FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: 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 of Reporting Person* GLOVER JAMES T						2. Issuer Name and Ticker or Trading Symbol ORGANOVO HOLDINGS, INC. [ONVO]								Relationship of the Relati	cable)	ig Pers	son(s) to Iss 10% Ov	
(Last) 6275 NA	(Last) (First) (Middle) 6275 NANCY RIDGE DRIVE, SUITE 110					3. Date of Earliest Transaction (Month/Day/Year) 08/20/2014								Officer below)	(give title		Other (s below)	pecify
(Street) SAN DIEGO CA 92121 (City) (State) (Zip)				4.1	4. If Amendment, Date of Original Filed (Month/Day/Year)								ndividual or Joint/Group Filing (Check Applicable e) X Form filed by One Reporting Person Form filed by More than One Reporting Person					
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) 2. Transa Date (Month/D					Execution Dat			e, Transaction Code (Instr.		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5)		ed (A) or tr. 3, 4 and	Benefici	es Formally (D) (Following (I) (I		: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
									Code		Amount	(A) or (D)	Price	Transact (Instr. 3	ion(s)			(111301.4)
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																		
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)		4. Transaction Code (Instr. 8)				6. Date Exercisable a Expiration Date (Month/Day/Year)			7. Title and Ame of Securities Underlying Derivative Secu (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)		10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership (Instr. 4)
				c	Code	v	(A)	(D)	Date Exercisable	Exp	piration te	Title	Amount or Number of Shares					
Stock Option (Right to Buy)	\$7.62	08/20/2014			Α		31,500		(1)	08/2	20/2024	Common Stock	31,500	\$0	31,50	0	D	

Explanation of Responses:

1. The option shares vest and become exercisable in full on the earlier of (i) August 20, 2015 or (ii) immediately prior to commencement of the Issuer's next annual stockholder meeting,

/s/ Barry Michaels, Attorney-

08/26/2014

in-fact

** Signature of Reporting Person

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.