FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10. OMB Number: 3235-0287 Estimated average burden hours per response: 0.5

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address			2. Issuer Name and Ticker or Trading Symbol ENZO BIOCHEM INC [ENZ]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
COUCHMAN JONATHAN				X	Director	10% Owner			
				-	Officer (give title below)	Other (specify below)			
(Last) C/O ENZO BIOCI 21 EXECUTIVE E		(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 01/16/2025		Delow)	Delow)			
(Street)			4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Li X Form filed by One Reporting Person					
FARMINGDALE	NY	11735			Form filed by One Reportin Form filed by More than O	5			
(City)	(State)	(Zip)							

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
			Code V		Amount	nount (A) or (D)		(Instr. 3 and 4)		(Instr. 4)
Common Stock	01/16/2025		Α		142,897(1)	Α	\$ <mark>0</mark>	142,897	D	
Common Stock								130,000	I	By Xstelos Holdings, Inc. ⁽²⁾
Common Stock								130,000	I	By Xstelos Holdings, Inc. ⁽³⁾
Common Stock								277,237	I	In retirement accounts ⁽⁴⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

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1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	ercise (Month/Day/Year) of ative	3A. Deemed Execution Date, if any (Month/Day/Year)			5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		Derivative	derivative Securities Beneficially Owned Following Reported	Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		Transaction(s) (Instr. 4)		

Explanation of Responses:

1. The Reporting Person was granted Restricted Stock Units that will fully vest upon the earlier of: (i) the first anniversary of the grant date (i.e., January 16, 2026), or (ii) a change of control event.

2. Shares are owned by Xstelos Holdings, Inc., of which the Reporting Person is the sole officer and controlling person. He controls a majority of the shares of Xstelos Holdings, Inc., through shares held in his personal Roth IRA retirement account and through shares held by Couchman Investments LP, a family investment fund, which he controls and which is owned by him and by a trust for the benefit of his children, of which he is the investment fund, which he controls and which is owned by him and by a trust for the benefit of his children, of which he is the investment manager. The Reporting Person disclaims beneficial ownership of the securities of the Issuer reported herein, except to the extent of his pecuniary interest therein, and the filing of this Form 3 shall not be construed as an admission that the Reporting Person is a beneficial owner of the securities of the Issuer reported herein.

3. Shares are owned by Myrexis, Inc., of which the Reporting Person is the sole officer and controlling person. Myrexis, Inc. is controlled by Xstelos Holdings, Inc. The Reporting Person disclaims beneficial ownership of the securities of the Issuer reported herein, except to the extent of his pecuniary interest therein, and the filing of this Form 3 shall not be construed as an admission that the Reporting Person is a beneficial owner of the securities of the Issuer reported herein.

4. 227,237 shares are held in the Reporting Person's personal SEP-IRA retirement account and 50,000 shares are held in the Reporting Person's personal 401(k) retirement account.

<u>/s/ Jon Couchman</u> ** Signature of Reporting Person 01/17/2025 Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

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