Enzo Biochem, Inc. *Annual Report 2004*

Enzo Biochem, Inc. *is a leading biotechnology company engaged in the research, development, marketing and manufacture of innovative health care products. In business since 1976, Enzo's products and services are sold to and used by scientists and the medical community worldwide. The Company has proprietary technologies and expertise in manipulating and modifying genetic material and other biological molecules. Through three wholly-owned subsidiaries, the Company targets its technology toward satisfying specific market needs.* ***Enzo Therapeutics, Inc.*** *is leading the development of medicines based on genetic and immune regulation to combat cancer, viral and other diseases.* ***Enzo Life Sciences, Inc.*** *develops and markets proprietary DNA probe-based products to clinicians and researchers.* ***Enzo Clinical Labs, Inc.*** *provides diagnostic testing services to the New York medical community.*

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To Our Shareholders:

Throughout its history, Enzo Biochem has been unique among biotechnology companies. We realized early on that the identification and modification of DNA could serve as the foundation for new exploration and products in the health care field. Since our founding, Enzo thus has concentrated on developing enabling technologies that have opened the field of modern biomedical research to produce novel approaches and products.

We are at the point at which the realization of our vision is beginning to materialize. Our proprietary technologies form the basis of a line of more than 300 life science products that are marketed to the biomedical and pharmaceutical research markets. These products are integral in the formation of platforms to address needed improvements in clinical diagnostics as well as new research tools. Our extensive research and technical capabilities have also led to significant promising therapeutic candidates, a number of which are in clinical trials. In addition, a number of compounds are in preclinical laboratory studies, providing Enzo with a full pipeline of potential therapeutic products. In the course of our research we have built an intellectual property portfolio of an aggregate of over 200 U.S. and foreign issued patents with an additional nearly 200 patent applications. We are committed to protect our Company's valuable patent estate by pursuing, when necessary, legal action against those companies who infringe our proprietary technologies. The settlement we announced in October of this year with Digene, Inc. is an example of a successful outcome of this strategy.

Following are key highlights from each of our divisions this past year:

ENZO THERAPEUTICS

Enzo Therapeutics made significant progress on a number of fronts in fiscal 2004. To further broaden our proprietary intellectual property and technological capabilities in the area of infectious disease, we acquired the assets of OraGen, Inc, a privately held biotechnology company specializing in immune regulation. This purchase was an opportunistic one for us, allowing us to combine the work that OraGen had done in developing methods and compositions that could be useful for regulating undesirable immune responses with our expertise in immune regulation.

We also introduced an entirely new therapeutic compound, EGS21, a beta-D-glucosylceramide compound (GC) that appears to interfere with several types of immune cells, most notably natural killer (NKT) cells. These NKT cells are thought to be part of the immune regulatory system of the body and therefore, by their regulation, one could regulate the inflammatory response. We believe that GC may also be involved in autoimmune reactions. Enzo scientists and collaborators have studied the action of GC in animal model systems, and have reported the results of these studies in a number of peer-reviewed presentations. GC holds promise of being an important candidate drug in the treatment of immune mediated diseases

such as Crohn's disease, hepatitis, diabetes, and HIV. During this past year, we completed a Phase I safety trial of EGS21.

We initiated a Phase I/II trial of our HIV gene medicine, StealthVector® HGTV43™, this past year. The main objective of this phase of the study is to increase the number of engineered cells in circulation that contain the anti-HIV antisense RNA genes. In order to reach this stage, we were required to conduct hundreds of additional tests designed to assure the safety of our treatment. In the Phase I study of the HGTV43 medicine, the subjects tested to date continue to tolerate the procedure, and their circulating CD4+ cells contained the antisense RNA for as long as 48 months. We are extremely pleased with the duration of the circulating genetically altered cells and look forward to the outcome of the next phase of the study.

Earlier this year we reported promising results from the Phase II randomized double blind study of Alequel™, Enzo's potential therapeutic for Crohn's disease. In the study, 67% of the subjects achieved clinical response, 58% achieved clinical remission and 43% showed an improved "quality of life" as measured by the standard Inflammatory Bowel Disease Questionnaire (IBDQ) . It is notable that there were no serious treatment-related side effects experienced by the group treated with Alequel™. This is not the case with most currently prescribed medicines for individuals who suffer from this debilitating disease. The next steps in the trial process are to broaden and diversify the subject population and to evaluate dosing regimens.

Alequel™ is only one potential product in our immune regulation platform that involves oral administration of a specific protein or complex of proteins to adjust or enhance the immune system. We are developing treatments for other immune mediated diseases based on this platform.

Upon the conclusion of a successful Phase II clinical trial of EHT899™, our candidate drug for hepatitis B, we focused on manufacturing protocols to reduce the cost of the drug, given the demographics of this particular disease and its prevalence in less developed countries. We believe we have now achieved a cost of manufacture that will allow us to pursue this product as a world health medicine.

This year the Company initiated a new product opportunity for the treatment of bone disorders. Enzo Therapeutics entered into two agreements with the University of Connecticut Health Center to license and cooperatively develop novel treatments for the stimulation and enhancement of bone formation. We have developed a number of candidate compounds in two main categories that could produce new mineral and organic bone. One category includes a set of injectable peptides and the second category is an orally delivered medicine. The products that could result from this technology could provide therapy for osteoporosis, fractures, and other applications.

Our product and technology pipeline is large. We are working hard to drive our therapeutic candidates through the regulatory process in order to produce revenue generating products. Additionally, we continue to develop new therapeutic modalities that should keep our pipeline full well into the future.

ENZO LIFE SCIENCES

This past year has been one of transition and accomplishment. In October, we announced that our long-standing dispute with Digene, Inc. had been resolved. Under the terms of the settlement, we granted Digene a non-exclusive royalty bearing license to one of Life Sciences' patents that relates to the process by which nucleic acid hybrids are captured and immobilized so that they can be analyzed. In return Digene paid Enzo $16 million initially, and has irrevocably agreed to pay us at least an additional $14.5 million over the next five years as minimum payments against owed royalties, plus it will continue to pay royalties to Enzo until this patent expires in 2018. This agreement, we feel, supports our view that Enzo over the years has developed technology that is truly groundbreaking and pioneering.

Additionally, Enzo Life Sciences this past year signed an agreement granting GlaxoSmithKline a non-exclusive license and supply agreement to use our proprietary labeling, detection and non-linear amplification technologies to generate genomic information for supporting their research and development activities.

With respect to sales and marketing of our products, Enzo took what we felt was a necessary step early in the fiscal year by terminating a contract with what had been our major distributor of our products used in the life sciences research market. Additionally, we brought an action against this distributor, Affymetrix, Inc, for misappropriating Enzo's assets and for manufacturing and selling our products in violation of their distribution agreement with us. While this carefully considered decision has had a negative impact on our revenues, we believe that it was a necessary action to protect our valuable intellectual property assets. In order to become less reliant on distributors, we have made a considerable investment in building a direct sales force. Furthermore, because we view the outlook for the life sciences market favorably, we have constructed new production and quality control facilities to assist us in bringing a continuing flow of new products into the future. Additionally, we continued development of a product for the study of Comparative Genome Hybridization, or CGH, a process by which the number of copies of a particular chromosome of interest can be determined. We believe that this technology may have great utility in the study of cancer.

On the diagnostics front, we were awarded an important patent covering linear amplification of specific nucleotides, the first in a series of pending applications for our genetic analysis methodology. Our Inchworm™ isothermal amplification technology permits a sequential series of copying reactions at a constant temperature, thereby avoiding some of the shortcomings of other amplification systems. This technology will allow us unfettered access towards the next generation of diagnostic

products which, we believe, will be based increasingly on nucleic acid analysis. This technology is at the core of our diagnostic approach for performing rapid identification of specific pathogens.

ENZO CLINICAL LABS

Substantial human and financial investments have been made at Enzo Clinical Labs over the past year. We recently completed an initiative increasing our sales and marketing group, as well as extending our service capabilities geographically in the metropolitan New York area to parts of northern and central New Jersey. Simultaneously, we rolled out the EnzoDirect™ system, our suite of physician connectivity solutions that now allow our clients unsurpassed speed in receiving their patients' results and in communicating with our laboratory. These solutions can be tailored to satisfy individual client needs. We also introduced an enhancement to our system for performing instant scanning of not only the laboratory information we receive along with a specimen, but also the billing information. It should allow us to ascertain specific third-party payor information in a more expeditious manner so that our efforts can be concentrated on more profitable mixes of business.

Enzo Clinical Labs is one of a small number of reference laboratories that has been awarded the prestigious Accreditation with Distinction from the College of American Pathologists. Further, Enzo's technical personnel have been selected to lead inspection teams at other labs seeking this accreditation. We also substantially increased our in-house testing menu, adding assays in the areas of infectious disease, cardiac screening and women's health. The investments we made in both sales and marketing and information transmission systems are expected to benefit Clinical Labs during fiscal 2005.

FINANCIAL RESULTS

We closed fiscal 2004 – the 12 months ended July 31, 2004 – with a strong balance sheet with stockholders' equity of over $104 million, and cash, cash equivalents and marketable securities in excess of $70 million and no debt. As of today, our cash position exceeds $85 million.

Operationally, our revenues for FY 2004 were $41.6 million, down about $11.2 million from the prior year. There were two primary reasons for this. First, the termination of our agreement with Affymetrix, as indicated earlier, had a negative effect on revenue. The investment in building our direct sales and market effort at Life Sciences may contribute to an improvement in this area. Second, there was a small decline in revenues at Enzo Clinical Labs due to continued downward trends in reimbursements at third party payors. We believe that the enhancements we have put into place at the Labs may help us deal with this in a more effective manner going forward.

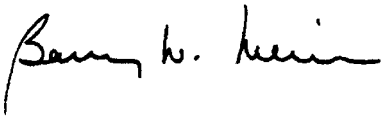
As an expression of the Board of Directors' confidence in the Company, a 5% stock dividend was paid on November 15, 2004.

This year we were pleased to add Marcus Conant, MD to our Board of Directors. Dr. Conant served as the Principal Investigator in our Phase I clinical trial for the treatment of HIV-1 and is a Professor at the University of California, San Francisco where he has served on the faculty for more than a quarter century. His insight and experience will be a major asset to Enzo as we move forward with our clinical programs.

CONCLUSION

Enzo Biochem is an exciting company, not only because of our cutting edge technology and pioneering spirit, but also due to the diligence we are applying to expanding the frontiers of knowledge. Medical technology is rapidly changing and Enzo Biochem is clearly, we believe, one of the companies that will make a difference and participate in this fast evolving environment that holds great promise for mankind's increased well being.

We greatly appreciate the support of our loyal shareholders, and the dedication and contributions of our employees and officers as well as the members of the Company's Board of Directors.



Barry W. Weiner
President

Except for historical information, the matters discussed in this letter may be considered "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements include declarations regarding the intent, belief or current expectations of the Company and its management. Investors are cautioned that any such forward-looking statements are not guarantees of future performance and involve a number of risks and uncertainties that could materially affect actual results. The Company disclaims any obligations to update any forward-looking statement as a result of developments occurring after this mailing.

Selected Financial Data

The selected operating results for the years ended July 31, 2004, 2003 and 2002 and the financial position data as of July 31, 2004 and 2003, have been derived from the Company's audited consolidated financial statements included elsewhere in this Annual Report. The selected operating results for the years ended July 31, 2001 and 2000, and the selected financial position data as of July 31, 2002, 2001 and 2000 are derived from the Company's audited consolidated financial statements which are not included in this Annual Report.

The following tables summarize the Company's consolidated statement of operations and balance sheet data. This information should be read together with the discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Company's consolidated financial statements and notes to those statements included elsewhere in this Annual Report.

	For the Years Ended July 31,				
	(In thousands, except per share data)				
	2004	2003	2002	2001	2000
Operating Results:					
Operating revenues	$41,644	$52,767	$54,015	$52,266	$42,847
Interest income	1,152	1,355	1,350	3,003	2,585
(Loss) income before benefit (provision) for taxes on income	(11,080)	5,725	10,340	12,231	7,668
Benefit (provision) for taxes on income	4,848	(1,881)	(3,417)	(5,418)	(1,044)
Net (loss) income	$(6,232)	$3,844	$6,923	$6,813	$6,624
Basic net (loss) income per common share:	$ (.20)	$0.12	$0.22	$0.22	$0.22
Diluted net (loss) income per common share:	$(.20)	$0.12	$0.21	$0.21	$0.20
Denominator for per share calculation:					
Basic	31,700	31,399	31,359	31,254	30,789
Diluted	31,700	32,175	32,327	32,558	32,802
Financial Position:					
Working capital	$92,259	$97,723	$92,772	$85,094	$74,094
Total assets	$110,334	$115,878	$109,291	$102,931	$92,886
Stockholders' equity	$104,166	$109,380	$104,733	$97,517	$87,176

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 financial statements and related notes. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements. See "Cautionary Statement for Purposes of the "Safe Harbor" Provisions of the Private Securities Litigation Reform Act of 1995". Because of the foregoing factors, you should not rely on past financial results as an indication of future performance. We believe that period-to-period comparisons of our financial results to date are not necessarily meaningful and expect that our results of operations might fluctuate from period to period in the future.

Liquidity and Capital Resources

At July 31, 2004, our cash and cash equivalents of $54.5 million and marketable securities of $17.2 million totaled $71.7 million, a decrease of $6.7 million from July 31, 2003. We had working capital of $92.3 million at July 31, 2004 compared to $97.7 million at July 31, 2003. On October 14, 2004 the Company received $16 million from Digene Corporation in connection with execution of a settlement and license agreement. See Item 3. Legal Proceeding.

Net cash used in operating activities for the year ended July 31, 2004 was approximately $5.6 million as compared to net cash provided by operating activities of $12.1 million for the year ended July 31, 2003. The decrease in net cash provided by operating activities from fiscal 2003 to fiscal 2004 was primarily due to a net loss in the current year offset by the net change in operating assets and liabilities compared to the prior year.

Net cash used in investing activities decreased approximately $12.5 million from fiscal 2003, primarily as a result of a decrease in the purchase of marketable securities in the current year.

Net cash provided by financing activities increased by $.3 million from fiscal 2003 primarily as a result of the increase in proceeds from the exercise of stock options.

Net accounts receivable of $14.8 million and $17.3 million represented 130 days and 119 days of operating revenues at July 31, 2004 and 2003, respectively. The change in net accounts receivable is due to a decrease in accounts receivable at the clinical reference laboratory of approximately $1.3 million and a decrease of research products accounts receivable of approximately $1.2 million. The decrease in the clinical laboratory receivable is primarily due to the decrease in revenue. The decrease in the research products accounts receivable is primarily due to the decrease in revenue from one specific distributor of research products. The Company had written off $1.8 million against the open accounts receivable due from this one distributor in the fourth quarter of 2004.

The Company has entered into various real estate operating leases with both related and unrelated parties. See Note 6 to the Consolidated Financial Statements for a further description of these various leases.

The Company has an exclusive licensing agreement to an invention covered by licensed patents. Under this agreement, the Company is required to make certain minimum royalty payments of $200,000 per year through the life of the patents. See Note 10 to the Consolidated Financial Statement.

The total future payments under the Company's contractual obligations as of July 31, 2004 are as follows:

	Payments Due by Period			
	Total	Less than 1 year	1-3 years	4-5 years
Operating Leases	$1,393,000	$705,000	$498,000	$190,000
Total Contractual Cash Obligations	$1,393,000	$705,000	$498,000	$190,000

We believe that our current cash position is sufficient for our foreseeable liquidity and capital resource needs, although there can be no assurance that future events will not alter such view.

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

Critical Accounting Policies

General

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 allowance, allowance for uncollectible accounts, 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.

Revenue Recognition

Revenues from the clinical laboratory are recognized as services are rendered upon completion of the testing process for a specific patient and reported to the ordering physician. The Company's revenue is based on amounts billed or billable for services rendered, net of contractual adjustments and other arrangements made with third-party payors to provide services at less than established billing rates. Revenues from research product sales, exclusive of certain non-exclusive distribution agreements, are recognized when the products are shipped.

The Company has certain non-exclusive distribution agreements, which provide for consideration to be paid to the distributors for the manufacture of certain products. The Company records such consideration provided to distributors under these non-exclusive distribution agreements as a reduction to research product revenues. The revenue from these non-exclusive distribution agreements are recognized when shipments are made to their respective customers and reported to the Company.

Contractual Allowances

The percentage of the Company's revenues derived from Medicare, third party payers, commercial insurers and managed care patients continue to increase. The Medicare regulations and various managed care contracts are often complex and may include multiple reimbursement mechanisms for different types of services provided in our clinical laboratory. We estimate the allowance for contractual allowances on a payer-specific basis given our interpretation of the applicable regulations and historical calculations. However, the services authorized and provided and related reimbursement are often subject to interpretation that could result in payments that differ from our estimates. Additionally, updated regulations occur frequently necessitating continual review and assessment of the estimation process by management.

Allowance for Doubtful Accounts

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 uninsured patients or patients for whom primary insurance has paid but a patient portion remains outstanding. The Company estimates the allowance for doubtful accounts primarily based upon the age of the accounts since invoice date. The Company continually monitors its accounts receivable balances and utilizes cash collections data to support the basis for its estimates of the provision for doubtful accounts. Significant changes in payer mix or regulations could have a significant impact on the Company's results of operations and cash flows. In addition, the Company has implemented a process to estimate and review the collectibles of its receivables based on the period they have been outstanding. Historical collection and payor reimbursement experience is an integral part of the estimation process related to reserves for doubtful accounts. 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 reserve 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. Revisions in reserve for doubtful accounts estimates are recorded as an adjustment to bad debt expense. The Company believes that its collection and reserves processes, along with the close monitoring of its billing processes, helps reduce the risk associated with material revisions to reserve estimates resulting from adverse changes in collection and reimbursement experience and billing operations.

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 more likely than not the benefits may not be realized. 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.

Impairment of Long-Lived Assets

The Company evaluates the requirement to recognize impairment losses on long-lived assets used in operations when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. Company management believes that no impairment to its long-lived assets has occurred.

	Comparative financial data for the years ended July 31,				
	2004	Increase (Decrease)	2003	Increase (Decrease)	2002
			(In thousands)		
Revenues:					
Research product sales	$12,972	($10,281)	$23,253	($2,710)	$25,963
Clinical laboratory services	28,672	(842)	29,514	1,462	28,052
Total revenue	$41,644	(11,123)	$52,767	(1,248)	$54,015
Costs and expenses:					
Cost of research products	2,518	(871)	3,389	1,552	1,837
Cost of laboratory services	10,586	993	9,593	(516)	10,109
Research & development	8,078	(233)	8,311	2,132	6,179
Selling expense	4,335	829	3,506	263	3,243
General & administrative	10,032	1,441	8,591	1,233	7,358
Provision for uncollectible A/R	11,987	2,642	9,345	(4,843)	14,188
Legal expenses	6,340	679	5,661	3,550	2,111
Total costs and expenses	$53,876	5,480	$48,396	3,371	$45,025
Operating (loss) income	$(12,232)	$(16,603)	$4,371	$(4,619)	$8,990

Results of Operations

Fiscal 2004 Compared to Fiscal 2003

Revenues from operations for the fiscal year ended July 31, 2004 were $41.6 million a decrease of $11.1 million over revenues from operations for the fiscal year ended July 31, 2003. This decrease was due to a decrease of $10.3 million in revenues from our research product sales operations and decrease of $.8 million in revenues from clinical reference laboratory operation over revenues for such activities in fiscal 2004.

The decrease in research product sales resulted primarily from a decrease in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets related to shipments to Affymetrix a major distributor. Research product revenue from this one major distributor accounted for approximately 0% and 50% of the Company's total research product revenues in fiscal 2004 and 2003, respectively. See Item 3. Legal Proceedings.

The decrease of clinical laboratory services revenue was due primarily to the recent downward trends that had indicated a decrease in the reimbursements rates from the Medicare Program, certain third party payors and HMO's. Clinical laboratory services are provided to patients covered by various third party payor programs, including Medicare and health maintenance organizations ("HMO's"). Billings for services are included in revenue net of allowances for contractual discounts and allowances paid for differences between the amounts billed and the estimated amount to be paid. The effect of such reduced reimbursement rates have been reflected in fiscal 2004. The clinical laboratory is subject to seasonal fluctuations in operating results. Volume of testing generally declines during the summer months, the year-end holiday periods and other major holidays. In addition, volume declines due to inclement weather may reduce net revenues. Therefore, comparison of the results of successive quarters may not accurately reflect trends or results for the full year.

The cost of research products sold decreased by $.9 million from the prior fiscal year. This decrease was primarily due to the decrease in research product revenue based on the termination of a contract with one major distributor.

The cost of clinical laboratory services increased by $1.0 million during this period primarily due to an increase in costs with certain esoteric tests and costs related to performing more testing in house.

Research and development expenses decreased by approximately $.2 million as a result of a decrease in the expenses related to the clinical trial activities and other research projects.

Selling expenses increased by $.8 million during this fiscal year, as compared to the prior year's fiscal year. This increase was primarily due to an increase in both the sales personnel and marketing expenditures for research product sales and clinical laboratory services.

The Company's provision for uncollectible accounts receivable increased by $2.6 million to $11.9 million from $9.3 million as compared to last year. At the clinical laboratory division the percentage of the provision for uncollectible accounts receivable as a relationship to revenue increased to 35.7% this fiscal year as compared to 29.6% for last year. These increases were primarily due to the change in the mix of payors during the current fiscal year. The company wrote off $1.8 million of an uncollectible receivable from one of its distributors at the Life Science division this fiscal year. See Item 3. Legal Proceedings.

The Company's legal expenses increased by $.6 million to $6.3 million from $5.7 million as compared to the previous year. This increase is primarily due to the increase in patent infringement proceedings and the increase in the overall legal activities on these infringement proceedings.

General and administrative expenses increased by $1.4 million due to an increase at the clinical lab in the information technology expenditures and the in-house legal patent costs.

Interest income was comparable to the prior fiscal year.

In fiscal 2004, we recorded a benefit for income taxes of $4.8 million, based upon an $11.1 million loss before benefit for taxes on income in the current year as compared to a provision for income taxes of $1.9 million in fiscal 2003, which were based on the combined effective federal, state and local income tax rates.

Net accounts receivable from our clinical laboratory operations of $13.1 million and $14.4 million represented an average of 167 days and 174 days of operating revenues at July 31, 2004 and 2003, respectively.

Loss before provision for taxes on income from the research and development segment activities and related costs was $1.3 million in fiscal 2004, as compared to income before provision for taxes on income of $9.4 million in fiscal 2003. The decrease in the profit resulted primarily from a decrease in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets to Affymetrix a major distributor. Loss before provision for taxes on income from the clinical reference laboratories segment amounted to a $1.5 million for fiscal 2004, as compared to income of $3.0 million for fiscal 2003. The decrease in income before taxes for the clinical laboratory segment was primarily due to the reduction in reimbursement rates from third party payors. Loss before provision for taxes on income at the other segment amounted to a loss of $8.3 million for fiscal 2004, as compared to a loss of $6.7 million for fiscal 2003, due to the increase in legal expenses in fiscal 2004.

Fiscal 2003 Compared to Fiscal 2002

Revenues from operations for the fiscal year ended July 31, 2003 were $52.8 million a decrease of $1.2 million over revenues from operations for the fiscal year ended July 31, 2002. This decrease was due to a decrease of $2.7 million in revenues from our research product sales operations offset by an increase of $1.5 million in revenues from clinical reference laboratory operation over revenues for such activities in fiscal 2003.

The decrease in research product sales resulted primarily from a decrease in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets related to shipments to one major distributor. Research product revenue from this one major distributor accounted for approximately 50% and 49% of the Company's total research product revenues in fiscal 2003 and 2002, respectively.

The increase of clinical laboratory services revenue was due primarily to increase volume of higher priced esoteric tests. Clinical laboratory services are provided to patients covered by various third party payor programs, including Medicare and health maintenance organizations ("HMO's"). Billings for services are included in revenue net of allowances for contractual discounts and allowances paid for differences between the amounts billed and the estimated amount to be paid. Recent trends had indicated a decrease in the collection rates from the Medicare Program, certain third party payors and HMO's. The effect of such reduced collection rates have been reflected in fiscal 2003. The clinical laboratory is subject to seasonal fluctuations in operating results. Volume of testing generally declines during the summer months, the year-end holiday periods and other major holidays. In addition, volume declines due to inclement weather may reduce net revenues. Therefore, comparison of the results of successive quarters may not accurately reflect trends or results for the full year.

Although, research product revenue decreased for the fiscal year, the cost of research products sold increased by $1.6 million to $3.4 million from the prior fiscal year. This increase was primarily due to the increase in reagent costs, the expansion of the manufacturing, processing capabilities and an increase in headcount in these areas, due to the unusually high volume of the orders shipped in the first quarter of fiscal 2003 to one major distributor that did not continue for the balance of fiscal 2003.

The cost of clinical laboratory services decreased by $.5 million during this period primarily due to a reduction in personnel costs and the improved efficiency of performing certain esoteric tests in-house that reduced certain other expenses.

Research and development expenses increased by approximately $2.1 million as a result of an increase in the expenses related to the clinical trial activities and other research projects.

Selling expenses increased by $.3 million during this fiscal year, as compared to the prior year's fiscal year. This increase was primarily due to costs associated with the unusually high volume of the orders shipped in the first quarter of fiscal 2003 to one major distributor of research products.

General and administrative expenses increased by $1.2 million due to the increase in overall insurance costs of professional, directors & officers, liability insurance premiums and an increase in data processing personnel costs.

The Company's legal expenses increased by $3.6 million to $5.7 million from $2.1 million as compared to the previous year. This increase is primarily due to the increase in patent infringement proceedings and the increase in the overall legal activities on these infringement proceedings.

The Company's provision for uncollectible accounts receivable decreased by $5.5 million to $8.7 million from $14.2 million as compared to last year at the clinical laboratory division. The percentage of the provision for uncollectible accounts receivable as a relationship to revenue decreased to 30.8% this fiscal year as compared to 50.6% for last year. These decreases were primarily due to the change in the mix of payors and improved collection procedures and the effect of the canceled HMO contract last year. In addition, during the current fiscal year, the Company wrote off $.6 million as an uncollectible receivable from one of its distributors at the Life Science division.

Interest income was comparable to the prior fiscal year.

In fiscal 2003 and 2002, we recorded a provision for income taxes of $1.8 and $3.4 million, respectively, which was based on the combined effective federal, state and local income tax rates.

Net accounts receivable from our clinical laboratory operations of $14.4 million and $13.8 million represented an average of 174 days and 180 days of operating revenues at July 31, 2003 and 2002, respectively.

Income before provision for taxes on income from the research and development segment activities and related costs was $9.4 million in fiscal 2003, as compared to income before provision for taxes on income of $16.6 million in fiscal 2002. The decrease in the profit resulted primarily from a decrease in direct sales of research products of labeling and detection reagents for the genomics and sequencing markets to one specific customer. Income before provision for taxes on income from the clinical reference laboratories segment amounted to a $3.0 million for fiscal 2003, as compared to a loss of $3.8 million for fiscal 2002. The increase in income before taxes for the clinical laboratory segment was primarily due to the increase in revenue from an increase in higher gross margin reimbursement and an increase in volume of esoteric tests being ordered by physicians. These esoteric tests have higher pricing levels as compared to the regular tests performed at the laboratory.

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

Report of Registered Public Accounting Firm

Board of Directors and Stockholders
Enzo Biochem, Inc.

We have audited the accompanying consolidated balance sheets of Enzo Biochem, Inc. (the "Company") as of July 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended July 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Enzo Biochem, Inc. at July 31, 2004 and 2003 and the consolidated results of their operations and their cash flows for each of the three years in the period ended July 31, 2004, in conformity with United States generally accepted accounting principles.

Ernst & Young LLP

Melville, New York
October 7, 2004, except for Note 14 and the third paragraph of
Note 7, as to which the date is October 14, 2004

ENZO BIOCHEM, INC
CONSOLIDATED BALANCE SHEETS

JULY 31, 2004 and 2003

ASSETS	**2004**	**2003**
Current assets:		
Cash and cash equivalents	$54,499,100	$63,267,600
Marketable securities	17,241,500	15,154,100
Accounts receivable, less allowance for doubtful accounts of $5,503,000 in 2004 and $4,900,000 in 2003	14,794,400	17,266,400
Income tax receivable	3,906,900	542,300
Inventories	3,434,300	3,421,800
Prepaid expenses	1,832,500	2,232,900
Deferred taxes	1,974,800	1,013,800
Total current assets	97,683,500	102,898,900
Property and equipment, at cost less accumulated depreciation and amortization	2,414,600	2,199,800
Goodwill	7,452,000	7,452,000
Deferred patent costs, less accumulated amortization of $8,383,600 in 2004 and $7,097,200 in 2003	2,624,500	3,166,200
Other	159,600	161,000
	$110,334,200	$115,877,900
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Trade accounts payable	$2,092,300	$1,321,000
Accrued legal fees	2,050,500	1,915,200
Other accrued expenses	711,600	551,000
Accrued research and development expenses	225,000	453,400
Accrued payroll	258,100	703,000
Deferred rent	86,700	232,300
Total current liabilities	5,424,200	5,175,900
Deferred taxes	444,200	1,234,800
Deferred rent	---	87,000
Long term payable	300,000	---
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 and outstanding: 30,864,800 in 2004 and 29,975,100 in 2003	308,600	299,800
Additional paid-in capital	205,920,000	199,081,800
Less treasury stock at cost, 349,900 shares	(5,668,900)	---
Accumulated deficit	(96,148,000)	(89,916,400)
Accumulated other comprehensive loss	(245,900)	(85,000)
Total stockholders' equity	104,165,800	109,380,200
	$110,334,200	$115,877,900

See accompanying notes.

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF OPERATIONS

Years ended July 31, 2004, 2003 and 2002

	2004	2003	2002
Revenues:			
Research product revenues	$12,972,200	$23,253,100	$25,963,400
Clinical laboratory services	28,672,200	29,513,900	28,051,700
	41,644,400	52,767,000	54,015,100
Costs and expenses:			
Cost of research product revenues	2,517,800	3,388,900	1,837,100
Cost of clinical laboratory services	10,586,200	9,592,900	10,109,500
Research and development expense	8,078,300	8,311,200	6,178,600
Selling expense	4,334,900	3,506,100	3,242,800
Provision for uncollectible accounts receivable	11,986,500	9,345,300	14,188,400
Legal expense	6,339,900	5,661,000	2,111,000
General and administrative expense	10,032,300	8,591,300	7,358,200
	53,875,900	48,396,700	45,025,600
(Loss) income before interest income and benefit (provision) for taxes on income	(12,231,500)	4,370,300	8,989,500
Interest income	1,151,800	1,355,000	1,350,400
(Loss) income before benefit (provision) for taxes on income	(11,079,700)	5,725,300	10,339,900
Benefit (provision) for taxes on income	4,848,100	(1,881,300)	(3,417,100)
Net (loss) income	($6,231,600)	$3,844,000	$6,922,800
Net (loss) income per common share:			
Basic	$(0.20)	$0.12	$0.22
Diluted	$(0.20)	$0.12	$0.21
Denominator for per share calculation:			
Basic	31,700,000	31,399,000	31,359,000
Diluted	31,700,000	32,175,000	32,327,000

See accompanying notes.

ENZO BIOCHEM, INC
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Years ended July 31, 2004, 2003 and 2002

	Common Stock Shares	Treasury Stock Shares	Common Stock Amount	Treasury Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance at July 31, 2001	27,080,100	---	$270,700	---	$133,136,100	$(35,889,800)	---	$97,517,000
Net income for the year ended July 31, 2002	---	---	---	---	---	6,922,800	---	6,922,800
5% stock dividend (fair value on date declared)	1,353,500	---	13,600	---	26,974,000	(26,987,600)	---	---
Payment of cash for fractional shares for the 5% stock dividend	---	---	---	---	---	(96,600)	---	(96,600)
Increase in common stock and paid-in capital due to exercise of stock options	15,200	---	200	---	127,800	---	---	128,000
Tax benefit from stock options exercised	---	---	---	---	15,000	---	---	15,000
Issuance of stock for employee 401(k) plan	11,000	---	100	---	246,900	---	---	247,000
Balance at July 31, 2002	28,459,800	---	284,600	---	160,499,800	(56,051,200)	---	104,733,200
Net income for the year ended July 31, 2003	---	---	---	---	---	3,844,000	---	3,844,000
Net unrealized loss on available for-sale securities, net of tax	---	---	---	---	---	---	($85,000)	(85,000)
Comprehensive income								3,759,000
5% stock dividend (fair value on date declared)	1,423,600	---	14,300	---	37,694,900	(37,709,200)	---	---
Increase in common stock and paid-in capital due to exercise of stock options	73,300	---	700	---	630,100	---	---	630,800
Issuance of stock for employee 401(k) plan	18,400	---	200	---	257,000	---	---	257,200
Balance at July 31, 2003	29,975,100	---	299,800	---	199,081,800	(89,916,400)	(85,000)	109,380,200
Net loss for the year ended July 31, 2004	---	---	---	---	---	(6,231,600)	---	(6,231,600)
Net unrealized loss on available for-sale securities, net of tax	---	---	---	---	---	---	(160,900)	(160,900)
Comprehensive loss								(6,392,500)
Purchase of treasury stock	---	349,900	---	$(5,668,900)	---	---	---	(5,668,900)
Increase in common stock and paid-in capital due to exercise of stock options	873,900	---	8,700	---	6,556,100	---	---	6,564,800
Issuance of stock for employee 401(k) plan	15,800	---	100	---	282,100	---	---	282,200
Balance at July 31, 2004	30,864,800	349,900	$308,600	$(5,668,900)	$205,920,000	$(96,148,000)	$(245,900)	$104,165,800

See accompanying notes.

ENZO BIOCHEM, INC
CONSOLIDATED STATEMENT OF CASH FLOWS

Years ended July 31, 2004, 2003 and 2002

	2004	2003	2002
Cash flows from operating activities:			
Net (loss) income	($6,231,600)	$3,844,000	$6,922,800
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:			
Depreciation and amortization of property and equipment	1,076,000	1,058,000	989,900
Amortization of costs in excess of fair value of net tangible assets acquired	---	---	370,700
Amortization of deferred patent costs	1,285,500	750,000	793,600
Provision for uncollectible accounts receivable	11,986,500	9,345,300	14,188,400
Deferred income tax provision	(1,650,700)	(128,100)	720,000
Issuance of stock for employee 401(k) plan	282,200	257,200	247,000
Tax benefit from stock options exercised	---	---	15,000
Deferred rent	(232,600)	(195,400)	(160,300)
Changes in operating assets and liabilities:			
Accounts receivable before provision for uncollectible amounts	(9,514,500)	(6,344,200)	(9,896,900)
Inventories	(12,500)	768,400	(2,170,400)
Prepaid expenses	400,400	(741,900)	(358,700)
Income taxes receivable	(3,364,600)	1,426,300	(1,618,400)
Trade accounts payable and accrued expenses	931,900	(374,700)	(527,200)
Accrued research and development expenses	(228,400)	453,400	---
Accrued legal fees	135,300	1,775,200	(111,000)
Accrued payroll	(444,900)	227,100	153,600
Total adjustments	649,600	8,276,600	2,635,300
Net cash (used in) provided by operating activities	(5,582,000)	12,120,600	9,558,100
Cash flows from investing activities:			
Capital expenditures	(1,303,800)	(956,700)	(620,400)
Patent costs deferred	(443,800)	(353,900)	(490,700)
Purchase of marketable securities	(2,349,000)	(15,293,400)	---
Security deposits	1,400	(14,800)	(14,400)
Net cash used in investing activities	(4,095,200)	(16,618,800)	(1,125,500)
Cash flows from financing activities:			
Payment for fractional shares of stock dividend	---	---	(96,600)
Proceeds from the exercise of stock options	895,700	630,800	128,000
Proceeds from insurance loss	13,000	---	---
Net cash provided by financing activities	908,700	630,800	31,400
Net (decrease) increase in cash and cash equivalents	(8,768,500)	(3,867,400)	8,464,000
Cash and cash equivalents at the beginning of the year	63,267,600	67,135,000	58,671,000
Cash and cash equivalents at the end of the year	$54,499,100	$63,267,600	$67,135,000

See accompanying notes.

Note 1 - Business and summary of significant accounting policies

Business

Enzo Biochem, Inc. (the "Company") is engaged in research, development, manufacturing and marketing of diagnostic and research products based on genetic engineering, biotechnology and molecular biology. These products are designed for the diagnosis of and/or screening for infectious diseases, cancers, genetic defects and other medically pertinent diagnostic information. The Company is conducting research and development activities in the development of therapeutic products based on the Company's technology platform of genetic modulation and immune modulation. The Company also operates a clinical reference laboratory that offers and provides diagnostic medical testing services to the health care community.

Summary of significant accounting policies

Principles of consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated.

Cash and cash equivalents

The Company considers all highly liquid debt instruments purchased with maturities of three months or less to be cash equivalents. Cash equivalents consist of short-term debt securities of domestic companies that the Company intends to hold to maturity through October 2004. The market values of these securities, as determined by quoted sources, aggregated $54,449,100 and $63,267,600 at July 31, 2004 and 2003, respectively, and approximated cost at the respective dates.

Marketable securities

The Company invests funds that are not required for immediate operating needs both in income bond mutual funds and in a diversified portfolio of debt securities. Management determines the appropriate classification of these marketable securities at the time of purchase and reevaluates such designation as of each balance sheet date. The Company classifies its marketable securities as "available for sale" and, accordingly, carries these investments at their aggregate fair values. Unrealized gains or losses, net of tax, on these marketable securities are included as a separate component of stockholders' equity. Realized gains & losses and declines in value judged to be other-than-temporary on the marketable securities are included in investment income. The cost of securities sold is based on the specific identification method.

Concentration of credit risk

Financial instruments that subject the Company to significant concentrations of credit risk primarily consist of cash and cash equivalents, marketable securities and the net accounts receivable. The Company's cash equivalents and marketable securities are invested in financial instruments with high credit ratings.

Approximately 89% at July 31, 2004 and 83% at July 31, 2003, of the Company's net accounts receivable relates to its clinical reference laboratory business, which operates in the New York Metropolitan area. The Company believes that the concentration of credit risk with respect to clinical laboratory's accounts receivable is limited due to the diversity of the Company's client base and to the various numbers of insurance carriers and the numerous individual patient accounts. As is standard in the health care industry, substantially all of the Company's clinical laboratory's accounts receivable is with numerous third party insurance carriers and individual patient accounts. However, the Company provides services to certain patients covered by various third-party payors, including the Federal Medicare program. Revenue, net of contractual allowances, from direct billings under the Federal Medicare program during the years ended July 31, 2004, 2003 and 2002 were approximately 19%, 11% and 10%, respectively, of the Company's total revenue. The clinical reference laboratory industry is characterized by a significant amount of uncollectible accounts receivable related to the inability to receive accurate and timely billing information in order to forward it to the third party payors for reimbursement, and the inaccurate information received from the covered individual patients for unreimbursed unpaid amounts. The Company's provision for uncollectible accounts receivable is within historical expectations.

Note 1 - Business and summary of significant accounting policies (Continued)

Research product revenue from one major distributor represented approximately 0%, 22% and 23% of the consolidated revenues in fiscal 2004, 2003 and 2002, respectively, under a non-exclusive distribution and supply agreement. Research product revenue from this one major distributor accounted for approximately 0% and 50% of the Company's total research product revenues in fiscal 2004 and 2003, respectively.

Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market. Work-in-process and finished goods inventories consist of material, labor, outside processing costs and manufacturing overhead.

Property and equipment

Property and equipment is stated at cost, and depreciated on the straight-line basis over the estimated useful lives of the assets. Leasehold improvements are amortized over the term of the related leases or estimated useful lives of the assets, whichever is shorter.

Patent costs

The Company capitalizes certain legal costs directly incurred in pursuing patent applications as deferred patent costs under its research and development segment. When such applications result in an issued patent, the related costs are amortized over a ten year period, 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.

Revenue Recognition

The Company has certain non-exclusive distribution agreements, which provide for consideration to be paid to the distributors for the manufacture of certain products. In accordance with EITF 00-25 and EITF 01-09, the Company records such consideration provided to distributors under these non-exclusive distribution agreements as a reduction to research product revenues. The revenue from these non-exclusive distribution agreements are recognized when shipments are made from the distributors to their respective customers and reported to the Company.

Revenues from services from the clinical reference laboratory are recognized when services are provided. The Company's revenue is based on amounts billed or billable for services rendered, net of contractual adjustments and other arrangements made with third-party payors to provide services at less than established billing rates. Revenues from research product sales, excluding certain non-exclusive distribution agreement revenues, are recognized when the products are shipped.

Reimbursement Contingencies

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.

Shipping and Handling Costs

Research product revenue shipping and handling costs included in selling expense amounted to approximately $384,000, $414,000 and $325,000 for fiscal years ended July 31, 2004, 2003 and 2002, respectively.

Note 1 - Business and summary of significant accounting policies (Continued)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

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 carryforwards and other items be reduced by a valuation allowance where it is more likely than not that the benefits may not be realized. 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.

Reclassifications

Certain amounts in prior years have been reclassified to conform to current year presentation.

Goodwill and other Intangibles

The Company follows the provisions of the Financial Accounting Standards Board ("FASB") Statement No. 142 ("SFAS 142"), Goodwill and Other Intangibles. Under SFAS 142, goodwill is no longer subject to amortization over its estimated useful life. Rather, goodwill is subject to at least an annual assessment for impairment by applying a fair-value based test. Additionally, an acquired intangible asset should be separately recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if intangible asset can be sold, transferred, licensed, rented or exchanged, regardless of the acquirer's intent to do so. All of the Company's goodwill is related to their clinical reference laboratory segment. The Company adopted SFAS No. 142 as of August 1, 2002 and has performed the requisite impairment testing. The Company has performed their annual impairment testing on the first day of the fourth quarter of their fiscal year. Based on this testing, there is no impairment to the goodwill recorded on the accompanying balance sheet.

SFAS 142 requires the disclosure of net income and earning per share computed on a pro forma basis by reversing the goodwill amortized in the periods presented. Such pro forma disclosures are required in the period of adoption and thereafter until all periods presented reflect goodwill accounted for in accordance with SFAS 142. The goodwill amortized in the year ended July 31, 2002 was $370,700. Therefore, had SFAS 142 been effective prior to August 1, 2002, the Company's net income would have been $7,293,500 for the year ended July 31, 2002. Basic net income per share would have been $.24 for the year ended July 31, 2002. Diluted net income per share would have been $.24 for the year ended July 31, 2002.

Impairment of Long-Lived Assets

The Company accounts for its investments in long-lived assets in accordance with FASB Statement No. 144 ("SFAS No. 144"), Accounting for the Impairment or Disposal of Long-Lived Assets and Long-Lived Assets. The Company adopted SFAS No. 144 on August 1, 2002. SFAS No. 144 requires a company to review its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Factors the Company considers important, which could trigger an impairment review, include, among others, the following:

- a significant adverse change in the extent or manner in which a long-lived asset is being used;
- a significant adverse change in the business climate that could affect the value of a long-lived asset; and
- a significant decrease in the market value of assets.

Note 1 - Business and summary of significant accounting policies (Continued)

If the Company determines that the carrying value of long-lived assets may not be recoverable, based upon the existence of one or more of the above indicators of impairment, the Company compares the carrying value of the asset group to the undiscounted cash flows expected to be generated by the group. If the carrying value exceeds the undiscounted cash flows, an impairment charge may be needed. To determine the amount of the impairment charge, the Company compares the carrying value of the applicable asset group to its fair value. If the fair value is less than the carrying value, such amount is recognized as an impairment charge. As of July 31, 2004 the Company has not recorded an impairment charge.

Stock Dividend

The Company declared a 5% stock dividend on October 5, 2004 payable November 15, 2004 to shareholders of record as of October 25, 2004. The Company declared a 5% stock dividend on June 10, 2003 payable July 14, 2003 to shareholders of record as of June 30, 2003. The Company declared a 5% stock dividend on January 23, 2002 payable February 27, 2002 to shareholders of record as of February 2, 2003. The per share data has been adjusted retroactively to reflect the stock dividend declared on October 5, 2004. The consolidated balance sheet and consolidated statement of stockholders' equity do not give effect to the dividend declared October 5, 2004. The shares and per share data have been adjusted to retroactively reflect the stock dividends in fiscal 2003 and 2002. The Company recorded a charge to accumulated deficit and a credit to common stock and additional paid-in capital in the amounts of approximately $37,709,000 and $26,988,000 in fiscal 2003 and fiscal 2002, respectively, which reflects the fair value of the dividends on the dates of declaration.

Net (loss) income per share

The Company applies SFAS No. 128, "Earnings per Share." SFAS No. 128 establishes standards for computing and presenting earnings per share. Basic net (loss) income per share represents net (loss) income 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, is determined using the treasury stock method in accordance with SFAS No. 128. Diluted weighted average shares outstanding for 2004 do not include the potential common shares from stock options because to do so would have been antidilutive. Accordingly, basic and diluted net loss per share is the same. The number of potential common shares excluded from the calculation of diluted earnings per share during the year ended July 31, 2004 was 798,349 shares.

The following table sets forth the computation of basic and diluted net (loss) income per share pursuant to SFAS No. 128.

	2004	2003	2002
Numerator:			
Net (loss) income for numerator for basic and diluted net income per common share	$(6,231,600)	$3,844,000	$6,922,800
Denominator:			
Denominator for basic net income per common share-weighted-average shares	31,700,000	31,399,000	31,359,000
Effect of dilutive employee and director stock options and warrants	---	776,000	968,000
Denominator for diluted net income per share-adjusted weighted-average shares	31,700,000	32,175,000	32,327,000
Basic net (loss) income per share	$(.20)	$.12	$.22
Diluted net (loss) income per share	$(.20)	$.12	$.21

Note 1 - Business and summary of significant accounting policies (Continued)

Basic earnings per share have been computed using the weighted-average number of shares of common stock outstanding. Diluted earnings per share has been computed using the basic weighted-average shares of common stock issued plus outstanding stock options, in the periods in which such options have a dilutive effect under the treasury stock method.

Stock Compensation Plans

The Company accounts for stock option grants to employees under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations. Under APB No. 25, because the exercise price of the Company's employee stock options equals the market price of the underlying stock on the date of grant, no compensation expense is recorded.

Pro forma information regarding net (loss) income applicable to common stockholders is required by FASB Statement No. 123 ("SFAS 123"), "Accounting for Stock-Based Compensation," which also requires that the information be determined as if the Company has accounted for its stock options under the fair value method of that statement. For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The fair value for these options was estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions used for all grants in the years ended July 31, 2004, 2003, and 2002: no dividend yield, weighted-average expected life of the option of seven years, risk-free interest rate ranges of 3% to 6.88% and a volatility of .74, .77 and .78 for all grants.

The Company follows the provisions of FASB Statement No. 148 ("SFAS 148"), "Accounting for Stock-Based Compensation – Transition and Disclosure." SFAS No. 148 amends SFAS No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition to SFAS No. 123's fair value method of accounting for stock-based employee compensation. SFAS No. 148 also amends the disclosure provisions of SFAS No. 123 to require disclosure in the summary of significant accounting policies of the effects of an entity's accounting policy with respect to stock-based employee compensation on reported net income. While SFAS No. 148 does not amend SFAS No. 123 to require companies to account for employee stock options using the fair value method, the disclosure provisions of SFAS No. 148 are applicable to all companies with stock-based employee compensation, method of SFAS No. 123 or the intrinsic value method of APB No. 25. The Company adopted SFAS No. 148 effective January 31, 2004.

The following table illustrates the effect on net (loss) income if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based (loss) compensation:

Year ended July 31,	2004	2003	2002
Reported net (loss) income…..…….	($6,231,600)	$3,844,000	$6,922,800
Stock compensation expense included in net income……	---	---	---
Pro forma compensation expense……..……..	(3,239,800)	(3,010,900)	(2,597,800)
Pro forma net (loss) income……...	($9,471,400)	$833,100	$4,325,000
Pro forma (loss) earnings per share:			
Basic ……...	($.30)	$.03	$.14
Diluted……....	($.30)	$.03	$.14

Note 2 - Supplemental disclosure for statement of cash flows

In the years ended July 31, 2004, 2003 and 2002, the Company paid cash for income taxes of approximately $219,000, $583,000 and $4,300,000 respectively.

In fiscal 2004, certain officers exercised 769,290 shares of incentive stock options. The officers surrendered 349,932 of previously owned shares of the Company's common stock to be utilized to exercise the stock options. The Company recorded the 349,932 of surrendered shares as treasury stock of approximately $5.6 million as a non cash transaction.

In fiscal 2004, the Company purchased the assets of a privately held company for $650,000, of which 350,000 was paid in cash during fiscal 2004 and the remaining $300,000 is to be paid in two $150,000 installments on the 18 and 36 month anniversary date of the acquisition. The $300,000 is a non-cash transaction at July 31, 2004.

Note 3 – Marketable securities

The following is a summary of available for-sale securities at July 31, 2004 and 2003:

	Fiscal Years Ended July 31,		Unrealized Holding Gain (Loss) Years Ended July 31,	
	2004	2003	2004	2003
Income bond mutual fund	$15,401,300	$15,154,100	$(132,300)	$(139,300)
Marketable securities				
U.S. Government and agency securities	1,063,100	---	---	---
Corporate and other debt securities	777,100	---	(129,400)	---
(Average of remaining maturity of approximately four months at July 31, 2004)	$17,241,500	$15,154,100	$(261,700)	($139,300)

There were no realized gains during fiscal 2004 and 2003 on the Company's marketable securities.

The following is a summary of income tax effects relating to other comprehensive income (loss):

	Before-Tax Amount	Tax (Expense) or Benefit	Net-of-Tax Amount
Fiscal 2004 unrealized loss……	($261,700)	$100,800	($160,900)
Fiscal 2003 unrealized loss……	(139,300)	54,300	(85,000)
Cumulative balance at July 31, 2004….	($401,000)	$155,100	($245,900)

Note 4 - Inventories

At July 31, 2004 and 2003 inventories consist of:

	2004	2003
Raw materials.....	$124,900	$167,900
Work in process.....	2,188,000	2,057,900
Finished products.....	1,121,400	1,196,000
	$3,434,300	$3,421,800

Note 5 - Property and equipment

At July 31, 2004 and 2003 property and equipment consist of:

	2004	2003
Laboratory machinery and equipment.....	$1,901,900	$1,866,700
Leasehold improvements.....	2,543,400	2,327,400
Office furniture and equipment.....	5,650,300	4,896,500
	10,095,600	9,090,600
Accumulated depreciation and amortization.....	7,681,000	6,890,800
	$2,414,600	$2,199,800

Note 6 - Lease obligations

The Company leases its office and laboratory space under several leases that expire between November 30, 2004 and December 2008. Certain officers / directors of the Company own the building that the Company uses as its main facility for laboratories and research and manufacturing. In addition to the minimum annual rentals of space, this lease is subject to an escalation clause. Rent expense under this lease approximated $1,370,000, $1,302,000 and $1,238,000 in fiscal 2004, 2003 and 2002, respectively.

The Company has various other operating leases for office and laboratory space, which expire through fiscal 2009.

Total consolidated rent expense incurred by the Company during fiscal 2004, 2003 and 2002 was approximately $1,801,000, $1,742,000 and $1,710,000 respectively. Minimum annual rentals under operating lease commitments for fiscal years ending July 31 are as follows:

2005	$705,000
2006	$288,000
2007	$210,000
2008	$169,000
2009	$21,000
	$1,393,000

Note 7 – Litigation

Patent Infringement

In June 1999, the Company filed suit in the United States District Court for the Southern District of New York against Gen-Probe Incorporated, Chugai Pharma U.S.A., Inc., Chugai Pharmaceutical Co., Ltd., bioMerieux, Inc., bioMerieux SA, and Becton Dickinson and Company, charging them with infringing the Company's U.S. Patent 4,900,659, which concerns probes for the detection of the bacteria that causes gonorrhea. On January 26, 2001, the court granted the defendants' motion for summary judgment that the Company's patent is invalid. On July 15, 2002, the Court of Appeals for the Federal Circuit reversed the judgment of invalidity and remanded the case to the district court for further proceedings. In March 2003, settlements were reached with bioMerieux and Chugai; the settlements did not have a material monetary impact on the Company. In July 2004, the district court again granted another motion by the remaining defendants (Gen-Probe and Becton Dickinson) that all claims of the Company's patent are invalid. The Company has filed an appeal of that judgment. There can be no assurance that the Company will be successful in the on-going proceedings. However, even if the Company is not successful, management does not believe that there will be a significant adverse monetary impact to the Company.

Note 7 – Litigation (Continued)

On March 6, 2002, the Company was named, along with certain of its officers and directors among others, in a complaint entitled Lawrence F. Glaser and Maureen Glaser, individually and on behalf of Kimberly, Erin, Hannah, and Benjamin Glasser v. Hyman Gross, Barry Weiner, Enzo Biochemical Inc., Elazar Rabbani, Shahram Rabbani, John Delucca, Dean Engelhardt, Richard Keating, Doug Yates and Docs 1-50, in the U.S. District Court for the Eastern District of Virginia. The complaint was filed by an investor in the Company who has filed for bankruptcy protection and his family. The complaint alleged securities and common law fraud and breach of fiduciary duty and seeks in excess of $150 million in damages. On August 22, 2002, the complaint was voluntarily dismissed; however a new substantially similar complaint was filed at the same time. On October 21, 2002, the Company and the other defendants filed a motion to dismiss the complaint, and the plaintiffs responded by amending the complaint and dropping their claims against defendants Keating and Yates. On November 18, 2002, the Company and the other defendants again moved to dismiss the Amended Complaint. On July 16, 2003, the Court issued a Memorandum Opinion dismissing the Amended Complaint in its entirety with prejudice. Plaintiffs thereafter moved for reconsideration but the Court denied the motion on September 8, 2003. The plaintiffs subsequently appealed to the Fourth Circuit and that appeal is presently pending. The Company does not believe that the complaint has any merit and was correctly dismissed, and intends to continue to defend the complaint vigorously in any event.

In March 2002, Enzo Life Sciences, a subsidiary of the Company, filed suit in the United States District Court for the District of Delaware against Digene Corp., charging it with infringing the Company's U.S. Patent No. 6,221,581 B1, which concerns a novel process for detecting nucleic acids of interest. On May 31, 2002, Digene filed counterclaims in that suit against Enzo Life Sciences and the Company, including business tort counterclaims relating to the '581 patent. On October 13, 2004, the Company, its wholly owned subsidiary Enzo Life Sciences, Inc. ("Enzo Life Sciences") and Digene Corporation ("Digene") entered into a Settlement and License Agreement (the "Agreement") and a Joint Stipulation and Order of Dismissal with Prejudice (the "Stipulation"). The Agreement provides for (i) the full and final settlement of the Litigation and (ii) the grant to Digene of a non-exclusive, worldwide, royalty-bearing license with respect to such '581 Patent and the remaining patents in the '581 patents global family. The '581 patent is set to expire on April 24, 2018. Pursuant to the Agreement Digene is irrevocably required to pay Enzo Life Sciences and aggregate of $30.5 million of which Life Sciences received U.S. $16 million (the "First Payment") from Digene on October 14, 2004. Digene will pay to Enzo U.S. $16.5 million (subject to the $2 million credit discussed below) ("Additional Irrevocable Payments"), $2.5 million of which shall be paid by November 14, 2005 and $3.5 million per year by November 14 of each of 2006, 2007 2008 and 2009. In addition, Digene shall pay Enzo Life Sciences Running Royalties on Net Sales of Licensed Products. Each Additional Irrevocable Payment is fully creditable by Digene against the Running Royalties that are due under the Agreement. Digene at it discretion may credit $2 million of the First Payment against either the payment required to be paid by Digene by November 14, 2005 or the Running Royalties due Enzo Life Sciences under the Agreement. The Stipulation which will be filed with the Court by October 15, 2004 dismisses with prejudice all claims, counterclaims and defenses brought or raised by any party to the Litigation.

In October 2002, the Company filed suit in the United States District Court of the Southern District of New York against Amersham plc, Amersham Biosciences, Perkin Elmer, Inc., Perkin Elmer Life Sciences, Inc., Sigma-Aldrich Corporation, Sigma Chemical Company, Inc., Molecular Probes, Inc. and Orchid Biosciences, Inc. In January 2003, the Company amended its complaint to include defendants Sigma Aldrich Co. and Sigma Aldrich, Inc. The counts set forth in the suit are for breach of contract; patent infringement; unfair competition under state law; unfair competition under federal law; tortious interference with business relations; and fraud in the inducement of contract. The complaint alleges that these counts arise out of the defendants' breach of distributorship agreements with the Company concerning labeled nucleotide products and technology, and the defendants' infringement of patents covering the same. In April, 2003, the Court directed that individual complaints be filed separately against each defendant. A number of the defendants have answered the individual complaints and asserted a variety of affirmative defenses and counterclaims. Fact discovery is currently scheduled to close on May 6, 2005. The Court will conduct a claim construction hearing on June 28, 2005. There can be no assurance that the Company will be successful in this litigation. However, even if the Company is not successful, management does not believe that there will be a significant adverse monetary impact to the Company.

Note 7 – Litigation (Continued)

On October 28, 2003, the Company and Enzo Life Sciences, Inc., a subsidiary of the Company, filed suit in the United States District Court of the Eastern District of New York against Affymetrix, Inc. The Complaint alleges that Affymetrix improperly transferred or distributed substantial business assets of the Company to third parties, including portions of the Company's proprietary technology, reagent systems, detection reagents and other intellectual property. The Complaint also charges that Affymetrix failed to account for certain shortfalls in sales of the Company's products, and that Affymetrix improperly induced collaborators and customers to use the Company's products in unauthorized fields or otherwise in violation of the agreement. The Complaint seeks full compensation from Affymetrix to the Company for its substantial damages, in addition to injunctive and declaratory relief to prohibit, among other things, Affymetrix's unauthorized use, development, manufacture, sale, distribution and transfer of the Company's products, technology, and/or intellectual property, as well as to prohibit Affymetrix from inducing collaborators, joint venture partners, customers and other third parties to use the Company's products in violation of the terms of the agreement and the Company's rights. Subsequent to the filing of the Complaint against Affymetrix, Inc. referenced above, on or about November 10, 2003, Affymetrix, Inc. filed its own complaint against the Company and its subsidiary, Enzo Life Sciences, Inc., in the United States District Court for the Southern District of New York, seeking among other things, declaratory relief that Affymetrix, Inc., has not breached the parties' agreement, that it has not infringed certain of Enzo's Patents, and that certain of Enzo's patents are invalid. The Affymetrix complaint also seeks damages for alleged breach of the parties' agreement, unfair competition, and tortuous interference, as well as certain injunction relief to prevent alleged unfair competition and tortuous interference. The Company does not believe that the complaint has any merit and intends to defend vigorously. Affymetrix also moved to transfer venue of Enzo's action to the Southern District of New York, where other actions commenced by Enzo were pending as well as Affymetrix's subsequently filed action. On January 30, 2004, Affymetrix's motion to transfer was granted. Accordingly, the Enzo and Affymetrix actions are now both pending in the Southern District of New York. Pleadings have not been completed and discovery has not commenced.

On June 2, 2004 Roche Diagnostic GmbH and Roche Molecular Systems, Inc. (collectively "Roche") filed suit in the U.S. District Court of the Southern District of New York against Enzo Biochem, Inc. and Enzo Life Sciences, Inc. (collectively "Enzo"). The complaint was filed after Enzo rejected Roche's latest cash offer to settle Enzo's claims for, *inter alia*, alleged breach of contract and misappropriation of Enzo's assets. The complaint seeks declaratory judgment (i) of patent invalidity with respect to Enzo's 4,994,373 patent, (ii) of no breach by Roche of its 1994 Distribution and Supply Agreement with Enzo (the "1994 Agreement"), (iii) that non-payment by Roche to Enzo for certain sales of Roche products does not constitute a breach of the 1994 Agreement, and (iv) that Enzo's claims of ownership to proprietary inventions, technology and products developed by Roche are without basis. In addition, the suit claims tortious interference and unfair competition. The Company does not believe that the complaint has merit and intends to vigorously respond to such action with appropriate affirmative defenses and counterclaims.

On June 7, 2004, the Company and its wholly-owned subsidiary, 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. The complaint alleges infringement of six patents (relating to DNA sequencing systems, labelled nucleotide products, and other technology). Yale University is the owner of four of the patents and the Company is the exclusive licensee. Accordingly, Yale is also a plaintiff in the lawsuit. Yale and Enzo are aligned in protecting the validity and enforceability of the patents. Enzo Life Sciences is the owner of the remaining two patents. The complaint seeks permanent injunction and damages (including treble damages for wilful infringement). Defendants answered the complaint on July 29, 2004. The answer pleads affirmative defences of invalidity, estoppel and laches and asserts counterclaims of non-infringement and invalidity. A trial date has not been set. Discovery commences on September 15, 2004. 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.

Note 8 - Income taxes

The Company accounts for income taxes under the provisions of SFAS No. 109 "Accounting for Income Taxes".

	2004	2003	2002
Current			
Federal	($3,288,000)	$1,828,000	$2,211,600
State and local	191,500	181,400	485,500
Deferred	(1,751,600)	(128,100)	720,000
(Benefit) provision for income taxes	$(4,848,100)	$1,881,300	$3,417,100

Deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements. The components of deferred income taxes are as follows:

	2004	2003
Current deferred tax assets:		
Provision for uncollectible accounts receivable……	$1,072,500	$837,100
State and local taxes carry forward losses……	720,900	---
Other	181,400	176,700
Current deferred tax assets……	1,974,800	1,013,800
Non current deferred tax liability:		
Deferred patent costs	(906,800)	(1,234,800)
Non current deferred tax asset:		
Depreciation……	462,000	---
Non current deferred tax liability, net……	(444,800)	(1,234,800)
Net deferred tax asset (liability)	$1,530,600	($221,000)

In assessing the reliability of deferred tax assets, management considers whether it is more likely than not that some portion or the entire deferred tax asset will be realized. The ultimate realization of the deferred tax asset is dependent upon the generation of future taxable income. Management considers scheduled reversals of deferred tax liabilities, projected future taxable income and tax planning strategies that can be implemented by the Company in making this assessment.

The provisions for income taxes were at rates different from U.S. federal statutory rates for the following reasons:

	2004	2003	2002
Federal statutory rate	(34%)	34%	34%
Expenses not deductible for income tax return purposes	3%	2%	2%
State income taxes, net (benefit) of federal tax deduction.	(4%)	3%	5%
Benefit of foreign sales…….	(2%)	(4%)	(4%)
Fixed asset basis difference……..	(8%)	---	---
Benefit of tax credits	---	---	(4%)
Other……	1%	(2%)	---
	(44%)	33%	33%

Note 9 – Stockholders' equity

Treasury stock

In fiscal 2004, certain officers exercised 769,290 shares of incentive stock options. The officers surrendered 349,932 of previously owned shares of the Company's common stock to be utilized to exercise the stock options. The Company recorded the 349,932 of surrendered shares as treasury stock of approximately $5.6 million as a non cash transaction.

Note 9 – Stockholders' equity (Con't)

Incentive stock option plan

The Company has incentive stock option plans ("1993 plan" and "1994 plan") under which the Company may grant options for up to 2,110,650 shares (1993 plan) and up to 1,336,745 shares (1994 plan) of common stock. No additional options may be granted under the 1993 plan or the 1994 plan. In fiscal 1999, the Company set up a new incentive stock options plan ("1999 plan") under which the Company may grant up to 2,202,244 shares of common stock. The exercise price of options granted under such plans is equal to or greater than fair market value of the common stock on the date of grant. The options granted pursuant to the plans may be either incentive stock options or no statutory options. To date, the Company has only granted incentive stock options under these plans.

A summary of the information pursuant to the Company's stock option plan for the years ended July 31, 2004, 2003 and 2002 under SFAS No. 123 is as follows:

	2004		2003		2002	
	Options	Weighted - Average Exercise Price	Options	Weighted - Average Exercise Price	Options	Weighted-Average Exercise Price
Outstanding at beginning of year	3,397,087	$9.88	2,841,401	$9.38	2,864,595	$8.85
Granted	428,925	$17.02	661,225	$11.76	26,046	$20.20
Exercised	(917,539)	$7.16	(79,838)	$6.85	(17,630)	$7.33
Terminated	(51,672)	$10.13	(25,701)	$12.51	(31,611)	$10.69
Outstanding at end of year	2,856,801	$11.86	3,397,087	$9.88	2,841,401	$9.38
Exercisable at end of year	1,770,492	$10.54	2,490,003	$8.98	2,297,908	$8.81
Weighted average fair value of options granted during year		$12.40		$8.49		$14.18

The following table summarizes information for stock options outstanding at July 31, 2004:

	Options Outstanding			Options Exercisable	
Range of Exercise prices	Shares	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
$5.42-8.08	390,660	3.32 years	$6.00	390,660	$6.00
$8.32-12.25	1,741,557	5.52 years	$11.09	1,168,734	$11.08
$12.93-14.36	644,708	1.98 years	$15.92	135,563	$15.92
$20.20-24.42	61,643	7.00 years	$21.42	57,302	$21.42
$36.05	18,232	5.45 years	$36.05	18,232	$36.05
	2,856,801			1,770,492	

Incentive stock options generally become exercisable at 25% per year after one year and expire ten years after the date of grant.

Note 9 – Stockholders' equity (Con't)

Restricted stock incentive plan

The Company has a restricted stock incentive plan whereby the Company may award up to 281,420 shares of its common stock. Under the terms of the plan, any shares issued are restricted in regard to sales and transfers for a period of five years after award. Such restrictions begin to expire at 25% per year after the second year of ownership. As of July 31, 2004, the Company has not awarded any shares of common stock under this plan.

****

As of July 31, 2004, the Company has reserved 3,640,359 shares under the arrangements described above.

Note 10 – Commitments

The Company has an exclusive licensing agreement to an invention covered by licensed patents. Under this agreement, the Company is required to make certain minimum royalty payments of $200,000 per year through the life of the patents.

Note 11 – Acquisitions

In fiscal 2004, the Company purchased the assets of a privately held company for $650,000, of which $350,000 was paid in cash during fiscal 2004 and the remaining $300,000 is to be paid in two $150,000 installments on the 18 and 36 month anniversary date of the acquisition. The Company has allocated the entire purchase price to patents as of July 31, 2004.

Note 12 - Employee benefit plan

The Company has a qualified Salary Reduction Profit Sharing Plan (the "Plan") for eligible employees under Section 401(k) of the Internal Revenue Code. The Plan provides for voluntary employee contributions through salary reduction and voluntary employer contributions at the discretion of the Company. For the years ended July 31, 2004, 2003 and 2002, the Company has authorized employer contributions of 50% of the employees' contribution up to 10% of the employees' compensation in Enzo Biochem, Inc. common stock. The 401(k) employer contributions expense was $282,300, $257,200, and $247,000 in fiscal years 2004, 2003 and 2002, respectively.

Note 13 – Quarterly financial data (unaudited)

The following table contains statement of operations information for each quarter of fiscal 2004 and 2003. The Company believes that the following information reflects all normal recurring adjustments necessary for a fair presentation of the information for the periods presented. The operating results for any quarter are not necessarily indicative of results for any future period.

Unaudited quarterly financial data (in thousands, except per share amounts) for fiscal 2004 and 2003 is summarized as follows:

	Three Months Ended			
	October 31, 2003	January 31, 2004	April 30, 2004	July 31, 2004
Revenues	$10,273	$11,028	$11,765	$8,578
Gross profit	7,567	8,099	8,705	4,167
Loss before benefit for taxes on income	($816)	($2,755)	($891)	($6,618)
Net loss	($323)	($1,455)	($460)	($3,994)
Basic loss per common share	($.01)	($0.05)	($0.02)	($0.12)
Diluted loss per common share	($.01)	($0.05)	($0.02)	($0.12)

	Three Months Ended			
	October 31, 2002	January 31, 2003	April 30, 2003	July 31, 2003
Revenues	$17,356	$13,112	$11,640	$10,659
Gross profit	13,966	10,340	8,923	6,556
Income (loss) before provision for taxes on income	6,047	2,370	2,022	(4,714)
Net income (loss)	$3,688	$1,446	$1,233	($2,523)
Basic income (loss) per common share	$.12	$.04	$.04	($.08)
Diluted income (loss) per common share	$.12	$.04	$.04	($.08)

Note 14 – Subsequent event

On October 13, 2004, the Company, its wholly owned subsidiary Enzo Life Sciences, Inc. ("Enzo Life Sciences") and Digene Corporation ("Digene") entered into a Settlement and License Agreement (the "Agreement") and a Joint Stipulation and Order of Dismissal with Prejudice (the "Stipulation"). The Agreement provides for (i) the full and final settlement of the Litigation and (ii) the grant to Digene of a non-exclusive, worldwide, royalty-bearing license with respect to such '581 Patent and the remaining patents in the '581 patents global family. The '581 patent is set to expire on April 24, 2018. Pursuant to the Agreement Digene is irrevocably required to pay Enzo Life Sciences and aggregate of $30.5 million of which Life Sciences received U.S. $16 million (the "First Payment") from Digene on October 14, 2004. Digene will pay to Enzo U.S. $16.5 million (subject to the $2 million credit discussed below) ("Additional Irrevocable Payments"), $2.5 million of which shall be paid by November 14, 2005 and $3.5 million per year by November 14 of each of 2006, 2007 2008 and 2009. In addition, Digene shall pay Enzo Life Sciences Running Royalties on Net Sales of Licensed Products. Each Additional Irrevocable Payment is fully creditable by Digene against the Running Royalties that are due under the Agreement. Digene at it discretion may credit $2 million of the First Payment against either the payment required to be paid by Digene by November 14, 2005 or the Running Royalties due Enzo Life Sciences under the Agreement. The Stipulation which will be filed with the Court by October 15, 2004 dismisses with prejudice all claims, counterclaims and defenses brought or raised by any party to the Litigation.

Note 15--Segment Reporting

The Company applies SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information." SFAS No. 131 establishes standards for reporting information regarding operating segments in annual financial statements and requires selected information for those segments to be presented in interim financial reports issued to stockholders. SFAS No. 131 also establishes standards for related disclosures about products and services and geographic areas. The chief operating decision maker, or decision-making group, in making decision how to allocate resources and assess performance, identifies operating segments as components of an enterprise about which separate discrete financial information is available for evaluation.

The Company has two reportable segments: research and development and clinical reference laboratories. The Company's research and development segment conducts research and development activities as well as selling products derived from these activities. The clinical reference laboratories provide diagnostic services to the health care community. The Company evaluates performance based on (loss) income before (benefit) provision for taxes on income. The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. Costs excluded from income before provision for taxes on income and reported as other consist of corporate general and administrative costs that are not allocable to the two 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 following financial information (in thousands) represents the reportable segments of the Company:

	Research and Development Fiscal Year Ended July 31,			Clinical Reference Laboratories Fiscal Year Ended July 31,			Other Fiscal Year Ended July 31,			Consolidated Fiscal Year Ended July 31,		
	2004	2003	2002	2004	2003	2002	2004	2003	2002	2004	2003	2002
Operating revenues:												
Research product revenues……..	$12,972	$23,253	$25,963	---	---	---	---	---	---	$12,972	$23,253	$25,963
Clinical laboratory services……..		---	---	$28,672	$29,514	$28,052	---	---	---	28,672	29,514	28,052
Cost and expenses:												
Cost of research product revenues……	2,518	3,389	1,837	---	---	---	---	---	---	2,518	3,389	1,837
Cost of clinical laboratory services……	---	---	---	10,586	9,593	10,110	---	---	---	10,586	9,593	10,110
Research and development expense……...	8,078	8,311	6,179	---	---	---	---	---	---	8,078	8,311	6,179
Depreciation and amortization……....	1,414	881	923	902	893	1,231	$45	$34	---	2,361	1,808	2,154
Provision for uncollectible accounts.....	1,753	616	---	10,234	8,729	14,188	---	---	---	11,987	9,345	14,188
Other costs and expenses……..	508	609	420	8,429	7,294	6,279	9,409	8,048	$3,858	18,346	15,951	10,557
Interest income……...	---	---	---	---	---	---	1,152	1,355	1,350	1,152	1,355	1,350
(Loss) income before (benefit) provision for Taxes on income…..……	$(1,299)	$9,447	$16,604	$(1,479)	$3,005	$(3,756)	$(8,302)	($6,727)	($2,508)	$(11,080)	$5,725	$10,340

The Company's reportable segments are determined based on the services they performed and the products they sell, not on the geographic area in which they operate. The Company's clinical reference laboratories segment operates 100% in the United States with all revenue derived from this country. The research and development segment earns revenue both in the United States and foreign countries. The following is a summary of research and development revenues attributable to customers located in the United States and foreign countries:

	2004	2003	2002
United States……	$8,029	$19,492	$21,431
Foreign Countries……	4,943	3,761	4,532
	$12,972	$23,253	$25,963

Corporate Information

Board of Directors

John J. Delucca
Former Chief Financial Officer
and Executive Vice President
Coty, Inc.

Marcus A. Conant, M.D.
Clinical Professor, University of
California San Francisco

Irwin C. Gerson
Chairman Emeritus, Lowe
McAdams Healthcare Division
of the Interpublic Group

Melvin F. Lazar, CPA
Founding Partner
Lazar, Levine & Felix, LLP

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

Shahram K. Rabbani
Chief Operating Officer,
Treasurer and Secretary

John B. Sias
Former President and
Chief Executive Officer
Chronicle Publishing Co.

Barry W. Weiner
President and Chief Financial Officer

Officers and Management

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

Shahram K. Rabbani
Chief Operating Officer,
Treasurer and Secretary

Barry W. Weiner
President and Chief Financial Officer

Dean L. Engelhardt, Ph.D.
Executive Vice President

Norman E. Kelker, Ph.D.
Senior Vice President

Herbert B. Bass
Vice President, Finance

Barbara E. Thalenfeld, Ph.D.
Vice President,
Corporate Development

David C. Goldberg
Vice President,
Business Development

Ronald Fedus
Patent Counsel

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Corporate Subsidiaries

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Enzo Clinical Labs, Inc.
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General Counsel
Greenberg Traurig, LLP
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New York, NY 10166

Independent Auditors
Ernst & Young, LLP
395 North Service Road
Melville, NY 11747

Transfer Agent and Registrar
American Stock Transfer &
Trust Company
59 Maiden Lane
New York, NY 10038

Common Stock
Listed on NYSE
(Symbol:ENZ)

A copy of the Company's annual report on Form 10-K, as filed with the Securities and Exchange Commission, will be furnished without charge to any shareholder upon written request to: Enzo Biochem, Inc. Attention: Investor Relations 527 Madison Avenue, New York, NY 10022.

Market for Registrant's Common Equity And Related Stockholder Matters

The common stock of the Company is traded on the New York Stock Exchange: (Symbol:ENZ). The following table sets forth the high and low sale price of the Company's Common Stock for the periods indicated as reported on the New York Stock Exchange.

	High	Low
2003 Fiscal Year (August 1, 2002 to July 31, 2003):		
1st Quarter	$16.40	$11.64
2nd Quarter	$15.86	$12.76
3rd Quarter	$15.23	$11.50
4th Quarter	$30.10	$14.78
2004 Fiscal Year (August 1, 2003 to July 31, 2004):		
1st Quarter	$22.45	$17.35
2nd Quarter	$20.95	$15.85
3rd Quarter	$19.88	$14.20
4th Quarter	$15.69	$12.57

As of October 7, 2004, the Company had approximately 1,171 record holders of its Common Stock.

The Company has not paid a cash dividend on its Common Stock and intends to continue to follow a policy of retaining future earnings to finance its operations. Accordingly, the Company does not anticipate the payment of cash dividends to holders of Common Stock in the foreseeable future.

The Company declared a 5% stock dividend on October 5, 2004 payable November 15, 2004 to shareholders of record as of October 25, 2004. The Company declared a 5% stock dividend on June 10, 2003 payable July 14, 2003 to shareholders of record as of June 30, 2003. The Company declared a 5% stock dividend on January 23, 2002 payable February 27, 2002 to shareholders of record as of February 2, 2002. The shares and per share data have been adjusted retroactively to reflect the stock dividend declared on October 5, 2004. The consolidated balance sheet and consolidated statement of stockholders' equity do not give retroactively effect to the dividend declared October 5, 2004. The shares and per share data have been adjusted to retroactively reflect the stock dividends in fiscal 2003 and 2002. The Company recorded a charge to accumulated deficit and a credit to common stock and additional paid-in capital in the amounts of approximately $37,709,000 and $26,988,000 in fiscal 2003 and fiscal 2002 and fiscal 2001, respectively, which reflects the fair value of the dividends on the dates of declaration.

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