

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549

SCHEDULE 13G

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

**SYNLOGIC, INC.**

(Name of Issuer)

**Common Stock, par value \$0.001 per share**

(Title of Class of Securities)

**87166L209**

(CUSIP Number)

**December 31, 2023**

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*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 the disclosures provided in a prior cover page.

The information required in 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	NAME OF REPORTING PERSONS Armistice Capital, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 1,285,542
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 1,285,542
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,285,542	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.99%	
12	TYPE OF REPORTING PERSON IA, OO	

1	NAME OF REPORTING PERSONS Steven Boyd	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 1,285,542
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 1,285,542
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,285,542	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.99%	
12	TYPE OF REPORTING PERSON IN, HC	

**Item 1. (a) Name of Issuer**

SYNLOGIC, INC.

**Item 1. (b) Address of Issuer's Principal Executive Offices**

301 Binney St.  
Suite 402  
Cambridge, Massachusetts 02142

**Item 2. (a) Names of Person Filing:**

Armistice Capital, LLC  
Steven Boyd

Collectively, the "Reporting Persons"

**Item 2. (b) Address of Principal Business Office:**

Armistice Capital, LLC  
510 Madison Avenue, 7th Floor  
New York, New York 10022  
United States of America

Steven Boyd  
c/o Armistice Capital, LLC  
510 Madison Avenue, 7th Floor  
New York, New York 10022  
United States of America

**Item 2. (c) Citizenship:**

Armistice Capital, LLC - Delaware  
Steven Boyd - United States of America

**Item 2. (d) Title of Class of Securities**

Common Stock, par value \$0.001 per share ("Shares")

**Item 2. (e) CUSIP No.:**

87166L209

**Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:**

- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c)  Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d)  Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e)  An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g)  A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h)  A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j)  A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- (k)  A group, in accordance with §240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution: \_\_\_\_\_

**Item 4. Ownership**

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned as of December 31, 2023:

Armistice Capital, LLC - 1,285,542

Steven Boyd - 1,285,542

(b) Percent of Class as of December 31, 2023:

Armistice Capital, LLC - 9.99%

Steven Boyd - 9.99%

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

Armistice Capital, LLC - 0

Steven Boyd - 0

(ii) Shared power to vote or to direct the vote

Armistice Capital, LLC - 1,285,542

Steven Boyd - 1,285,542

(iii) Sole power to dispose or to direct the disposition of

Armistice Capital, LLC - 0

Steven Boyd - 0

(iv) Shared power to dispose or to direct the disposition of

Armistice Capital, LLC - 1,285,542

Steven Boyd - 1,285,542

The percentage of Shares reported to be beneficially owned by the Reporting Persons are based on information from the Issuer.

Armistice Capital, LLC ("Armistice Capital") is the investment manager of Armistice Capital Master Fund Ltd. (the "Master Fund"), the direct holder of the Shares, and pursuant to an Investment Management Agreement, Armistice Capital exercises voting and investment power over the securities of the Issuer held by the Master Fund and thus may be deemed to beneficially own the securities of the Issuer held by the Master Fund. Mr. Boyd, as the managing member of Armistice Capital, may be deemed to beneficially own the securities of the Issuer held by the Master Fund. The Master Fund specifically disclaims beneficial ownership of the securities of the Issuer directly held by it by virtue of its inability to vote or dispose of such securities as a result of its Investment Management Agreement with Armistice Capital.

**Item 5. Ownership of Five Percent or Less of a Class**

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [ ].

**Item 6. Ownership of More Than Five Percent on Behalf of Another Person**

The Master Fund, a Cayman Islands exempted company that is an investment advisory client of Armistice Capital, has the right to receive dividends from, or the proceeds from the sale of, the reported securities.

**Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company or Control Person**

Not Applicable.

**Item 8. Identification and Classification of Members of the Group**

Not Applicable.

**Item 9. Notice of Dissolution of Group**

Not Applicable.

**Item 10. Certification**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

**SIGNATURE**

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

Dated: February 14, 2024

Armistice Capital, LLC

By: /s/ Steven Boyd  
Steven Boyd  
Managing Member

By: /s/ Steven Boyd  
Steven Boyd

Exhibit I**JOINT FILING STATEMENT****PURSUANT TO RULE 13d-1(k)**

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G, is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G, shall be filed on behalf of each of the undersigned without the necessity of filing additional joint acquisition statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Dated: February 14, 2024

Armistice Capital, LLC

By: /s/ Steven BoydSteven Boyd  
Managing MemberBy: /s/ Steven Boyd

Steven Boyd