

**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): **April 29, 2021**



GENOCEA BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

001-36289
(Commission File Number)

51-0596811
(IRS Employer
Identification No.)

100 Acorn Park Drive, 5th Floor
Cambridge, MA 02140
(Address of principal executive offices, including zip code)

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

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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common stock, \$0.001 par value per share	GNCA	Nasdaq Capital Market

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-2 of 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 April 29, 2021, Genocea Biosciences, Inc. (the "Company") announced its financial results for the quarter ended March 31, 2021. 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.**(d) Exhibits**

99.1	Press Release issued by Genocea Biosciences, Inc. on April 29, 2021
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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/ DIANTHA DUVALL
Diantha Duvall
Chief Financial Officer
(Principal Financial Officer)

Date: April 29, 2021



Investor Contact:

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Genocea Provides First Quarter 2021 Corporate Update

GEN-011 and GEN-009 immuno-oncology programs continue to advance

Research on Inhibigens™ and SARS-CoV-2 continues to progress

Conference call today at 8:30 a.m. E.T.

CAMBRIDGE, Mass., APRIL 29, 2021 - Genocea Biosciences, Inc. (NASDAQ: GNCA), a biopharmaceutical company developing next-generation neoantigen immunotherapies, today provided a business update for the first quarter ended March 31, 2021.

"Genocea continues to accumulate evidence that our ATLAS™ platform may enable immunotherapies that preferentially attack the surface-presented antigens driving anti-tumor responses or as we say, 'Targets Matter,'" said Chip Clark, Genocea's President and Chief Executive Officer. "Whether through our ongoing clinical trials with GEN-011, our neoantigen-targeted peripheral T cell ("NPT") therapy and GEN-009, our neoantigen vaccine, or through our research efforts with Inhibigens™ and SARS-CoV-2 antigen discovery, we look forward to providing updates consistent with this thesis throughout the year."

Clinical updates

GEN-011 Phase 1/2a clinical trial (the "TITAN study")

- GEN-011 is in development to treat checkpoint inhibitor-refractory patients. Genocea believes using patient T cells taken from easily accessible peripheral blood and expanding the T cells only on tumor neoantigens prioritized by our ATLAS platform may give GEN-011 efficacy, accessibility and cost advantages over other T cell therapies. The TITAN study is designed to explore safety, biomarkers of activity and anti-tumor efficacy. During the first quarter, Genocea continued to add clinical sites and accrue patients. The company expects to have initial efficacy data from a patient subset late in the fourth quarter of 2021 or the first quarter of 2022.

GEN-009 Phase 1/2a clinical trial

- The Company will provide long-term follow-up clinical and immunogenicity data from the ongoing Phase 1/2a clinical study at the American Society of Clinical Oncology ("ASCO") 2021 Annual Meeting from June 4 - June 8.

Research updates

Inhibigens

- At the American Association for Cancer Research ("AACR") Annual Meeting 2021 in April, the Company presented novel preclinical Inhibigen data highlighting that the presence of a single Inhibigen in an otherwise protective immunotherapy can completely reverse the therapy's intended anti-tumor responses and the Inhibigen effect can be seen as early as 4 days post-dosing.

SARS-CoV-2

- The Company continues its SARS-CoV-2 research efforts to identify conserved antigens of protective T cell responses that may enable a next-generation vaccine protecting against a wide range of strains.

Other business updates

Strengthened executive leadership team

- Genoclea appointed Jacquelyn Sumer as Chief Legal and Compliance Officer. Jackie brings over fifteen years of legal experience, including roles at several biopharmaceutical companies with a focus in oncology and cell therapy experience development and commercialization.

Financial and other updates

First quarter 2021 financial results

- Cash position: As of March 31, 2021, cash and cash equivalents were \$66.0 million compared to \$79.8 million as of December 31, 2020.
- Research and Development (R&D) expenses: R&D expenses were \$8.8 million for the quarter ended March 31, 2021, compared to \$10.0 million for the same period in 2020.
- General and Administrative (G&A) expenses: G&A expenses were \$3.7 million for the quarter ended March 31, 2021, compared to \$3.4 million for the same period in 2020.
- Net loss: Net loss was \$12.0 million for the quarter ended March 31, 2021, compared to \$12.9 million for the same period in 2020.

Debt Refinancing

- In February 2021, the Company entered into an agreement with Silicon Valley Bank for a \$10 million term loan. The proceeds from the loan were used to repay the Company's outstanding loan from Hercules Capital, Inc., and for general corporate purposes.

Guidance

- Genoclea's operating plan extends its cash runway to the end of 2022.

Conference Call

Genoclea will host a conference call and webcast today at 8:30 a.m. E.T. Interested participants may access the conference call by dialing (844) 826-0619 (domestic) or (315) 625-6883 (international) and referring to conference ID number 2191366. To join the live webcast, please visit the presentation page of the investor relations section of the Genoclea website at <https://ir.genoclea.com/events-and-presentations>. A webcast replay of the conference call will be available on the Genoclea website beginning approximately two hours after the event and will be archived for 90 days.

About Genoclea Biosciences, Inc.

Genoclea's mission is to identify the right tumor targets to develop life-changing immunotherapies for people suffering from cancer. Our proprietary ATLAS™ platform comprehensively profiles each patient's T cell responses to potential targets, or antigens, on that patient's tumor. ATLAS zeroes in on both antigens that activate anti-tumor T cell responses and inhibitory antigens, Inhibigens™, that drive pro-tumor immune responses. We are advancing two ATLAS-enabled programs: GEN-009, our neoantigen vaccine for which we are conducting a Phase 1/2a clinical trial and GEN-011, our adoptive T cell therapy comprising neoantigen-targeted peripheral cells for which we are conducting a Phase 1/2a clinical trial. In addition to our two clinical programs, we are conducting research in several areas where we believe ATLAS could be a key tool in optimizing antigen selection for therapies across a number of diseases. To learn more, please visit <https://www.genoclea.com>.

Forward-Looking Statements

This press release includes forward-looking statements related to GEN-009, GEN-011 and research updates 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, 2020 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.

(Tables to follow)

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

	March 31, 2021	December 31, 2020
Cash and cash equivalents	\$ 66,035	\$ 79,769
Property and equipment, net	4,853	5,123
Right of use assets	8,831	9,308
Other assets	4,219	4,293
Total assets	\$ 83,938	\$ 98,493
Accounts payable and accrued expenses	\$ 5,627	\$ 7,878
Deferred revenue	1,641	1,641
Debt, current and long-term	9,649	13,862
Warrant liabilities	55,264	56,118
Lease liabilities	9,995	10,012
Total liabilities	82,176	89,511
Stockholders' equity	1,762	8,982
Total liabilities and stockholders' equity	\$ 83,938	\$ 98,493

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

	Three Months Ended March 31,	
	2021	2020
Operating expenses:		
Research and development	\$ 8,751	\$ 9,987
General and administrative	3,671	3,388
Total operating expenses	12,422	13,375
Loss from operations	(12,422)	(13,375)
Other income	439	522
Net loss	\$ (11,983)	\$ (12,853)
Net loss per share:		
Basic	\$ (0.18)	\$ (0.46)
Diluted	\$ (0.17)	\$ (0.46)
Weighted-average number of shares used in computing net loss per share:		
Basic	66,158	28,141
Diluted	74,220	28,141