UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): 11/1/2018

GENOCEA BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**001-36289**	**51-0596811**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

Cambridge Discovery Park 100 Acorn Park Drive, 5th Floor Cambridge, MA	**02140**
(Address of principal executive offices)	(Zip Code)

(Registrant's telephone number, including area code): **(617) 876-8191**

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (230.405 of this chapter) or Rule 12b-2of the Securities Exchange Act of 1934 (§ 240 12b-2 of this chapter).

Emerging Growth Company ☒

If an emerging growth company, indicate by a check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Item 2.02 Results of Operations and Financial Condition.

On November 1, 2018, Genocea Biosciences, Inc. (the "Company") announced its financial results for the third quarter ended September 30, 2018. A full text of the press release issued in connection with the announcement is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information contained in this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, is being furnished and shall not be deemed "filed" for any purpose, and shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except as expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits

Exhibit No.	Description
99.1	Press Release issued by Genocea Biosciences, Inc. on November 1, 2018

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

GENOCEA BIOSCIENCES, INC.

By: /s/ MICHAEL ALFIERI

Michael Alfieri

Vice President, Finance and Principle Financial Officer

Date: November 1, 2018

Contact:
Jennifer LaVin
617-715-6687
jennifer.lavin@genocea.com

Genocea Reports Third Quarter 2018 Financial and Operating Results

Neoantigen vaccine program GEN-009 Phase 1/2a clinical trial enrolling patients
Presenting novel findings at upcoming SITC conference

Conference call today at 9:00 am ET

CAMBRIDGE, Mass., November 1, 2018 – Genocea Biosciences, Inc. (NASDAQ: GNCA), a biopharmaceutical company developing neoantigen cancer immunotherapies, today reported its financial and operating results for the third quarter ended September 30, 2018.

"In the year since our strategic pivot, we have made significant progress by advancing our lead cancer vaccine candidate, GEN-009, into the clinic and using our ATLAS™ platform to identify and characterize the T cell responses cancer patients make to both tumor-associated antigens and neoantigens," said Chip Clark, president & CEO of Genocea. "We continue to believe that ATLAS, which lets patients' own T cells identify the optimal antigens for their cancer immunotherapies, stands apart from peer approaches that instead rely on software to predict antigens. We believe that the next evidence for this will emerge from our upcoming presentations at SITC and then from the first patient cohort in our Phase 1/2a clinical trial for GEN-009, from which we expect to report immunogenicity data in the first half of 2019."

Recent Milestones & Events

- October 2018: Announced multiple presentations at the upcoming meeting of the Society for Immunotherapy of Cancer (SITC 2018) taking place November 7-11, 2018 at the Walter E. Washington Convention Center in Washington, D.C. These posters further highlight the advantages of Genocea's ATLAS platform over *in silico* methods in identifying both neoantigens for vaccine inclusion and "inhibitory" neoantigens for exclusion. Genocea believes that the "inhibitory" antigen findings may point to novel biological insights only available through ATLAS. The following posters will be presented simultaneously on Saturday, November 10 from 12:20 - 1:50 p.m. and 7:00 - 8:30 p.m. ET in Poster Hall E:
  - **Poster Number: P154**
    Title: *Empiric profiling of neoantigen-specific T cell responses in NSCLC patients with ATLAS™ reveals unexpected neoantigen and inhibitory antigen profiles*
  - **Poster Number: P166**
    Title: *Ex vivo ATLAS-identified inhibitory neoantigens promote mouse melanoma tumor progression*
  - **Poster Number: P174**
    Title: *A phase 1/2a study to evaluate the safety, tolerability, immunogenicity, and anti-tumor activity of GEN-009 adjuvanted neoantigen vaccine in adult patients with selected solid tumors*
- October 2018: Strengthened its leadership team with the addition of Thomas Davis, M.D. as Chief Medical Officer and Derek Meisner, J.D., as General Counsel. Dr. Davis joins Genocea with 20+ years of academic

and industry experience in immuno-oncology and cancer drug development. Mr. Meisner brings broad legal expertise to Genocea as the company's first General Counsel.

Third Quarter 2018 Financial Results

- Cash Position: As of September 30, 2018, cash and cash equivalents were $34.5 million compared to $12.3 million, as of December 31, 2017.
- Research and Development (R&D) Expenses: R&D expenses were $6.4 million for the quarter ended September 30, 2018, compared to $10.2 million for the same period in 2017. The decrease was due largely to reduced headcount-related costs, external development, clinical, and consulting costs.
- General and Administrative (G&A) Expenses: G&A expenses were $4.1 million for the quarter ended September 30, 2018, compared to $3.8 million for the same period in 2017. The increase was primarily due to increases in professional services expenses, partially offset by decreases in consulting costs.
- Net Loss: Net loss was $7.8 million for the quarter ended September 30, 2018, compared to a net loss of $16.9 million for quarter ended September 30, 2017.

Financial Guidance

Genocea expects that its existing cash and cash equivalents are sufficient to support its operating expenses and capital expenditure requirements into the fourth quarter of 2019.

Genocea continues to explore strategic alternatives for GEN-003, its Phase 3-ready investigational immunotherapy for the treatment of genital herpes.

Conference Call

Genocea will host a conference call and webcast today at 9:00 a.m. ET. The conference call may be accessed by dialing (844) 826-0619 (domestic) or (315) 625-6883 (international) and referring to conference ID number 9864055. A live webcast of the conference call will be available online from the investor relations section of the Company's website at http://ir.genocea.com. A webcast replay of the conference call will be available on the Genocea website beginning approximately two hours after the event and will be archived for 90 days.

About Genocea Biosciences, Inc.

Genocea's mission is to help conquer cancer by designing and delivering targeted vaccines and immunotherapies. While traditional immunotherapy discovery methods have largely used predictive methods to propose T cell targets, or antigens, Genocea has developed ATLAS™, its proprietary technology platform, to identify clinically relevant antigens of T cells based on actual human immune responses. Genocea is using ATLAS to develop cancer vaccines and immunotherapies. Genocea is currently studying the safety, immunogenicity, and efficacy of its lead neoantigen cancer vaccine, GEN-009, in a Phase 1/2a clinical trial. For more information, please visit www.genocea.com.

Forward-Looking Statements

This press release includes forward-looking statements, including statements relating to the expected clinical development of GEN-009, the rate of cash utilized by Genocea in its business, and the period for which existing cash will be able to fund such operation, within the meaning of the Private Securities Litigation Reform Act. Such forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. Genocea cautions that these forward-looking statements are subject to numerous assumptions, risks and uncertainties that change over time. Applicable risks and uncertainties include those identified under the heading "Risk Factors" included in Genocea's Annual Report on Form 10-K for the year ended December 31, 2017 and any subsequent SEC filings. These forward-looking statements speak only as of the date of this press release and Genocea assumes no duty to update forward-looking statements, except as may be required by law.

++++++++++

GENOCEA BIOSCIENCES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)
(In thousands)

	September 30, 2018	December 31, 2017
Cash and cash equivalents	$ 34,494	$ 12,273
Other assets	5,207	5,215
Total assets	$ 39,701	$ 17,488
Debt, current and long-term	$ 14,638	$ 14,311
Accounts payable	1,276	3,516
Accrued expenses and other liabilities	4,268	5,711
Warrant liability	13,021	—
Total liabilities	33,203	23,538
Stockholders' equity (deficit)	6,498	(6,050)
Total liabilities and stockholders' equity (deficit)	$ 39,701	$ 17,488

GENOCEA BIOSCIENCES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(UNAUDITED)
(In thousands, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Operating expenses:				
Research and development	$ 6,359	$ 10,155	$ 18,950	$ 31,324
General and administrative	4,101	3,750	11,682	10,955
Restructuring costs	—	2,591	—	2,591
Total operating expenses	10,460	16,496	30,632	44,870
Loss from operations	(10,460)	(16,496)	(30,632)	(44,870)
Other income (expense):				
Change in fair value of warrants	2,894	—	3,093	—
Interest expense, net	(266)	(366)	(708)	(1,094)
Other income (expense)	(1)	(6)	86	(14)
Total other income (expense)	2,627	(372)	2,471	(1,108)
Net loss	$ (7,833)	$ (16,868)	$ (28,161)	$ (45,978)
Other comprehensive loss:				
Comprehensive loss	$ (7,833)	$ (16,868)	$ (28,161)	$ (45,978)
Net loss per share - basic and diluted	$ (0.09)	$ (0.59)	$ (0.35)	$ (1.61)
Weighted-average number of common shares used in computing net loss per share	86,626	28,666	81,191	28,568