                        | 1,011              | 1,625      |
| Selling, general, and administrative            | 11,415             | 12,385     |
| Provision for uncollectible accounts receivable | 1,594              | 1,286      |
| Legal   | 1,700              | 868        |
| Total operating expenses                        | 29,614             | 30,115     |
| Operating loss                                  | (3,984)            | (4,362)    |
| Other income (expense):                         | (0)                | (0)        |
| Interest  | (9)                | (2)<br>9   |
| Other   | 9<br>229           | 9<br>29    |
| Foreign currency gain                           | 229                | 29         |
| Loss before income taxes                        | ${(3,755)}$        | (4,326)    |
| Benefit (provision) for income taxes            | 64                 | (168)      |
| Net loss  | \$ (3,691)         | \$ (4,494) |
|   |                    |            |
| Net loss per common share:                      |                    |            |
| Basic and diluted                               | \$ (0.09)          | \$ (0.12)  |
| basic and diluted                               | ψ (0.03)           | ψ (0.12)   |
| Weighted average common shares outstanding:     |                    |            |
| Basic and diluted                               | 39,279             | 38,597     |
| Dasic and unded                                 | 39,219             | 30,397     |
|   |                    |            |

# ENZO BIOCHEM, INC. C ONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (UNAUDITED) (Dollars in thousands)

|   | Three Mont<br>Octob |               |
|---|---------------------|---------------|
|   | 2012                | 2011          |
| Net loss  | \$<br>(3,691)       | \$<br>(4,494) |
| Other comprehensive income (loss) – foreign currency translation adjustment | <br>160             | (962)         |
| Comprehensive loss  | \$<br>(3,531)       | \$<br>(5,456) |

# ENZO BIOCHEM, INC. C ONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY Three months ended October 31, 2012 (UNAUDITED) (Dollars In thousands, except share data)

|  | Common<br>Stock<br>Shares | Treasury<br>Stock<br>Shares | ,  | Common<br>Stock<br>Amount | A  | Additional<br>Paid-in<br>Capital |    | Treasury<br>Stock<br>Amount | Ac | cumulated<br>Deficit |    | Accumulated<br>Other<br>Comprehensive<br>Income | Sto | Total<br>ockholders'<br>Equity |
|--|---------------------------|-----------------------------|----|---------------------------|----|----------------------------------|----|-----------------------------|----|----------------------|----|---|-----|--------------------------------|
| Balance at July 31,<br>2012                          | 39,495,475                | 216,556                     | \$ | 395                       | \$ | 304,358                          | \$ | (3,074)                     | \$ | (254,183)            | \$ | 1,605   | \$  | 49,101                         |
| Net loss for the period<br>ended October 31,<br>2012 | _                         | _                           |    | _                         |    | _                                |    | _                           |    | (3,691)              |    | _   |     | (3,691)                        |
| Vesting of restricted<br>stock                       | 500                       | _                           |    | _                         |    | _                                |    | _                           |    | _                    |    | _   |     | _                              |
| Stock based compensation charges                     | _                         | _                           |    | _                         |    | 142                              |    | _                           |    | _                    |    | _   |     | 142                            |
| Foreign currency translation adjustments             | _                         | _                           |    | _                         |    | _                                |    | _                           |    | _                    |    | 160   |     | 160                            |
| Balance at October 31,                               |                           |                             |    |                           |    |                                  | _  |                             | _  |                      | _  |   |     |                                |
| 2012   | 39,495,975                | 216,556                     | \$ | 395                       | \$ | 304,500                          | \$ | (3,074)                     | \$ | (257,874)            | \$ | 1,765   | \$  | 45,712                         |
|  |                           |                             | _  |                           | _  |                                  | _  |                             | _  |                      | =  |   | _   |                                |

# ENZO BIOCHEM, INC. C ONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED) (Dollars in thousands)

#### Three Months Ended October 31, 2012 201

|   |            | ber 31,            |
|---|------------|--------------------|
|   | 2012       | 2011               |
| Cash flows from operating activities:                                       |            | -                  |
| Net loss  | \$ (3,691) | \$ (4,494)         |
| Adjustments to reconcile net loss to net cash used in operating activities: |            |                    |
| Depreciation and amortization of property, plant and equipment              | 652        | 801                |
| Amortization of intangible assets   | 497        | 421                |
| Provision for uncollectible accounts receivable                             | 1,594      | 1,286              |
| Income tax benefit  | (197)      | (34)               |
| Share based compensation charges  | 142        | 213                |
| Share based 401(k) employer match expense                                   | 147        | 130                |
| Foreign currency transaction gain   | (282)      | (57)               |
| Changes in operating assets and liabilities:                                |            |                    |
| Accounts receivable   | (1,410)    | (724)              |
| Inventories   | 190        | 17                 |
| Prepaid expenses  | 259        | 402                |
| Accounts payable – trade  | (1,125)    | (1,341)            |
| Accrued liabilities, other current liabilities and other liabilities        | 1,747      | 1,078              |
| Total adjustments   | 2,214      | 2,192              |
| Net cash used in operating activities                                       | (1,477)    | (2,302)            |
| Cash flows from investing activities: Purchases of short term investments   |            | (10,000)           |
|   |            | (10,000)<br>10,000 |
| Maturities of short term investments  | - (204)    | •                  |
| Capital expenditures  | (291)      | (252)              |
| Security deposits and other   | (44)       | (106)              |
| Net cash used in investing activities                                       | (335)      | (358)              |
| Cash flows from financing activities:                                       |            |                    |
| Installment loan payments   | (28)       | (33)               |
| Net cash used in financing activities                                       | (28)       | (33)               |
| Effect of exchange rate changes on cash and cash equivalents                | 165        | (91)               |
|   |            |                    |
| Decrease in cash and cash equivalents                                       | (1,675)    | (2,784)            |
| Cash and cash equivalents - beginning of period                             | 15,076     | 14,161             |
| Cash and cash equivalents - end of period                                   | \$ 13,401  | \$ 11,377          |
|   |            |                    |

### ENZO BIOCHEM, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of October 31, 2012 and for the three months ended October 31, 2012 and 2011 (Unaudited) (Dollars in thousands, except share data)

#### Note 1 – Basis of Presentation

The accompanying consolidated financial statements include the accounts of Enzo Biochem, Inc. and its wholly-owned subsidiaries, Enzo Life Sciences, Enzo Clinical Labs, Enzo Therapeutics and Enzo Realty LLC, collectively referred to as the "Company" or "Companies". The consolidated balance sheet as of October 31, 2012, the consolidated statements of operations, the consolidated statements of comprehensive income (loss), and the consolidated statements of cash flows for the three months ended October 31, 2012 and 2011, and the consolidated statement of stockholders' equity for the three months ended October 31, 2012 are unaudited. In the opinion of management, all adjustments (which include normal recurring adjustments) necessary to present fairly the financial position and operating results for the interim periods have been made. Certain information and footnote disclosure, normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States, have been condensed or omitted. The consolidated financial statements should be read in conjunction with the consolidated financial statements for the year ended July 31, 2012 and notes thereto contained in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission. The consolidated balance sheet at July 31, 2012 has been derived from the audited financial statements at that date. The results of operations for the three months ended October 31, 2012 are not necessarily indicative of the results that may be expected for the fiscal year ending July 31, 2013.

#### Recent Accounting Pronouncements Adopted

In June 2011, the FASB issued Accounting Standards Update No. 2011-05, "Comprehensive Income" (Topic 220) – Presentation of Comprehensive Income" (ASU No. 2011-05), which requires an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. ASU 2011-05 eliminated the option to present the components of other comprehensive income as part of the statement of stockholders' equity. The Company adopted ASU 2011-05 in its first guarter of fiscal year 2013 by including the required disclosures in two separate but consecutive statements.

In September 2011, the FASB issued Accounting Standards Update No. 2011-08 "Testing Goodwill for Impairment" (ASU No. 2011-08) which is intended to reduce the complexity and costs to test goodwill for impairment. The amendment allows an entity the option to make a qualitative evaluation about the likelihood of goodwill impairment to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. An entity will no longer be required to calculate the fair value of a reporting unit unless the entity determines, based on its qualitative assessment, that it is more likely than not that the fair value of the reporting unit is less than its carrying amount. The ASU also expands upon the examples of events and circumstances that an entity should consider between annual impairment tests in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. The amendment became effective for annual and interim goodwill impairment tests performed for the Company's fiscal year beginning August 1, 2012. The Company does not expect the adoption of ASU 2011-08 to have a material impact on its consolidated financial statements.

In July 2011, the FASB issued ASU No. 2011-07 "Health Care Entities (Topic 954) - Presentation and Disclosure of Patient Service Revenue, Provision for Bad Debts, and the Allowance for Doubtful Accounts for Certain Health Care Entities". This update was issued to provide greater transparency relating to accounting practices used for net patient service revenue and related bad debt allowances by health care entities. Some health care entities recognize patient service revenue at the time the services are rendered regardless of whether the entity expects to collect that amount or has assessed the patient's ability to pay. These prior accounting practices used by some health care entities resulted in a gross-up of patient service revenue and the provision for bad debts, causing difficulty for users of financial statements to make accurate comparisons and analyses of financial statements among entities. ASU No. 2011-07 requires certain healthcare entities to change the presentation of the statement of operations, reclassifying the provision for bad debts associated with patient service revenue from an operating expense to a deduction from patient service revenue and also requires enhanced quantitative and qualitative disclosures relevant to the entity's policies for recognizing revenue and assessing bad debts. This update is not designed to change and will not change the net income reported by healthcare entities. The Company adopted this update in its first quarter of fiscal year 2013 with no impact on its consolidated financial position or results of operations.

#### Note 2 – Net loss per share

Basic net income (loss) per share represents net income (loss) divided by the weighted average number of common shares outstanding during the period. The dilutive effect of potential common shares, consisting of outstanding stock options and unvested restricted stock, is determined using the treasury stock method. Diluted weighted average shares outstanding for the three months ended October 31, 2012 and 2011 do not include the potential common shares from stock options and unvested restricted stock because to do so would have been antidilutive and as such is the same as basic weighted average shares outstanding. There were no potential common shares ("in the money options") or unvested restricted stock excluded from the calculation of diluted earnings per share during the three months ended October 31, 2012 and 2011. For the three months ended October 31, 2012 and 2011, the effect of approximately 686,000 and 785,000 respectively, of outstanding "out of the money" options to purchase common shares were excluded from the calculation of diluted net loss per share because their effect would be anti-dilutive.

#### Note 3 – Share-based compensation

The following table sets forth the amount of expense related to share-based payment arrangements included in specific line items in the accompanying statements of operations:

|                                      | Three months ended<br>October 31, |    |      |  |  |
|--------------------------------------|-----------------------------------|----|------|--|--|
|                                      | 2012                              |    | 2011 |  |  |
| Cost of clinical laboratory services | \$<br>2                           | \$ | 2    |  |  |
| Research and development             | 1                                 |    | 3    |  |  |
| Selling, general and administrative  | 139                               |    | 208  |  |  |
|                                      | \$<br>142                         | \$ | 213  |  |  |
|                                      | <br>                              |    |      |  |  |

No excess tax benefits were recognized during the three month periods ended October 31, 2012 and 2011.

Stock option plans

A summary of the activity relating to the Company's stock option plans for the three month period ended October 31, 2012 is as follows:

|  | Options  |    | ice       | Aggregate<br>Intrinsic Value |   |  |
|--|----------|----|-----------|------------------------------|---|--|
| Outstanding at July 31, 2012                 | 736,490  | \$ | 14.50     | \$                           | _ |  |
| Exercised Cancelled                          | <u> </u> | \$ | <br>11.25 |                              | _ |  |
| Outstanding and exercisable at end of period | 685,852  |    | 14.74     | \$                           | _ |  |
| ·  |          |    |           |                              |   |  |

As of October 31, 2012, there were no unvested stock options.

#### Restricted Stock Awards

A summary of the activity pursuant to the Company's restricted stock awards for the three months ended October 31, 2012 is as follows:

|                           | Awards  | Av | ighted<br>verage<br>rd Price |
|---------------------------|---------|----|------------------------------|
| Unvested at July 31, 2012 | 257,583 | \$ | 3.58                         |
| Awarded                   | 30,000  | \$ | 1.52                         |
| Vested                    | (500)   | \$ | (3.93)                       |
| Forfeited                 | (3,292) | \$ | (5.13)                       |
| Unvested at end of period | 283,791 | \$ | 3.34                         |

The fair value of a restricted stock award is determined based on the closing stock price on the award date. As of October 31, 2012, there was approximately \$0.5 million of unrecognized compensation cost related to unvested restricted stock-based compensation to be recognized over a weighted average remaining period of approximately one year.

The total number of shares available for grant as equity awards is approximately 2,658,000 as of October 31, 2012.

#### Note 4 - Inventories

Inventories consist of the following:

|                   | October 31,<br>2012 | July 31,<br>2012 |
|-------------------|---------------------|------------------|
| Raw materials     | \$ 1,215            | \$ 1,283         |
| Work in process   | 2,849               | 2,821            |
| Finished products | 4,607               | 4,696            |
|                   | \$ 8,671            | \$ 8,800         |

#### Note 5 - Goodwill and intangible assets

At October 31, 2012 and July 31, 2012, the Company's net carrying amount of goodwill related to the Clinical Labs segment, is \$7,452.

#### Intangible assets

The Company's change in the net carrying amount of intangible assets, all in the Life Sciences segment is as follows:

|                              | Gross        | Accumulated<br>Amortization | Net          |
|------------------------------|--------------|-----------------------------|--------------|
| July 31, 2012                | \$<br>27,904 | \$<br>(16,124)              | \$<br>11,780 |
| Amortization expense         | _            | (497)                       | (497)        |
| Foreign currency translation | 314          | (177)                       | 137          |
| October 31, 2012             | \$<br>28,218 | \$<br>(16,798)              | \$<br>11,420 |
|                              | <br>         | <br>                        | <br>         |

Intangible assets consist of the following:

| October 31, 2012 | July 31, 2012 |
|------------------|---------------|
|                  |               |

|                               |    | Gross  |    | Accumulated<br>Amortization |    | Net    |    | Gross  |    | Accumulated<br>Amortization |    | Net    |
|-------------------------------|----|--------|----|-----------------------------|----|--------|----|--------|----|-----------------------------|----|--------|
| Patents                       | \$ | 11,027 | \$ | (10,472)                    | \$ | 555    | \$ | 11,027 | \$ | (10,439)                    | \$ | 588    |
| Customer relationships        | ·  | 12,474 | •  | (4,680)                     | •  | 7,794  | •  | 12,304 | ·  | (4,356)                     | •  | 7,948  |
| Website and acquired content  |    | 1,029  |    | (911)                       |    | 118    |    | 1,019  |    | (874)                       |    | 145    |
| Licensed technology and other |    | 491    |    | (330)                       |    | 161    |    | 485    |    | (300)                       |    | 185    |
| Trademarks                    |    | 3,197  |    | (405)                       |    | 2,792  |    | 3,069  |    | (155)                       |    | 2,914  |
| Total                         | \$ | 28,218 | \$ | (16,798)                    | \$ | 11,420 | \$ | 27,904 | \$ | (16,124)                    | \$ | 11,780 |

|                        | Useful life<br>assigned | Weighted average<br>remaining useful life |
|------------------------|-------------------------|---|
| Customer relationships | 8-15 years              | 8 years                                   |
| Trademarks             | 5 years                 | 4.5 years                                 |
| Other intangibles      | 4-10 years              | 2 years                                   |

At October 31, 2012, the weighted average useful lives of amortizable intangible assets were approximately seven years.

#### Note 6 - Accrued Liabilities and Other Current Liabilities

Accrued liabilities consist of the following as of:

| 7 tool dod maximus sorroller or and formatting do on      |    |                     |    |                  |
|---|----|---------------------|----|------------------|
|   |    | October 31,<br>2012 | •  | July 31,<br>2012 |
| Legal   |    | \$ 2,744            | \$ | 1,475            |
| Payroll, benefits, and commissions                        |    | 4,888               |    | 5,125            |
| Professional fees   |    | 1,218               |    | 901              |
| Research and development                                  |    | 696                 |    | 696              |
| Other   |    | 2,154               |    | 1,621            |
|   | •  | \$ 11,700           | \$ | 9,818            |
| Other current liabilities consist of the following as of: | •  |                     | -  |                  |
|   |    | October 31,<br>2012 |    | July 31,<br>2012 |
| Capital lease obligations                                 | 9  |                     | \$ | _                |
| Installment loans   |    | 115                 |    | 118              |
|   | \$ | 6 264               | \$ | 118              |
|   | -  |                     |    |                  |
| Note 7 – Other Liabilities                                |    |                     |    |                  |
| Other liabilities consist of the following as of:         |    |                     |    |                  |
|   |    | October 31,<br>2012 |    | July 31,<br>2012 |
| Capital lease obligations, net of short term              | \$ | 619                 | \$ | _                |
| Installment loans, net of short term                      |    | 100                 |    | 128              |
|   | \$ | 719                 | \$ | 128              |

During the three months ended October 31, 2012, the Company entered into a five year capital lease arrangement for lab equipment aggregating \$768 for the clinical labs segment. Future minimum annual payments under the capital lease net of interest of \$76 aggregates \$768, including a short term debt portion of \$149 included in other current liabilities.

#### Note 8 - Income taxes

At the end of each interim reporting period, the Company estimates its effective income tax rate expected to be applicable for the full year. This estimate is used to determine the income tax provision or benefit on a year-to-date basis and may change in subsequent interim periods.

The Company's effective tax rate benefit (provision) for the three months ended October 31, 2012 was a benefit of 1.7% compared to a provision of (3.9%) during the three months ended October 31, 2011. The tax benefit (provision) for the periods were based on state and local taxes and domestic and foreign tax for tax deductible intangibles. The Company's effective tax rate for both periods differed from the expected net operating loss carryforward benefit at the U.S. federal statutory rate of 34% primarily due to the inability to recognize such benefit. The carryforward benefit cannot be recognized because of uncertainties relating to future taxable income in terms of both its timing and its sufficiency, which would enable the Company to realize the federal carryforward benefit.

The Company files a consolidated Federal income tax return. The Company files combined returns with California, Michigan and New York State and City for certain subsidiaries. Other subsidiaries file separate state and foreign tax returns. With few exceptions, the periods that remain subject to examination are fiscal years ended July 31, 2009 through fiscal 2011.

#### Note 9 - Royalty and licensing income

The Company has a license agreement with QIAGEN Gaithersburg Inc. ("Qiagen") that began in 2005, whereby the Company earns quarterly running royalties on the net sales of Qiagen products subject to the license until the expiration of the patent on April 24, 2018. During the three months ended October 31, 2012 and 2011, the Company recorded royalty income under the Agreement of approximately \$1.9 million, which is included in the Life Sciences segment.

#### Note 10 – Segment reporting

The Company has three reportable segments: Clinical Labs, Life Sciences, and Therapeutics. The Clinical Labs segment provides diagnostic services to the health care community. The Company's Life Sciences segment develops, manufactures, and markets products to research and pharmaceutical customers. The Company's Therapeutic segment conducts research and development activities for therapeutic drug candidates. The Company evaluates segment performance based on segment income (loss) before taxes. Costs excluded from segment income (loss) before taxes and reported as "Other" consist of corporate general and administrative costs which are not allocable to the three reportable segments.

Management of the Company assesses assets on a consolidated basis only and, therefore, assets by reportable segment have not been included in the reportable segments below. The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies contained in the Company's Annual Report on Form 10-K for the year ended July 31, 2012.

The following financial information represents the operating results of the reportable segments of the Company:

#### Three months ended October 31, 2012

| Three months ended October 31, 2012             | Clinical Life<br>Labs Sciences |         | Therapeutics |                | Other |       | Consolidated |         |    |                |
|---|--------------------------------|---------|--------------|----------------|-------|-------|--------------|---------|----|----------------|
| Revenues:                                       | _                              |         |              |                |       |       |              |         |    |                |
| Clinical laboratory services                    | \$                             | 15,177  |              | _              |       | _     |              | _       | \$ | 15,177         |
| Product revenues Royalty and license fee income |                                | _       | \$           | 8,434<br>2,019 |       | _     |              | _       |    | 8,434<br>2,019 |
|   |                                | 15,177  |              | 10,453         |       | _     |              | _       |    | 25,630         |
| Operating expenses:                             |                                |         | -            |                |       |       |              |         | -  |                |
| Cost of clinical laboratory services            |                                | 9,710   |              |                |       | _     |              | _       |    | 9,710          |
| Cost of product revenues                        |                                | _       |              | 4,184          |       | _     |              | _       |    | 4,184          |
| Research and development                        |                                | 89      |              | 606            | \$    | 316   |              | _       |    | 1,011          |
| Selling, general and administrative             |                                | 4,961   |              | 4,272          |       | _     | \$           | 2,182   |    | 11,415         |
| Provision for uncollectible accounts receivable |                                | 1,556   |              | 38             |       | _     |              | ´ —     |    | 1,594          |
| Legal   |                                | 107     |              | 6              |       | _     |              | 1,587   |    | 1,700          |
| Total operating expenses                        |                                | 16,423  |              | 9,106          |       | 316   |              | 3,769   |    | 29,614         |
| Operating (loss) income                         |                                | (1,246) |              | 1,347          |       | (316) |              | (3,769) |    | (3,984)        |
| Other income (expense)                          |                                |         |              |                |       |       |              |         |    |                |
| Interest  |                                | (9)     |              | (1)            |       | _     |              | 1       |    | (9)            |
| Other   |                                | 6       |              | 1              |       | _     |              | 2       |    | 9              |
| Foreign currency gain                           |                                | _       |              | 229            |       | _     |              | _       |    | 229            |
| Income (loss) before income taxes               | \$                             | (1,249) | \$           | 1,576          | \$    | (316) | \$           | (3,766) | \$ | (3,755)        |
| Depreciation and amortization included above    | \$                             | 308     | \$           | 813            | \$    | 7     | \$           | 21      | \$ | 1,149          |
| Share-based compensation included in above:     | _                              |         | _            |                |       |       | _            |         |    |                |
| Cost of clinical laboratory services            | \$                             | 2       |              | _              |       |       |              | _       | \$ | 2              |
| Research and development                        | Ψ                              | _       | \$           | 1              |       |       |              |         | Ψ  | 1              |
| Selling, general and administrative             |                                | 11      | Ψ            | _              |       | _     | \$           | 128     |    | 139            |
| Total   | \$                             | 13      | \$           | 1              |       |       | \$           | 128     | \$ | 142            |
| Total   | Ψ                              | 13      | Ψ            | <u>'</u>       |       |       | Ψ            | 120     | Ψ  | 142            |
| Capital expenditures                            | \$                             | 205     | \$           | 86             |       | _     | \$           | _       | \$ | 291            |
|   |                                | 13      |              |                |       |       |              |         |    |                |

#### Three months ended October 31, 2011

| Inree months ended October 31, 2011             | (  | Clinical<br>Labs |    |        | Therapeutics |       | Other |         | Consolidated |          |
|---|----|------------------|----|--------|--------------|-------|-------|---------|--------------|----------|
| Revenues:                                       | _  |                  |    |        |              |       | _     |         | _            | 11.10=   |
| Clinical laboratory services                    | \$ | 14,187           | •  |        |              | _     |       | _       | \$           | 14,187   |
| Product revenues                                |    | _                | \$ | 9,704  |              | _     |       | _       |              | 9,704    |
| Royalty and license fee income                  |    | _                |    | 1,862  |              | _     |       | _       |              | 1,862    |
|   |    | 14,187           |    | 11,566 | -            |       |       | _       |              | 25,753   |
| Operating expenses:                             |    |                  |    |        |              |       |       |         |              |          |
| Cost of clinical laboratory services            |    | 8,814            |    |        |              | _     |       | _       |              | 8,814    |
| Cost of product revenues                        |    |                  |    | 5,137  |              |       |       | _       |              | 5,137    |
| Research and development                        |    | 44               |    | 1,048  | \$           | 533   |       |         |              | 1,625    |
| Selling, general and administrative             |    | 4,831            |    | 5,228  |              | _     | \$    | 2,326   |              | 12,385   |
| Provision for uncollectible accounts receivable |    | 1,273            |    | 13     |              | _     |       | _       |              | 1,286    |
| Legal   |    | 43               |    | 383    |              | _     |       | 442     |              | 868      |
| Total operating expenses                        |    | 15,005           |    | 11,809 |              | 533   |       | 2,768   |              | 30,115   |
| Operating loss                                  |    | (818)            |    | (243)  |              | (533) |       | (2,768) |              | (4,362)  |
| Other income (expense)                          |    |                  |    |        |              |       |       |         |              |          |
| Interest  |    | (1)              |    | (1)    |              | _     |       | _       |              | (2)<br>9 |
| Other   |    | 5                |    | (5)    |              | _     |       | 9       |              | 9        |
| Foreign exchange gain                           |    | _                |    | 29     |              | _     |       | _       |              | 29       |
| Loss before income taxes                        | \$ | (814)            | \$ | (220)  | \$           | (533) | \$    | (2,759) | \$           | (4,326)  |
|   | _  |                  | _  |        |              |       | _     |         |              |          |
| Depreciation and amortization included above    | \$ | 266              | \$ | 914    | \$           | 11    | \$    | 31      | \$           | 1,222    |
|   | _  |                  | _  |        |              |       | _     |         |              |          |
| Share-based compensation included in above:     | •  | 0                |    |        |              |       |       |         | •            | 0        |
| Cost of clinical laboratory services            | \$ | 2                | •  | _      |              | _     |       | _       | \$           | 2        |
| Research and development                        |    | _                | \$ | 3      |              | _     |       |         |              | 3        |
| Selling, general and administrative             |    | 13               |    | 20     |              | _     | \$    | 175     |              | 208      |
| Total   | \$ | 15               | \$ | 23     |              | _     | \$    | 175     | \$           | 213      |
|   | _  |                  | _  |        |              |       | _     |         |              |          |
| Capital expenditures                            | \$ | 215              | \$ | 30     |              | _     | \$    | 7       | \$           | 252      |
|   | =  |                  | =  |        |              |       |       |         |              |          |
|   |    | 14               |    |        |              |       |       |         |              |          |

#### Note 11 - Contingencies

On June 7, 2004, the Company and Enzo Life Sciences, Inc., filed suit in the United States District Court for the District of Connecticut against Applera Corporation and its wholly-owned subsidiary Tropix, Inc., now Life Technologies, Inc. (NASDAQ:LIFE). The complaint alleged infringement of six patents (relating to DNA sequencing systems, labeled nucleotide products, and other technology). Yale University is the owner of four of the patents and the Company is the exclusive licensee. These four patents are commonly referred to as the "Ward" patents. On November 12, 2012, a jury in New Haven found that one of these patents (United States Patent No. 5,449,667) was infringed and not proven invalid. The jury awarded \$48.5 million for this infringement. Prejudgment interest should provide for additional recovery in the tens of millions of dollars. Life Technologies will likely appeal and there can be no assurance that the Company will be successful in this litigation. Even if the Company is not successful, management does not believe that there will be a significant adverse monetary impact on the Company.

The Company is party to other claims, legal actions, complaints, and contractual disputes that arise in the ordinary course of business. The Company believes that any liability that may ultimately result from the resolution of these matters will not, individually or in the aggregate, have a material adverse effect on its financial position or results of operations.

#### Item 2 . Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes and other information included elsewhere in this Quarterly Report on Form 10-Q.

#### Forward-Looking Statements

Our disclosure and analysis in this report, including but not limited to the information discussed in this Item 2, contain forward-looking information about our Company's financial results and estimates, business prospects and products in research and development that involve substantial risks and uncertainties. From time to time, we also may provide oral or written forward-looking statements in other materials we release to the public. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historic or current facts. They use words such as anticipate," expect," project," intend," plan," believe," will," and other words and terms of similar meaning in connection with any discussion of future operations or financial performance. In particular, these include statements relating to future actions, prospective products or product approvals, future performance or results of current and anticipated products, sales efforts, expenses, interest rates, foreign currency rates, intellectual property matters, the outcome of contingencies, such as legal proceedings, and financial results.

We cannot guarantee that any forward-looking statement will be realized, although we believe we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and inaccurate assumptions. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove inaccurate, actual results could vary materially from past results and those anticipated, estimated or projected. As a result, investors are cautioned not to place undue reliance on any of our forward-looking statements. Investors should bear this in mind as they consider forward-looking statements. We do not assume any obligation to update or revise any forward-looking statement that we make, even if new information becomes available or other events occur in the future. We are also affected by other factors that may be identified from time to time in our filings with the Securities and Exchange Commission, some of which are set forth in Item 1A - Risk Factors in our Form 10-K filing for the 2012 fiscal year. You are advised to consult any further disclosures we make on related subjects in our Forms 10-Q, 8-K and 10-K reports to the Securities and Exchange Commission. Although we have attempted to provide a list of important factors which may affect our business, investors are cautioned that other factors may prove to be important in the future and could affect our operating results. You should understand that it is not possible to predict or identify all such factors or to assess the impact of each factor or combination of factors on our business. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties.

#### Overview

The Company is a growth-oriented integrated life sciences and biotechnology company focused on harnessing biological processes to develop research tools, diagnostics and therapeutics and serves as a provider of test services, including esoteric tests, to the medical community. Since our founding in 1976, our strategic focus has been on the development of enabling technologies in research, development, manufacture, licensing and marketing of innovative health care products, platforms and services based on molecular and cellular technologies. Our pioneering work in genomic analysis coupled with its extensive patent estate and enabling platforms have strategically positioned the Company to play an important role in the rapidly growing life sciences and molecular medicine marketplaces.

In the course of our research and development activities, we have built a substantial portfolio of intellectual property assets, comprising 114 key issued patents worldwide, and over 250 pending patent applications, along with extensive enabling technologies and platforms.

We are comprised of three operating companies that have evolved out of our core competence: the use of nucleic acids as informational molecules and the use of compounds for immune modulation. These wholly owned operating companies conduct their operations through three reportable segments. Below are brief descriptions of each of our operating segments (see note 10 in the Notes to Consolidated Financial Statements):

Enzo Clinical Labs is a regional clinical laboratory serving the greater New York, New Jersey and Eastern Pennsylvania medical communities. The Company believes having clinical diagnostic services allows us to capitalize firsthand on our extensive advanced molecular and cytogenetic capabilities and the broader trends in predictive and personalized diagnostics. We offer a menu of routine and esoteric clinical laboratory tests or procedures used in general patient care by physicians to establish or support a diagnosis, monitor treatment or medication, or search for an otherwise undiagnosed condition. We operate a full-service clinical laboratory in Farmingdale, New York, a network of approximately 30 patient service centers throughout greater New York, New Jersey and Eastern Pennsylvania, a standalone "stat" or rapid response laboratory in New York City, and a full-service phlebotomy and an in-house logistics department. Payments for clinical laboratory testing services are made by the Medicare program, healthcare insurers and patients.

Enzo Life Sciences manufactures, develops and markets products and tools to life sciences, drug development and clinical research customers world-wide and has amassed a large patent and technology portfolio. Enzo Life Sciences, Inc. is a recognized leader in labeling and detection technologies across research and diagnostic markets. Our strong portfolio of proteins, antibodies, peptides, small molecules, labeling probes, dyes and kits provides life science researchers tools for target identification/validation, high content analysis, gene expression analysis, nucleic acid detection, protein biochemistry and detection, and cellular analysis. We are internationally recognized and acknowledged as a leader in manufacturing, in-licensing, and commercialization of over 7,500 of our own products and in addition distribute over 30,000 products made by over 40 other original manufacturers. Our strategic focus is directed to innovative high quality research reagents and kits in the primary key research areas of genomics, cellular analysis, small molecule chemistry, protein homeostasis and epigenetics and immunoassays and assay development. The segment is an established source for a comprehensive panel of products to scientific experts in the fields of cancer, cardiovascular disease, neurological disorders, diabetes and obesity, endocrine disorders, infectious and autoimmune disease, hepatotoxicity and renal injury.

<u>Enzo Therapeutics</u> is a biopharmaceutical company that has developed multiple novel approaches in the areas of gastrointestinal, infectious, ophthalmic and metabolic diseases, many of which are derived from the pioneering work of Enzo Life Sciences. The Company has focused its efforts on developing treatment regimens for diseases and conditions in which current treatment options are ineffective, costly, and/or cause unwanted side effects. This focus has generated a clinical and preclinical pipeline, as well as more than 130 patents and patent applications.

## Results of Operations Three months ended October 31, 2012 as compared to October 31, 2011

Comparative Financial Data for the Three Months Ended October 31,

| Revenues:   | 2012 |                 | 2011 |                 | Increase<br>(Decrease) | % Change   |
|---|------|-----------------|------|-----------------|------------------------|------------|
| Clinical laboratory services Product revenues                 | \$   | 15,177<br>8,434 | \$   | 14,187<br>9,704 | \$ 990<br>(1,270)      | 7%<br>(13) |
| Royalty and license fee income                                |      | 2,019           |      | 1,862           | 157                    | 8          |
| Total revenues  |      | 25,630          | -    | 25,753          | (123)                  | -          |
| Operating expenses:   |      | 0.740           |      | 0.044           | 200                    | 40         |
| Cost of clinical laboratory services Cost of product revenues |      | 9,710<br>4,184  |      | 8,814<br>5,137  | 896<br>(953)           | 10<br>(19) |
| Research and development                                      |      | 1,011           |      | 1,625           | (614)                  | (38)       |
| Selling, general, and administrative                          |      | 11,415          |      | 12,385          | (970)                  | (8)        |
| Provision for uncollectible accounts receivable               |      | 1,594           |      | 1,286           | 308                    | 24         |
| Legal   |      | 1,700           |      | 868             | 832                    | 96         |
| Total operating expenses                                      |      | 29,614          |      | 30,115          | (501)                  | (2)        |
| Operating loss  |      | (3,984)         |      | (4,362)         | 378                    | 9          |
| Other income (expense):                                       |      |                 |      |                 |                        |            |
| Interest  |      | (9)             |      | (2)             | (7)                    | (350)      |
| Other<br>Foreign currency gain                                |      | 9<br>229        |      | 9<br>29         | 200                    | -<br>690   |
| i oraigh currency gaill                                       |      | 229             |      | 29              | 200                    | 090        |
| Loss before income taxes                                      | \$   | (3,755)         | \$   | (4,326)         | \$ 571                 | 13         |

#### Consolidated Results:

The "2013 period" and the "2012 period" refer to the three months ended October 31, 2012 and 2011, respectively.

Clinical laboratory services revenues for the 2013 period were \$15.2 million compared to \$14.2 million in the 2012 period. The 2013 period's increase over the 2012 period was \$1.0 million or 7% due to organic growth. During the 2013 period the increase in revenues was negatively impacted by a severe storm affecting our service area in the last three days in the quarter and reduced reimbursements from a third party payer, collectively approximately \$1.1 million.

Product revenues decreased by \$1.3 million or 13% in the 2013 period to \$8.4 million as compared to \$9.7 million in the 2012 period due to a decline in organic sales. During the 2013 period we continue to experience a decline attributed to certain distributed products for certain customer types and declines in resale products due to market softness in research reagent products.

Royalty and license fee income during the 2013 period was \$2.0 million compared to \$1.8 million in the 2012 period an increase of \$0.2 million or 8%. Royalties are primarily earned from the reported sales of Qiagen products subject to a license agreement. There are no direct expenses relating to royalty and licensing income.

The cost of clinical laboratory services during the 2013 period was \$9.7 million as compared to \$8.8 million in the 2012 period, an increase of \$0.9 million or 10%. The Company incurred increased costs due to higher reagent costs and supplies of \$0.3 million, higher laboratory personnel costs of \$0.1 million, higher outside reference lab costs of \$0.3 million and other lab support costs of \$0.2 million, all attributed to the increased service volume. In the 2013 period the gross profit margin was 36% as compared to 38% in the 2012 period.

The cost of product revenues during the 2013 period was \$4.2 million compared to \$5.2 million in the 2012 period, a decrease of \$1.0 million or 19%. The decrease is attributed to lower payroll costs of \$0.5 million due to the business realignments during fiscal 2012, and \$0.5 million due to lower product revenue.

Research and development expenses were approximately \$1.0 million during the 2013 period, compared to \$1.6 million in the 2012 period, a decrease of \$0.6 million or 38%. The decrease was principally attributed to lower costs of \$0.4 million at the Enzo Life Sciences segment due to lower payroll and related costs of \$0.3 million and overhead costs of \$0.1 million due to a refocus of projects. The clinical trial and related activities at the Therapeutics segment decreased by \$0.2 million due to lower payroll and related costs as compared to the 2012 period.

The Company's selling, general and administrative expenses were approximately \$11.4 million during the 2013 period and \$12.4 million during the 2012 period, a decrease of \$1.0 million or 8%. The Enzo Life Sciences segment selling, general and administrative decreased by \$1.0 million due to the positive effects from the business realignments in the last three quarters of fiscal 2012 resulting in lower payroll and related costs of \$0.7 million, rent and facility costs of \$0.1 million and \$0.2 million in other operating costs. The Other selling general and administrative decreased by \$0.1 million, primarily due to a decrease of \$0.2 million in compensation and related expenses offset by an increase in other costs of \$0.1 million. The Clinical Lab segment selling general and administrative increased by \$0.1 million primarily due to an increase in sales support expenses related to the increased revenue volume.

The provision for uncollectible accounts receivable, primarily related to the Clinical Labs segment, was \$1.6 million for the 2013 period as compared to \$1.3 million in the 2012 period, primarily due to the increase in service volume. As a percentage of revenues the provision for uncollectible accounts receivable for the Clinical Lab segment increased to 10.2% from 9.0% in the 2012 period.

Legal expense was \$1.7 million during the 2013 period compared to \$0.9 million in the 2012 period, an increase of \$0.8 million due to overall increases in legal services in the 2013 period for a patent litigation trial that occurred in the quarter and other litigation related matters.

During the 2013 period, the gain on foreign currency transactions increased by \$0.2 million as compared to the 2012 period. The gain in the period was due to the strengthening of foreign currencies relative to the US dollar and Swiss franc.

#### Segment Results

#### Clinical Labs

The Clinical Labs segment's loss before taxes was \$1.2 million for the 2013 period as compared to a loss of \$0.8 million in the 2012 period, an increase of \$0.4 million resulting from increased operating costs partially offset by increased service volume. The revenue from laboratory services increased in the 2013 period by \$1.0 million or 7% due to organic growth. The 2013 period gross profit of \$5.5 million increased over the 2012 period by \$0.1 million or 2%. The increase in service revenues was offset by increases in cost of lab services and the negative impact from a severe storm affecting our service area in the last week of the quarter and lower reimbursement rates from a payer. Selling, general and administrative expense increased by approximately \$0.1 million primarily due to increases in costs directly the result of increased service revenues. The provision for uncollectible accounts receivable increased by \$0.3 million as compared to the 2012 period due to the increase in service volume and as a percentage of revenues increased to 10.2% from 9.0% in the 2012 period.

#### Life Sciences

The Life Sciences segment's income before taxes was \$1.6 million for the 2013 period as compared to a loss of \$0.2 million for the 2012 period. The segment's gross profit was \$6.3 million in the 2013 period, as compared \$6.4 million in the 2012 period. Gross profit was negatively impacted by the decline in product revenues, offset by reduced payroll, facility and other costs resulting from realignments during the last three quarters of fiscal 2012. Product revenues decreased by \$1.3 million or 13% in the 2013 period to \$8.4 million as compared to \$9.7 million in the 2012 period due to a decline in organic sales. During the 2013 period we continue to experience a decline attributed to certain distributed products for certain customer types and declines in resale products due to market softness in research reagent products. Royalty and license fee income of \$2.0 million represented an increase of \$0.2 million as compared to the 2012 period and is primarily from the reported sales of Qiagen products subject to a license agreement. The segment's other operating expenses, including selling, general and administrative, legal and research and development, decreased by approximately \$1.8 million during the 2013 period due to reduced research and development and selling, general and administrative of \$1.4 million and lower legal of \$0.4 million. Due to the slight strengthening of foreign currencies during the 2013 period as compared to the 2012 period, the foreign currency gain increased by \$0.2 million in the 2013 period.

#### **Therapeutics**

Therapeutics loss before income taxes was approximately \$0.3 million for the 2013 period as compared to the \$0.5 million in 2012 period due to lower payroll costs and lower clinical trial activities.

#### Other

The Other loss before taxes for the 2013 period was approximately \$3.8 million as compared to \$2.8 million for the 2012 period, an increase of \$1.0 million. In the 2013 period legal expenses increased by \$1.1 million due to overall increases in legal services directly related to a patent litigation trial that occurred in the quarter and other legal activities. General and administrative costs decreased due to lower compensation and related costs by \$0.1 million.

#### **Liquidity and Capital Resources**

At October 31, 2012, the Company had cash and cash equivalents of \$13.4 million of which \$3.3 million was in foreign accounts, as compared to cash and cash equivalents of \$15.1 million, of which \$2.5 million was in foreign accounts at July 31, 2012. It is the Company's current intent to permanently reinvest these funds outside of the United States, and its current plans do not demonstrate a need to repatriate them to fund its United States operations. The Company had working capital of \$18.3 million at October 31, 2012 compared to \$21.4 million at July 31, 2012. The decrease in working capital of \$3.1 million was primarily the result of the net loss and funding capital expenditures offset by changes in net operating assets and liabilities.

Net cash used in operating activities for the three months ended October 31, 2012 was approximately \$1.5 million as compared to \$2.3 million for the three months ended October 31, 2011. The decrease in net cash used in operating activities in the 2013 period over the 2012 period of approximately \$0.8 million was primarily due to a decrease in the net loss, net of non-cash charges, of \$0.6 million, and by changes in operating assets and liabilities of \$0.2 million, relating primarily to a decrease in accounts receivable and increases in current liabilities.

Net cash used in investing activities was approximately \$0.3 million as compared to cash used of \$0.4 million in the year ago period. The decrease in the 2013 period of \$0.1 million is primarily due to a decrease in security deposits.

As previously disclosed in the Company's Form 10-K for the year ended July 31, 2012 filed on October 15, 2012, in the fourth quarter of fiscal 2012 the Company completed a review of all operating units and expects to reduce annual cash expenditures by \$6.0 million in fiscal 2013 based on actions completed by September 1, 2012 which included, among other items, a realignment of our workforce, final integration of the acquired businesses at Life Sciences, rationalization of low margin products, a refocus of our research and development program toward higher value diagnostic platforms and the reduction in outside consulting costs. The Company anticipates a reduction in cash used as a result of the aforementioned actions taken. In addition, the Company anticipates, but there can be no assurance, that it will be able increase its revenue in the Life Sciences reporting unit and that it will continue to see growth in its Clinical Lab reporting unit. Further, despite the challenging global economic environment, declining revenues in the Life Sciences reporting unit in fiscal 2013 and impacts of healthcare reform regulations affecting providers and plan sponsors and the funding of research, the Company believes that its current cash and cash equivalents level is sufficient for its foreseeable liquidity and capital resource needs over the next twelve (12) months, although there can be no assurance that future events will not alter such view. Although there can be no assurances in the event additional capital is required, the Company believes it has the ability to raise funds through equity offerings, secure asset-based borrowings, or other sources of funds. Our liquidity plans are subject to a number of risks and uncertainties, including those described in the Item 1A. "Risk Factors" section of the Form 10-K for the year ended July 31, 2012 referred to above are unchanged, some of which are outside our control. Macroeconomic conditions could limit our ability to successfully execute our business plans and therefore adver

See our Form 10-K for the fiscal year ended July 31, 2012 for Forward Looking Cautionary Statements and Risk Factors.

#### **Contractual Obligations**

There have been no material changes to our Contractual Obligations as reported in our Form 10-K for the fiscal year ended July 31, 2012, except as noted in Note 7 Other Liabilities.

Management is not aware of any material claims, disputes or settled matters concerning third party reimbursement that would have a material effect on our financial statements.

#### Off Balance Sheet Arrangements

The Company does not have any "off balance sheet arrangements" as such term is defined in Item 303(a)(4) of Regulation S-K.

#### **Critical Accounting Policies**

The Company's discussion and analysis of its financial condition and results of operations are based upon Enzo Biochem, Inc. consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. These estimates and judgments also affect related disclosure of contingent assets and liabilities.

On an on-going basis, we evaluate our estimates, including those related to contractual expense, allowance for uncollectible accounts, inventory, intangible assets and income taxes. The Company bases its estimates on experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

#### Product revenues

Revenues from product sales are recognized when the products are shipped and title transfers, the sales price is fixed or determinable and collectibility is reasonably assured.

#### Royalties

Royalty revenues are recorded in the period earned. Royalties received in advance of being earned are recorded as deferred revenues.

#### Revenues – Clinical laboratory services

Revenues from Clinical Labs are recognized upon completion of the testing process for a specific patient and reported to the ordering physician. These revenues and the associated accounts receivable are based on gross amounts billed or billable for services rendered, net of a contractual adjustment, which is the difference between amounts billed to payers and the expected approved reimbursable settlements from such payers.

The following table represents the clinical laboratory segment's net revenues and percentages by revenue category:

|                   | Three months end<br>October 31, 2012 | Three months ended<br>October 31, 2011 |              |      |  |
|-------------------|--------------------------------------|--|--------------|------|--|
| Revenue category  |                                      |  |              |      |  |
| Medicare          | \$<br>3,280                          | 22%                                    | \$<br>3,020  | 21%  |  |
| Third-party payer | 7,149                                | 47                                     | 6,942        | 49   |  |
| Patient self-pay  | 3,420                                | 23                                     | 2,915        | 21   |  |
| HMO's             | 1,328                                | 8                                      | 1,310        | 9    |  |
|                   |                                      |  |              |      |  |
| Total             | \$<br>15,177                         | 100%                                   | \$<br>14,187 | 100% |  |
|                   | <br>                                 |  | <br>         |      |  |

The Company provides services to certain patients covered by various third-party payers, including the Federal Medicare program. Laws and regulations governing Medicare are complex and subject to interpretation for which action for noncompliance includes fines, penalties and exclusion from the Medicare programs. The Company believes that it is in compliance with all applicable laws and regulations and is not aware of any pending or threatened investigations involving allegations of potential wrongdoing.

Other than the Medicare program, one provider whose programs are included in the Third-party payers and Health Maintenance Organizations ("HMO's") categories represents approximately 21% of the Clinical Labs net revenues for the three months ended October 31, 2012 and 2011. Another third party provider represents 11% and 13% of Clinical Labs net revenues for the three months ended October 31, 2012 and 2011, respectively.

#### Contractual Adjustment

The Company's estimate of contractual adjustment is based on significant assumptions and judgments, such as its interpretation of payer reimbursement policies, and bears the risk of change. The estimation process is based on the experience of amounts approved as reimbursable and ultimately settled by payers, versus the corresponding gross amount billed to the respective payers. The contractual adjustment is an estimate that reduces gross revenue, based on gross billing rates, to amounts expected to be approved and reimbursed. Gross billings are based on a standard fee schedule we set for all third party payers, including Medicare, HMO's and managed care. The Company adjusts the contractual adjustment estimate quarterly, based on its evaluation of current and historical settlement experience with payers, industry reimbursement trends, and other relevant factors.

The other relevant factors that affect our contractual adjustment include the monthly and quarterly review of: 1) current gross billings and receivables and reimbursement by payer, 2) current changes in third party arrangements and 3) the growth of in-network provider arrangements and managed care plans specific to our Company.

Our clinical laboratory business is primarily dependent upon reimbursement from third-party payers, such as Medicare (which principally serves patients 65 and older) and insurers. We are subject to variances in reimbursement rates among different third-party payers, as well as constant changes of reimbursement rates. Changes that decrease reimbursement rates or coverage would negatively impact our revenues. The number of individuals covered under managed care contracts or other similar arrangements has grown over the past several years and may continue to grow in the future. In addition, Medicare and other government healthcare programs continue to shift to managed care. These trends will continue to reduce our revenues.

During the three months ended October 31, 2012 and 2011, the contractual adjustment percentages, determined using current and historical reimbursement statistics, were 84.8% and 84.5%, respectively, of gross billings. The Company believes a decline in reimbursement rates or a shift to managed care or similar arrangements may be offset by the positive impact of an increase in the number of tests we perform. However, there can be no assurance that we can increase the number of tests we perform or that if we do increase the number of tests we perform, that we can maintain that higher number of tests performed, or that an increase in the number of tests we perform would result in increased revenue.

The Company estimates (by using a sensitivity analysis) that each 1% point change in the contractual adjustment percentage could result in a change in clinical laboratory services revenues of approximately \$1.0 million and \$0.9 million for the three months ended October 31, 2012 and 2011, respectively, and a change in the net accounts receivable of approximately \$0.5 million as of October 31, 2012.

Our clinical laboratory financial billing system records gross billings using a standard fee schedule for all payers and does not record contractual adjustment by payer at the time of billing. Adjustments to our standard fee schedule will impact the contractual adjustment recorded. Therefore, we are unable to quantify the effect of contractual adjustment recorded during the current period that relates to revenue recorded in a previous period. However, we can reasonably estimate our contractual adjustment to revenue on a timely basis based on our quarterly review process, which includes:

- an analysis of industry reimbursement trends;
- an evaluation of third-party reimbursement rates changes and changes in reimbursement arrangements with third-party payers;
- a rolling monthly analysis of current and historical claim settlement and reimbursement experience statistics with payers;
- an analysis of current gross billings and receivables by payer.

#### Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are reported at realizable value, net of allowances for doubtful accounts, which is estimated and recorded in the period of the related revenue.

The following is a table of the Company's net accounts receivable by segment. The Clinical Labs segment's net receivables are detailed by billing category and as a percent to its total net receivables. At October 31, 2012 and July 31, 2012, approximately 55% of the Company's net accounts receivable relates to its Clinical Labs business, which operates in the New York, New Jersey, and Eastern Pennsylvania medical communities.

The Life Sciences segment's accounts receivable, of which \$2.2 million or 35% and \$2.3 million or 36% represents foreign receivables as of October 31, 2012 and July 31, 2012 respectively, includes royalty receivables of \$1.9 million and \$1.7 million, as of October 31, 2012 and July 31, 2012, respectively, from Qiagen (Note 9).

#### Net accounts receivable

|                           |    | As of       |      | As of                    |       |
|---------------------------|----|-------------|------|--------------------------|-------|
| Billing category          |    | October 31, | 2012 | July 31, 20 <sup>2</sup> | 12    |
| Clinical Labs             | _  |             |      |                          |       |
| Medicare                  | \$ | 1,217       | 16%  | \$<br>1,270              | 16%   |
| Third party payers        |    | 3,355       | 44   | 3,478                    | 45    |
| Patient self-pay          |    | 2,782       | 36   | 2,655                    | 35    |
| HMO's                     |    | 310         | 4    | 330                      | 4     |
| Total Clinical Labs       |    | 7,664       | 100% | 7,733                    | 100 % |
| Total Life Sciences       |    | 6,339       |      | 6,402                    |       |
| Total accounts receivable | \$ | 14,003      |      | \$<br>14,135             |       |

Changes in the Company's allowance for doubtful accounts are as follows:

|                                 | <br>Three months<br>ended<br>October 31,<br>2012 | <br>Twelve months<br>ended<br>July 31,<br>2012 |
|---------------------------------|--|--|
| Beginning balance               | \$<br>3,273                                      | \$<br>3,488                                    |
| Provision for doubtful accounts | 1,594  | 5,104  |
| Write-offs, net                 | <br>(955)  | (5,319)  |
| Ending balance                  | \$<br>3,912                                      | \$<br>3,273                                    |

The Company estimates its allowance for doubtful accounts in the period the related services are billed and adjusts the estimate in future accounting periods as necessary. It bases the estimate for the allowance on the evaluation of historical collection experience, the aging profile of accounts receivable, the historical doubtful account write-off percentages, payer mix, and other relevant factors.

The allowance for doubtful accounts includes the balances, after receipt of the approved settlements from third party payers for the insufficient diagnosis information received from the ordering physician, which result in denials of payment, and the uncollectible portion of receivables from self payers, including deductibles and copayments, which are subject to credit risk and patients' ability to pay.

During the three months ended October 31, 2012 and 2011, the Company determined an allowance for doubtful accounts less than 210 days and wrote off 100% of accounts receivable over 210 days, as it assumed those accounts are uncollectible, except for certain fully reserved balances, principally related to Medicare. These accounts have not been written off because the payer's filing date deadline has not occurred or the collection process has not been exhausted. The Company's collection experience on Medicare receivables beyond 210 days has been insignificant. The Company adjusts the historical collection analysis for recoveries, if any, on an ongoing basis.

The Company's ability to collect outstanding receivables from third party payers is critical to its operating performance and cash flows. The primary collection risk lies with patients initially determined to have primary insurance and patients for whom primary insurance has paid but a copay or deductible portion remains outstanding. The Company also assesses the current state of its billing functions in order to identify any known collection or reimbursement issues in order to assess the impact, if any, on the allowance estimates, which involves judgment.

The Company believes that the collectibility of its receivables is directly linked to the quality of its billing processes, most notably, those related to obtaining the correct information in order to bill effectively for the services provided. Should circumstances change (e.g. shift in payer mix, decline in economic conditions or deterioration in aging of receivables), our estimates of net realizable value of receivables could be reduced by a material amount.

The following table indicates the Clinical Labs aged gross receivables by payer group which is prior to adjustment to gross receivables for: 1) contractual adjustment, 2) fully reserved balances not yet written off, and 3) other revenue adjustments.

| As of October 31, 2012                               | Total<br>Amount                      | %                      | Medicare<br>Amount            | %  | Third<br>Party<br>Payers<br>Amount                                | %                      | Self-pay<br>Amount                | %                        | HMO<br>Amount                 | %                     |
|--|--------------------------------------|------------------------|-------------------------------|--|---|------------------------|-----------------------------------|--------------------------|-------------------------------|-----------------------|
| 1-30 days  | \$ 27,307                            | 51%                    | \$ 5,729                      | 53%  | \$ 14,226   | 49%                    | \$ 3,748                          | 41%                      | \$ 3,604                      | 82%                   |
| 31-60 days   | 6,996                                | 13%                    | 1,116                         | 10%  | 3,910   | 14%                    | 1,755                             | 19%                      | 215                           | 5%                    |
| 61-90 days   | 5,792                                | 11%                    | 993                           | 9%   | 2,977   | 10%                    | 1,702                             | 19%                      | 120                           | 3%                    |
| 91-120 days  | 3,792                                | 7%                     | 471                           | 4%   | 2,425   | 8%                     | 769                               | 8%                       | 127                           | 3%                    |
| 121-150 days   | 3,625                                | 7%                     | 292                           | 3%   | 2,002   | 7%                     | 1,199                             | 13%                      | 132                           | 3%                    |
| Greater than 150 days*                               | 5,811                                | 11%                    | 2,243                         | 21%  | 3,381   | 12%                    | 28                                | 0%                       | 159                           | 4%                    |
| Totals   | \$ 53,323                            | 100%                   | \$ 10,844                     | 100%   | \$ 28,921   | 100%                   | \$ 9,201                          | 100%                     | \$ 4,357                      | 100%                  |
|  |                                      |                        |                               |  |   |                        |                                   |                          |                               |                       |
|  |                                      |                        |                               |  |   |                        |                                   |                          |                               |                       |
|  | Total                                |                        | Medicare                      |  | Third<br>Party<br>Payers  |                        | Self-pay                          |                          | HMO's                         |                       |
| As of July 31, 2012                                  | Total<br>Amount                      | %                      | Medicare<br>Amount            | %  |   | %                      | Self-pay<br>Amount                | %                        | HMO's<br>Amount               | %                     |
|  |                                      | <b>%</b>               | Amount                        | <b>%</b><br>———————————————————————————————————— | Party<br>Payers   | <b>%</b><br>52%        | Amount                            | <b>%</b><br>——39%        |                               | <b>%</b><br>——89%     |
| As of July 31, 2012  1-30 days 31-60 days            | Amount                               |                        | Amount                        |  | Party<br>Payers<br>Amount   |                        | Amount                            |                          | Amount                        |                       |
| 1-30 days  | \$ 27,092                            | 54%                    | Amount \$ 5,246               | 56%  | Party<br>Payers<br>Amount   | 52%                    | Amount \$ 3,337                   | 39%                      | Amount \$ 3,980               | 89%                   |
| 1-30 days<br>31-60 days                              | \$ 27,092<br>8,282                   | 54%<br>17%             | \$ 5,246<br>475               | 56%<br>5%  | Party<br>Payers<br>Amount<br>\$ 14,529<br>4,566                   | 52%<br>17%             | \$ 3,337<br>3,092                 | 39%<br>36%               | \$ 3,980<br>149               | 89%<br>3%             |
| 1-30 days<br>31-60 days<br>61-90 days                | \$ 27,092<br>8,282<br>4,922          | 54%<br>17%<br>9%       | \$ 5,246<br>475<br>964        | 56%<br>5%<br>10%                                 | Party<br>Payers<br>Amount<br>\$ 14,529<br>4,566<br>2,561          | 52%<br>17%<br>9%       | \$ 3,337<br>3,092<br>1,257        | 39%<br>36%<br>15%        | \$ 3,980<br>149<br>140        | 89%<br>3%<br>3%       |
| 1-30 days<br>31-60 days<br>61-90 days<br>91-120 days | \$ 27,092<br>8,282<br>4,922<br>3,758 | 54%<br>17%<br>9%<br>8% | \$ 5,246<br>475<br>964<br>512 | 56%<br>5%<br>10%<br>6%                           | Party<br>Payers<br>Amount<br>\$ 14,529<br>4,566<br>2,561<br>2,124 | 52%<br>17%<br>9%<br>8% | \$ 3,337<br>3,092<br>1,257<br>977 | 39%<br>36%<br>15%<br>10% | \$ 3,980<br>149<br>140<br>145 | 89%<br>3%<br>3%<br>3% |

<sup>\*</sup> Total includes \$2,118 fully reserved over 210 days as of October 31, 2012.

#### Income Taxes

The Company accounts for income taxes under the liability method of accounting for income taxes. Under the liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. The liability method requires that any tax benefits recognized for net operating loss carry forwards and other items be reduced by a valuation allowance where it is not more likely than not the benefits will be realized in the foreseeable future.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under the liability method, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

It is the Company's policy to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. To the extent the Company prevails in matters for which a liability for an unrecognized tax benefit is established or is required to pay amounts in excess of the liability, the Company's effective tax rate in a given financial statement period may be affected.

#### Inventory

The Company values inventory at the lower of cost (first-in, first-out) or market. Work-in-process and finished goods inventories consist of material, labor, and manufacturing overhead. Write downs of inventories to market value are based on a review of inventory quantities on hand and estimated sales forecasts based on sales history and anticipated future demand. Unanticipated changes in demand could have a significant impact on the value of our inventory and require additional write downs of inventory which would impact our results of operations.

Total includes \$1,178 fully reserved over 210 days as of July 31, 2012.

#### Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. The Company tests goodwill and other indefinite lived intangibles for impairment annually as of the first day of the fourth quarter, or more frequently if indicators of potential impairment exist. Goodwill is reviewed for impairment utilizing a two-step process. The first step of the impairment test requires the identification of the reporting units and comparison of the fair value of each of these reporting units to their respective carrying value. If the carrying value of the reporting unit is less than its fair value, no impairment exists and the second step is not performed. If the carrying value of the reporting unit is higher than its fair value, the second step must be performed to compute the amount of the goodwill impairment, if any. In the second step, the impairment is computed by comparing the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized for the excess

#### Intangible Assets

Intangible assets (exclusive of patents), arose primarily from acquisitions and primarily consist of customer relationships, trademarks, licenses, and website and database content. Finite-lived intangible assets are amortized according to their estimated useful lives, which range from 4 to 15 years. The Company has capitalized certain legal costs directly incurred in pursuing patent applications as patent costs. When such applications result in an issued patent, the related costs are amortized over a ten year period or the life of the patent, whichever is shorter, using the straight-line method. The Company reviews its issued patents and pending patent applications, and if it determines to abandon a patent application or that an issued patent no longer has economic value, the unamortized balance in deferred patent costs relating to that patent is immediately expensed.

#### Accrual for Self-funded Medical

Accruals for self-funded medical insurance are determined based on a number of assumptions and factors, including historical payment trends, claims history and current estimates. These estimated liabilities are not discounted. If actual trends differ from these estimates, the financial results could be impacted.

#### Recent Accounting Pronouncements Adopted

In June 2011, the FASB issued Accounting Standards Update No. 2011-05, "Comprehensive Income" (Topic 220) – Presentation of Comprehensive Income" (ASU No. 2011-05), which requires an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. ASU 2011-05 eliminated the option to present the components of other comprehensive income as part of the statement of equity. The Company adopted ASU 2011-05 in its first quarter of fiscal year 2013 by including the required disclosures in two separate but consecutive statements.

In September 2011, the FASB issued Accounting Standards Update No. 2011-08 "Testing Goodwill for Impairment" (ASU No. 2011-08) which is intended to reduce the complexity and costs to test goodwill for impairment. The amendment allows an entity the option to make a qualitative evaluation about the likelihood of goodwill impairment to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. An entity will no longer be required to calculate the fair value of a reporting unit unless the entity determines, based on its qualitative assessment, that it is more likely than not that the fair value of the reporting unit is less than its carrying amount. The ASU also expands upon the examples of events and circumstances that an entity should consider between annual impairment tests in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. The amendment became effective for annual and interim goodwill impairment tests performed for the Company's fiscal year beginning August 1, 2012. The Company does not expect the adoption of ASU 2011-08 to have a material impact on its consolidated financial statements.

In July 2011, the FASB issued ASU No. 2011-07 "Health Care Entities (Topic 954) - Presentation and Disclosure of Patient Service Revenue, Provision for Bad Debts, and the Allowance for Doubtful Accounts for Certain Health Care Entities". This update was issued to provide greater transparency relating to accounting practices used for net patient service revenue and related bad debt allowances by health care entities. Some health care entities recognize patient service revenue at the time the services are rendered regardless of whether the entity expects to collect that amount or has assessed the patient's ability to pay. These prior accounting practices used by some health care entities resulted in a gross-up of patient service revenue and the provision for bad debts, causing difficulty for users of financial statements to make accurate comparisons and analyses of financial statements among entities. ASU No. 2011-07 requires certain healthcare entities to change the presentation of the statement of operations, reclassifying the provision for bad debts associated with patient service revenue from an operating expense to a deduction from patient service revenue and also requires enhanced quantitative and qualitative disclosures relevant to the entity's policies for recognizing revenue and assessing bad debts. This update is not designed to change and will not change the net income reported by healthcare entities. The Company adopted this update in its first quarter of fiscal year 2013 with no impact on its consolidated financial position or results of operations.

#### I tem 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk from changes in foreign currency exchange rates resulting from transactions at foreign locations which could impact our results of operations and financial position. We do not currently engage in any hedging or market risk management tools.

#### Foreign Currency Exchange Rate Risk

The financial reporting of our non-U.S. subsidiaries is denominated in currencies other than the U.S. dollar. Since the functional currency of our non-U.S. subsidiaries is the local currency, foreign currency translation adjustments are accumulated as a component of accumulated other comprehensive income in stockholders' equity. Assuming a hypothetical decline of 10% in the value of the U.S. dollar versus foreign currencies at October 31, 2012, our assets and liabilities would decrease by \$1.2 million and \$0.7 million, respectively, and our net sales and net earnings (loss) would decrease by \$1.4 million and \$0.2 million, respectively, on an annual basis.

We also maintain intercompany balances and loans receivable with subsidiaries in different local currencies. These amounts are at risk of foreign exchange losses if exchange rates fluctuate. Assuming a hypothetical increase of 10% in the value of the U.S. dollar versus foreign currencies at October 31, 2012, our pre-tax earnings (loss) would be unfavorably impacted by approximately \$0.4 million on an annual basis.

#### Interest Rate Risk

Our excess cash is invested in highly liquid money market accounts and U.S. Treasury bills. Changes in interest rates may affect the investment income we earn on these funds which are classified as cash equivalents and therefore affect our cash flows and results of operations. As of October 31, 2012, we were exposed to interest rate change market risk with respect to our cash equivalents of \$7.0 million. The cash equivalents bear interest rates ranging from 0% to 0.05%. As of October 31, 2012, based on the cash equivalents held, it is determined we have no material interest rate risk.

As of October 31, 2012, we have fixed interest rate financing on transportation and equipment leases.

#### I tem 4. Controls and Procedures

#### (a) Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this report, the Company's management conducted an evaluation (as required under Rules 13a-15(b) and 15d-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of the Company's "disclosure controls and procedures" (as such term is defined under the Exchange Act), under the supervision and with the participation of the principal executive officer and the principal financial officer. Based on this evaluation, the principal executive officer and the principal financial officer concluded that the Company's disclosure controls and procedures are effective as of the period covered by this report. Notwithstanding the foregoing, a control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that it will detect or uncover failures within the Company to disclose material information otherwise required to be set forth in the Company's periodic reports.

#### (b) Changes in Internal Controls over Financial Reporting

There was no change in the Company's internal controls over financial reporting during the fiscal quarter covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

#### P ART II - OTHER INFORMATION

#### I tem 1. <u>Legal Proceedings</u>

There have been no other material developments with respect to previously reported legal proceedings discussed in the annual report on Form 10-K for the fiscal year ended July 31, 2012 filed with the Securities and Exchange Commission, other than as noted in Note 11 to the consolidated financial statements as of October 31, 2012 and the three months then ended.

#### I tem 1A. Risk Factors

There have been no material changes from the risk factors disclosed in Part 1, Item 1A, of the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2012.

| ī | tem | 6  | Exhibits |
|---|-----|----|----------|
| ı | tem | υ. | EXHIDITS |

Date: December 10, 2012

| Exhibit No. | Exhibit   |
|-------------|---|
|             |   |
| 31.1        | Certification of Elazar Rabbani, Ph.D. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.   |
| 31.2        | Certification of Barry Weiner pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.  |
| 32.1        | Certification of Elazar Rabbani, Ph.D. pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 32.2        | Certification of Barry Weiner pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.          |
| 101. INS*   | XBRL Instance Document  |
| 101. SCH*   | XBRL Taxonomy Extension Schema Document   |
| 101. CAL*   | XBRL Taxonomy Extension Calculation Linkbase Document   |
| 101.DEF*    | XBRL Taxonomy Extension Definitions Linkbase Document   |
| 101.LAB*    | XBRL Taxonomy Extension Label Linkbase Document   |
| 101.PRE*    | XBRL Taxonomy Extension Presentation Linkbase Document  |

<sup>\*</sup>XBRL (Extensible Business Reporting Language) information is being furnished and not filed for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934.

#### **S IGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ENZO BIOCHEM, INC.

(Registrant)

by: /s/ Barry Weiner

President, Chief Financial Officer, Principal Accounting Officer, Treasurer and Director

26

## CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Elazar Rabbani, Ph.D., certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Enzo Biochem, Inc (the "registrant").
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a 15(e) and 15d 15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared:
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 10, 2012

By: /s/ Elazar Rabbani, Ph.D.

Elazar Rabbani, Ph.D. Chairman of the Board, Chief Executive Officer and Secretary

#### CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Barry Weiner, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Enzo Biochem, Inc (the "registrant").
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a 15(e) and 15d 15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared:
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 10, 2012

By: /s/ Barry Weiner

Barry Weiner

President, Chief Financial Officer, Principal Accounting Officer, Treasurer and Director

#### CERTIFICATION PURSUANT TO TITLE 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Enzo Biochem, Inc., and Subsidiaries ("the Company") on Form 10-Q for the period ended October 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Elazar Rabbani, Ph.D., Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: December 10, 2012

By: /s/ Elazar Rabbani, Ph.D.

Elazar Rabbani, Ph.D. Chairman of the Board, Chief Executive Officer and Director

#### CERTIFICATION PURSUANT TO TITLE 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Enzo Biochem, Inc., and Subsidiaries ("the Company") on Form 10-Q for the period ended October 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Barry Weiner, President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: December 10, 2012

By: /s/ Barry Weiner

Barry Weiner
President, Chief Financial Officer, Principal Accounting Officer, Treasurer and Director