FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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OMB APPROVAL

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

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*  Flynn James E  (Last) (First) (Middle)  780 THIRD AVENUE, 37TH FLOOR						Issuer Name and Ticker or Trading Symbol     Homology Medicines, Inc. [ FIXX ]      Jate of Earliest Transaction (Month/Day/Year)     04/02/2018									5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  X Director X 10% Owner  Officer (give title X Other (specify below)  *Director by Deputization						
(Street) NEW YO		JY	10017	-	4. If Amendment, Date of Original Filed (Month/Day/Year)									Individual or Joint/Group Filing (Check Applicable Line)     Form filed by One Reporting Person							
(City)	?)	State)	(Zip)												X Form filed by More than One Reporting Person						
		7	able I - No	on-De	eriva	tive S	Secu	rities Ac	quirec	d, Di	sposed o	of, o	r Ben	eficially	Owned						
1. Title of	Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)		Year)	2A. Deemed Execution Date, if any (Month/Day/Year)		3. Transaction Code (Instr. 8)		4. Securitie Disposed (	es Ac Of (D)	(Instr. 3	A) or 3, 4 and 5)	nd 5) Securities Beneficially Owned Following Reported		6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	irect Ir direct B .4) C	7. Nature of Indirect Beneficial Ownership (Instr. 4)			
									Code	v	Amount		(A) or (D)	Price	Transaction (Instr. 3 and				·		
Common	Common Stock 04		04/0	02/20	18			С		669,03	4	A	(1)	669,03	34	I	I H In	Chrough Deerfield Jealthcare movations and, L.P.			
Common	Stock			04/02/201		.018		С		669,03	4 A (1)		(1)	669,034		I		Chrough Deerfield rivate Design Fund III,P.(3)(4)			
Common	ommon Stock 04/02/2		02/20	018		С		1,319,484 A		A	(2)	1,988,518		I I		Chrough Deerfield Jealthcare movations and, L.P.					
Common	Common Stock		04/02/2018		18			С		1,319,48	33	A	(2)	1,988,517		I	I P I F	Through Deerfield rivate Design und III,P.(3)(4)			
Common	Common Stock 04/02/3		02/20	2018			P		625,000 A		\$16	2,613,517		I		Chrough Deerfield rivate Design Fund III,P.(3)(4)					
Common	Common Stock 04/02/20		2018		P		625,000 A		\$16	625,000		I	I P	Through Deerfield Partners, P. (3)(4)							
			Table II								posed of converti				Owned						
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Da if any (Month/Day/	ate,	4. Transa Code ( 8)	action	5. No Deri Seco Acqu	umber of vative urities uired (A) isposed of Instr. 3, 4	6. Date Exercis Expiration Date (Month/Day/Yea		isable and te	7. Title and Amou Securities Under Derivative Securi (Instr. 3 and 4)		Amount of Inderlying ecurity 4)	Derivative Security (Instr. 5) Ber Ow Foll Rep		ties icially d ving ted action(s)	10. Ownershi Form: Direct (D) or Indirec (I) (Instr. 4	Beneficial Ownership t (Instr. 4)		
					Code	v	(A)	(D)	Date Exercisa		Expiration Date	Title		Amount or Number of Shares		(Instr.	4)				
Series A Preferred Stock	(1)	04/02/2018			С			3,521,126	(1)		(1)		nmon ock	669,034	(1)		0	I	Through Deerfield Healthcare Innovation Fund, L.P. (3)(4)		

				curities Acquired, Disposed of, or Beneficially Owned lls, 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)	Execution Date, Transaction Derivative Expiration Date		ate	7. Title an Securities Derivative (Instr. 3 an		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported	10. Ownership 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)		
Series A Preferred Stock	(1)	04/02/2018		С			3,521,126	(1)	(1)	Common Stock	669,034	(1)	0	I	Through Deerfield Private Design Fund III, L.P. <sup>(3)(4)</sup>
Series B Preferred Stock	(2)	04/02/2018		С			6,944,445	(2)	(2)	Common Stock	1,319,484	(2)	0	I	Through Deerfield Healthcare Innovations Fund, L.P. (3)(4)
Series B Preferred Stock	(2)	04/02/2018		С			6,944,444	(2)	(2)	Common Stock	1,319,483	(2)	0	I	Through Deerfield Private Design Fund III, L.P. <sup>(3)(4)</sup>
	nd Address of James E	Reporting Person*	,												
(Last) 780 THI	RD AVENU	(First) JE, 37TH FLOC	(Middle)												
(Street) NEW Y	ORK	NY	10017												
(City)		(State)	(Zip)												
	FIELD M	Reporting Person* ANAGEMEI	NT COMPAN	<u> </u>	<u>.P.</u>										
(Last) 780 THI	RD AVENU	(First) JE, 37TH FLOC	(Middle)												

(Street)
NEW YORK

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Deerfield Private Design Fund III, L.P.

1. Name and Address of Reporting Person\*

1. Name and Address of Reporting Person\*

<u>DEERFIELD PARTNERS, L.P.</u>

1. Name and Address of Reporting  $\mathsf{Person}^{\star}$ 

Deerfield Mgmt L.P.

780 THIRD AVENUE 37TH FLOOR

780 THIRD AVENUE 37TH FLOOR 10017

(Zip)

(Middle)

10017

(Zip)

(Middle)

10017

(Zip)

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(Last) 780 THIRD AVENU	(First) JE, 37TH FLOOR	(Middle)							
-									
(Street) NEW YORK	NY	10017							
(City)	(State)	(Zip)							
1. Name and Address of Deerfield Mgmt									
(Last) 780 THIRD AVENU	(First) JE, 37TH FLOOR	(Middle)							
(Ctroot)									
(Street) NEW YORK	NY	10017							
(City)	(State)	(Zip)							
1. Name and Address of Reporting Person*  Deerfield Healthcare Innovations Fund, L.P.									
(Last) 780 THIRD AVENU 37TH FLOOR	(First) JE	(Middle)							
(Street) NEW YORK	NY	10017							
(City)	(State)	(Zip)							
1. Name and Address of Reporting Person*  Deerfield Mgmt HIF, L.P.									
(Last) 780 THIRD AVENU 37TH FLOOR	(First) JE	(Middle)							
(Street) NEW YORK	NY	10017							
(City)	(State)	(Zip)							

## Explanation of Responses:

- 1. Each share of Series A Preferred Stock automatically converted into 0.1900057 shares of the Issuer's common stock upon the closing of the Issuer's initial public offering (on an adjusted basis, after giving effect to the 1-for-5.263 reverse stock split effected by the Issuer in connection with its initial public offering).
- 2. Each share of Series B Preferred Stock automatically converted into 0.1900057 shares of the Issuer's common stock upon the closing of the Issuer's initial public offering (on an adjusted basis, after giving effect to the 1-for-5.263 reverse stock split effected by the Issuer in connection with its initial public offering).
- 3. This Form 4 is being filed by the undersigned as well as the entities listed on the Joint Filer Information Statement attached as an exhibit hereto (the "Reporting Persons"). Deerfield Mgmt III, L.P. is the general partner of Deerfield Private Design Fund III, L.P. ("Fund III"). Deerfield Mgmt, L.P. is the general partner of Deerfield Partners, L.P. ("Deerfield Partners"). Deerfield Mgmt HIF, L.P. is the general partner of Deerfield Healthcare Innovations Fund, L.P. (collectively with Fund III and Deerfield Partners, the "Funds"). Deerfield Management Company, L.P. is the investment manager of the Funds. James E. Flynn is the sole member of the general partner of each of Deerfield Mgmt, L.P., Deerfield Mgmt III, L.P., Deerfield Mgmt HIF, L.P. and Deerfield Management Company, L.P.
- 4. In accordance with Instruction 4 (b)(iv) to Form 4, the entire amount of the Issuer's securities held by the Funds is reported herein. For purposes of Section 16 of the Securities Exchange Act of 1934, as amended, each Reporting Person disclaims beneficial ownership of any such securities, except to the extent of his/its indirect pecuniary interest therein, if any, and this report shall not be deemed an admission that such Reporting Person is the beneficial owner of such securities for purposes of Section 16 or otherwise.

## Remarks:

Cameron Wheeler, an employee of Deerfield Management, serves as a director of the Issuer. Jonathan Isler, Attorney-in-Fact: Power of Attorney, which is hereby incorporated by reference to Exhibit 24 to a Form 3 with regard to Proteon Therapeutics, Inc. filed with the Securities and Exchange Commission on August 4, 2017 by Deerfield Special Situations Fund, L.P., Deerfield Partners, L.P., Deerfield International Master Fund, L.P., Deerfield Private Design Fund III, L.P., Deerfield Private Design Fund III, L.P., Deerfield Mgmt III, L.P., Deerfield Mgmt III, L.P., Deerfield Mgmt IV, L.P., Deerfield Mgmt IV, L.P., Deerfield Mgmt III, L.P.

/s/ Jonathan Isler, Attorney-in-Fact 04/04/2018

\*\* 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.

## Joint Filer Information

Names: Deerfield Mgmt III, L.P., Deerfield Mgmt HIF, L.P., Deerfield Management Company, L.P., Deerfield Private Design

Fund III, L.P., Deerfield Healthcare Innovations Fund, L.P., Deerfield Partners, L.P., Deerfield Mgmt, L.P.

Address: 780 Third Avenue, 37<sup>th</sup> Floor

New York, NY 10017

Designated Filer: James E. Flynn

Issuer and Ticker Symbol: Homology Medicines, Inc. [FIXX]

Date of Event Requiring Statement: April 2, 2018

The undersigned, Deerfield Mgmt III, L.P., Deerfield Mgmt HIF, L.P., Deerfield Management Company, L.P., Deerfield Private Design Fund III, L.P., Deerfield Healthcare Innovations Fund, L.P., Deerfield Mgmt, L.P. and Deerfield Partners, L.P. are jointly filing the attached Changes in Beneficial Ownership on Form 4 with James E. Flynn with respect to the beneficial ownership of securities of Homology Medicines, Inc.

Signatures:

DEERFIELD MGMT HIF, L.P. DEERFIELD MGMT III, L.P.

By: J.E. Flynn Capital HIF, LLC, General Partner

By: J.E. Flynn Capital III, LLC, General Partner

By: /s/ Jonathan Isler By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact Jonathan Isler, Attorney-In-Fact

DEERFIELD MANAGEMENT COMPANY, L.P. DEERFIELD PRIVATE DESIGN FUND III, L.P.

By: Flynn Management LLC, General Partner

By: Deerfield Mgmt III, L.P., General Partner

By: /s/ Jonathan Isler

By: J.E. Flynn Capital III, LLC, General Partner

Jonathan Isler, Attorney-In-Fact

By: <u>/s/ Jonathan Isler</u> Jonathan Isler, Attorney-In-Fact

DEERFIELD HEALTHCARE INNOVATIONS FUND, L.P. DEERFIELD PARTNERS, L.P.

By: Deerfield Mgmt HIF, L.P., General Partner

By: Deerfield Mgmt, L.P., General Partner

By: J.E. Flynn Capital HIF, LLC, General Partner By: J.E. Flynn Capital, LLC, General Partner

By: <u>/s/ Jonathan Isler</u>
By: <u>/s/ Jonathan Isler</u>

Jonathan Isler, Attorney-In-Fact Jonathan Isler, Attorney-In-Fact

DEERFIELD MGMT, L.P.

By: J.E. Flynn Capital, LLC, General Partner

By: /s/ Jonathan Isler

Jonathan Isler, Attorney-In-Fact