Instruction 1(b)

Form 3 Holdings Reported.

FORM 5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington,	$D \subset$	205/19
wasiiiigton,	D.C.	20549

ANNUAL STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL											
OMB Number:	3235-0362										
Estimated average burden											
hours per response:	1.0										

Form 4	Transactions R	eported.	File	ed pursuant to or Sectior					ities Excha ompany Ac								
Name and Address of Reporting Person* Presnell Sharon Collins				2. Issuer Name and Ticker or Trading Symbol ORGANOVO HOLDINGS, INC. [ONVO]						5. Relationship of Reporting Pers (Check all applicable) Director				10%	Owner		
(Last) (First) (Middle) 6275 NANCY RIDGE DRIVE, SUITE 110				3. Statement for Issuer's Fiscal Year Ended (Month/Day/Year) 03/31/2017					Year)	X Officer (give title Other (specify below) Chief Scientific Officer							
(Street) SAN DIE (City)	GO CA		2121 Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)							ine)	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																	
Date		2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)		Code (Instr.		4. Securities Acquired (A) or Dispos Of (D) (Instr. 3, 4 and 5)			or Disposed	Securiti Benefic		ies O		ership n: Direct	7. Nature of Indirect Beneficial Ownership	
								Amour	nt	(A) or (D)	Price		Issuer's Fiscal Year (Instr. 3 and 4)		(D) or Indirect (I) (Instr. 4)		(Instr. 4)
Common Stock			03/18/2017		G ⁽¹⁾		1)	15	,000	D	\$0.00	100,355 ⁽²⁾		355(2)		D	
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)	Derivative Conversion Date Execution Date, or Exercise (Month/Day/Year)		4. Transaction Code (Instr. 8) 5. Num of Derivat Securit Acquiri (A) or Dispos of (D) (Instr. 3 and 5)		rative rities ired r osed)	Expiration Date (Month/Day/Year) titles sed 3, 4			Deriv	int of rities rlying ative rity (Instr. 3			9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	re (es control control	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Beneficial Ownership t (Instr. 4)	
					(A)	(D)	Date Exerc	cisable	Expiration Date	Title	or Number of Shares						

Explanation of Responses:

- 1. This transaction represents charitable contributions by the Reporting Person.
- 2. This number does not include 1,282,192 shares of common stock underlying outstanding options held by Dr. Presnell; post-transaction Dr. Presnell continues to beneficially own or have a right to acquire 1,382,547 shares of common stock.

Remarks:

/s/ Sharon Presnell

05/09/2017

** 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.