

EXHIBIT INDEX

EXHIBIT -----	DESCRIPTION -----
99.1	Registrant's press release dated June 14, 2004 announcing operating results for the fiscal quarter ended April 30, 2004.*

* Furnished herewith.

ENZO BIOCHEM, INC.
527 MADISON AVENUE
NEW YORK, NY 10022

FOR IMMEDIATE RELEASE

ENZO BIOCHEM REPORTS RESULTS
FOR FISCAL 2004 THIRD QUARTER

STEADY SALES PROGRESS AT ENZO LIFE SCIENCES

FARMINGDALE, NY, June 14, 2004 -- Enzo Biochem, Inc. (NYSE:ENZ), a leading biotechnology company specializing in gene identification and genetic and immune regulation technologies for diagnostic and therapeutic applications, today reported operating results for the third fiscal quarter ended April 30, 2004.

"The Company's operating results showed progress, with increased sales, and significant sequential improvement in gross profit and a sequentially sharply reduced net loss. Despite higher expenditures for research and development, and litigation related issues, cash flow from operating activities was positive," said Barry Weiner, President. "All in all, our financial position remains sound, with over \$75 million in cash and marketable securities. We are well positioned to continue investing in both our Life Sciences and Clinical Labs businesses, and to support multiple clinical programs. Our operational results are reflective of the expanded sales and marketing efforts we have made. At Enzo Life Sciences specifically we have, in the third quarter, on a year-to-year comparison of sales, more than offset the business lost as a result of the cancellation of a key distribution contract. With four products currently in clinical development programs, and preclinical studies underway for a number of new target medicines, our therapeutics activities are proceeding at a vigorous pace."

In the three months ended April 30, 2004, total revenue increased 1.1%, to \$11.8 million, compared with \$11.6 million in the corresponding year-earlier period. Gross profit amounted to \$8.7 million, compared with \$8.1 million and \$7.6 million in the prior two quarters of fiscal 2004, respectively, and \$8.9 million, a year ago. Research and development expenses, owing to expanded clinical and pre-clinical activity, increased 24.6%, to \$2.1 million, and selling, general and administrative ("SG&A") expenses rose 14.7%, to \$3.6 million in the corresponding year-earlier period. Legal expenses increased to \$1.3 million in the third fiscal quarter, compared to \$0.2 million in the corresponding year-earlier period, and compared to \$1.8 million in the preceding second quarter of fiscal 2004. The net loss for the third fiscal quarter of fiscal 2004 amounted to \$0.5 million, or (\$0.02) per share fully diluted, which compares to a net loss of \$1.5 million, or (\$0.05) per share fully diluted, in the preceding second quarter of this fiscal year. In the corresponding year-ago third quarter, net income amounted to \$1.2 million, or \$0.04 per share fully diluted. Cash flow from operating activities for the fiscal 2004 third quarter increased by \$0.6 million, with cash and cash equivalents on April 30, 2004 totaling \$75.2 million. Working capital as of that date amounted to \$96.6 million, and stockholders equity exceeded \$108 million.

Enzo Clinical Labs' expanded marketing effort, which includes additional sales personnel and entry into new contiguous geographical areas in the metropolitan New York area, contributed to a \$0.5 million increase or a 7.1% increase in revenue from the fiscal second quarter. Revenues for the third quarter increased by 1.2% to \$7.6 million, from \$7.5 million in the corresponding year-earlier period. Gross profit improved sequentially to \$4.9 million, from \$4.5 million in the fiscal 2004 second quarter and compared with \$5.0 million in the corresponding year-earlier period. Total expenses, excluding cost of sales, for the segment increased 25.6%, to \$5.2 million in the corresponding year-ago period, reflecting the increased sales force, additional installation and introductory expenditures for the ENZODIRECT(TM), suite of products for rapid transmission of laboratory results to client physicians, and a \$0.6 million increase in provision for uncollectible accounts receivable resulting from slow or reduced

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payments from third party payers, an ongoing issue in the industry. EnzoLabs' operating loss of \$0.3 million for the fiscal third quarter improved from a loss of \$1.1 million in the second fiscal quarter, an improvement of \$0.8 million, and year-ago operating income of \$0.9 million.

At Enzo Life Sciences, fiscal third quarter product sales amounted to \$4.2 million, compared with \$4.2 million in the corresponding year-earlier period, while the prior year period included approximately \$1.5 million of revenue from Affymetrix. Product sales at Enzo Life Sciences have increased sequentially in each of the three quarters in fiscal 2004, aided by direct sales as well as introduction of new products for the genomic market, and in the third quarter were 50% greater than in the fiscal 2004 first quarter. Gross profit for the third quarter of fiscal 2004 amounted to \$3.8 million, compared with \$3.6 million in the preceding second quarter and \$3.9 million in the corresponding year-ago period. Reflecting the newly instituted direct sales and marketing team, and a 33.7% increase in research and development, to \$1.6 million, total expenses increased to \$2.2 million, compared with \$1.8 million a year ago. Fiscal 2004 third quarter operating income for Enzo Life Sciences amounted to \$1.5 million, compared with \$2.1 million in the corresponding year-ago period, and \$1.3 million and \$0.4 million in the second and first quarters of the current fiscal year, respectively.

Enzo Therapeutics recently initiated a Phase 1 clinical trial to study its new immunomodulatory agent, EGS21, a beta-D-glucosylceramide compound. Together with the Company's current oral immune regulation platform, it is believed that EGS21 could accelerate Enzo's development and launching of products for treatment of a broad range of immune mediated diseases. EGS21 is now the fourth Enzo therapeutic product in clinical development. The others include a double blind Phase 2 study of Alequel(TM), an investigation therapeutic modality for management of Crohn's disease; a Phase I/II study of the STEALTHVECTOR(R) HGTV43(TM) gene construct for HIV infection at New York Presbyterian Hospital-Weill Cornell Medical College in New York City; and a planned multi-site Phase II study of EHT899, an immune regulation medicine for hepatitis B infection.

ABOUT ENZO

Enzo Biochem is engaged in the research, development and manufacture of innovative health care products based on molecular biology and genetic engineering techniques, and in providing diagnostic services to the medical community. The Company's proprietary labeling and detection products for gene sequencing and genetic analysis, with over 180 patents worldwide, are sold to the life sciences market throughout the world. The Company's therapeutic division is in various stages of clinical evaluation of its proprietary gene medicine for HIV-1 infection and its proprietary immune regulation medicines for hepatitis B and hepatitis C infection and for Crohn's Disease. The Company also holds a patent covering a method and materials for correcting point mutations or small insertions or deletions of genetic material that would allow for editing and correcting certain abnormalities in genes. For more information visit our website www.enzo.com.

EXCEPT FOR HISTORICAL INFORMATION, THE MATTERS DISCUSSED IN THIS NEWS RELEASE MAY BE CONSIDERED "FORWARD-LOOKING" STATEMENTS WITHIN THE MEANING OF SECTION 27A OF THE SECURITIES ACT OF 1933, AS AMENDED AND SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED. SUCH STATEMENTS INCLUDE DECLARATIONS REGARDING THE INTENT, BELIEF OR CURRENT EXPECTATIONS OF THE COMPANY AND ITS MANAGEMENT. INVESTORS ARE CAUTIONED THAT ANY SUCH FORWARD-LOOKING STATEMENTS ARE NOT GUARANTEES OF FUTURE PERFORMANCE AND INVOLVE A NUMBER OF RISKS AND UNCERTAINTIES THAT COULD MATERIALLY AFFECT ACTUAL RESULTS. THE COMPANY DISCLAIMS ANY OBLIGATIONS TO UPDATE ANY FORWARD-LOOKING STATEMENT AS A RESULT OF DEVELOPMENTS OCCURRING AFTER THE DATE OF THIS PRESS RELEASE.

AN INFORMATIONAL CALL CONDUCTED BY ENZO BIOCHEM, INC. MANAGEMENT WILL TAKE PLACE ON MONDAY, JUNE 14, 2004 AT 4:30 PM E.T. IT CAN BE ACCESSED BY DIALING 1-877-780-2271. INTERNATIONAL CALLERS CAN DIAL 1-973-582-2737. YOU MAY ALSO LISTEN OVER THE INTERNET AT WWW.VCALL.COM. TO LISTEN TO THE LIVE CALL ON THE INTERNET, PLEASE GO TO THE WEB SITE AT LEAST FIFTEEN MINUTES EARLY TO REGISTER, DOWNLOAD AND INSTALL ANY NECESSARY AUDIO SOFTWARE. FOR THOSE WHO CANNOT LISTEN TO THE LIVE BROADCAST, A REPLAY WILL BE AVAILABLE APPROXIMATELY TWO HOURS AFTER THE END OF THE LIVE CALL, THROUGH MIDNIGHT JUNE 27, 2004. FOR REPLAY, DIAL 1-877-519-4471 (1-973-341-3080 INTERNATIONALLY). YOU WILL BE PROMPTED FOR PIN NUMBER 4869702.

- Table follows -

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ENZO BIOCHEM, INC. SELECTED STATEMENT OF OPERATIONS DATA

<TABLE>
<CAPTION>

	Three Months Ended April 30, 2004	2003	Nine Months Ended April 30, 2004
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2003

(in thousands, except per share data)
(unaudited)

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Operating revenues	\$11,765	\$11,640	\$33,065	\$42,108
(Loss) income before provision benefit for income taxes	(\$891)	\$2,022	(\$4,463)	\$10,439
(Provision) benefit for income taxes	\$431	(\$789)	\$2,224	(\$4,072)
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Net Income (loss) \$6,367	(\$460)	\$1,233	(\$2,239)	
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Basic earnings (loss) per share	(\$0.02)	\$0.04	(\$0.07)	\$0.21
Diluted earnings (loss) per share	(\$0.02)	\$0.04	(\$0.07)	\$0.21
Common share - basic 29,888	30,203	29,889	30,082	
Common share - diluted 30,467	30,203	30,409	30,082	

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SELECTED BALANCE SHEET DATA

	April 30, 2004 (unaudited)	July 31, 2003 (audited)
	(in thousands)	
Cash and Marketable Securities	\$75,220	\$78,422
Working Capital	\$96,629	\$97,724
Stockholders' Equity	\$108,204	\$109,381
Total Assets	\$113,422	\$115,878

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