

GLYCOMIMETICS INC
Form SC 13D
January 23, 2014

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. ___)*

GlycoMimetics, Inc.

(Name of Issuer)

Common Stock, \$.001 par value

(Title of Class of Securities)

38000Q102

(CUSIP Number)

Louis S. Citron, Esq.
New Enterprise Associates

1954 Greenspring Drive, Suite 600
Timonium, MD 21093
(410) 842-4000

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

January 15, 2014

(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.

*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).

CUSIP NO. 38000Q102

13D

Page 2 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

New Enterprise Associates 10, Limited Partnership

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a)
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

WC

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

9,099,032 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,099,032 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP NO. 38000Q102

13D

Page 3 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

NEA Partners 10, Limited Partnership

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

9,099,032 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,099,032 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP NO. 38000Q102

13D

Page 4 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

New Enterprise Associates 13, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

WC

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

9,099,032 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,099,032 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP NO. 38000Q102

13D

Page 5 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

NEA Partners 13, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

9,099,032 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,099,032 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

PN

CUSIP NO. 38000Q102

13D

Page 6 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

NEA 13 GP, LTD

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

9,099,032 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,099,032 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

CO

CUSIP NO. 38000Q102

13D

Page 7 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

M. James Barrett

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7

SOLE VOTING POWER

NUMBER OF
SHARES

12,295 shares

BENEFICIALLY

8

SHARED VOTING POWER

OWNED BY
EACH

9,099,032 shares

REPORTING
PERSON

9

SOLE DISPOSITIVE POWER

WITH

12,295 shares

10

SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,111,327 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.4%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 8 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Peter J. Barris

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

9,099,032 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,099,032 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 9 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Forest Baskett

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

4,093,377 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

4,093,377 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,093,377 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

23.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 10 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Ryan D. Drant

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

4,093,377 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

4,093,377 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,093,377 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

23.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 11 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Patrick J. Kerins

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

4,093,377 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

4,093,377 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,093,377 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

23.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 12 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Krishna S. Kolluri

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

4,093,377 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

4,093,377 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,093,377 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

23.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 13 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

David M. Mott

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

4,093,377 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

4,093,377 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,093,377 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

23.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 14 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Scott D. Sandell

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

9,099,032 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

9,099,032 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9,099,032 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

50.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 15 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Ravi Viswanathan

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

4,093,377 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

4,093,377 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,093,377 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

23.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 16 of 28 Pages

1 NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

Harry R. Weller

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS (SEE INSTRUCTIONS)

AF

5 CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States citizen

7 SOLE VOTING POWER

0 shares

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON
WITH

8 SHARED VOTING POWER

4,093,377 shares

9 SOLE DISPOSITIVE POWER

0 shares

10 SHARED DISPOSITIVE POWER

4,093,377 shares

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

4,093,377 shares

12 CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

23.3%

14 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

CUSIP NO. 38000Q102

13D

Page 17 of 28 Pages

Schedule 13D

Item 1. Security and Issuer.

This statement relates to the common stock, \$.001 par value (the “Common Stock”) of GlycoMimetics, Inc. (the “Issuer”) having its principal executive office at 401 Professional Drive, Suite 250, Gaithersburg, MD 20879.

Item 2. Identity and Background.

This statement is being filed by:

- (a) New Enterprise Associates 10, Limited Partnership (“NEA 10”);
- (b) NEA Partners 10, Limited Partnership (“NEA Partners 10”), which is the sole general partner of NEA 10;
- (c) New Enterprise Associates 13, L.P. (“NEA 13”);
- (d) NEA Partners 13, L.P. (“NEA Partners 13”), which is the sole general partner of NEA 13;
- (e) NEA 13 GP, LTD (“NEA 13 LTD”), which is the sole general partner of NEA Partners 13; and
- (f) Forest Baskett (“Baskett”), Ryan D. Drant (“Drant”), Patrick J. Kerins (“Kerins”), Krishna S. Kolluri (“Kolluri”), David M. Mott (“Mott”), Ravi Viswanathan (“Viswanathan”) and Harry R. Weller (“Weller”) (collectively, the “NEA 13-Only Directors”) and M. James Barrett (“Barrett”), Peter J. Barris (“Barris”) and Scott D. Sandell (“Sandell”) (collectively with the NEA 13-Only Directors, the “Directors”). The Directors are the directors of NEA 13 LTD. Barrett, Barris and Sandell are also the individual general partners of NEA Partners 10 (collectively, the “Individual General Partners”).

The persons named in this Item 2 are referred to individually herein as a “Reporting Person” and collectively as the “Reporting Persons.”

The address of the principal business office of NEA 10, NEA Partners 10, NEA 13, NEA Partners 13 and NEA 13 LTD is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093. The address of the principal business office of each of Barrett, Barris, Drant, Kerins, Mott and Weller is New Enterprise Associates, 5425 Wisconsin Avenue, Suite 800, Chevy Chase, MD 20815. The address of the principal business office of Baskett, Kolluri, Sandell and Viswanathan is New Enterprise Associates, 2855 Sand Hill Road, Menlo Park, California 94025.

The principal business of NEA 10 is to invest in and assist growth-oriented businesses located principally in the United States. The principal business of NEA Partners 10 is to act as the sole general partner of NEA 10. The principal business of each of the Individual General Partners is to act as a general partner of NEA Partners 10 and a number of affiliated partnerships with similar businesses.

The principal business of NEA 13 is to invest in and assist growth-oriented businesses located principally in the United States. The principal business of NEA Partners 13 is to act as the sole general partner of NEA 13. The principal business of NEA 13 LTD is to act as the sole general partner of NEA Partners 13. The principal business of each of the Directors is to manage NEA 13, NEA Partners 13, NEA 13 LTD and a number of affiliated partnerships

with similar businesses.

During the five years prior to the date hereof, none of the Reporting Persons has been convicted in a criminal proceeding or has been a party to a civil proceeding ending in 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.

CUSIP NO. 38000Q102

13D

Page 18 of 28 Pages

Each of NEA 10 and NEA Partners 10 is a limited partnership organized under the laws of the State of Delaware. Each of the Individual General Partners is a United States citizen.

NEA 13 and NEA Partners 13 are exempt limited partnerships organized under the laws of the Cayman Islands. NEA 13 LTD is an exempted company organized under the laws of the Cayman Islands. Each of the Directors is a United States citizen.

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

On January 9, 2014, the Registration Statement on Form S-1 filed with the Securities and Exchange Commission by the Issuer (File No. 333-191567) in connection with its initial public offering of 7,000,000 shares of Common Stock of the Issuer (the "IPO") was declared effective. The closing of the IPO took place on January 15, 2014, and at such closing NEA 10 purchased an aggregate of 487,500 shares of Common Stock at the IPO price of \$8.00 per share. In addition, immediately prior to the closing of the IPO, the 11,250,850 shares of Series A-1 Preferred Stock (the "NEA 10 Series A-1 Stock") held by NEA 10 automatically converted into 3,407,283 shares of Common Stock of the Issuer. NEA 10 also holds an additional 586,975 shares of Common Stock (the "NEA 10 Pre-IPO Common Shares") and warrants (the "NEA 10 Warrants"), exercisable at any time, to purchase, subject to certain limitations, 523,897 shares of Common Stock (the "NEA 10 Warrant Shares"). Prior to the IPO, the NEA 10 Pre-IPO Common Shares, NEA 10 Series A-1 Stock and NEA 10 Warrants were purchased from the Issuer in a series of private transactions for an aggregate purchase price of \$30,481,034. NEA 10 now holds a total of 4,481,758 shares of the Issuer's Common Stock (the "NEA 10 Shares" and, collectively with the NEA 10 Warrants, the "NEA 10 Securities").

NEA 13 purchased an aggregate of 512,500 shares of Common Stock at the IPO price of \$8.00 per share. In addition, immediately prior to the closing of the IPO, the 11,824,058 shares of Series A-1 Preferred Stock (the "NEA 13 Series A-1 Stock") held by NEA 13 automatically converted into 3,580,877 shares of Common Stock of the Issuer. Prior to the IPO, the NEA 13 Series A-1 Stock was purchased from the Issuer in a series of private transactions for an aggregate purchase price of \$15,000,000. NEA 13 now holds a total of 4,093,377 shares of the Issuer's Common Stock (the "NEA 13 Shares").

The working capital of NEA 10 was the source of the funds for the purchase of the NEA 10 Securities. No part of the purchase price of the NEA 10 Securities was represented by funds or other consideration borrowed or otherwise obtained for the purpose of acquiring, holding, trading or voting the NEA 10 Securities.

The working capital of NEA 13 was the source of the funds for the purchase of the NEA 13 Shares. No part of the purchase price of the NEA 13 Shares was represented by funds or other consideration borrowed or otherwise obtained for the purpose of acquiring, holding, trading or voting the NEA 13 Shares.

Item 4. Purpose of Transaction.

NEA 10 acquired the NEA 10 Securities and NEA 13 acquired the NEA 13 Shares for investment purposes. Depending on market conditions, their continuing evaluation of the business and prospects of the Issuer and other factors, NEA 10, NEA 13 and other Reporting Persons may dispose of or acquire additional shares of the Issuer. Except as set forth above, none of the Reporting Persons has any present plans which relate to or would result in:

- (a) The acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
 - (b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
 - (c) A sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
-

CUSIP NO. 38000Q102

13D

Page 19 of 28 Pages

- (d) Any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- (e) Any material change in the present capitalization or dividend policy of the Issuer;
- (f) Any other material change in the Issuer's business or corporate structure;
- (g) Changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;
- (h) Causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) A class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or
- (j) Any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer.

(a) NEA 10 is the record owner of the NEA 10 Shares and the NEA 10 Warrants. As the NEA 10 Warrants are immediately exercisable, NEA 10 may be deemed to beneficially own the NEA 10 Warrant Shares as of January 15, 2014. As a result, NEA 10 may be deemed to beneficially own in the aggregate 5,005,655 shares of Common Stock (the "Total NEA 10 Shares"). As the sole general partner of NEA 10, NEA Partners 10 may be deemed to beneficially own the Total NEA 10 Shares. As the individual general partners of NEA Partners 10, each of the Individual General Partners also may be deemed to beneficially own the Total NEA 10 Shares.

NEA 13 is the record owner of the NEA 13 Shares. As the sole general partner of NEA 13, NEA Partners 13 may be deemed to own beneficially the NEA 13 Shares. As the sole general partner of NEA Partners 13, NEA 13 LTD may be deemed to own beneficially the NEA 13 Shares. As the individual directors of NEA 13 LTD, each of the Directors may be deemed to own beneficially the NEA 13 Shares.

By virtue of their relationship as affiliated entities, whose controlling entities have overlapping individual controlling persons, each of NEA 10, NEA Partners 10, NEA 13, NEA Partners 13 and NEA 13 LTD may be deemed to share the power to direct the disposition and vote of the Total NEA 10 Shares and the NEA 13 Shares.

As of January 15, 2014, Barrett is the record owner of options to purchase 12,295 shares of Common Stock (the "Barrett Option Shares") exercisable within sixty days. Accordingly, Barrett may be deemed to be the beneficial owner of the Barrett Option Shares in addition to the Total NEA 10 Shares and the NEA 13 Shares.

Each Reporting Person disclaims beneficial ownership of the Total NEA 10 Shares and the NEA 13 Shares other than those shares which such person owns of record.

CUSIP NO. 38000Q102

13D

Page 20 of 28 Pages

The percentage of outstanding Common Stock of the Issuer which may be deemed to be beneficially owned by each Reporting Person is set forth on Line 13 of such Reporting Person's cover sheet. Such percentage was calculated for each Reporting Person other than Barrett and the NEA 13-Only Directors based on 18,079,394 shares, which includes (i) the 17,555,497 shares of Common Stock (the "IPO Shares") reported to be outstanding immediately after the IPO on the Issuer's prospectus filed under Rule 424(b)(4), filed with the Securities Exchange Commission on January 10, 2014 and (ii) the NEA 10 Warrant Shares. Such percentage was calculated for Barrett based on 18,091,689 shares, which includes (i) the IPO Shares, (ii) the NEA 10 Warrant Shares and (iii) the Barrett Option Shares. Such percentage was calculated for the NEA 13-Only Directors based on the IPO Shares.

(b) Regarding the number of shares as to which such person has:

(i) sole power to vote or to direct the vote: See line 7 of cover sheets

(ii) shared power to vote or to direct the vote: See line 8 of cover sheets

(iii) sole power to dispose or to direct the disposition: See line 9 of cover sheets.

(iv) shared power to dispose or to direct the disposition: See line 10 of cover sheets

(c) Except as set forth in Item 3 above, none of the Reporting Persons has effected any transaction in the Common Stock during the last 60 days.

(d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, Shares beneficially owned by any of the Reporting Persons.

(e) Not applicable.

Item 6. Contracts, Arrangements, Undertakings or Relationships with Respect to Securities of the Issuer.

NEA 10 and NEA 13 have entered into a lock-up agreement with the underwriters of the IPO pursuant to which NEA 10 and NEA 13 have generally agreed, subject to certain exceptions, not to directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale, or otherwise dispose of or hedge any Common Stock, any options or warrants to purchase Common Stock, or any securities convertible into, or exchangeable for or that represent the right to receive shares of Common Stock for a period of 180 days from January 9, 2014 without the prior written consent of Jefferies LLC and Barclays Capital Inc.

Item 7. Material to be Filed as Exhibits.

Exhibit 1 – Agreement regarding filing of joint Schedule 13D.

Exhibit 2 – Power of Attorney regarding filings under the Securities Exchange Act of 1934, as amended.

CUSIP NO. 38000Q102

13D

Page 21 of 28 Pages

SIGNATURE

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

EXECUTED this 23RD day of January, 2014.

NEW ENTERPRISE ASSOCIATES 10,
LIMITED PARTNERSHIP

By: NEA PARTNERS 10, LIMITED PARTNERSHIP
General Partner

By: *
Peter J. Barris
General Partner

NEA PARTNERS 10, LIMITED PARTNERSHIP

By: *
Peter J. Barris
General Partner

*
M. James Barrett

*
Peter J. Barris

*
Scott D. Sandell

NEW ENTERPRISE ASSOCIATES 13, L.P.

By: NEA PARTNERS 13, L.P.
General Partner

By: NEA 13 GP, LTD
General Partner

By: *
Peter J. Barris
Director

CUSIP NO. 38000Q102

13D

Page 22 of 28 Pages

NEA PARTNERS 13, L.P.

By: NEA 13 GP, LTD
General Partner

By: *
Peter J. Barris
Director

NEA 13 GP, LTD

By: *
Peter J. Barris
Director

*
M. James Barrett

*
Peter J. Barris

*
Forest Baskett

*
Ryan D. Drant

*
Patrick J. Kerins

*
Krishna S. Kolluri

*

David M. Mott

*

Scott D. Sandell

CUSIP NO. 38000Q102

13D

Page 23 of 28 Pages

*

Ravi Viswanathan

*

Harry R. Weller

*/s/ Louis S. Citron
Louis S. Citron
As attorney-in-fact

This Schedule 13D was executed by Louis S. Citron on behalf of the individuals listed above pursuant to a Power of Attorney a copy of which is attached as Exhibit 2.

CUSIP NO. 38000Q102

13D

Page 24 of 28 Pages

EXHIBIT 1

AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of shares of stock of GlycoMimetics, Inc.

EXECUTED this 23RD day of January, 2014.

NEW ENTERPRISE ASSOCIATES 10,
LIMITED PARTNERSHIP

By: NEA PARTNERS 10, LIMITED PARTNERSHIP
General Partner

By: *
Peter J. Barris
General Partner

NEA PARTNERS 10, LIMITED PARTNERSHIP

By: *
Peter J. Barris
General Partner

*
M. James Barrett

*
Peter J. Barris

*
Scott D. Sandell

NEW ENTERPRISE ASSOCIATES 13, L.P.

By: NEA PARTNERS 13, L.P.
General Partner

By: NEA 13 GP, LTD
General Partner

By: *
Peter J. Barris
Director

CUSIP NO. 38000Q102

13D

Page 25 of 28 Pages

NEA PARTNERS 13, L.P.

By: NEA 13 GP, LTD
General Partner

By: *
Peter J. Barris
Director

NEA 13 GP, LTD

By: *
Peter J. Barris
Director

*
M. James Barrett

*
Peter J. Barris

*
Forest Baskett

*
Ryan D. Drant

*
Patrick J. Kerins

*
Krishna S. Kolluri

*

David M. Mott

*

Scott D. Sandell

CUSIP NO. 38000Q102

13D

Page 26 of 28 Pages

*

Ravi Viswanathan

*

Harry R. Weller

*/s/ Louis S. Citron

Louis S. Citron

As attorney-in-fact

This Agreement relating to Schedule 13D was executed by Louis S. Citron on behalf of the individuals listed above pursuant to a Power of Attorney a copy of which is attached hereto as Exhibit 2.

CUSIP NO. 38000Q102

13D

Page 27 of 28 Pages

EXHIBIT 2

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Louis S. Citron, Timothy Schaller, Sasha Keough and Stephanie Brecher, and each of them, with full power to act without the others, his or her true and lawful attorney-in-fact, with full power of substitution, to sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of himself as an individual or in his or her capacity as a direct or indirect general partner, director, officer or manager of any partnership, corporation or limited liability company, pursuant to section 13 or 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission, and with any other entity when and if such is mandated by the Exchange Act or by the Financial Industry Regulatory Authority, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as he or she might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or his or her substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 1st day of August, 2013.

/s/ M. James Barrett
M. James Barrett

/s/ Peter J. Barris
Peter J. Barris

/s/ Forest Baskett
Forest Baskett

/s/ Rohini Chakravarthy
Rohini Chakravarthy

/s/ Patrick Chung
Patrick Chung

/s/ Ryan Drant
Ryan Drant

/s/ Anthony A. Florence
Anthony A. Florence

/s/ Robert Garland
Robert Garland

/s/ Paul Hsiao

Paul Hsiao

/s/ Patrick J. Kerins
Patrick J. Kerins

/s/ Suzanne King
Suzanne King

CUSIP NO. 38000Q102

13D

Page 28 of 28 Pages

/s/ Krishna S. Kolluri
Krishna S. Kolluri

/s/ C. Richard Kramlich
C. Richard Kramlich

/s/ Edward Mathers
Edward Mathers

/s/ David M. Mott
David M. Mott

/s/ John M. Nehra
John M. Nehra

/s/ Charles W. Newhall III
Charles W. Newhall III

/s/ Jason R. Nunn
Jason R. Nunn

/s/ Jon Sakoda
Jon Sakoda

/s/ Scott D. Sandell
Scott D. Sandell

/s/ Peter W. Sonsini
Peter W. Sonsini

/s/ A. Brooke Seawell
A. Brooke Seawell

/s/ Ravi Viswanathan
Ravi Viswanathan

/s/ Paul E. Walker
Paul E. Walker

/s/ Harry Weller
Harry Weller

