#### FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

| wasn | ington, | D.C. | 20549 |
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|      |         |      |       |

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

#### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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 of Reporting Person*  Gallant Paul  (Last) (First) (Middle)  6275 NANCY RIDGE DRIVE, SUITE 110 |   |  |  |         | <u>OF</u>                    | Issuer Name and Ticker or Trading Symbol     ORGANOVO HOLDINGS, INC. [ ONVO ]      Inc. [ ONVO ]  3. Date of Earliest Transaction (Month/Day/Year)     O5/16/2018 |  |                                |   |                 |                       |   |                           |   | all app<br>Dired  | blicable)<br>ctor<br>er (give title<br>v)  |  | Owner<br>r (specify                   |
|--|---|--|--|---------|------------------------------|---|--|--------------------------------|---|-----------------|-----------------------|---|---------------------------|---|---|--|--|---------------------------------------|
| (Street) SAN DIE   |   |  | )2121<br>Zip)                              |         | 4. If                        | 4. If Amendment, Date of Original Filed (Month/Day/Year)  |  |                                |   |                 |                       | 6. Indiv<br>Line)<br>X  | Forn                      | or Joint/Group Filing (Check Applicable<br>m filed by One Reporting Person<br>m filed by More than One Reporting<br>son |   |  |  |                                       |
|  |   | Tabl                                       | e I - No                                   | n-Deriv | ative                        | Sec   | curitie  | s Ac                           | quired  | , Dis           | posed o               | f, or E   | Benefic                   | ially   | Owne  | ed   |  |                                       |
| 1. Title of Security (Instr. 3)  2. Transact Date (Month/Day   |   |  |  |         | Execution Date,              |   | 3. 4. Securitie<br>Transaction<br>Code (Instr.<br>8)     |                                |   |                 | and 5) Secur<br>Benef |   | icially<br>d Following    | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)   | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |  |                                       |
|  |   |  |  |         |                              |   |  | Code                           | v   | Amount          | (A)<br>(D)            | or Pric   | e                         | Transa  | action(s)<br>3 and 4)   |  | (11341.4)  |                                       |
| Common Stock 05/16   |   |  | 05/16                                      | /2018   | 018                          |   | F  |                                | 6,890(1)  | D \$1.0         |                       | 6621  | 21 173,689 <sup>(2)</sup> |   | D   |  |  |                                       |
|  |   | Та   |  |         |                              |   |  |                                |   |                 | osed of,<br>onvertib  |   |                           |   | vned  |  |  |                                       |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)  | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deen<br>Executio<br>if any<br>(Month/D | n Date, | 4.<br>Transa<br>Code (<br>8) | Instr.  | 5. Nu of Deriv Secu Acqu (A) on Dispo of (D) (Instrand 5 | ative<br>rities<br>ired<br>sed | 6. Date E<br>Expirati<br>(Month/II)<br>Date<br>Exercisa | on Da<br>Day/Yo |                       | 7. Title<br>Amour<br>Securi<br>Underl<br>Deriva<br>Securi<br>and 4) | nt of<br>ties<br>ying     | Deriv<br>Secu<br>(Inst  |   | 9. Number o<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction<br>(Instr. 4) | Ownershi<br>Form:<br>Direct (D)<br>or Indirec<br>(I) (Instr. 4 | Beneficial<br>Ownership<br>(Instr. 4) |

## Explanation of Responses:

- 1. Represents the mandatory sale of shares to satisfy the Reporting Person's tax withholding obligations, in connection with the partial vesting and settlement of restricted stock units granted in July 2016 and June 2017, pursuant to the Reporting Person's agreement with the Issuer.
- 2. This number does not include 320,000 shares of common stock underlying outstanding options held by Mr. Gallant; post-transaction Mr. Gallant beneficially owns or has a right to acquire 493,689 shares of common stock.

# Remarks:

/s/ Paul Gallant

05/17/2018

\*\* Signature of Reporting Person

Date

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

- $^{\star}$  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.