

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

[Rule 13d-101]

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO § 24.13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO § 240.13D-2(a)

(Amendment No.)*

Singular Genomics Systems, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

82933R308

(CUSIP Number)

**David Clark
Elliot Press
Deerfield Management Company, L.P.
345 Park Avenue South, 12 Floor
New York, New York 10010
(212) 551-1600**

With a copy to:

**Jonathan D. Weiner, Esq.
Mark D. Wood, Esq.
Katten Muchin Rosenman LLP
50 Rockefeller Plaza
New York, New York 10020
(212) 940-8800**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

September 5, 2024

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

(Continued on following pages)
(Page 1 of 12 Pages)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAMES OF REPORTING PERSONS Deerfield Mgmt IV, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*	(a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY	
AF	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)	<input type="checkbox"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 249,495 (1)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 249,495 (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 249,495 (1)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*	<input type="checkbox"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.66%	
14	TYPE OF REPORTING PERSON PN	

(1) Comprised of (i) 166,162 shares of common stock and (ii) 83,333 shares of common stock issuable upon conversion of 2,500 shares of Series A Common Stock Equivalent Convertible Preferred Stock, in each case, held by Deerfield Private Design Fund IV, L.P. The terms of the Series A Common Stock Equivalent Convertible Preferred Stock restrict the conversion of such shares to the extent that, upon such conversion, the number of shares of common stock then beneficially owned by the holder and its affiliates and any other person or entities with which such holder would constitute a Section 13(d) "group" would exceed 4.9% of the total number of shares of common stock then outstanding (the "Ownership Cap"). Accordingly, notwithstanding the number of shares reported, the reporting person disclaims beneficial ownership of the shares of common stock issuable upon conversion of Series A Common Stock Equivalent Convertible Preferred Stock to the extent that upon such conversion the number of shares beneficially owned by all reporting persons hereunder, in the aggregate, would exceed the Ownership Cap.

1	NAMES OF REPORTING PERSONS Deerfield Private Design Fund IV, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 249,495 (2)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 249,495 (2)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 249,495 (2)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.66%	
14	TYPE OF REPORTING PERSON PN	

(2) Comprised of (i) 166,162 shares of common stock and (ii) 83,333 shares of common stock issuable upon conversion of 2,500 shares of Series A Common Stock Equivalent Convertible Preferred Stock. The terms of the Series A Common Stock Equivalent Convertible Preferred Stock restrict the conversion of such shares to the extent that, upon such conversion, the number of shares of common stock then beneficially owned by the holder and its affiliates and any other person or entities with which such holder would constitute a Section 13(d) "group" would exceed 4.9% of the total number of shares of common stock then outstanding (the "Ownership Cap"). Accordingly, notwithstanding the number of shares reported, the reporting person disclaims beneficial ownership of the shares of common stock issuable upon conversion of Series A Common Stock Equivalent Convertible Preferred Stock to the extent that upon such conversion the number of shares beneficially owned by all reporting persons hereunder, in the aggregate, would exceed the Ownership Cap.

1	NAMES OF REPORTING PERSONS Deerfield Management Company, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 249,495 (3)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 249,495 (3)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 249,495 (3)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.66%	
14	TYPE OF REPORTING PERSON PN	

(3) Comprised of (i) 166,162 shares of common stock and (ii) 83,333 shares of common stock issuable upon conversion of 2,500 shares of Series A Common Stock Equivalent Convertible Preferred Stock, in each case, held by Deerfield Private Design Fund IV, L.P. The terms of the Series A Common Stock Equivalent Convertible Preferred Stock restrict the conversion of such shares to the extent that, upon such conversion, the number of shares of common stock then beneficially owned by the holder and its affiliates and any other person or entities with which such holder would constitute a Section 13(d) "group" would exceed 4.9% of the total number of shares of common stock then outstanding (the "Ownership Cap"). Accordingly, notwithstanding the number of shares reported, the reporting person disclaims beneficial ownership of the shares of common stock issuable upon conversion of Series A Common Stock Equivalent Convertible Preferred Stock to the extent that upon such conversion the number of shares beneficially owned by all reporting persons hereunder, in the aggregate, would exceed the Ownership Cap.

1	NAMES OF REPORTING PERSONS James E. Flynn	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS AF	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 249,495 (4)
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 249,495 (4)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 249,495 (4)	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 6.66%	
14	TYPE OF REPORTING PERSON IN	

(4) Comprised of (i) 166,162 shares of common stock and (ii) 83,333 shares of common stock issuable upon conversion of 2,500 shares of Series A Common Stock Equivalent Convertible Preferred Stock, in each case, held by Deerfield Private Design Fund IV, L.P. The terms of the Series A Common Stock Equivalent Convertible Preferred Stock restrict the conversion of such shares to the extent that, upon such conversion, the number of shares of common stock then beneficially owned by the holder and its affiliates and any other person or entities with which such holder would constitute a Section 13(d) "group" would exceed 4.9% of the total number of shares of common stock then outstanding (the "Ownership Cap"). Accordingly, notwithstanding the number of shares reported, the reporting person disclaims beneficial ownership of the shares of common stock issuable upon conversion of Series A Common Stock Equivalent Convertible Preferred Stock to the extent that upon such conversion the number of shares beneficially owned by all reporting persons hereunder, in the aggregate, would exceed the Ownership Cap.

This Schedule 13D is filed by (i) Deerfield Mgmt IV, L.P. ("Deerfield Mgmt IV"), (ii) Deerfield Private Design Fund IV, L.P. ("Deerfield Private Design Fund IV"), (iii) Deerfield Management Company, L.P. ("Deerfield Management"), and (iv) James E. Flynn, a natural person ("Flynn") and collectively with Deerfield Mgmt IV, Deerfield Private Design Fund IV, Deerfield Management and Flynn, the "Reporting Persons", with respect to the Common Stock (as defined in Item 1) of Singular Genomics Systems, Inc.

Item 1. Security and Issuer.

This Statement on Schedule 13D relates to the shares of common stock, par value \$0.0001 per share (the "Common Stock"), of Singular Genomics Systems, Inc., a Delaware corporation (the "Company"). The address of the Company's principal executive offices is 3010 Science Park Road, San Diego, California, 92121.

Item 2. Identity and Background.

- (a) This Statement is filed as a joint statement pursuant to Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934 (the "Exchange Act") by the Reporting Persons.
- (b) The address of the principal business and/or principal office of each Reporting Person is 345 Park Avenue South, 12th Floor, New York, New York 10010.
- (c) Flynn is the managing member of the general partner of each of Deerfield Mgmt IV and Deerfield Management. Deerfield Mgmt IV is the general partner of Deerfield Private Design Fund IV, and Deerfield Management is the investment manager of Deerfield Private Design Fund IV. Deerfield Private Design Fund IV purchases, holds and sells securities and other investment products. Schedule A hereto sets forth information regarding persons referred in Instruction C to Schedule 13D.
- (d) During the last five years, none of the Reporting Persons, nor, to the best of each of the Reporting Person's knowledge, any of the persons listed on Schedule A attached hereto, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

During the last five years, none of the Reporting Persons, nor, to the best of each of the Reporting Person's knowledge, any of the persons listed on Schedule A attached hereto, has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and, as a result of such proceeding, was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

- (e) Each of Deerfield Mgmt IV, Deerfield Private Design Fund IV and Deerfield Management is organized under the laws of the State of Delaware. Flynn is a citizen of the United States of America.

The Reporting Persons have entered into a Joint Filing Agreement, a copy of which is attached hereto as Exhibit A.

Item 3. Source and Amount of Funds or Other Consideration.

Prior to the Company's initial public offering (the "IPO") in May 2021, Deerfield Private Design Fund IV participated in debt and equity financings involving the Company.

In June 2019, Deerfield Private Design Fund IV acquired 6,457,723 shares (the "Series B Conversion Shares") of the Company's Series B convertible preferred Stock ("Series B Preferred Stock") from the Company for an aggregate purchase price of approximately \$15,000,000. Upon the closing of the Issuer's IPO, each such share of Series B Preferred Stock automatically converted into one share of Common Stock (without giving effect to the June 2024 Reverse Stock Split (as defined below)).

In February 2021, Deerfield Private Design Fund IV purchased \$10,000,000 aggregate principal amount of the Company's convertible notes (the "2021 Convertible Notes") from the Company for \$10,000,000. Upon the closing of the IPO, the 2021 Convertible Notes, including accrued interest thereon, converted into an aggregate of 577,148 shares (the "2021 Note Conversion Shares") of Common Stock (on an unadjusted basis, without giving effect to the June 2024 Reverse Stock Split) at a conversion price equal to \$17.60 per share.

In connection with the IPO, Deerfield Private Design Fund IV acquired 450,000 shares (the "IPO Shares") of Common Stock (on an unadjusted basis, without giving effect to the June 2024 Reverse Stock Split), for \$22.00 per share. The aggregate purchase price paid by Deerfield Private Design Fund IV and Deerfield Partners for such shares was \$9,900,000.

On January 25, 2022, Deerfield Private Design Fund IV and the Company entered into an Exchange Agreement, pursuant to which Deerfield Private Design Fund IV exchanged an aggregate of 2,500,000 shares of Common Stock (on an unadjusted basis, without giving effect to the June 2024 Reverse Stock Split) for 2,500 shares of Series A Common Stock Equivalent Convertible Preferred Stock ("Series A Preferred Stock"). Each share of Series A Preferred Stock is convertible into 33.33 shares of Common Stock (on an adjusted basis, giving effect to the June 2024 Reverse Stock Split), subject to further adjustment as provided in the Certificate of Designation of Preferences, Rights and Limitations of Series A Preferred Stock (the "Series A Certificate of Designation").

On June 25, 2024, the Company effected a 1-for-30 reverse stock split of its Common Stock (the "June 2024 Reverse Stock Split"), which became effective at 12:01 a.m. Eastern Time on June 26, 2024. As a result of the June 2024 Reverse Stock Split, the Series B Conversion Shares, 2021 Note Conversion Shares and IPO Shares were converted into an aggregate of 166,162 shares of Common Stock. As a result of the June 2024 Reverse Stock Split, the conversion rate applicable to the Series A Preferred Stock was proportionately adjusted pursuant to the Series A Certificate of Designation.

Prior to the IPO, Andrew ElBardissi, an employee of Deerfield Management, served as a director of the Company and, on March 19, 2021, the Company granted an option to purchase shares of Common Stock to Andrew ElBardissi for his service as a director of the Company. As of the date of this report, such option is exercisable in respect of 1,000 shares of Common Stock (on an adjusted basis, giving effect to the June 2024 Reverse Stock Split). Such option is held for the benefit, and subject to the direction, of Deerfield Management. Mr. ElBardissi resigned as a director of the Company immediately prior to the pricing of the IPO.

Except as otherwise indicated herein, Deerfield Private Design Fund IV utilized its working capital to purchase the shares of Common Stock reported herein. Shares of Common Stock beneficially owned by the Reporting Persons are or may be held from time to time by Deerfield Private Design Fund IV in margin accounts established with its brokers or banks, and a portion of the purchase price for the Common Stock may have been obtained through margin borrowing. Common Stock positions held in margin accounts may be pledged as collateral security for the repayment of debit balances in the margin accounts.

Item 4. Purpose of Transaction.

The information set forth in Item 3 and Item 6 is incorporated herein by reference.

On September 5, 2024, Deerfield Private Design Fund IV, Deerfield Mgmt IV and Deerfield Management (collectively, “Deerfield”) submitted a non-binding proposal (the “September 2024 Proposal”) to the special committee of independent directors of the Company (the “Special Committee”). The September 2024 Proposal relates to a proposed acquisition through a special purpose vehicle to be established by Deerfield of all of the outstanding shares of Common Stock not already owned by Deerfield or any other stockholders or members of management that Deerfield invites to “roll over” their current equity shares for a purchase price of \$10.00 per share, in cash (the “Proposed Transaction”). The September 2024 Proposal contemplates (i) inviting other major stockholders to rollover their shares of Common Stock into the combined company and support the Proposed Transaction, and (ii) that existing management holders of shares of Common Stock (including any members of the Special Committee) would have a desire to participate in the rollover. The September 2024 Proposal indicates that Deerfield expects holders of over 50% of the outstanding shares of Common Stock, in total, would rollover into the combined company. It also indicates that Deerfield will not move forward with the Proposed Transaction (or any similar transaction) unless it is recommended to the board of directors of the Company (the “Board”) by the Special Committee and thereafter approved by the Board, and that prior to moving forward Deerfield would expect to enter into an exclusivity agreement with the Company.

The September 2024 Proposal contemplates that the Proposed Transaction would be fully financed by committed equity financing and not be subject to any financing condition.

Any definitive agreement entered into in connection with the Proposed Transaction would be subject to customary closing conditions, including approval by the Special Committee, any required stockholder approvals and approval by any applicable regulatory authorities. No assurance can be given that any definitive agreement will be entered into, that the Proposed Transaction will be consummated, or that the Proposed Transaction will be consummated on the terms set forth in the September 2024 Proposal. Deerfield reserves the right to modify or withdraw the Proposal at any time and no binding obligation on the part of any of the Reporting Persons or any of their affiliates will arise with respect to the filing of this Statement.

In furtherance of the September 2024 Proposal, the Reporting Persons and their affiliates expect to engage in communications and discussions with the Company, members of the Special Committee and, with the permission of the Special Committee, management of the Company. Among other things, the Reporting Persons expect to respond to inquiries from, and negotiate the terms of the September 2024 Proposal with, the Special Committee and its representatives. The Reporting Persons also expect to engage in communications and discussions with other current or prospective stockholders of the Company, potential co-investors and financing sources (including current or potential investors in funds managed by Deerfield), investment and financing professionals, industry analysts and other knowledgeable industry or market observers and participants, and other interested parties regarding the Transaction and/or the matters set forth in the September 2024 Proposal, and may exchange information with such persons pursuant to appropriate confidentiality or similar agreements.

The Reporting Persons do not currently intend to or provide updated or additional disclosures regarding the September 2024 Proposal or the Proposed Transaction unless and until a definitive agreement has been reached, unless disclosure is otherwise required under applicable U.S. securities laws.

The September 2024 Proposal may result in one or more of the transactions, events or actions specified in clauses (a) through (j) of Item 4 of Schedule 13D, including, without limitation, an acquisition of additional securities of the Issuer, an extraordinary corporate transaction (such as a merger) involving the Company, delisting of the Common Stock of from the Nasdaq Capital Market and other material changes in the Company's business or corporate structure.

Reference to the September 2024 Proposal in this Amendment No. 1 is qualified in its entirety by reference to the copy of the September 2024 Proposal, which is attached hereto as Exhibit 2, and incorporated herein by reference in its entirety.

Except for the foregoing, none of the Reporting Persons has any plans or proposals which relate to, or would result in, any of the matters referred to in paragraphs (a) through (j) of Item 4 of Schedule 13D. The Reporting Persons may, at any time and from time to time, formulate other purposes, plans or proposals regarding the Issuer, or any other actions that could involve one or more of the types of transactions or have one or more of the results described in paragraphs (a) through (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer.

(a)

(1) Deerfield Mgmt IV

Number of shares: 249,495 (comprised of shares, and shares underlying Series A Preferred Stock, held by Deerfield Private Design Fund IV)
Percentage of shares: 6.66%

(2) Deerfield Management

Number of shares: 249,495 (comprised of shares, and shares underlying Series A Preferred Stock, held by Deerfield Private Design Fund IV)
Percentage of shares: 6.66%

(3) Deerfield Private Design Fund IV

Number of shares: 249,495 (comprised of shares, and shares underlying Series A Preferred Stock, held directly)
Percentage of shares: 6.66%

(4) Flynn

Number of shares: 249,495 (comprised of shares, and shares underlying Series A Preferred Stock, held by Deerfield Private Design Fund IV)
Percentage of shares: 6.66%

(b)

(1) Deerfield Mgmt IV

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 249,495
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 249,495

(2) Deerfield Management

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 249,495
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 249,495

(3) Deerfield Private Design Fund IV

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 249,495
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 249,495

(4) Flynn

Sole power to vote or direct the vote: 0
Shared power to vote or direct the vote: 249,495
Sole power to dispose or to direct the disposition: 0
Shared power to dispose or direct the disposition: 249,495

Flynn is the sole member of the general partner of each of Deerfield Mgmt IV and Deerfield Management. Deerfield Mgmt IV is the general partner, and Deerfield Management is the investment manager, of Deerfield Private Design Fund IV.

(c) Except as set forth in Items 3 and 4 of this Schedule 13D, the Reporting Persons have not engaged in any transactions in the Company's securities during the past 60 days.

(d) As of the date of this Schedule 13D, no person other than the Reporting Persons is known to the Reporting Persons to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock covered by this Schedule 13D.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.

In January, February and March 2022, Deerfield Private Design Fund IV entered into a cash-settled swaps with UBS AG (“UBS”) which represent economic exposure comparable to a notional interest in 73,640 shares of Common Stock (representing 2.95% of the issued and outstanding Common Stock), in addition to the shares of Common Stock beneficially owned by the Reporting Persons. Under the terms of each of the swaps, (i) Deerfield Private Design Fund IV will be obligated to pay to UBS any negative price performance of the specified notional number of shares of Common Stock subject to the swap as of the expiration date of such swap, plus interest at rates set forth in the applicable contracts, and (ii) UBS will be obligated to pay Deerfield Private Design Fund IV any positive price performance of the specified notional number of shares of Common Stock subject to the swap as of the expiration date of the swap, plus interest at rates set forth in the applicable contracts. All balances will be settled in cash. The swaps do not give Deerfield Private Design Fund IV or any other Reporting Person direct or indirect voting, investment or dispositive control over any securities of the Company and do not require the counterparty thereto to acquire, hold, vote or dispose of any securities of the Company. Accordingly, the Reporting Persons do not beneficially own any shares of Common Stock that may be referenced in the swap contracts or in any Common Stock or other securities or financial instruments that may be held from time to time by the counterparty to the contracts. The swaps expire on February 1, 2027.

Item 7. Material to be Filed as Exhibits.

Exhibit 1 Joint Filing Agreement dated as of March 5, 2018 by and among the Reporting Persons.*

Exhibit 2 Power of Attorney previously filed as Exhibit 24 to a Form 3 with regard to BiomX Inc. filed with the Securities and Exchange Commission on March 19, 2024 by Deerfield Private Design Fund V, L.P., Deerfield Healthcare Innovations Fund II, L.P., Deerfield Mgmt V, L.P., Deerfield Mgmt HIF II, L.P., Deerfield Management Company, L.P. and James E. Flynn.

Exhibit 3 Non-binding Indication of Interest, submitted September 5, 2024*

* Filed herewith.

SIGNATURE

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Dated: September 12, 2024

DEERFIELD MGMT IV, L.P.
By: J.E. Flynn Capital IV, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD PRIVATE DESIGN FUND IV, L.P.
By: Deerfield Mgmt IV, L.P., General Partner
By: J.E. Flynn Capital IV, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

JAMES E. FLYNN

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

Schedule A

General Partner of Deerfield Mgmt IV, L.P.

The general partner of Deerfield Mgmt IV is J.E. Flynn Capital IV, LLC. The address of the principal business and/or principal office of Deerfield Mgmt IV and J.E. Flynn Capital IV, LLC is 345 Park Avenue South, 12th Floor, New York, New York 10010.

General Partner of Deerfield Private Design Fund IV, L.P.

The general partner of Deerfield Private Design Fund IV is Deerfield Mgmt IV. The address of the principal business and/or principal office of Deerfield Mgmt IV and Deerfield Private Design Fund IV is 345 Park Avenue South, 12th Floor, New York, New York 10010.

General Partner of Deerfield Management Company, L.P.

The general partner of Deerfield Management is Flynn Management LLC. The address of the principal business and/or principal office of Deerfield Management and Flynn Management LLC is 345 Park Avenue South, 12th Floor, New York, New York 10010.

Exhibit Index

Exhibit

Number Description

Exhibit 1 [Joint Filing Agreement dated as of March 5, 2018 by and among the Reporting Persons.*](#)

Exhibit 2 [Power of Attorney previously filed as Exhibit 24 to a Form 3 with regard to BiomX Inc. filed with the Securities and Exchange Commission on March 19, 2024 by Deerfield Private Design Fund V, L.P., Deerfield Healthcare Innovations Fund II, L.P., Deerfield Mgmt V, L.P., Deerfield Mgmt HIF II, L.P., Deerfield Management Company, L.P. and James E. Flynn.](#)

Exhibit 3 [Non-binding Indication of Interest, submitted September 5, 2024*](#)

* Filed herewith.

JOINT FILING AGREEMENT

Pursuant to and in accordance with the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the "Exchange Act") the undersigned hereby agree to the joint filing on behalf of each of them of any filing required by such party under Section 13 of the Exchange Act or any rule or regulation thereunder (including any amendment, restatement, supplement, and/or exhibit thereto) with respect to securities of Singular Genomic Systems, Inc., a Delaware corporation, and further agree to the filing, furnishing, and/or incorporation by reference of this Agreement as an exhibit thereto. Each of them is responsible for the timely filing of such filings and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate. This Agreement shall remain in full force and effect until revoked by any party hereto in a signed writing provided to each other party hereto, and then only with respect to such revoking party. This Agreement may be executed in any number of counterparts all of which taken together shall constitute one and the same instrument.

Dated: September 12, 2024.

DEERFIELD MGMT IV, L.P.
By: J.E. Flynn Capital IV, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD PRIVATE DESIGN FUND IV, L.P.
By: Deerfield Mgmt IV, L.P., General Partner
By: J.E. Flynn Capital IV, LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC, General Partner

By: /s/ Jonathan Isler
Name: Jonathan Isler
Title: Attorney-in-Fact

JAMES E. FLYNN

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

Deerfield Mgmt IV, L.P.
Deerfield Management Company, L.P.
Deerfield Private Design Fund IV, L.P.
345 Park Avenue South
New York, NY 10010

September 4, 2024¹

Special Committee of Independent Directors
Singular Genomics Systems, Inc.
3010 Science Park Road
San Diego, CA 92121

Re: Non-Binding Indication of Interest

Dear Special Committee of Independent Directors (the "Special Committee") of Singular Genomics Systems, Inc. (the "Company"):

As you know, Deerfield Mgmt IV, L.P., Deerfield Management Company, L.P. and Deerfield Private Design Fund IV, L.P. (together with their affiliated investment funds and persons, collectively, "Deerfield", "we" or "our") currently beneficially own approximately 6.70% of the issued and outstanding shares of common stock of the Company, not taking into account the 250,000 shares of common stock issuable upon conversion of shares of Series A Common Stock Equivalent Convertible Preferred Stock of the Company that are held by Deerfield, subject to a 4.9% beneficial ownership limitation. On behalf of Deerfield, we are pleased to present this non-binding proposal (this "Proposal") for the acquisition through a special purpose vehicle established by Deerfield of all of the outstanding shares of common stock (the "Common Shares") of the Company not already owned by Deerfield or any other stockholders or members of management that we invite to "roll over" their current equity shares, as outlined below.

We believe that the potential transaction (the "Transaction") detailed in this Proposal would offer the Company's public stockholders a highly attractive opportunity to de-risk their investment by obtaining immediate liquidity and certainty of value. Following the Transaction, the Company and its management team would be able to focus their resources on the Company's business, without the expenses, ongoing disclosure obligations, scrutiny of quarterly results and other burdens associated with being a publicly traded company.

¹ Although the letter bore the date of September 4, 2024, the submission of the Proposal was authorized by Deerfield, and this letter was executed and submitted to a representative of the Special Committee, on September 5, 2024.

The key terms of the Proposal are as follows:

1. Purchase Price: We are prepared to offer \$10.00 per share in cash to acquire 100% of the Common Shares. This price per share represents a premium of nearly 60% to the closing stock price of \$6.28 per share as of September 3, 2024.
2. Rollover: We contemplate inviting other major stockholders to rollover their Common Shares into the combined company and support the Transaction, and we also anticipate that existing management holders of Common Shares (including any members of the Special Committee) would have a desire to participate in the rollover. Our expectation is that, in total, holders of over 50% of the outstanding Common Shares would rollover into the combined company.
3. Financing: The Transaction would be fully financed by committed equity financing and not be subject to any financing condition.
4. Timing and Due Diligence: Our goal would be to consummate the Transaction as quickly as possible, subject to obtaining stockholder approval and satisfaction of other customary closing conditions, and we, together with our advisors, are prepared to devote the necessary time and resources to efficiently complete due diligence required to close the Transaction.
5. Merger Agreement: We are ready to work expeditiously to negotiate and finalize a mutually satisfactory definitive agreement.
6. Expenses: Each party will be responsible for its own legal, accounting, advisor and other fees and expenses related to the negotiation, execution and consummation of the Transaction and the preparation and negotiation of all agreements related thereto.

In furtherance of the Proposal, we expect to engage in communications and discussions with the Company, members of the Special Committee and, with the permission of the Special Committee, management of the Company, other current or prospective stockholders of the Company, potential co-investors and financing sources (including current or potential investors in funds managed by Deerfield), investment and financing professionals, industry analysts and other knowledgeable industry or market observers and participants, and other interested parties regarding the Transaction and/or the matters set forth in this letter (this "Letter"), and may exchange information with such persons pursuant to appropriate confidentiality or similar agreements.

We recognize that the Special Committee, with the assistance of its legal and financial advisors, will consider the Proposal carefully and make a recommendation to the Board of Directors of the Company. We will not move forward with the Transaction (or any similar transaction) unless it is recommended to the Board by the Special Committee and thereafter approved by the Board.

To demonstrate our commitment to the Transaction we are prepared to invest significant time and resources to move swiftly to consummate the Transaction, subject to entry into an agreement granting Deerfield exclusivity and a mutually agreeable non-disclosure agreement with respect to the information to be made available in our discussions. Prior to moving forward with this Proposal, we will send you an exclusivity agreement and will either send you a non-disclosure agreement for execution or review and consider the Company's preferred form thereof.

This Letter constitutes an expression of interest only, and we reserve the right to withdraw or modify it in any manner. This Letter does not include or constitute a binding offer to acquire the Company or any securities or assets of the Company, or a proposal of definitive terms for any transaction. Please be advised that we intend to file with the Securities and Exchange Commission, within five (5) business days of delivery of this Letter a Schedule 13D, which will disclose this Proposal and include a copy of this Letter.

If you have any questions about this Proposal, please feel free to contact our counsel Mark Wood at Katten Muchin Rosenman LLP at 312-902-5493 We appreciate the opportunity to provide this Proposal and look forward to working with you on the Transaction.

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Very truly yours,

DEERFIELD MANAGEMENT COMPANY, L.P.

By: Flynn Management LLC
Its: General Partner

By: /s/ David J. Clark
Name: David J. Clark
Title: Authorized Signatory

DEERFIELD MGMT IV, L.P.

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

By: /s/ David J. Clark
Name: David J. Clark
Title: Authorized Signatory

DEERFIELD PRIVATE DESIGN FUND IV, L.P.

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

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

By: /s/ David J. Clark
Name: David J. Clark
Title: Authorized Signatory