SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

Mark one

|X| ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended July 31, 1999

or

|_| TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 1-9974

ENZO BIOCHEM, INC.

(Exact name of Registrant as Specified in Its Charter)

New York	13-2866202
(State or Other jurisdiction of Incorporation or Organization)	I.R.S. Employer Identification No.)
60 Executive Boulevard, Farmingdale, New York	11735
(Address of Principal Executive Offices)	(Zip Code)

(516) 755-5500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, $.01 par value	The American Stock Exchange
(Title of Each Class)	(Name of Each Exchange on Which Registered)

Securities registered pursuant to Section 12(g) of the Act:

NONE

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes |X| No |_|

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. |X|

The aggregate market value of the Common Stock held by nonaffiliates as of October 20, 1999 was approximately $482,510,700.

As of October 20, 1999, the Registrant had 25,099,736 shares of Common Stock outstanding

Part of Form 10-K	Document Incorporated by Reference
Part III - Items 11, 12 and 13	In the Company's Proxy Statement to be filed with the Securities and Exchange Commission no later than November 29, 1999
Part IV - Certain exhibits listed in response to Item 14(a)(3)	Prior filings made by the Company under the Securities Act of 1999 and the Securities Exchange Act of 1934

PART I

Item I. Business

Introduction

Enzo Biochem, Inc. (the "Company" or "Enzo") develops, manufactures and markets health care products based on molecular biology and genetic engineering techniques, and also provides diagnostic services to the medical community. The business activities of the Company are performed by one of the Company's three wholly-owned subsidiaries--Enzo Diagnostics, Inc., Enzo Therapeutics, Inc., and Enzo Clinical Labs, Inc. ("Enzo Diagnostics", "Enzo Therapeutics" and "Enzo Clinical Labs", respectively). These activities are: (1) research and development, manufacture and marketing of diagnostic research products and therapeutic products through Enzo Diagnostics and Enzo Therapeutics, and (2) the operation of a clinical reference laboratory through Enzo Clinical Labs. For information relating to the Company's business segments, see Note 12 of the Notes to Consolidated Financial Statements.

For the fiscal year ended July 31, 1999 (fiscal 1999), approximately 37% of the Company's operating revenues was derived from product sales and approximately 63% was derived from clinical reference laboratory services. For the fiscal years ended July 31, 1998 and 1997 (fiscal 1998 and fiscal 1997, respectively), approximately 31% and 38% of the Company's operating revenues were derived from product sales and approximately 69% and 62% were derived from clinical reference laboratory services.

Product Development Activities

The Company's product development programs incorporate various scientific areas of expertise, including recombinant DNA, monoclonal antibody development, enzymology, microbiology, biochemistry, molecular biology, organic chemistry, and fermentation. The Company's activities in research and development are performed by the Company's professional and scientific staff. To a lesser extent, research and development is pursued in collaboration with outside consultants at research and academic institutions.

The primary focus of the Company's current research is the development of products based on two technology platforms -- genetic modulation and immune modulation. The Company is funding its research programs through its operating cash flows and cash and cash equivalents. It also is seeking joint ventures and collaborative relationships.

Through Enzo Diagnostics, the Company develops products based on gene identification and a major component of this technology platform is, the Company's proprietary BioProbe(R) nucleic acid probe products. The Company has devoted a major portion of its research and development activities to develop simple and reliable test formats and protocols for the commercialization of probe products, as well as other diagnostic products for the diagnostic and medical research markets. The Company has continued to introduce new products based on its proprietary technology into the research market during fiscal 1999.

The product development programs of the Company include the use of its BioProbe(R) technology for the development of tests to detect sexually transmitted diseases such as AIDS, herpes, chlamydia, gonorrhea and other infectious diseases including tuberculosis, cytomegalovirus, hepatitis and Epstein-Barr virus (implicated in mononucleosis). The Company currently markets several such products.

The Company, through Enzo Therapeutics, is developing therapeutic applications based on its genetic modulation and immune modulation technologies. In May 1987, the Company entered into an agreement with the Research Foundation of the State University of New York, granting the Company certain exclusive rights to "genetic antisense" a technology that uses specially constructed genes inserted into cells to regulate the functioning of target genes. The Company has patents and pending applications covering this technology. In fiscal 1999, the company began studies for products using its proprietary immune modulation platform.

In fiscal 1998, the Company entered into a licensing agreement with Japan Tobacco, Inc. for use of this technology in Japan. This agreement is the first agricultural licensing agreement involving the Company's proprietary technology and covers the development of new and improved strains of rice. The Company believes that this technology will be the basis for the Company to derive meaningful revenues in the future.

Whenever the Company complements its internal research and development activities with collaborative research arrangements with academic and private research institutions or consultants on specific projects, the Company typically supplies funds to cover salaries, materials, certain laboratory equipment and a portion of the overhead. In all such collaborative research arrangements, the Company reserves the patent and commercial rights to any product or process developed. The location of the

Company in the greater New York area affords the Company access to and interaction with a large number of research institutions and qualified scientists.

In the fiscal years ended July 31, 1999, 1998 and 1997, the Company incurred costs of $4,427,000, $3,983,500 and $3,561,900, respectively, for research and development activities.

Clinical Reference Laboratory

The Company, through Enzo Clinical Labs, operates a clinical reference laboratory that offers full diagnostic services to the greater New York medical community. The services Enzo Clinical Labs provides include chemistry, blood tests, cytology studies, tissue pathology, hormone studies, and diagnostic procedures that seek to detect precancerous conditions, cancers in cervical specimens and sexually transmitted diseases. Enzo Clinical Labs provides these services primarily to physicians as well as to clinics, and other clinical laboratories. Enzo Clinical Labs operates a regional clinical reference laboratory on Long Island and also operates eleven satellite patient service centers in the greater New York area, including a stat laboratory in Manhattan. The patient service center collects the specimens as requested by the physician. The specimens are sent through the Company's in-house courier system to the Company's laboratory for testing. A "STAT" lab is a laboratory that has the ability to perform certain routine tests quickly and report results to the physician immediately.

Patient specimens are delivered to the Company accompanied by a test request form. These forms, which are completed by the physician, indicate the tests to be performed and provide the necessary billing information. Once this information is entered into the computer system, the tests are performed and the results are entered primarily through a computer interface or manually. Most routine testing is completed by early the next morning, and test results are printed and prepared for distribution. Some physicians have local printer capability and have reports printed out directly in their offices. Physicians who request that they be called with a result are so notified in the morning.

The Company currently offers over 2,000 different routine and esoteric clinical laboratory tests or procedures. Several hundred of these are frequently used in general patient care by physicians to establish or support a diagnosis, to monitor treatment or medication or to search for an otherwise undiagnosed condition. These routine and esoteric procedures are most often used by practicing physicians in their outpatient office practices.

Approximately 88% and 92% at July 31, 1999 and 1998, respectively, of the Company's net accounts receivable related 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 accounts receivable are limited due to the diversity of the Company's client base. 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 each of the fiscal years ended July 31, 1998 and 1997 approximated 10% and 12%, respectively of the Company's total revenue. For the year ended July 31, 1999, 1998 and 1997 no other payor accounted for more than 10% of the Enzo Clinical Labs revenues.

In addition, the Company utilizes its clinical reference laboratory to evaluate and demonstrate the benefits of the Company's diagnostic products (see Note 12 of the Notes to Consolidated Financial Statements for segment information and operating revenues and profits).

Business Objectives

The current business objectives of the Company are (1) to develop; manufacture and market on a worldwide basis diagnostic and therapeutic products based on the Company's technology platforms of genetic modulation and immune modulation, and (2) to perform diagnostic tests for the U.S. health care community. The Company's research and development efforts are directed to both short and long-term projects. Diagnostic products require less time to commercialize than therapeutic products because the procedures required for attaining government clearance are less time consuming. Therapeutic products, once developed, require extensive clinical testing and compliance. This process can range from three to five years and, in some instances, longer.

At such time, if ever, as the Company's self-funded research activities and programs demonstrates technical feasibility and potential commercial importance, the Company expects that it will have the option to pursue the opportunity on its own or to associate with another entity for development and ultimate marketing of the product. There can, however, be no assurance that an acceptable partner could be found if sought. The Company's strategy is to retain ownership with respect to development and marketing of a product or process unless there is a compelling business reason to its licensed products or process.

Marketing Strategy

Product Development Activities

The Company has been successful in obtaining clearance from the Federal Drug Administration ("FDA") for a number of in vitro diagnostic products for sale to the clinical diagnostic market through Enzo Diagnostics. Among these products are four DNA probe products based on the Company's BioProbe(R) nucleic acid probe technology and developed and manufactured by the Company. The Company believes that significant delays will not be encountered with any future probe product submissions to the FDA since products based on this technology have been FDA cleared. However, there can be no assurance that delays will not be incurred.

Through Enzo Diagnostics, the Company manufactures and markets its BioProbe(R) nucleic acid probe products to the research market, where FDA clearance is not required. These research products include products that allow researchers to make and detect their own non-radioactive DNA and RNA probes. Also included in this product line are complete kits that contain all the reagents necessary to detect various disease-causing organisms in clinical samples.

During fiscal 1998, the Company developed the BioArray(TM) Labeling Systems, a product line designed and optimized to meet the needs of those research scientists using microchip array assays. The BioArray(TM) products provide efficient labeling, strong signals and clear displays characteristics that are required for microchip assays. These products are manufactured and sold by Enzo Diagnostics to researchers directly and through the company's worldwide distribution network.

Enzo Diagnostics manufactures and markets a variety of in situ hybridization kits. These PathoGene(R) DNA probe kits detect the presence of specific pathogens, including human papillomavirus (HPV), herpes simplex virus, cytomegalovirus, Epstein-Barr virus, adenovirus, hepatitis B virus and Chlamydia trachomatis. The Company's BioPap(R) DNA probe kits detect several types of HPV in Pap smear samples. The Company has developed an enhanced detection procedure with increased sensitivity that enables the pathologist to identify the pathogen when only small numbers of the organism are present. These products compete directly with products labeled with various radioactive isotopes, as well as with products based on antibody assays.

In addition to the in situ hybridization kits, Enzo Diagnostics also manufactures and markets products based on the Company's proprietary microplate hybridization format. Microplate hybridization assay kits have been developed for the detection of the AIDS-causing virus, HIV-1. Kits are also available to detect HIV-2, another strain of the AIDS virus, hepatitis B virus, the tuberculosis-causing bacterium (MTB) and members of the MTB complex. An enhanced version of the microplate assay has been developed to detect the hepatitis virus directly in serum and is aimed at the blood bank market.

Enzo's HIV test was one of the first commercial DNA probe tests for this pathogen in the microplate format. Unlike AIDS tests that detect antibodies to HIV-1, the DNA probe test detects nucleic acid DNA unique to the virus. Individuals may carry HIV for months before developing antibodies, therefore a test directed at the virus can provide earlier detection. Because Enzo's HIV microplate hybridization assay can be used as a means to quantify the virus, researchers can determine HIV levels in patients and study relationships between these levels and other disease indicators such as antibody production or appearance of symptoms. This product is currently marketed to the research community.

In the early stages of infection, a pathogen may be present in very small amounts and may be difficult to detect. Samples, however, can be treated in a way that produces copies of the pathogen's nucleic acid, if it is present. This amplification process is one possible approach to detect very low levels of infection. All of Enzo's microplate assays can be used to detect the presence of these pathogens in amplified, as well as unamplified samples. In order to fully integrate its technology, Enzo has developed a simplified amplification process for multicopy production of nucleic acid. A patent application was filed in January 1994 and this proprietary amplification process was incorporated into the microplate assay format, thus providing a totally integrated assay system. This approach is being developed for use with the hepatitis assay system and will form the basis for all Enzo's microplate assays.

In addition to nucleic acid-based products, the Company produces and sells other types of research products, such as monoclonal antibodies. The products are marketed through direct sales, an extensive product catalog, advertising in scientific and trade journals and U.S. and foreign distributors. In fiscal 1993, Enzo Diagnostics began to expand its non-exclusive distribution arrangements for its proprietary products in both the U.S. and foreign markets with companies having worldwide distribution and with companies having local foreign

distribution. In fiscal 1994, the Company continued to expand these distribution arrangements and began a policy of using joint labels on all products marketed by its distributors.

In April 1994, the Company signed a multi-year non-exclusive worldwide distribution and supply agreement with Boehringer Mannheim Biochemicals (Roche Diagnostics GmbH). Under the terms of this agreement, Roche Diagnostics GmbH distributes to the global medical research market, a broad range of biochemical products and reagents manufactured and supplied by Enzo. The agreement includes products based on nonradioactive DNA probe technology and includes products that were developed and marketed by Roche Diagnostics GmbH prior to the agreement, as well as products developed by the Company, all of which are

covered by Enzo patents. The agreement took effect in April 1994 and extends for the life of the last patent to expire for products involved.

In February 1995, a multi-year non-exclusive distribution agreement was signed with Amersham International under which Amersham markets a broad group of products that had been developed and marketed by Amersham, as well as products developed by Enzo Diagnostics. All products are based on nonradioactive DNA labeling technologies covered by Enzo patents. A multi-year non-exclusive distribution agreement, also covering the Company's line of proprietary DNA labeling products and reagents was concluded in May 1995 with Dako A/S, a privately-held international company with headquarters in Copenhagen, Denmark and subsidiaries worldwide, including the Dako Corporation based in Carpinteria, California. In September 1995 a similar multi-year non-exclusive distribution agreement was concluded with VWR Scientific Products, a leader in the medical research market that was formerly an operating unit of Baxter Health Care. In fiscal 1997 a previous distribution agreement with Sigma Chemical Co. was expanded and an additional multi-year nonexclusive distribution agreement was concluded with Wako Chemical Co., a leader in the medical research market in Japan.

During fiscal 1998, Enzo Diagnostics continued expanding its non-exclusive distribution network. In October 1997, the Company signed an agreement with Li-Cor, Inc, a developer of instrumentation for biological sciences, under which Enzo will produce and supply its proprietary DNA labeling and detection reagents to be used in conjunction with Li-Cor's automated DNA sequence analysis systems for the medical research market. In May 1998, the Company concluded an agreement with Affymetrix, Inc. under which Enzo will be the sole supplier of specified proprietary nucleic acid labeling and detection products for Affymetrix' microchip array systems.

In January 1999, the Company through Enzo Diagnostics further expanded its distribution network by concluding a worldwide distribution agreement with NEN Life Science Products, Inc. Under the agreement NEN began to distribute a broad range of Enzo's biochemical products and reagents to the global medical research market. The agreement covers products manufactured by NEN and based on both Enzo's and NEN's proprietary non-radioactive DNA labeling and detection technologies, that were marketed by NEN prior to the agreement, as well as products developed by Enzo, all of which are covered by Enzo patents. With the signing of this agreement, the issue of prior sales and past infringement by NEN was satisfactorily resolved.

The Company, because of its various proprietary diagnostic technologies, may pursue entering into joint ventures with other biotechnology companies or other health care companies with marketing resources and/or complementary technology or products in order to more fully take advantage of market opportunities.

Clinical Reference Laboratory

Enzo Clinical Labs is a major regional clinical reference laboratory offering full service diagnostic testing in the greater New York marketplace. Its services are marketed by a professional sales force who serve client physicians, clinics, nursing homes and other clinical laboratories in the area. A key marketing strategy has been the strategic placement of a network of patient service centers, where patients can go to have samples taken upon the request of their physicians. The Company operates a stat laboratory at its Manhattan patient service center, affording its client physicians rapid test turnaround. The diagnostic service business provides Enzo Diagnostics with a practical application of its products, making it possible to more appropriately tailor diagnostic products to the end-user. The Company's nucleic acid probe products offer Enzo Clinical Labs a marketing tool to offer nucleic acid based tests.

The Company offers its services through direct sales representatives. Sales representatives market the laboratory services primarily to physicians, clinics, hospitals and other laboratories. The Company's sales representatives are compensated through a combination of salaries, commissions and bonuses, at levels commensurate with each individual's qualifications and responsibilities. Commissions are primarily based upon the individual's productivity in generating

new business for the Company.

The Company also employs customer service representatives ("CSR's") to interact with clients on an ongoing basis. CSR's monitor the status of the services being provided to clients, act as problem solvers, provide information on new testing developments and serve as the client's regular point of contact with the Company. CSR's are compensated with a salary commensurate with each individual's qualifications and responsibilities.

Health care reform, the shift to managed care and increased competition by hospitals all had an impact on the clinical laboratory testing industry. The Company expects these trends to continue and plans to respond by shifting additional sales staff to support the managed care market segment.

Technology and Product Development

The major focus of the Company's diagnostic product development program has been toward the commercialization of nucleic acid probe-based in vitro diagnostics. Nucleic acid probes had been radioactive and required complex protocols to their use. To develop probe technology into useful commercial products, it was necessary to develop methods that were for, easy-to-use, easy to interpret, readily automatable and sensitive enough to detect the presence of low levels of pathogen. As a result of this product development effort, the Company has developed a broad technology base for the labeling, detection, sensitivity enhancement, signal amplification and testing formats of nucleic acid probe products. Patent protection has been aggressively pursued for this technology base. At the end of fiscal 1999 some 186 patents worldwide had been granted to or licensed by the Company in this area of technology. In fiscal 1997 and continuing during fiscal 1998 and 1999, the Company began to receive revenues from the distribution agreements related to these patents and believes that the patents have positioned the Company to derive more revenues in the future as the markets for these products continue to develop. These patents cover a variety of nucleic acid probe products, chelation technology for easy radioactive labeling, signal amplification methods, sensitivity enhancements, and automatable formats.

BioProbe(R) Nucleic Acid Probe Labeling and Signal Generating Systems

Traditionally, nucleic acid probes used in biomedical research and recombinant DNA technology have been radioactively labeled with isotopes of hydrogen, phosphorous, carbon or iodine. Radioactive materials have historically provided researchers with the most sensitive and, in many cases, the only means to perform many important experimental or analytical tests. However, limitations and drawbacks are associated with the use of radioactive compounds. For example, radioactive materials are often very unstable and have a limited shelf life. Because of the potentially hazardous nature of radioactive materials, their use must be licensed and elaborate safety precautions must be maintained during the preparation, utilization and disposal of radioisotopes. In addition, radioactive nucleotides are extremely expensive and there instability increases usage cost.

To overcome the limitations of radioactively labeled probes, the Company, has developed proprietary technologies that allow DNA probes to be used effectively without the use of radioactivity. These technologies permit the application of genetic analysis in a clinical setting without the shelf life, licensing and disposal problems associated with radioactively labeled probes.

In December 1987, a patent for the technology used in nonradioactive DNA probe labeling was issued to (`Yale") University. In July 1994 and in September 1995 additional patents, broadening the coverage were also issued to Yale. The Company has an exclusive license for these patents from Yale for their life. Pursuant to such license agreement, the Company is obligated to pay Yale royalties equal to a percentage of sales. The Company is obligated to pay Yale an annual minimum royalty fee of $200,000, which shall continue through the end of the term of the exclusive license.

The near term application of nucleic acid probe systems in the human health care area is in bacterial and viral diagnostics. Nucleic acid probe diagnostics can be developed for any organism. Advantages of the nucleic acid probes for the direct detection of pathogens in human diagnostics are speed (less than an hour for test results as compared to days), greater specificity, and the capability of diagnosing a disease in an early or latent stage of development.

Radioactive Labeling Systems

The Company has developed a new method for labeling molecules with radioisotopes that is safer, faster, simpler and more cost effective than traditional methods of radiolabeling. This method is to be used in those applications requiring more sensitivity than non-radioactive materials permit. This method permits radiolabeling of a wide range of molecules for use in a variety of applications, including in vivo imaging, therapeutics, and clinical assays. With this technology stable products are radiolabeled just prior to use,

thereby overcoming inherent limitations of classical radiolabeling technologies. The Company's method for radiolabeling maximizes the sensitivity while minimizing radiation exposure and radioactive waste.

In November 1987, the Company received two U.S. patents protecting aspects of its versatile technology for linking radioactive ions or biotin to various biologically active molecules for diagnostic and therapeutic uses. Since that time additional patents covering aspects of this technology have been issued to the Company.

Automatable Test Formats

In February 1991, the Company was granted a U.S. patent for its nucleic acid probe technology that generates a signal in solution. This technology enables the development of probe-based tests that can be readily automated and measured by instrumentation. With this technology, probes can be detected by either chemiluminescent, fluorescent or colorimetric methods. The Company has developed test kits employing this technology and currently supplies such kits to the research market. The first kits launched in fiscal 1992, include a test for HIV-1, the virus that causes AIDS and a test for the organism causing tuberculosis. Tests for other viruses, including HIV-2 another strain of the AIDS virus and hepatitis were later introduced to researchers. A more

sensitive assay that can detect hepatitis B virus directly in serum and geared to the blood banking market was developed. More recently the Company's amplification technology was integrated with the enhanced hepatitis assay. The Company is developing an instrument-based automatable system employing this and other proprietary Enzo technologies.

Rapid, On-Site Diagnostics

The Company also has developed a gel-based diagnostic test technology that is geared to accurate, rapid, and one-step tests. The ease of performing and interpreting tests based on this proprietary gel technology makes these tests well suited for at-home and doctor's office use. The Company has developed a fecal occult blood test to screen for colorectal cancer based on the gel technology and has received FDA clearance to market this test to the physician's offices. The Company is exploring other tests based on the gel technology.

Monoclonal Antibodies

The Company markets a panel of monoclonal antibodies that are being used in pathology laboratories to help identify the original source of a metastatic cancer and the type of cancer in undifferentiated cancer cells. The ability to identify the origin and type of cancer aids in the diagnosis of cancer and assists physicians in prescribing therapy. In order to offer a full line of state-of-the-art research products, the Company is actively engaged in expanding its line of monoclonal antibodies.

Therapeutic Technology and Product Development

Through Enzo Therapeutics, the Company is applying its technological capabilities for manipulating genetic material towards the development of therapeutic treatments for a variety of infectious diseases and cancers. During fiscal 1998, the Company improved a new gene delivery system that is designed to provide universal and efficient delivery of any gene to any cell. The GenSert(TM) Universal Delivery System is being combined with Enzo's antisense technology in its therapeutic development program. The Company has also developed techniques for stably attaching drugs and radioisotopes to proteins and DNA. The Company is working towards the development of products relating to HIV, certain cancers and hepatitis, however, no products have been finalized and there can be no assurance that any such products will even be successfully developed.

In May 1987, Enzo entered into an agreement with The Research Foundation of the State of New York ("SUNY"), granting the Company certain exclusive rights to its genetic antisense technology. Three U.S. applications were subsequently issued as patents by the U.S. Patent and Trademark Office. The first patent issued in March 1993; a second patent issued in May 1993; the third patent issued in December 1993. Similar patents covering this technology have been issued in Europe and in Japan. See Item 3- Legal Proceedings.

This antisense technology theoretically offers a way to control the expression of any gene in any organism, therefore the Company believes it has broad therapeutic and agricultural applications. For example, genetic antisense could make possible a new approach to controlling viral diseases and cancers. It could also be used to control viral diseases in animals and agriculturally important plants and could lead to a variety of other desirable traits in animals and in agricultural crops. Genetic antisense has proven to be effective in a variety of organisms, including plants, animals and bacteria. Researchers have developed transgenic mice that are resistant to murine leukemia virus and tomato plants that produce tomatoes that do not spoil upon ripening. The Company

is currently in human clinical studies with an antisense product for the treatment of HIV-1 infection. It is also exploring the development of a number of other antisense-based therapeutic products.

Because genetic antisense has such broad application, the Company is exploring collaborative business relationships of various types with other companies to develop the applications that Enzo is not interested in retaining for its own activities. The Company is itself involved in applying genetic antisense to human therapeutic products and it recognizes that the technology also holds important implications for crops, as well as animal husbandry and industrial uses. In January 1998, the Company entered into a licensing agreement with Japan Tobacco, Inc., for use of the Company's patented genetic antisense technology in Japan. This agreement is the first agricultural licensing agreement involving Enzo's proprietary technology and covers the development of new and improved strains of rice.

In January 1995, the Company, through Enzo Therapeutics, signed a collaborative research agreement with Cornell University on behalf of Cornell's Medical College, aimed at evaluating the Company's genetic antisense technology for use in managing the treatment of HIV-1, the AIDS-causing virus. Early research results indicated that this technology could be applied to inhibiting the function of genes necessary for HIV-1 to grow within the cell. In preclinical studies, Enzo scientists and collaborators were able to demonstrate stable resistance to HIV in human immune cells in culture that were treated with the Company's HIV product. These results were published in May 1997 in the Journal of Virology, a peer-reviewed publication of the American Society for Microbiology. The ability of Enzo's genetic antisense construct to enable immune cells to withstand the effects of infection by HIV-1 is an extremely important step in the development of an effective clinical product. Notwithstanding the foregoing, there can be

no assurances that the Company's preclinical success in culture can be repeated in human trials. A key element in the success was the development by Enzo scientists of the Stealth Vector(TM), the antisense construct designed to localize in the cell nucleus, where it could be most effective. The StealthVector(TM) was also designed to be "invisible" to the human immune system, so as not to trigger an immune response.

In October 1997, Enzo Therapeutics signed an agreement with the University of California, San Francisco ("UCSF") to conduct the first human trials of the StealthVector(TM), the Company's genetic antisense medicine to treat HIV-1 infected individuals. This product, designed to stop the growth of the virus, has been developed to protect human immune cells against infection by a broad spectrum of strains of HIV-1 including its mutational variants. The primary investigators for this Phase I trial, physicians at UCSF have extensive experience and expertise in the evaluation of new drugs for the treatment of immunodeficient patients.

An Investigational New Drug ("IND") application was filed with the FDA by the Company and in March 1998, Enzo Therapeutics received clearance from the FDA to initiate the Phase I trial of its Stealth Vector(TM) therapeutic product for HIV-1. In July 1998 the Phase I clinical trial was initiated and is currently on going. In addition to providing an evaluation of the safety of the product, certain aspects of the trial will provide insight on how to formulate and deliver this medicine in the most effective manner.

In February 1996, the Company initiated a joint research program with scientists at the Albert Einstein College of Medicine in New York City, geared towards the development of a specific therapeutic product for the treatment of hepatitis B based on the Company's proprietary technologies. During fiscal 1998, Enzo scientists, working with researchers at Einstein, were successful in developing mice hosting functional human liver cells that can support the growth of hepatitis B virus. Until now, one of the major problems in hepatitis research has been the lack of viable animal models capable of supporting the infection and replication of the virus in human hepatic cells in vivo. This was the first time this type of animal model system capable of supporting the growth of hepatitis B virus in human hepatocytes has been reported. These experimental mice, that can mimic hepatitis infection in humans, can function as an animal model system for evaluation new therapeutic modalities to treat hepatitis B.

In April 1998, the Company, through Enzo Therapeutics, initiated a joint research program with Hadassah University Hospital in Jerusalem, Israel aimed at a preclinical analysis of various therapeutic products using Enzo's proprietary immune modulation technology. This program was designed to study the efficacy of therapeutic treatments based on certain of Enzo's technologies, including oral tolerization, in areas in which the immune response is a major complication in the management of disease and in the control of graft Vs host disease (GvHD), a major complication of bone marrow and stem cell transplantation, accounting for much of the failure of these transplants. GvHD is an immune response mounted by the engrafted tissue or cell population against the recipient and can occasionally lead to death. There is currently no effective treatment for chronic GvHD, however the results of this preclinical studies carried out under

this joint research program have demonstrate that Enzo's immune modulation technology could be effective in negating the effects of GvHD by controlling the immune response mounted by the donor tissue or cells. Clinical protocols have been developed and human trials are expected to begin in the next fiscal year.

Preclinical animal studies begun in fiscal 1998 and continuing this year demonstrate the efficacy of Enzo's immune modulation technologies as a means of treating inflammatory bowel disease, including Crohn's disease and ulcerative colitis. Further studies are planned to explore this use as a therapeutic modality.

During fiscal 1999, preclinical laboratory studies showed strong promise for the Company's proprietary immune modulation technology as a therapeutic modality to treat the undesirable immune responses that lead to serious liver damage among patients suffering form chronic hepatitis B virus. In collaboration with researchers at the Liver Unit of Hadassah University Hospital in Jerusalem, Israel, oral administration of specific hepatitis B proteins was successful in controlling the anti-viral immune response to hepatitis B in laboratory animals. In other studies in collaboration with researchers at the Albert Einstein College of Medicine in New York City, Enzo scientists were successful in using this technology to treat primates infected with hepatitis B virus. The animals were given oral doses of the medicine, either before infection with the virus or after infection. When the medicine was given after HBV infections, the animals showed a decrease in their liver pathology and the liver enzymes returned to normal levels. When the medicine was given before infections with the virus, the animal never developed liver pathology and the liver enzymes remained at normal levels. Thus Enzo's hepatitis B therapy was successful in preventing or treating the liver disease conditions. Based on these and other laboratory studies, clinical protocols have been developed to determine the treatment's efficacy in humans and in July 1999, a human clinical study was initiated and is ongoing at the Liver Unit at Hadassah University Hospital in Jerusalem.

Enzo has filed several patent applications covering this technology, including the unique animal model, as well as therapeutic products and protocols.

According to the latest figures published by the World Health Organization, some 2 billion people today are infected by hepatitis B, of whom 350 million are chronically infected and therefore at risk of death from liver disease.

Notwithstanding the foregoing, there can be no assurances that the Company's success in pre-clinical and early stage trials can be repeated in later stage and/or human trials.

Manufacturing

The Company's nucleic acid probe products contained in its PathoGene(R) and BioPap(TM) product lines are manufactured by using recombinant DNA techniques and traditional chemical synthesis methods. The DNA sequence, which codes for a specific infectious agent or particular trait, is isolated by cloning. The sequence is then introduced into a plasmid, commonly one that grows in E. coli bacterium, and the bacterium serves as a reproduction vehicle with the application of standard fermentation procedures. The reproduced quantities of the specific DNA sequences are purified from the bacteria and then labeled so they can be detected. The detection system usually employs a non-radioactive visualization molecule, such as a color-changing enzyme-substrate or a fluorescent substance. The production of DNA probes does not require large manufacturing facilities because the yields from the bacteria are high and only small quantities of nucleic acids are required.

Monoclonal antibodies specific to certain substances are produced by fusing a type of mouse cancer cell with certain antibody-producing white blood cells from the spleens of mice that had been immunized with the targeted substance. The hybrid cells which make antibodies with the desired characteristics are then cultured to produce large quantities of that one discrete type of antibody. Monoclonal antibody production does not require extensive facilities.

The Company's manufacturing operation uses exempt quantities of tritium ((3)H) in its research and development activities and manufacturing operations. For the fiscal year ended July 31, 1999 the Company has not had an accumulation of tritium to be disposed.

Information Systems

The Company believes that with respect to its clinical reference laboratory business, the health care provider's need for data will continue to place high demands on its information systems staff. The Company believes that the efficient handling of information involving clients, patients, payors and other parties will be a critical factor in the Company's future success. (See Item 7- Management's Discussion and Analysis of Financial Condition and Results

of Operations-Year 2000)

Quality Assurance

The Company considers the quality of its clinical reference laboratory tests to be of critical importance, and it has established a comprehensive quality assurance program designed to help assure accurate and timely test results. In addition to the compulsory external inspections and proficiency programs demanded by the Medicare program and other regulatory agencies, Enzo Clinical Labs has in place systems to emphasize and monitor quality assurance. The Company's laboratory is subject to on-site evaluation by the College of American Pathologies ("CAP") proficiency testing program, New York State survey and the Company's own internal quality control programs.

External Proficiency/Accreditation's

Enzo Clinical Labs participates in numerous externally administered, blind quality surveillance programs, including the CAP program. The blind programs supplement all other quality assurance procedures and give Enzo Clinical Labs' management the opportunity to review its technical and service performance from the client's perspective.

The CAP accreditation program involves both on-site inspections of the laboratory and participation in the CAP's proficiency testing program for all categories in which the laboratory is accredited by the CAP. The CAP is an independent nongovernmental organization of board certified pathologists which offers an accreditation program to which laboratories can voluntarily subscribe. A laboratory's receipt of accreditation by the CAP satisfies the Medicare requirement for participation in proficiency testing programs administered by an external source. The Company's clinical laboratory facilities are accredited by the CAP.

Regulation of Pharmaceutical Products

New drugs are subject to regulation under the Federal Food, Drug and Cosmetic Act, and biological products, in addition to being subject to certain provisions of that Act, are regulated under the Public Health Service Act. The Company believes that products developed by it or its collaborators will be regulated either as biological products or as new drugs. Both statutes and the regulations promulgated thereunder govern, among other things, the testing, manufacturing, safety, efficacy, labeling, storage, record keeping, advertising and other promotional practices involving biologics or new drugs, as the case may be. FDA approval or other clearances must be obtained before clinical testing, and before manufacturing and marketing, of biologics and drugs. At the FDA, the

Center for Biological Evaluation and Research ("CBER") is responsible for the regulation of new biologics and the Center for Drug Evaluation and Research ("CDER") is responsible for the regulation of new drugs.

Any gene therapy products (one of the areas in which the Company is developing products) developed by the Company will require regulatory clearances prior to clinical trials and additional regulatory clearances prior to commercialization. New human gene therapy products, as therapeutics, are subject to regulation by the FDA and comparable agencies in other countries. The precise regulatory requirements with which the Company will have to comply are uncertain at this time due to the novelty of the human gene therapies currently under development. Currently, each protocol is reviewed by the FDA on a case-by-case basis. The FDA has published "Points to Consider" guidance documents with respect to the development of gene therapy protocols.

Obtaining FDA approval has historically been a costly and time-consuming process. Generally, in order to gain FDA approval, a developer first must conduct pre-clinical studies in the laboratory and, if appropriate, in animal model systems, to gain preliminary information on safety and efficacy. The results of these studies are submitted as a part of an investigational new drug ("IND") application, which the FDA must review before human clinical trials of an investigational drug can start. The IND application includes a detailed description of the clinical investigations to be undertaken.

In order to commercialize any products, the Company (sponsor) files an IND and will be responsible for initiating and overseeing the clinical studies to demonstrate the safety and efficacy necessary to obtain FDA approval of any such products. For Company sponsored INDs, the Company as sponsor will be required to select qualified clinical sites (usually physicians within medical institutions) to supervise the administration of the products, and ensure that the investigations are conducted and monitored in accordance with FDA regulations and the general investigational plan and protocols contained in the IND. Clinical trials are normally done in three phases, although the phases may overlap. Phase I trials, concerned primarily with the safety and preliminary effectiveness of the drug, involve fewer than 100 subjects. Phase II trials normally involve a few hundred patients and are designed primarily to

demonstrate effectiveness in treating or diagnosing the disease or condition for which the drug is intended, although short-term side effects and risks in people whose health is impaired may also be examined. Phase III trials are expanded clinical trials with larger numbers of patients and are intended to gather the additional information for proper dosage and labeling of the drug. Clinical trials generally take two to five years, but the period may vary. Recent regulations promulgated by the FDA may shorten the time periods and reduce the number of patients required to be tested in the case of certain life-threatening diseases, which lack available alternative treatments.

The FDA receives reports on the progress of each phase of clinical testing, and it may require the modification, suspension, or termination clinical trials if an unwarranted risk is presented to patients. Human gene therapy products are a new category of therapeutics. There can be no assurance as to the length of the clinical trial period, the number of patients the FDA will require to be enrolled in the clinical trials in order to establish the safety, efficacy and potency of human gene therapy products, or that the clinical data generated in these studies will be acceptable to the FDA to support marketing approval.

After completion of clinical trials of a new product, FDA marketing approval must be obtained. If the product is regulated as a new biologic, CBER will require the submission and approval of both a Product License Application ("PLA") and an Establishment License Application before commercial marketing of the Biologic. If the product is classified as a new drug, the Company must file a New Drug Application ("NDA") with CDER and receive approval before commercial marketing of the drug. The NDA or PLA must include results of product development, pre-clinical studies and clinical trials. The testing and approval processes require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all. NDAs and PLAs submitted to the FDA can take, on average, two to five years to receive approval. If questions arise during the FDA review process, approval can take more that five years. Notwithstanding the submission of relevant data, the FDA may ultimately decide that the NDA or PLA does not satisfy its regulatory criteria for approval and require additional clinical studies. Even after FDA regulatory clearances are obtained, a marketed product is subject to continual review, and later discovery of previously unknown problems or failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. In addition, the FDA may condition marketing approval on the conduct of specific post-marketing studies to further evaluate safety and effectiveness.

If a developer obtains designations by the FDA of a biologic or drug as an "orphan" drug for a particular use, the developer may request grants from the federal government to defray the costs of qualified testing expenses in connection with the development of such drug. Orphan drug designation is given to drugs for rare diseases, including many genetic diseases. The first applicant who has obtained designation of a drug as an orphan drug and who obtains approval of a marketing application for such drug is entitled to marketing exclusivity for a period of seven years. This means that no other company can market a molecularly identical orphan drug for the use approved by the FDA for seven years after the approval.

Regulation of Diagnostics

The diagnostic products developed by the Company or its collaborators are likely to be regulated by the FDA as medical devices. The nature of the FDA requirements applicable to such diagnostic devices depends on their classification by the FDA. A diagnostic device developed by the Company or its collaborators would be automatically classified as a Class III device, requiring pre-market approval, unless the sponsor could demonstrate to the FDA, in the required pre-market notification procedure, that the device was substantially equivalent to an existing device that has been classified in Class I or Class II or to a pre-1976 device that has not yet been classified. If the Company or its collaborators are unable to demonstrate such substantial equivalence, it would be required to undertake the time consuming process, comparable to that for new drugs, of conducting pre-clinical studies, obtaining an investigational device exemption to conduct clinical tests, filing a pre-market approval application, and obtaining FDA clearance.

If the Company or its collaborators can demonstrate substantial equivalence to a Class I product, the "general controls" of the Food, Drug, and Cosmetic Act- chiefly adulteration, misbranding, and good manufacturing practice requirements - will apply. If substantial equivalence to a Class II device can be shown, the general controls plus "special controls" - such as performance standard, guidelines for safety and effectiveness, and postmarket surveillance- will apply. While demonstrating substantial equivalence to a Class I or Class II product is not as costly or time-consuming as the pre-market approval process for Class III devices, it also involves conducting clinical tests to demonstrate, equivalence, or that any differences between the new device and devices already on the market do not affect safety or effectiveness.

Other - Regulation

The Company's business is and will be subject to regulation under various state and federal environmental laws, including the Occupational Safety and Health Act, the Recourse Conservation and Recovery Act and the Toxic Substances Control Act. These and other laws govern the Company's use, handling and disposal of various biological, chemical and radioactive substances used in and wastes generated by its operations. The Company believes that it is in material compliance with applicable environmental laws and that its continual compliance therewith will not have a material adverse effect on its business.

The Company has in-house personnel to expedite the preparation and filing of documentation necessary for FDA clearances and approvals, patent issuances and licensing agreements. The Company has received clearance from the FDA to market five of its in vitro diagnostic products. The Company also has several products in various stages of clinical trial evaluation which, if successful, are expected to be carried through the FDA process.

Clinical Laboratory Regulation and Reimbursement

The clinical laboratory industry is also subject to significant governmental regulation at the Federal, state and local levels. Under the Clinical Laboratory Improvement Act of 1967 and the Clinical Laboratory Improvement Amendments of 1988 (collectively, as amended, "CLIA"), virtually all clinical laboratories, including the Company's, must be certified by the Federal government. Many clinical laboratories also must meet governmental standards, undergo proficiency testing and are subject to inspection. Certificates or licenses are also required by various state and local laws.

The health care industry is undergoing significant change as third-party payors, such as Medicare (serving primarily patients 65 and older) and Medicaid (serving primarily indigent patients) and insurers, increase their efforts to control the cost, utilization and delivery of health care services. In an effort to address the problem of increasing health care costs, legislation has been proposed or enacted at both the Federal and state levels to regulate health care delivery in general and clinical laboratories in particular. Some of the proposals include managed competition, global budgeting and price controls. Although the Clinton Administration's health care reform proposal, initially advanced in 1994, was not enacted, such proposal or other proposals may be considered in the future. In particular, the Company believes that reductions in reimbursement for Medicare services will continue to be implemented from time to time. Reductions in the reimbursement rates of other third-party payors are likely to occur as well. The Company cannot predict the effect health care reform, if enacted, would have on its business, and there can be no assurance that such reforms, if enacted, would not have a material adverse effect on the company's business and operations.

In 1992, the U.S. Department of Health and Human Services ("HHS") published regulations implementing CLIA. The quality standards and enforcement procedure regulations became effective in 1992, although certain personnel, quality control and proficiency testing requirements are currently being phased in by HHS. The quality standards regulations divide all tests into three categories (waivered, moderate complexity and high complexity) and establish varying requirements depending upon the complexity of the test performed. A laboratory that performs high complexity tests must meet more stringent requirements than a laboratory that performs only moderate complexity tests, while those that perform only one or more of either routine "waivered" tests may apply for a waiver from most requirements of CLIA. The Company's facility is certified by CLIA to perform high complexity testing. Generally, the HHS regulations require, for laboratories that perform high complexity or moderate complexity tests, the

implementation of systems that ensure the accurate performance and reporting of test results, establishment of quality control systems, proficiency testing by approved agencies and biennial inspections.

The sanction for failure to comply with these regulations may be suspension, revocation or limitation of a laboratory's CLIA certificate necessary to conduct business, significant fines and criminal penalties. The loss of a license, imposition of a fine or future changes in such Federal, state and local laws and regulations (or in the interpretation of current laws and regulations) could have a material adverse effect on the Company.

The Company is also subject to state regulation. CLIA provides that a state may adopt more stringent regulations than Federal law. The State of New York's clinical laboratory regulations contain provisions that are more stringent than Federal law. The Company's laboratory has continuing programs to ensure that their operations meet all applicable regulatory requirements.

Containment of health care costs, including reimbursement for clinical laboratory services, has been a focus of ongoing governmental activity. In 1984,

Congress established a Medicare fee schedule for clinical laboratory services performed for patients covered under Part B of the Medicare program. Subsequently, Congress imposed a national ceiling on the amount that can be paid under the fee schedule. Laboratories must accept the scheduled amount as payment in full for most tests performed on behalf of Medicare beneficiaries and must bill the program directly. In fiscal 1999 and 1998, the Company derived approximately 13% and 10%, respectively of its revenue from tests performed for beneficiaries of Medicare and Medicaid programs. In addition, the Company's other business depends significantly on continued participation on these programs because clients often want a single laboratory to perform all of their testing services. Since 1984, Congress has periodically reduced the ceilings on Medicare reimbursement to clinical laboratories from previously authorized levels. Because a significant portion of the Company's costs are relatively fixed, these Medicare reimbursement reductions have a direct adverse effect on the Company's net earnings and cash flows. The Company cannot predict if additional Medicare reductions will be implemented.

On January 1, 1993, numerous changes in the Physicians' Current Procedural Terminology ("CPT") were published. The CPT is a coding system that is published by the American Medical Association. It lists descriptive terms and identifying codes for reporting medical and medically related services. The Medicare and Medicaid programs require suppliers, including laboratories, to use CPT codes when they bill the programs for services performed. HCFA implemented these CPT changes for Medicare and Medicaid on August 1, 1993. The CPT changes have altered the way the Company bills Medicare and Medicaid for some of its services, thereby reducing the reimbursement the Company receives from those programs for some of its services. In March 1996, the HCFA implemented changes in the policies used to administer Medicare payments to clinical laboratories for the most frequently performed automated blood chemistry profiles. Among other things, the changes established a consistent standard nationwide for the content of the automated chemistry profiles. Another change incorporated in the HCFA proposal requires laboratories performing certain automated blood chemistry profiles to obtain and provide documentation of the medical necessity of tests included in the profiles for each Medicare beneficiary. Reimbursements have been reduced as a result of this change.

Future changes in Federal, state and local regulations (or in the interpretation of current regulations) affecting governmental reimbursement for clinical laboratory testing could have a material adverse effect on the Company. The Company is unable to predict, however, whether and what type of legislation will be enacted into law. The Medicare and Medicaid anti-kickback laws prohibit intentionally paying anything of value to influence the referral of Medicare and Medicaid business.

Infectious Wastes and Radioactive Materials

The Company is subject to licensing and regulation under Federal, state and local laws relating to the handling and disposal of medical specimens, infectious and hazardous waste and radioactive materials as well as to the safety and health of laboratory employees. All Company laboratories are operated in accordance with applicable Federal and state laws and regulations relating to biohazard disposal of all facilities specimens and the Company utilizes outside vendors for disposal of such specimens. Although the Company believes that it is currently in compliance in all material respects with such Federal, state and local laws, failure to comply could subject the Company to denial of the right to conduct business, fines, criminal penalties and/or other enforcement actions.

Occupational Safety

In addition to its comprehensive regulation of safety in the workplace, the Federal Occupational Safety and Health Administration ("OSHA") has established extensive requirements relating to workplace safety for health care employers, including clinical laboratories, whose workers may be exposed to blood-borne pathogens such as HIV and the hepatitis B virus. These regulations, among other things, require work practice controls, protective clothing and equipment, training, medical follow-up, vaccinations and other measures designed to minimize exposure to, and transmission of, blood-borne pathogens. The use of controlled substances in testing for drugs of abuse is regulated by the Federal Drug Enforcement Administration.

Proprietary Technology - Patents

As novel techniques, processes, products or microorganisms are developed during the course of its research and development activities, the Company will seek U.S. and, if deemed necessary, foreign patents. At the end of fiscal 1999 the Company owned or licensed 36 U.S. and some 163 foreign patents and had filed approximately 215 U.S. and foreign patent applications covering products, methods and procedures resulting from the Company's internal or sponsored research projects. Patents relating to the BioProbe(R) nucleic acid probe system have issued in the U.S. and Europe. Management believes that additional patents will issue shortly and over the next several years with respect to the Company's pending applications. There can be no assurance, however, that patents will be

issued on pending applications or that any issued patents will have commercial benefit. The Company does not intend to rely on patent protection as the sole basis for protecting its proprietary technology. It also relies on its trade secrets and continuing technological innovation. The Company's policy is to have its employees sign confidentiality agreement prohibiting the employee from disclosing any confidential information about the Company, including the Company's technology or trade secrets.

In some instances, the Company may enter into royalty agreements with collaborating research parties in consideration for the commercial use by the Company of the developments of their joint research. In other instances a patent may be obtained by the collaborating party with the Company receiving a license to use the patented subject matter. In such cases, the Company will seek to secure exclusive licenses.

In other instances, the Company may have an obligation to pay royalties to, or reach a royalty arrangement with, a third party in consideration of the Company's use of developments of such third party. The Company has an exclusive licensing agreement with Yale for the technology used in nucleic acid probe products. The agreement covers licensed patents owned by Yale and licensed to the Company for the life of the patents which expire not earlier than 2004. See "Business-Technology and Product Development -BioProbe(R) Nucleic Acid Probe Labeling and Signal Generating System."

In fiscal 1987, the Company entered into an agreement with The Research Foundation of the State University of New York giving the Company exclusive rights to a genetic engineering technology using antisense nucleic acid control methodologies. This technology is covered by three U.S. patent applications subsequently issued as patents by the U.S. Patent and Trademark Office. The first patent issued in March 1993; a second patent issued in May 1993; the third patent issued in December 1993. The term of the license agreement extends through the life of such patents as may issue therefrom. See "Business-Technology and Patent Development - Therapeutic Technology and Product Development."

Human Resources

As of July 31, 1999, the Company employed 189 full-time and 41 part-time employees. Of the full-time employees, 33 were engaged in research, development, manufacturing and marketing of research products and 156 at the clinical reference laboratories. The scientific staff of the Company possesses a wide range of experience and expertise in the areas of recombinant DNA, nucleic acid chemistry, molecular biology and immunology. The Company believes that relations with its employees are good.

Competition

The Company's biotechnology activities compete with pharmaceutical, chemical, energy, and food companies which are diversifying into biotechnology, and with specialized biotechnology firms in the United States and elsewhere. Competition from existing companies and from newly formed private enterprises is expected to increase.

Most of the Company's competitors in the biotechnology industry are performing research in many of the same areas as the Company. Many of these competitors are larger and have greater financial and other resources than the Company. The primary competitive factors in the biotechnology field are the ability to create and maintain scientifically advanced technology during a period of rapid technological development, to attract and retain a breadth and depth of human resources, to develop proprietary products or processes and to have available adequate financial resources for bridging the often substantial time lag between technical concept and commercial implementation.

The Company's clinical reference laboratories activity, which is conducted in the New York metropolitan area, competes with numerous national and local entities, some of which are larger and have greater financial resources than the Company. Enzo Clinical Labs competes primarily on the basis of the quality and specialized nature of its testing, reporting and information services, its reputation in the medical community, the pricing of its services, its reliability and speed in performing diagnostic tests, and its ability to employ qualified laboratory personnel. The Company also believes that its ability to compete also depends on its ability to make investments in equipment and management information systems.

CAUTIONARY STATEMENT FOR PURPOSES OF THE "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements to encourage companies to provide prospective information about their companies without fear of litigation so long as those statements are identified as forward-looking and are accompanied by meaningful cautionary statements identifying important factors that could cause

actual results to differ materially from those projected in the statement. The Company desires to take advantage of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 and is including this section herein in order to do so. Accordingly, the Company hereby identifies the following important factors that could cause the Company's actual financial results to differ materially from those projected, forecast, estimated, or budgeted by the Company in forward-looking statements.

(a) Heightened competition, including the intensification of price competition.

(b) Impact of changes in payor mix, including the shift from traditional, fee-for-service medicine to managed-cost health care.

(c) Adverse actions by governmental or other third-party payors, including unilateral reduction of fee schedules payable to the Company.

(d) The impact upon the Company's collection rates or general or administrative expenses resulting from compliance with Medicare administrative policies including specifically the HCFA's recent requirement that laboratories performing certain automated blood chemistry profiles obtain and provide documentation of the medical necessity of tests included in the profiles for each Medicare beneficiary.

(e) Failure to obtain new customers, retain existing customers or reduction in tests ordered or specimens submitted by existing customers.

(f) Adverse results in significant litigation matters.

(g) Denial of certification or licensure of any of the Company's clinical laboratories under CLIA, by Medicare programs or other Federal, state or local agencies.

(h) Adverse publicity and news coverage about the Company or the clinical laboratory industry.

(i) Inability to carry out marketing and sales plans.

(j) Loss or retirements of key executives.

(k) Impact of potential patent infringement by others or the Company.

(l) Inability to obtain patent protection or secure and maintain proprietary positions on its technology.

Item 2. Properties

The following are the principal facilities of the Company:

<TABLE>
<CAPTION>

Location	Principal Operations	Approximate Floor Area (sq. ft.)	Approximate Annual Base Rent	Expiration Date
<S>	<C>	<C>	<C>	<C>
60 Executive Blvd.	Corporate headquarters, clinical reference and development facilities (See note 4 of Notes to Consolidated Financial Statements)	40,000	$1,080,000	November 30, 2004
527 Madison Ave. New York, NY	Executive office	6,400	$ 288,000	December, 2003

</TABLE>

Management believes that the current facilities will be adequate for current operating needs and in the foreseeable future.

Item 3. Legal Proceedings

In March 1993, the Company filed suit in the United States District Court for the District of Delaware charging patent infringement and acts of unfair competition against Calgene, Inc. and seeking a declaratory judgment of invalidity concerning Calgene's plant antisense patent. On February 9, 1994, the Company filed a second suit in the United States District Court for the District of Delaware charging Calgene with infringement of a second antisense patent

owned by the Company. Calgene filed a counterclaim in the second Delaware action seeking a declaration that a third patent belonging to the Company is invalid. The two Delaware actions have been consolidated and were tried to the Court in April 1995. In addition, the Company filed suit on March 22, 1994 in the United States District Court for the Western District of Washington against Calgene and the Fred Hutchinson Cancer Research Center, alleging that the defendants had conspired to issue a false and misleading press release regarding a supposed "patent license" from Hutchinson to Calgene, and conspired to damage the Company's antisense patents by improperly using confidential information to challenge them in the Patent Office. The Complaint further charges that Hutchinson is infringing and inducing Calgene to infringe the Company's antisense patents. On February 2, 1996, the Delaware Court issued an opinion ruling against Enzo and in favor of Calgene, finding certain Enzo claims infringed, but the patent, as a whole not infringed, and finding the claims at issue invalid for lack of enablement. Calgene's patent was found valid (non-obvious) over the prior art. On February 29, 1996, the Delaware Court issued an Order withdrawing its February 2, 1996 Opinion. On April 3, 1997, the European Patent Office rejected Calgene's opposition that had been lodged against the Company's related European antisense patent, thereby upholding the patent's validity. On May 23, 1997, the Japanese Patent Office issued a related antisense patent owned by the Company.

On June 1, 1998, the U.S. District Court for the District of Delaware issued its final decision in the case. In its decision the District Court held two of the Company's three antisense patents invalid and not infringed. The District Court declined to act on Calgene's claim that the Company's third antisense patent was invalid, citing lack of evidence. The District Court further held that the Calgene antisense patent was not invalid. Enzo appealed the District Court's judgment to the U.S. Court of Appeals for the Federal Circuit and Calgene cross-appealed. On September 24, 1999, the Court of Appeals issued its decision, rejecting Calgene's effort to invalidate Enzo's patent in genetic antisense technology, U.S. Patent No. 5,272,065, thus leaving it valid and standing. The Court of Appeals also clarified the District Court's judgment regarding two other of Enzo genetic antisense patents (5,190,931 and 5,208,149), limiting judgment of invalidity only to the claims of the two patents which had been asserted against Calgene. The Court of Appeals remanded the case to the District Court for determination of whether the case was exceptional, which related to Calgene's claim for attorney fees. On October 7, 1999, Calgene filed a petition for rehearing directed to the Court of Appeal's disposition of Calgene's cross-appeal as to Enzo patent. There can be no assurance that the Company will be successful in connection with Calgene's petition for rehearing and Calgene's claim that the case is exceptional, the latter to be there subject of further proceedings in the District Court. However, even if the Company is not successful, management does not believe there will be a significant monetary impact.

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. The case remains at an early stage. There can be no assurance that the Company will be successful in these proceedings. However, even if the Company is not successful, management does not believe that there will be a significant monetary impact.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were brought to a vote of the Company's stockholders in the fourth fiscal quarter ended July 31, 1999.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

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

	High	Low
1998 Fiscal Year (August 1, 1997 to July 31, 1998):		
1st Quarter	$21 1/4	$14 3/4
2nd Quarter	$17 3/16	$12 1/4
3rd Quarter	$16 1/2	$12 5/8
4th Quarter	$15 1/2	$11 3/4
1999 Fiscal Year (August 1, 1998		

to July 31, 1999):

1st Quarter	$12 1/2	$6 3/8
2nd Quarter	$13 3/4	$9 5/8
3rd Quarter	$12 15/16	$8
4th Quarter	$19 15/16	$9 3/4

On October 20, 1999, the last sale price of the Common Stock of the Company as reported on the American Stock Exchange was $24 11/16.

As of October 20, 1999, the Company had approximately 1,350 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.

On December 15, 1997, the Company declared a 5% stock dividend payable January 23, 1998 to shareholders of record as of January 9, 1998.

Item 6. Selected Financial Data

<TABLE>
<CAPTION>

	For the Years Ended July 31, (In thousands, except per share data)				
	1999	1998	1997	1996	1995
<S>	<C>	<C>	<C>	<C>	<C>
Operating Results:					
Operating revenues	$44,319	$40,417	$34,939	$34,490	$31,701
Litigation settlement, net of legal fees	--	--	--	--	21,860
Write-down of leasehold interest and related costs	--	--	--	7,613	11,400
Interest income, net	1,984	1,885	1,799	1,640	941
Income (loss) before benefit (provision) for taxes on income	5,387	2,570	1,564	(7,508)	9,749
Benefit (provision) for taxes on income	1,128	822	(111)	(199)	(4,131)
Net income (loss)	$6,515	$3,392	$1,453	($7,707)	$5,618
Basic net income (loss) per common share:	$0.26	$0.14	$0.06	($.32)	$.24
Diluted net income (loss) per common share (1):	$0.26	$0.13	$0.06	($.32)	$.23
Denominator for per share calculation:					
Basic	24,933	24,653	24,162	23,840	23,105
Diluted	25,477	25,746	25,498	23,840	24,229
Financial Position:					
Working capital	$59,323	$52,973	$43,232	$29,451	$24,449
Total assets	$78,901	$72,153	$67,419	$62,838	$72,458
Long-term debt and obligation under capital lease	--	--	$46	$114	$4,698
Stockholders' equity	$75,648	$68,783	$64,009	$55,253	$61,113

</TABLE>

(1) In fiscal year 1996, potentially dilutive securities have not been included because the effect of their inclusion would have been anti-dilutive.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Liquidity and Capital Resources

The Company, at July 31, 1999 had cash and cash equivalents of $43.2 million, an increase of $9.7 million from July 31, 1998. The Company had net working capital of $59.3 million at July 31, 1999 compared to $53.0 million at July 31, 1998.

The Company's income before taxes was $5.4 million which includes

depreciation and amortization aggregating approximately $1.9 million. The Company's positive cash flow from operations was sufficient to meet its current cash needs for the research and development programs and other investing activities. The Company believes that its current cash position is sufficient for its foreseeable liquidity and capital resource needs, although there can be no assurance that future events will not alter such view.

Net cash provided by operating activities for the 1999 fiscal year was approximately $11.1 million which also includes $5.0 million of cash received in connection with the litigation settlement as compared to net cash provided by operating activities of $8.3

million for the 1998 fiscal year. The increase in net cash provided by operating activities from fiscal 1998 to fiscal 1999 was primarily due to the Company's increase in net income for fiscal 1999.

Net cash used by investing activities in fiscal 1999 amounted to approximately $1.5 million as a result of capital expenditures and deferred patent costs as compared to net cash used by investing activities of $1.0 million in fiscal 1998. The increase relates primarily to increased capital expenditures in fiscal 1999 compared to fiscal 1998.

Net cash provided by financing activities of $.2 million in fiscal 1999 as compared to $1.1 million in fiscal 1998 represents a decrease of approximately $.9 million. This decrease was attributable primarily to a decrease in proceeds from stock options and warrants exercised during fiscal 1999.

The Company's net accounts receivable of $15.0 million and $14.2 million represent 124 days and 128 days of operating revenues at July 31, 1999 and 1998 respectively. The change in net accounts receivable is due to an increase in accounts receivable at the clinical reference laboratory of approximately $.1 million and an increase of research products accounts receivable of approximately $.7 million.

On October 19, 1994, the Company executed a settlement agreement with Johnson & Johnson, Inc. (J&J) pursuant to which the Company received $15.0 million and a promissory note requiring J&J and its subsidiary, Ortho Diagnostics, Inc., to pay $5.0 million a year for each of the four successive anniversaries of said date. These future payments are recorded at net present value discounted using an interest rate of 5.25%. The litigation settlement amounted to approximately $21.9 million, net of legal fees. Pursuant to the terms of the settlement, all of the Company's grants, licenses and intellectual property have been returned to the Company in totality.

Management is not aware of any material claims, disputes or settled matters concerning third-party reimbursements which would have a material effect on the Company's financial statements.

Results of Operations

Fiscal 1999 Compared to Fiscal 1998

Revenues from operations for the fiscal year ended July 31, 1999 increased by $3.9 million over revenues from operations for the fiscal year ended July 31, 1998. This increase was due to an increase of $.3 million in revenues from the clinical reference laboratory operations over revenue for the similar activity in fiscal 1998 and a increase of $3.6 million in revenues from research product sales. The increase in revenues from the clinical laboratory operations resulted primarily from an increase in volume of diagnostic screening tests and an increase in esoteric testing revenue. The increase in research product sales resulted primarily from an increase in sales from the non-exclusive distribution agreements and an increase in direct sales of research products. The cost of research product revenues increased by $.4 million primarily as a result of the Company's increase in sales from the distribution agreements activities.

Research and development expenses increased by approximately $.4 million as a result of an increase in research programs and the increased amortization of patent costs.

The provision for uncollectible accounts receivable increased by $.3 million primarily due to increased revenues at the clinical reference laboratory and reduced reimbursements received by the Company from Medicare and other third party insurers who generally follow the reimbursement policies of Medicare.

The Company's net accounts receivable from the clinical laboratory operations of $13.2 million and $13.1 million represent an average of 172 days of operating revenue at July 31, 1999 and 1998, respectively. The Company expects that in the future, as a result of the revised Medicare reimbursement policies, the Company will receive reimbursements and cash flows at the clinical reference laboratory at lower rates then those realized in fiscal 1999. The Company will continue its efforts at attempting to control costs associated with the performance of the tests; however, there can be no assurance that such

efforts will be successful.

Income before benefit (provision) for taxes on income from research and development activities and related costs amounts to $2.7 million in fiscal 1999, as compared to income before benefit (provision) for taxes on income of $.2 million in fiscal 1998. The increase in the profit is principally related to the increase in sales of product from the non-exclusive distribution agreements. Income before benefit (provision) for taxes on income from the clinical reference laboratories activities amounted to $2.4 million (9% of clinical laboratory services) as compared to $2.2 million (8% of clinical laboratory services) in fiscal 1998. This increase resulted principally from the increase in the operating revenues of esoteric testing.

In fiscal 1999, the Company recorded a benefit for income taxes of $1.1 million versus a benefit of $.8 million in fiscal 1998. In the fourth quarter of fiscal 1999, the Company recorded a deferred tax benefit of $1.6 million resulting from a reversal of a portion of the deferred tax asset valuation allowance. This was based on management's determination that it was more likely than not that a portion of the deferred tax asset would be realized.

Fiscal 1998 Compared to Fiscal 1997

Revenues from operations for the fiscal year ended July 31, 1998 ("fiscal 1998") increased by $5.5 million over revenues from operations for the fiscal year ended July 31, 1997 ("fiscal 1997"). This increase was due to an increase of $6.0 million in revenues from the clinical reference laboratory operations over revenue for the similar activity in fiscal 1997 and offset by a decrease of $0.5 million in revenues from research product sales. The increase in revenues from the clinical laboratory operations resulted primarily from an increase in volume of diagnostic screening tests and an increase in esoteric testing revenue. The decrease in research product sales resulted primarily from a decrease in lower profit margin sales from the non-exclusive distribution agreements.

The increase in the cost of clinical laboratory services of $1.1 million was primarily due to the costs related to the increased volume of higher costing esoteric tests. However, as a percentage of clinical laboratory services, the cost of sales decreased by 3%, due to the higher sales volume which absorbed the fixed costs of performing these tests. The cost of research product revenues decrease of $0.9 million from the Company's distribution agreements activities was primarily the result of the decrease in the sales of lower priced products.

Research and development expenses increased by approximately $0.4 million as a result of an increase in research programs and the increased amortization of patent costs.

The provision for uncollectible accounts receivable increased by $4.0 million primarily due to increased revenues at the clinical reference laboratory and reduced reimbursements received by the Company from Medicare and other third party insurers who generally follow the reimbursement policies of Medicare. Also, increases in esoteric screening tests not usually covered by third party insurance carriers contributed to this increase.

The Company's net accounts receivable from the clinical laboratory operations of $13.1 million and $11.1 million represent an average of 172 and 186 days of operating revenue at July 31, 1998 and 1997, respectively. The Company expects that in the future, as a result of the revised Medicare reimbursement policies, the Company will receive reimbursements and cash flows at the clinical reference laboratory at the lower rates realized in fiscal 1998. The Company will continue its efforts at attempting to control costs associated with the performance of the tests, however; there can be no assurance that such efforts will be successful.

Income before benefit (provision) for taxes on income from the clinical reference laboratories activities amounted to $2.2 million (8% of clinical laboratory services) as compared to $1.5 million (7% of clinical laboratory services) in fiscal 1997. This increase resulted principally from the increase in the operating revenues of esoteric testing.

In fiscal 1998, the Company recorded a benefit for income taxes of $0.8 million versus a tax provision of $0.1 million in fiscal 1997. In the fourth quarter of fiscal 1998, the Company recorded a deferred tax benefit of $1.0 million resulting from a reversal of a portion of the deferred tax asset valuation allowance. This was based on management's determination that it was more likely than not that a portion of the deferred tax asset would be realized.

Year 2000

The "Year 2000" issue is the result of computer systems that were programmed in prior years using a two digit representation for the year. Consequently, in the Year 2000, date sensitive computer programs may interpret the date "00" as 1900 rather than 2000. The Company has completed an assessment

of its system affected by the Year 2000 issue.

The Company has initiated formal communications with all of its significant suppliers and large customers to determine the extent to which the Company's interface systems are vulnerable to those third parties' failure to remediate their own Year 2000 issues. Due to the general uncertainty inherent in the Year 2000 problem, resulting in part from the uncertainty of the Year 2000 readiness for third-party vendors and payers, the Company is unable to determine at this time whether the consequences of potential Year 2000 business disruptions will have a material impact on the Company's results of operation, liquidity and financial condition.

For the "Year 2000" issue, the Company has identified those systems that require changes to accommodate the Year 2000. The systems were completely upgraded with new hardware and new software with an approximate cost of $500,000 which have been capitalized as property and equipment. The payor systems are being converted per instructions on the part of each payor (i.e. Medicare, Medicaid, insurance companies, etc.).

The Company could experience collection delays if Medicare or other large third party payers (such as insurance companies) experience Year 2000 problems. Medicare carriers are being required to implement new programs required by the 1997 Balanced Budget Act at the same time that they are attempting to make their systems Year 2000 compliant. In September 1998, the General Accounting Office reported that "HCFA and its contractors are behind schedule in repairing, testing and implementing the mission-critical systems supporting Medicare" and concluded that "it is highly unlikely that all of the Medicare systems will be compliant in time to ensure the delivery of uninterrupted benefits and services into the year 2000." However, HCFA is expected to develop contingency plans that may include making estimated payments to providers based on historical claims experience in the event of a system failure during the Year 2000.

While the Company believes that its Year 2000 readiness program significantly reduces the potential adverse effect of any such disruptions, the Company cannot guarantee that the Year 2000 problem will not result in significant business disruptions.

Item 7A Quantitative and Qualitative Disclosures About Market Risk

Not Applicable

Item 8. Financial Statements and Supplementary Data

The response to this item is submitted in a separate section of this report. See Item 14(a) (1) and (2)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Registrant

(a) Directors - The following sets forth certain information regarding directors of the Company who are not executive officers of the Company. Information with respect to directors of the Company who are also executive officers of the Company appears below under the subcaption "Executive Officers." The Company has a classified Board of Directors consisting of three classes.

JOHN B. SIAS (age 72) has been a Director of the Company since January 1982. Mr. Sias has been President and Chief Executive Officer of Chronicle Publishing Company since April 1993. From January 1986 until April 1993, Mr. Sias was President of ABC Network Division, Capital Cities/ABC, Inc. From 1977 until January 1986 he was the Executive Vice President, President of the Publishing Division (which includes Fairchild Publications) of Capital Cities Communications, Inc.

JOHN J. DELUCCA (age 56) has been a Director of the Company since January 1982. Since January 1999, Mr. Delucca has been Chief Financial Officer & Executive Vice President, Finance & Administration of Coty, Inc. From October 1993 until January 1999, he was Senior Vice President and Treasurer of RJR Nabisco, Inc. From January 1992 until October 1993, he was managing director and Chief Financial Officer of Hascoe Associates, Inc. From October 1, 1990 to January 1992 he was President of The Lexington Group. From September 1989 until September 1990, he was Senior Vice President-Finance of the Trump Group. From May 1986 until August 1989, he was senior Vice President-Finance at International Controls Corp. From February 1985 until May 1986, he was a Vice President and Treasurer of Textron, Inc. Prior to that he was a Vice President and Treasurer of the Avco Corporation, which was acquired by Textron.

During the fiscal year ended July 31, 1999, there were five formal meetings of the Board of Directors, several actions by unanimous consent and several informal meetings. The Board of Directors has an Audit Committee and Stock Option Committee. The Audit Committee had one formal meeting and the Stock Option Committee had three formal meetings in fiscal 1999.

The Audit Committee is authorized to review proposals of the Company's auditors regarding annual audits, recommend the engagement or discharge of the auditors, review recommendations of such auditors concerning accounting principles and the adequacy of internal controls and accounting procedures and practices, to review the scope of the annual audit, to approve or disapprove each professional service or type of service other than standard auditing services to be provided by the auditors, and to review and discuss the audited financial statements with the auditors. Its members are Shahram K. Rabbani and Messrs. Sias and Delucca.

The Stock Option Committee has the plenary authority in its discretion to determine the purchase price of the Common Stock issuable upon the exercise of each option, to determine the employees to whom, and the time or times at which, options shall be granted and the number of shares to be issuable upon the exercise of each option, to interpret the plans, to prescribe, amend and rescind rules and regulations relating to them, to determine the term and provisions of the respective option agreements and to make all other determinations deemed necessary or advisable for the administration of the plans. Its members are Messrs. Sias and Delucca.

The Company does not have a formal Executive Committee or Nominating Committee of the Board of Directors.

(b) Executive Officers - The following table sets forth the names and positions of all of the current executive officers of the Company:

Name	Position
Elazar Rabbani, Ph.D.	Chief Executive Officer, Chairman of the Board of Directors
Shahram K. Rabbani	Chief Operating Officer, Secretary, Treasurer
Barry W. Weiner	President
Norman E. Kelker, Ph.D.	Senior Vice President
Dean Engelhardt, Ph.D.	Senior Vice President
Herbert B. Bass	Vice President of Finance
Barbara E. Thalenfeld, Ph.D.	Vice President, Corporate Development
David C. Goldberg	Vice President, Business Development

DR. ELAZAR RABBANI (age 55) has served as President and a Director of the Company since its organization in 1976. Dr. Rabbani received his B.A. degree from New York University in Chemistry and his Ph.D. degree in Biochemistry from Columbia University. He is a member of the American Society for Microbiology.

SHAHRAM K. RABBANI (age 47) has served as Chief Operating Officer, Secretary, and Treasurer of the Company since November 1996, as Executive Vice President from September 1981 to November 1996 and as Vice President, Treasurer and a Director of the Company since its organization. Mr. Rabbani received a B.A. degree in chemistry from Adelphi University.

BARRY W. WEINER (age 48) has served as President of the Company since November 1996 and as a Director of the Company since its organization. Mr. Weiner has served as an Executive Vice President of the Company from September 1981 to November 1996, as a Vice President of the Company from the Company's organization to November 1996 and as Secretary of the Company from March 1980 to November 1996. He was employed by Colgate-Palmolive Company, New York, New York from August 1974 until March 1980, when he joined the Company on a full-time basis. Mr. Weiner received his B.S. degree in Economics from New York University and M.B.A. from Boston University. Mr. Weiner is a Director of the New York State Biotechnology Association.

DR. NORMAN E. KELKER (age 60) has been a Vice President of the Company since September 1981. Effective January 1, 1989, he was promoted to Senior Vice President. From 1975 until he joined the Company, Dr. Kelker was an Associate Professor in the Department of Microbiology of the New York University School of Medicine. He holds a Ph.D. from Michigan State University.

DR. DEAN ENGELHARDT (age 59) has been Vice President since September 1981. Effective January 1, 1989, he was promoted to Senior Vice President. Prior to joining the Company he was Associate Professor of Microbiology at Columbia University College of Physicians and Surgeons. He obtained his Ph.D. from Rockefeller University.

HERBERT B. BASS (age 51) is Vice President of Finance of the Company. Prior to his promotion, Mr. Bass was the Corporate Controller of Enzo. Before

joining Enzo in 1986, Mr. Bass held various positions at Danziger & Friedman, Certified Public Accountants, from 1979 to 1986, the most recent of which was audit manager. For the preceding seven years he held various positions at Berenson & Berenson, C.P.A's. Mr. Bass holds a Bachelor degree in Business Administration from Baruch College.

DR. BARBARA E. THALENFELD (age 59) is Vice President of Corporate Development and has been with Enzo since 1982. Prior to joining the Company she held an NIH research fellowship at Columbia University. She received a Ph.D. from Hebrew University-Hadassah Medical Center and an M.S. from Yale University.

DAVID C. GOLDBERG (age 42) is Vice President of Business Development. Prior to joining Enzo in 1985, he was employed at DuPont NEN Products. He received an M.S. from Rutgers University and an MBA from New York University.

Dr. Elazar Rabbani and Shahram K. Rabbani are brothers and Barry W. Weiner is their brother-in-law.

Item 11. Executive Compensation

The information required under this item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission on or before November 29, 1999 and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information required under this item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission on or before November 29, 1999 and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions

The information required under this item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission on or before November 29, 1999 and is incorporated herein by reference.

PART IV

Item 14. Exhibits. Financial Statement Schedules, and Reports on Form 8-K

(a) (1) Consolidated Financial Statements
- Consolidated Balance Sheet - July 31, 1999 and 1998
- Consolidated Statement of Operations- Years ended July 31, 1999, 1998 and 1997
- Consolidated Statement of Stockholders' Equity- Years ended July 31, 1999, 1998 and 1997
- Consolidated Statement of Cash Flows- Years ended July 31, 1999, 1998 and 1997
- Notes to Consolidated Financial Statements.

(2) Financial Statement Schedule

Schedule II - Valuation and Qualifying Accounts

All other schedules have been omitted because the required information is included in the consolidated financial statements or the notes thereto or because they are not required.

(3) Exhibits

The following documents are filed as Exhibits to this Annual Report on Form 10-K:

Exhibit No	Description
3(a)	Certificate of Incorporation, as amended March 17, 1980. (1)
3(b)	June 16, 1981 Certificate of Amendment of the Certificate of Incorporation. (2)
3(c)	Certificate of Amendment to the Certificate of Incorporation. (11)
3(d)	Bylaws. (1)

4(d)	Form of Note Indenture. (3)
10(a)	1980 Stock Option Plan. (1)
10(b)	Investment Agreement between the registrant and Johnson & Johnson Development Corp., dated June 25, 1982. (4)
10(c)	Agreement between the registrant and Ortho Diagnostic System, Inc. dated June 25, 1982. (5)
10(d)	1983 Incentive Stock Option Plan. (6)
10(e)	Letter Agreement between the Company and Ortho Diagnostic Systems, Inc. dated as of January 1, 1985. (7)
10(f)	Lease Agreement dated as of December 1, 1985. (8)
10(g)	Indenture of Mortgage and Trust dated as of December 1, 1985. (8)
10(h)	Letter of Credit Agreement dated as of December 1, 1985. (8)
10(i)	Leasehold Mortgage and Security Agreement dated as of February 5, 1986. (8)
10(j)	Loan Agreement dated as of December 31, 1985. (8)
10(k)	Restricted Stock Plan. (8)
10(p)	Agreement with First New York Bank for Business. (14)
10(q)	Agreement with BioHealth Laboratories, Inc. shareholders. (15)
10(r)	Agreement with Johnson & Johnson, Inc. (16)
10(s)	1993 Incentive Stock Option Plan. (16)
10(t)	Employment Agreement with Elazar Rabbani. (16)
10(u)	Employment Agreement with Shahram Rabbani. (16)
10(v)	Employment Agreement with Barry Weiner. (16)
10(w)	1994 Stock Option Plan (17).
10(x)	Stipulation of Settlement with the City of New York. (18)
10(y)	Agreement with Corange International Limited (Boehringer Mannheim) effective April 1994. (19)(20)
10(z)	Agreement with Amersham International effective February 1995. (18)(21)
10(aa)	Agreement with Dako A/S effective May 1995. (18)(21)
10(bb)	Agreement with Baxter Healthcare Corporation (VWR Scientific Products) effective September 1995. (18)(19)
10(cc)	Agreement with Yale University and amendments thereto. (19)(21)
10(dd)	Agreement with The Research Foundation of the State of New York effective May 1987. (18)(21)

10(ee)	1999 Stock Option Plan filed. (20)
11	Computation of per-share earnings filed herewith.
21	Subsidiaries of the registrant: Enzo Clinical Labs, Inc., a New York corporation. Enzo Diagnostics, Inc., a New York corporation. Enzo Therapeutics, Inc., a New York corporation.
23	Consent of Independent Auditors filed herewith.
27	Financial Data Schedule filed herewith.

Notes to (a)(3)

(1) The exhibits were filed as exhibits to the Company's Registration Statement on Form S-18 (File No. 2-67359) and are incorporated herein by reference.

(2) This exhibit was filed as an exhibit to the Company's Form 10-K for the year ended July 31, 1981 and is incorporated herein by reference.

(3) These exhibits were filed as exhibits to the Company's Current Report on Form 8-K dated April 4, 1986 and are incorporated herein by reference.

(4) This exhibit was filed as an exhibit to the Company's Current Report on Form 8-K dated June 29, 1982 and is incorporated herein by reference.

(5) This exhibit was filed as an exhibit to the Company's Annual Report on Form 10-K for the year ended July 31, 1983 and is incorporated herein by reference.

(6) This exhibit was filed with the Company's definitive proxy statement dated February 4, 1983 and is incorporated herein by reference.

(7) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1985 and is incorporated herein by reference.

(8) These exhibits were filed as exhibits to the Company's Quarterly Report on Form l0-Q for the quarter ended January 31, 1986 and are incorporated herein by reference.

(9) This exhibit was filed as an exhibit to the Company's Registration Statement on Form S-2(33-7657) and is incorporated herein by reference.

(10) This exhibit was filed as an exhibit to the Company's Current Report on Form 8-K dated July 12, 1990 and is incorporated herein by reference.

(11) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1989 and is incorporated herein by reference.

(12) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1990 and is incorporated herein by reference.

(13) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1991 and is incorporated herein by reference.

(14) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1992 and is incorporated herein by reference.

(15) This exhibit was filed as an exhibit to the Company's Registration Statement on Form S-3 (33-72170) and is incorporated herein by reference.

(16) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1994 and is incorporated herein by reference.

(17) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31,1995 and is incorporated herein by reference.

(18) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1996 or previously filed Amendment thereto and is incorporated by reference.

(19) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1997 or previously filed Amendment thereto and is incorporated by reference.

(20) This exhibit was filed with the Company's Registration Statement on Form S-8 (333-87153) and is incorporated herein by references

(21) These exhibits are subject to a confidential treatment request pursuant to Securities Exchange Act Rule 24b-2

(b) The Company's Current Reports on Form 8-K filed during the quarter ended July 31, 1999 -- none

(c) See Item 14(a)(3), above.

(d) See Item 14(a)(2), above.

****

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ENZO BIOCHEM, INC.

Date: October 26, 1999 By: /s/ Elazar Rabbani Ph.D.
Chairman of the Board

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: Elazar Rabbani Ph.D. October 26, 1999
Elazar Rabbani
Chairman of Board of Directors
(Principal Executive Officer)

By: Shahram K. Rabbani October 26, 1999
Shahram K. Rabbani,
Chief Operating Officer, Secretary
and Director (Principal Financial and
Accounting Officer)

By: Barry W. Weiner October 26, 1999
Barry W. Weiner,
President and Director

John B. Sias, Director

John J. Delucca, Director

FORM 10-K, ITEM 14(a) (1) and (2)
ENZO BIOCHEM, INC.

LIST OF CONSOLIDATED FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULES

The following consolidated financial statements and financial statement schedules of Enzo Biochem, Inc. are included in Item 14(a):

All other schedules for which provision is made in the applicable accounting regulation of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

Report of Independent Auditors

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, 1999 and 1998, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended July 31, 1999. Our audits also included the

financial statement schedule listed in the Index at Item 14(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. 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, 1999 and 1998 and the consolidated results of its operations and its cash flows for each of the three years in the period ended July 31, 1999, in conformity with generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ Ernst & Young LLP

Melville, New York
October 15, 1999

ENZO BIOCHEM, INC.
CONSOLIDATED BALANCE SHEET
July 31, 1999 and 1998

<TABLE>
<CAPTION>

ASSETS	1999	1998
<S>	<C>	<C>
Current assets:		
Cash and cash equivalents	$43,218,000	$33,542,500
Accounts receivable, less allowance for doubtful accounts of $6,027,000 in 1999 and $5,148,500 in 1998	15,007,700	14,196,400
Current portion of note receivable -- litigation settlement	--	4,941,600
Inventories	1,426,700	1,393,000
Deferred taxes	1,186,300	471,000
Other	846,700	843,900
Total current assets	61,685,400	55,388,400
Property and equipment, at cost less accumulated depreciation and amortization	2,824,200	2,569,900
Cost in excess of fair value of net tangible assets acquired, less accumulated amortization of $4,239,600 in 1999 and $3,869,100 in 1998	8,563,700	8,934,200
Deferred patent costs, less accumulated amortization of $4,080,400 in 1999 and $3,402,600 in 1998	4,311,900	4,558,700
Deferred taxes	1,388,700	554,000
Other	127,000	148,200
	$78,900,900	$72,153,400
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Trade accounts payable	$1,196,100	$1,439,100

Income taxes payable	300,000	164,000
Other accrued expenses	866,300	803,400
Current portion of long-term debt	--	8,900
Total current liabilities	2,362,400	2,415,400
Deferred liabilities	890,500	955,000
Commitments and contingencies (Notes 5, 6, and 9)		
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: 24,957,700 in 1999 and 24,905,300 in 1998	249,600	249,100
Additional paid-in capital	92,452,200	92,102,700
Accumulated deficit	(17,053,800)	(23,568,800)
Total stockholders' equity	75,648,000	68,783,000
	$78,900,900	$72,153,400

</TABLE>

See accompanying notes

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF OPERATIONS
Years ended July 31, 1999, 1998 and 1997

<TABLE>
<CAPTION>

	1999	1998	1997
<S>	<C>	<C>	
Revenues:			
Research product revenues	$16,278,600	$12,660,900	$13,189,600
Clinical laboratory services	28,040,800	27,756,100	21,748,900
	44,319,400	40,417,000	34,938,500
Costs and expenses:			
Cost of research product revenues	7,883,700	7,496,600	8,410,200
Cost of clinical laboratory services	8,285,000	8,247,200	7,153,400
Research and development expense	4,427,000	3,983,500	3,561,900
Selling expense	2,782,800	2,728,000	2,718,800
Provision for uncollectable accounts receivable	9,960,800	9,627,500	5,633,600
General and administrative expense	7,577,400	7,648,600	7,696,100
	40,916,700	39,731,400	35,174,000
Income (loss) before interest income, net and benefit (provision) for taxes on income	3,402,700	685,600	

(235,500)			
Interest income, net	1,983,900	1,884,600	
1,799,300			
	----------	----------	

Income before benefit (provision) for taxes on income	5,386,600	2,570,200	
1,563,800			
Benefit (provision) for taxes on income	1,128,400	821,600	
(111,000)			
	----------	----------	

Net income	$6,515,000	$3,391,800	
$1,452,800			
	==========	==========	
==========			
Net income per common share:			
Basic	$.26	$.14	
$.06			
	====	====	
====			
Diluted	$.26	$.13	
$.06			
	====	====	
====			
Denominator for per share calculation:			
Basic	24,933,000	24,653,000	
24,162,000			
	==========	==========	
==========			
Diluted	25,477,000	25,746,000	
25,498,000			
	==========	==========	
==========			

</TABLE>

See accompanying notes.

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
Years ended July 31, 1999, 1998 and 1997

<TABLE>
<CAPTION>

	Common Stock Shares	Common Stock Amount	Additional paid-in Capital	Accumulated deficit	Total Shareholders' equity
	------	------	-------	-------	------
<S>	<C>	<C>	<C>	<C>	<C>
Balance at July 31, 1996	21,624,900	$216,400	$83,450,000	$(28,413,400)	$55,253,000
Increase in common stock and paid-in capital due to 5% stock dividend (fair value on date declared $18,225,000)	1,080,000	10,800	(10,800)	--	--
Net income for the year ended July 31, 1997	--	--	--	1,452,800	1,452,800
Increase in common stock and paid-in capital due to exercise of stock options and warrants	203,000	2,000	809,100	--	811,100
Increase in common stock and paid-in capital due to exchange of stock for debt, net of offering costs	415,000	4,000	6,072,800	--	6,076,800
Issuance of stock for employee 401(k) plan	7,000	100	128,800	--	128,900
Proceeds from the issuance of common stock	--	--	286,300	--	286,300
	----------	--------	----------	----------	
-	----------				

Balance at July 31, 1997	23,329,900	233,300	90,736,200	(26,960,600)	64,008,900
Increase in common stock and paid-in capital due to 5% stock dividend (fair value on date declared $18,010,800)	1,166,500	11,700	(11,700)	--	--
Net income for the year ended July 31, 1998	--	--	--	3,391,800	3,391,800
Increase in common stock and paid-in capital due to exercise of stock options and warrants	399,200	4,000	1,093,800	--	1,097,800
Increase in common stock and paid-in capital due to issuance of warrants as compensation for services performed	--	--	150,000	--	150,000
Issuance of stock for employee 401(k) plan	9,700	100	134,400	--	134,500
Balance at July 31, 1998	24,905,300	249,100	92,102,700	(23,568,800)	68,783,000
Net income for the year ended July 31, 1999	--	--	--	6,515,000	6,515,000
Increase in common stock and paid in capital due to exercise of stock options and warrants	34,200	300	162,200	--	162,500
Issurance of stock for employee 401(k) plan	18,200	200	187,300	--	187,500
Balance at July 31, 1999	24,957,700	$249,600	$92,452,200	$(17,053,800)	$75,648,000

See accompanying notes.

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF CASH FLOWS
Years ended July 31, 1999, 1998 and 1997

	1999	1998	1997
Cash flows from operating activities:			
Net income	$6,515,000	$3,391,800	$1,452,800
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of property and equipment	883,300	853,000	887,900
Amortization of costs in excess of fair value of net tangible assets acquired	370,500	370,500	370,400
Amortization of deferred patent costs	677,800	640,000	586,800
Provision for uncollectible accounts receivable	9,960,800	9,627,500	5,633,600
Deferred income tax benefit	(1,550,000)	(1,025,000)	--
Issuance of warrants as compensation for services performed	--	150,000	--
Legal expenses converted into stock	--	--	142,300
Other	--	6,600	--
Accretion of interest on note receivable	(58,400)	(253,000)	(575,000)
Issuance of stock for employee 401(k) plan	187,500	134,500	128,900
Deferred liabilities	(64,500)	(35,500)	(17,500)
Changes in operating assets and liabilities:			
Note receivable - litigation settlement	5,000,000	5,000,000	5,000,000
Accounts receivable before provision for uncollectible amounts	(10,772,100)	(11,838,500)	(7,130,800)
Inventories	(33,700)	166,000	251,500
Other assets	(2,800)	967,500	710,300
Trade accounts payable and accrued expenses	(180,100)	64,100	109,000
Income taxes payable	136,000	36,000	128,000

Total adjustments	4,554,300	4,863,700	6,225,400
-			
Net cash provided by operating activities	11,069,300	8,255,500	7,678,200

</TABLE>

(Continued on following page.)

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF CASH FLOWS
Years ended July 31, 1999, 1998, and 1997

<TABLE>
<CAPTION>

	1999	1998	1997
<S>	<C>	<C>	<C>
Cash flows from investing activities:			
Capital expenditures	$(1,137,600)	$(577,700)	$(691,000)
Patent costs deferred	(431,000)	(441,100)	(465,800)
Decrease (increase) in security deposits	21,200	4,200	(2,700)
Net cash used by investing activities	(1,547,400)	(1,014,600)	(1,159,500)
Cash flows from financing activities:			
Payments of obligations under capital leases	(8,900)	(8,900)	(28,800)
Proceeds from the exercise of stock options and warrants	162,500	1,097,800	811,100
Payment of loans payable to bank and long term debt	--	(37,700)	(34,600)
Proceeds from the issuance of common stock	--	--	286,300
Payment for common stock offering costs	--	--	(95,000)
Net cash provided by financing activities	153,600	1,051,200	939,000
Net increase in cash and cash equivalents	9,675,500	8,292,100	7,457,700
Cash and cash equivalents at the beginning of the year	33,542,500	25,250,400	17,792,700
Cash and cash equivalents at the end of the year	$43,218,000	$33,542,500	$25,250,400

</TABLE>

See accompanying notes.

ENZO BIOCHEM, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
July 31, 1999, 1998 and 1997

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 that range from August 1999 to October 1999. The market values of these securities, as determined by quoted sources, aggregated $42,637,800 and $32,440,000 at July 31, 1999 and 1998, respectively, and approximated cost at the respective dates.

Concentration of credit risk

Approximately 88% and 92% at July 31, 1999 and 1998, respectively, of the Company's net accounts receivable relate to its clinical reference laboratory business that operates in the New York Metropolitan area. Concentration of credit risk with respect to accounts receivable are limited due to the diversity of the Company's client base. 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 each of the fiscal years ended July 31, 1998 and 1997 approximated 10% and 12%, respectively of revenue. The provision for uncollectible accounts receivable increased by $333,300 in fiscal 1999, primarily due to increased revenues. The fiscal 1999 increase is also attributable to an increase in esoteric screening tests not usually covered by third party insurers. Management is not aware of any material claims, disputes or settled matters concerning third-party reimbursements which would have a material effect on the Company's financial statements.

At July 31, 1999 and 1998, 2% and 4% of the Company's net accounts receivable relate to amounts due from the one major distributor, under a non-exclusive distribution and supply agreement. Research product revenues from the distributor represented approximately 22% and 21% and 25% of consolidated operating revenues in fiscal 1999, 1998 and 1997, respectively.

Note 1 - Business and summary of significant accounting policies (Cont'd)

Inventories

Inventories are stated at the lower of cost (first-in, first-out method) or market.

Property and equipment

Equipment is being depreciated on the straight-line and accelerated methods 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.

Amortization of intangible assets

The cost in excess of fair value of net tangible assets acquired is being amortized on the straight-line method over periods of fifteen to forty years.

Patent costs

The Company has filed applications for United States and foreign patents covering certain aspects of its technology. The costs incurred in filing such applications have been deferred and are amortized over the estimated useful lives of the patents beginning upon issue. Costs related to unsuccessful patent applications are expensed.

Revenue Recognition

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 are recognized when the products are shipped.

Reimbursement Contingencies

Laws and regulations governing the Medicare and Medicaid programs are complex and subject to interpretation for which action for noncompliance includes fines, penalties and exclusion from the Medicare and Medicaid 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.

Use of Estimates

The preparation of financial statements in conformity with generally accepted

accounting principles 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 Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes" ("SFAS No. 109"). SFAS No. 109 requires the liability method of accounting for income taxes. Under the liability method of SFAS No. 109, 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. SFAS No. 109 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 SFAS No. 109, 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.

Note 1 - Business and summary of significant accounting policies (Cont'd)

Impairment of Long-Lived Assets

In fiscal 1997, the Company adopted SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" ("SFAS No. 121"). SFAS No. 121 establishes the accounting for the impairment of long-lived assets, certain identifiable intangibles and the excess of cost over net assets acquired, related to those assets to be held and used in operations, whereby impairment losses are required to be recorded 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. SFAS No. 121 also addresses the accounting of long-lived assets and certain identifiable intangibles that are expected to be disposed of. The adoption of SFAS No. 121 did not have a material effect on the consolidated results of operations or financial condition of the Company.

Net income per share

In fiscal 1998, the Company adopted the provisions of SFAS No. 128, "Earnings Per Share" ("SFAS No. 128"). SFAS No. 128 replaced the previously reported primary and fully diluted earnings per share with basic and diluted earnings per share. Unlike primary earnings per share, basic earnings per share excludes any dilutive effects of options and warrants. Diluted earnings per share is very similar to the previously reported fully diluted earnings per share. All earnings per share amounts for all periods have been presented, and where necessary, restated to conform to SFAS No.128 requirements.

The net income per share amounts for fiscal 1997 has been retroactively adjusted to reflect the 5% stock dividends declared in December 1997 (See Note 11).

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

	1999	1998	1997
Numerator:			
Net income for numerator for basic and diluted net income per common share	$6,515,000	$3,391,800	$1,452,800
Denominator:			
Denominator for basic net income per common share-weighted-average shares	24,933,000	24,653,000	24,162,000
Effect of dilutive employee and director stock options and warrants (a)	544,000	1,093,000	1,336,000
Denominator for diluted net income per share-adjusted weighted-average shares	25,477,000	25,746,000	25,498,000

Basic net income per share	$.26	$.14	$.06
Diluted net income per share	$.26	$.13	$.06

(a) Potentially dilutive employee and director stock options and warrants that have been excluded from this amount because they are anti-dilutive amounted to 724,000, 89,000 and 71,000 in fiscal 1999,1998 and 1997, respectively.

Note 2 - Supplemental disclosure for statement of cash flows

In the years ended July 31, 1999, 1998 and 1997, the Company paid cash for interest of approximately $0, $5,000 and $17,000, respectively.

In the years ended July 31, 1999, 1998 and 1997, the Company paid cash for income taxes of approximately $286,000, $176,000 and $20,000 respectively, and received refunds of income taxes previously paid of approximately $0 in fiscal 1999, $9,000 in fiscal 1998 and $45,000 in fiscal 1997.

Other noncash items:

In fiscal 1997, the Company issued 415,000 shares of common stock in exchange for approximately $6,172,000 in accrued legal fees and costs.

Note 3 - Inventories

At July 31, 1999 and 1998 inventories consist of:

	1999	1998
Raw materials	$108,100	$68,300
Work in process	833,400	927,700
Finished products	485,200	397,000
	$1,426,700	$1,393,000

Note 4 - Property and equipment

At July 31, 1999 and 1998 property and equipment consist of:

	1999	1998
Laboratory machinery and equipment	$2,349,200	$2,128,300
Leasehold improvements	2,266,500	2,231,200
Office furniture and equipment	4,848,800	4,189,100
	9,464,500	8,548,600
Accumulated depreciation and amortization	6,640,300	5,978,700
	$2,824,200	$2,569,900

Note 5 - Lease obligations

Enzo Clinical Labs, Inc. ("Enzo Clinical Labs"), a wholly-owned subsidiary of the Company, leases its office and laboratory space under several leases that expire between September 1, 1999 and November 30, 2004. Certain officers of the Company own the building that Enzo Clinical Labs uses as its main facility. In addition to the minimum annual rentals of space, this lease is subject to an escalation clause. Rent expense under this lease approximated $986,000, $924,000 and $982,000 in fiscal 1999, 1998 and 1997, respectively.

Total consolidated rent expense incurred by the Company during fiscal 1999, 1998 and 1997 was approximately $1,527,000, $1,382,000 and $1,149,000 respectively. Minimum annual rentals under operating lease commitments for fiscal years ending July 31 are as follows:

2000	$1,258,000
2001	1,210,000
2002	1,192,000
2003	1,232,000
2004	1,055,000
Thereafter	318,000

$6,265,000
==========

ENZO BIOCHEM, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
July 31, 1999, 1998 and 1997

Note 6 - Litigation

Johnson & Johnson, Inc.

On October 19, 1994, the Company executed an agreement in settlement of various disputes in relation to research and development agreements between the Company and Ortho Diagnostic Systems Inc.("Ortho"), a subsidiary of Johnson & Johnson (J&J). Pursuant to this settlement agreement, the Company received $15.0 million in cash, of which $6.5 million related to amounts due under the agreements referred to above, and a promissory note requiring J&J and Ortho to pay a total of $5.0 million a year for each of the four successive anniversaries of said date. Pursuant to the terms of the settlement, all of the Company's grants, licenses and intellectual property have been returned to the Company in totality. The remainer of the future payments were recorded at their net present value of $4.9 million at July 31, 1998 in the accompanying consolidated balance sheet, using a discount rate of 5.25%.

Patent Infringement - Calgene, Inc.

In March 1993, the Company filed suit in the United States District Court for the District of Delaware charging patent infringement and acts of unfair competition against Calgene, Inc. and seeking a declaratory judgment of invalidity concerning Calgene, Inc.'s plant antisense patent. On February 9, 1994, the Company filed a second suit in the United States District Court for the District of Delaware charging Calgene with infringement of a second antisense patent owned by the Company. Calgene filed a counterclaim in the second Delaware action seeking a declaration that a third patent belonging to the Company is invalid. The two Delaware actions were consolidated and were tried to the Court in April 1995. In addition, the Company filed suit on March 22, 1994 in the United States District Court for the Western District of Washington against Calgene and the Fred Hutchinson Cancer Research Center, alleging that the defendants had conspired to issue a false and misleading press release regarding a supposed "patent license" from Hutchinson to Calgene, and conspired to damage the Company's antisense patents by improperly using confidential information to challenge them in the Patent Office. The Complaint further charges that Hutchinson is infringing and inducing Calgene to infringe the Company's antisense patents. On February 2, 1996, the Delaware Court issued an opinion ruling against Enzo and in favor of Calgene, finding certain Enzo claims infringed, but the patent, as a whole not infringed, and finding the claims at issue for lack of enablement. Calgene's patent was found valid (non-obvious) over the prior art. On February 29, 1996, the Delaware Court issued an Order withdrawing its February 2, 1996 Opinion. On April 3, 1997, the European Patent Office rejected Calgene's opposition that had been lodged against the Company's related European antisense patent, thereby upholding the patent's validity. On May 23, 1997, the Japanese Patent Office issued a related antisense patent owned by the Company.

On June 1, 1998, the U.S. District Court for the District of Delaware issued its final decision in the case. In its decision the District Court held two of the Company's three antisense patents were invalid, and not infringed. The District Court declined to act on Calgene's claim that the Company's third antisense patent was invalid citing lack of evidence. The District Court further held that the Calgene antisense patent was not invalid. Enzo appealed the District Court's judgment to the U.S. Court of Appeals for the Federal Circuit and Calgene cross-appealed. On September 24, 1999, the Court of Appeals issued its decision, rejecting Calgene's effort to invalidate Enzo's patent in genetic antisense technology, U.S. Patent No. 5,272,065, thus leaving it valid and standing. The Court of Appeals also clarified the District Court's judgment regarding two other of Enzo's genetic antisense patents (5,190,931 and 5,208,149), limiting judgment of invalidity only to the claims of the two patents which had been asserted against Calgene. The Court of Appeals remanded the case to the district court for determination of whether the case was exceptional, which related to Calgene's claim for attorney fees. On October 7, 1999, Calgene filed a petition for rehearing directed to the Court of Appeal's disposition of Calgene's cross-appeal as to Enzo patent. There can be no assurance that the Company will be successful in connection with Calgene's petition for rehearing and Calgene's claim that the case is exceptional, the latter to be the subject of further proceedings in the district court. However, even if the Company is not successful, management does not believe there will be a significant monetary impact.

Note 6 - Litigation (Cont'd)

Patent Infringement - Other

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. The case remains at an early stage. There can be no assurance that the Company will be successful in these proceedings. However, even if the Company is not successful, management does not believe that there will be a significant monetary impact.

Note 7 - Income taxes

The tax benefit (provision) is calculated under the provisions in SFAS No. 109.

	1999	1998	1997
Current			
Federal	$(108,000)	$(76,000)	$(38,000)
State and local	(313,600)	(127,400)	(73,000)
Deferred	1,550,000	1,025,000	--
Benefit (provision) for income taxes	$1,128,400	$821,600	$(111,000)

Current Federal income taxes provided for in fiscal 1999, 1998, and 1997 are based on the alternative minimum tax method.

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:

	1999	1998
Deferred tax liability:		
Deferred patent costs	$(1,804,000)	$(1,907,000)
Deferred tax assets:		
Provision for uncollectable accounts receivable	1,517,000	1,587,000
Net operating loss carry forwards	4,473,000	6,779,000
Alternative minimum tax credits	586,000	665,000
Other	373,000	399,000
	6,949,000	9,430,000
Valuation allowance for deferred tax assets	(2,570,000)	(6,498,000)
Net deferred tax asset	$2,575,000	$1,025,000

Note 7 - Income taxes (Cont'd)

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the 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 which can be implemented by the Company in making this assessment. The Company had provided a full valuation allowance for the net deferred tax asset at July 31, 1997. In fiscal 1999 and 1998, management reversed a portion of the deferred tax asset valuation allowance as management considered that it was more likely than not that a portion of the deferred tax asset would be realized. The valuation allowance decreased $3,928,000, $2,326,000 and $747,000 in fiscal 1999, 1998 and 1997, respectively.

The Company has net operating loss carry forwards of approximately $10,708,000 which are due to expire through 2011. The Company realized a benefit from the utilization of net operating loss carry forwards of $2,306,000, $1,877,000 and $877,000 in fiscal 1999, 1998 and 1997, respectively. The Company also has alternative minimum tax credits which do not expire.

The (benefit) provision for income taxes were at rates different from U.S. federal statutory rates for the following reasons:

	1999	1998	1997
Federal statutory rate	34%	34%	34%
Expenses not deductible for income tax return purposes	4%	7%	13%
State income taxes, net of federal tax deduction and change in deferred tax asset valuation reserve	--	(2%)	4%
Change in deferred tax asset valuation reserve and benefits recognized from net operating losses	(59%)	(71%)	(44%)
	(21%)	(32%)	7%

Note 8 - Stock options and warrants

In fiscal 1997, the Company adopted the disclosure provisions of SFAS No. 123. SFAS No. 123 defines a fair value method of accounting for the issuance of stock options and other equity instruments. Under the fair value method, compensation cost is measured at the grant date based on the fair value of the award and is recognized over the service period, which is usually the vesting period. Pursuant to SFAS No. 123, companies are encouraged, but are not required, to adopt the fair value method of accounting for employee stock-based transactions. Companies are also permitted to continue to account for such transactions under Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," but are required to disclose in a note to the consolidated financial statements proforma net income and per share amounts as if the Company had applied the new method of accounting. SFAS No. 123 also requires increased disclosures for stock-based compensation arrangements.

The Company has elected to comply with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") and related Interpretations, in accounting for its stock options because, as discussed below, the alternative fair value accounting provided for under SFAS No. 123, requires use of option valuation models which were not developed for use in valuing employee stock options. Under APB 25, because the exercise price of the Company's employee stock options equals the market price of the underlying stock on the data of grant, no compensation expense is recognized.

The Company has an incentive stock option plan and a restricted stock incentive plan and has issued other options and warrants, as described below. All share information has been adjusted to reflect a 5% stock dividend declared on December 15, 1997 (See Note 11).

Note 8 - Stock options and warrants (Cont'd)

Incentive stock option plan

The Company has an incentive stock option plan ("1983 plan") under which the Company may grant options for up to 1,041,863 shares of common stock. No additional options may be granted under the 1983 plan. The exercise price of options granted under such plan is equal to or greater than fair market value of the common stock on the date of grant. The Company has stock option plans ("1993 plan" and "1994 plan") under which the Company may grant options for up to 1,736,438 shares (1993 plan) and for up to 1,099,744 shares (1994 plan) of common stock. No additional options may be granted under the 1993 plan or the 1994 plan. During fiscal 1999, the Company set up a new incentive stock option plan ("1999 plan") under which the Company may grant up to 950,000 shares of common stock. The options granted pursuant to the plans may be either incentive stock options or nonstatutory 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 options plans for the years ended July 31, 1999, 1998 and 1997 under SFAS No. 123 is as follows:

<TABLE>
<CAPTION>

	1999		1998		1997	
	Options	Weighted -Average Exercise Price	Options	Weighted -Average Exercise Price	Options	Weighted -Average Exercise Price

<S>	<C>	<C>	<C>	<C>	<C>	<C>
Outstanding at Beginning of year	2,169,251	$9.15	2,124,989	$8.13	2,148,760	$ 7.73
Granted	603,500	8.41	273,000	13.51	116,550	14.79
Exercised	(26,432)	5.98	(212,612)	3.72	(73,618)	5.86
Terminated	(45,380)	13.40	(16,126)	12.41	(66,703)	10.62
Outstanding at end of year	2,700,939	$8.98	2,169,251	$9.15	2,124,989	$ 8.11
Exercisable at end of year	1,793,183		1,602,767		1,446,253	
Weighted average fair value of options granted during year	$5.80		$9.40		$ 10.86	

</TABLE>

The following table summarizes information for stock options outstanding at July 31, 1999:

<TABLE>
<CAPTION>

	Options Outstanding			Options Exercisable	
Range of Exercise prices	Shares	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
<S>	<C>	<C>	<C>	<C>	<C>
$1.30	122,788	2.3 years	$1.30	122,788	$1.30
$2.70 - $2.92	102,760	0.1 years	2.73	102,760	2.73
$3.89	95,641	3.2 years	3.89	95,641	3.89
$5.62 - $6.59	9,456	3.6 years	5.91	9,456	5.91
$6.63 - $9.83	1,435,447	5.8 years	7.42	1,102,947	7.54
$10.13 - $14.17	859,409	8.2 years	12.39	304,416	13.48
$15.71 - $17.46	75,438	7.0 years	16.47	55,175	16.75
	2,700,939			1,793,183	

</TABLE>

Note 8 - Stock options and warrants (cont'd)

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

Pro-forma information regarding net income and net income per share is required by SFAS No. 123, and has been determined as if the Company had accounted for its stock options under the fair value method of that statement. The fair value for these options was estimated at the date of grant using a Black-Sholes option pricing model with the following assumptions: risk free interest rate ranging from 4.54% to 6.88%; no dividend yield; volatility factor of the expected market price of the Company's common stock of .72 for grants prior to July 31, 1997, .69 for grants during fiscal year 1998 and .68 for grants during fiscal year 1999, and a weighted-average expected life of the options of 7 years at July 31, 1999, 1998 and 1997.

The Black-Sholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions incliding the expected stock price volatility. Because

the Company's stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The Company's pro forma information is as follows:

	1999	1998	1997
Pro forma net income:	$4,426,080	$1,841,000	$477,000
Pro forma net income per share:			
Basic	$.18	$.08	$.02
Diluted	$.18	$.07	$.02

The SFAS No. 123 method of accounting has not been applied to options granted prior to Aug 1, 1995. As a result, the pro forma compensation cost may not be representative of that to be expected in future years.

Restricted stock incentive plan

The Company has a restricted stock incentive plan whereby the Company may award up to 231,525 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, 1999, the Company has not awarded any shares of common stock under this plan.

Other options and warrants

As part of the restructuring of the Debenture in November 1991, the Company issued warrants to purchase 297,510 shares of common stock with an exercise price of $1.72 per share expiring ten years after the date of issue. In fiscal 1999, 1998 and 1997, 7,800, 186,579 and 7,497 of these warrants were exercised, respectively. In fiscal 1996, the Company issued warrants to purchase 89,854 shares of common stock with an exercise price ranging from $9.06 to $15.87 per share which expire five years after the date of issue. In fiscal 1996, 10,473 of these warrants were exercised and 12,679 were canceled.

****

As of July 31, 1999, the Company has reserved 4,853,800 shares under the arrangements described above.

Note 9 - 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 10 - 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, 1999, 1998 and 1997, the Company has authorized employer contributions of 50% of the employees' contribution up to 6% of the employees' compensation in Enzo Biochem, Inc. common stock. The 401(k) employer contributions expense was $188,000, $135,000 and $129,000 in fiscal years 1999, 1998, and 1997, respectively.

Note 11 - Stock dividend

On December 15, 1997, the Company declared a 5% stock dividend payable January 23, 1998 to shareholders of record as of January 9, 1998. The stock price on the date of declaration was $15.44.

Note 12 - Segment Information

In fiscal 1999, the Company adopted SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS No. 131") and retroactively applied it to fiscal 1998 and 1997. The adoption of SFAS No. 131 had no impact on the Company's reported net income or shareholders' equity. 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 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 benefit (provision) for taxes on income and reported as other consist of corporate general and administrative costs which 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 has not been included in the reportable segments below.

The following financial information (in thousands) represents the reportable segments of the Company:

<TABLE>
<CAPTION>

	Research and Development Laboratories			Clinical Reference Laboratories		
	Fiscal Year Ended July 31,			Fiscal Year Ended July 31,		
	1999	1998	1997	1999	1998	1997
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Operating revenues:						
Research product revenues	$16,279	$12,661	$13,190	--	--	--
Clinical laboratory services	--	--	--	$28,041	$27,756	$21,749
Cost and expenses:						
Cost of research product revenues	7,884	7,497	8,410	--	--	--
Cost of clinical laboratory services	--	--	--	8,285	8,247	7,153
Research and development expense	4,427	3,983	3,562	--	--	--
Depreciation and amortization	744	691	629	1,188	1,173	1,216
Interest income	--	--	--	23	39	
25						
Income before benefit (provision) for taxes on income	$2,661	$157	$157	$2,363	$2,195	
$1,461						
	------	----	----	------	------	----
--						

<CAPTION>

	Other			Consolidated		
	Fiscal Year Ended July 31,			Fiscal Year Ended July 31,		
	1999	1998	1997	1999	1998	1997
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Operating revenues:						
Research product revenues	--	--	--	$16,279	$12,661	$13,190
Clinical laboratory services	--	--	--	28,041	27,756	21,749
Cost and expenses:						
Cost of research product revenues	--	--	--	7,884	7,497	8,410
Cost of clinical laboratory services	--	--	--	8,285	8,247	7,153
Research and development expense	--	--	--	4,427	3,983	3,562
Depreciation and amortization	--	--	--	1,932	1,864	1,845
Interest income	$1,961	$1,846	$1,774	1,984	1,885	1,799
Income before benefit (provision) for taxes on income	$363	$218	$(54)	$5,387	$2,570	$1,564
	----	----	----	------	------	------

</TABLE>

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:

	1999	1998	1997
United States	$3,813	$1,171	$767
Foreign Countries	12,466	11,490	12,423
	$16,279	$12,661	$13,190

ENZO BIOCHEM, INC.
SCHEDULE II - VALUATION
AND QUALIFYING ACCOUNTS
Years ended July 31, 1999, 1998 and 1997

<TABLE>
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Description	Balance at Beginning of period	Additions: Charged (credited) to costs and expenses	Additions: Charged to other accounts	Deductions (Additions)	Balance at end of period
<S>	<C>	<C>	<C>	<C>	
1999					
Allowance for doubtful accounts receivable	$5,148,500	$9,960,800	--	$9,082,300 (1)	$6,027,000
Allowance for deferred tax valuation	$6,498,000	($1,550,000)	--	$2,378,000	$2,570,000
1998					
Allowance for doubtful accounts receivable	$4,105,200	$9,627,500	--	$8,584,200 (1)	$5,148,500
Allowance for deferred tax valuation	$8,824,000	$(1,025,000)	--	$1,301,000	$6,498,000
1997					
Allowance for doubtful accounts receivable	$5,398,000	$5,633,600	--	$6,926,400 (1)	$4,105,200
Allowance for deferred tax valuation	$9,571,000	--	--	$747,000	$8,824,000

</TABLE>

(1) Write-off of uncollectable accounts receivable.

Exhibit 23

Consent of Independent Auditors

We consent to the incorporation by reference in the Registration Statements (Forms S-3, No. 333-15533, 33-58736, 33-60229, 33-78760, 33-72170, 33-68542 and Forms S-8 No. 33-45348, 33-75466, 33-88826 and 333-87153) of Enzo Biochem, Inc. and in the related Prospectus of our report dated October 15, 1999, with respect to the consolidated financial statements and schedule of Enzo Biochem, Inc. included in this Annual Report (Form 10-K) for the fiscal year ended July 31, 1999.

/s/ Ernst & Young LLP

Melville, New York
October 28, 1999

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