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

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**FORM 8-K**

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

Date of Report (Date of earliest event reported): November 26, 2018

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**G1 THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**001-38096**  
(Commission  
File Number)

**26-3648180**  
(IRS Employer  
Identification No.)

**79 T.W. Alexander Drive  
4501 Research Commons, Suite 100  
Research Triangle Park, NC**  
(Address of principal executive offices)

**27709**  
(Zip Code)

Registrant's telephone number, including area code: (919) 213-9835

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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-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by 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.

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**Item 8.01 Results of Operations and Financial Condition**

On November 26, 2018, G1 Therapeutics, Inc. issued a press release announcing positive myelopreservation data from a randomized, double-blind, placebo-controlled Phase 2 trial of trilaciclib in combination with chemotherapy/Tecentriq® in first-line small cell lung cancer. A copy of the press release is attached hereto as Exhibit 99.1.

**Item 9.01 Financial Statements and Exhibits**

<u>Exhibit No.</u>	<u>Description</u>
99.1	<a href="#">Press release dated November 26, 2018</a>

**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.

Date: November 26, 2018

**G1 THERAPEUTICS, INC.**

*/s/ Mark A. Velleca*

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Mark A. Velleca, M.D., Ph.D.

President and Chief Executive Officer



**G1 Therapeutics Announces Positive Myelopreservation Data from Randomized, Double-Blind, Placebo-Controlled Phase 2 Trial of Trilaciclib in Combination with Chemotherapy/Tecentriq® in First-Line Small Cell Lung Cancer**

- Second randomized, double-blind, placebo-controlled Phase 2 trial confirms multi-lineage myelopreservation benefits of trilaciclib in first-line small cell lung cancer (1L SCLC)
- Statistically significant improvements in both primary endpoints of occurrence of Grade 4 neutropenia and duration of Grade 4 neutropenia in cycle 1; statistically significant reduction in Grade 4 thrombocytopenia and clinically meaningful reduction in red blood cell transfusions
- Management to host webcast and conference call today at 4:30 p.m. ET

**RESEARCH TRIANGLE PARK, N.C., November 26, 2018** – G1 Therapeutics, Inc. (Nasdaq: GTHX), a clinical-stage oncology company, today announced positive topline data from its randomized, double-blind, placebo-controlled Phase 2 trial evaluating trilaciclib in combination with chemotherapy and the checkpoint inhibitor Tecentriq® (atezolizumab) as a treatment for 1L SCLC. Trilaciclib is a first-in-class myelopreservation therapy designed to improve outcomes of patients who receive chemotherapy by preserving hematopoietic stem and progenitor cell (HSPC) and immune system function.

“The robust multi-lineage myelopreservation benefits of trilaciclib shown in this trial confirm the results we observed in our earlier trial in first-line small cell lung cancer,” said Raj Malik, M.D., Chief Medical Officer and Senior Vice President, R&D. “Trilaciclib may also extend overall survival in patients receiving chemotherapy and Tecentriq, and we expect to report those data when available.”

**Key Multi-Lineage Myelopreservation Findings**

Data from this randomized, double-blind, placebo-controlled Phase 2 trial demonstrated that trilaciclib reduced clinically relevant consequences of myelosuppression versus placebo when administered in combination with chemotherapy (etoposide and carboplatin) and Tecentriq across three lineages: neutrophils, red blood cells (RBCs) and platelets. Lymphocyte subset analyses are ongoing. Trilaciclib was well tolerated, with no Grade 4 trilaciclib-related treatment emergent adverse events (TEAEs) reported.

Key hematological results from the trilaciclib/chemotherapy/Tecentriq trial are shown in the table below, along with data from the company’s previously reported Phase 2 trial that evaluated trilaciclib in combination with the same chemotherapy regimen for treatment of 1L SCLC.

	Endpoint	Trilaciclib or Placebo + Chemo/Tecentriq				Trilaciclib or Placebo + Chemo			
		Placebo N=53	Trilaciclib N=54	% Reduction	P-value	Placebo N=37	Trilaciclib N=38	% Reduction	P-value
<b>Neutrophils</b>	Mean duration in days of severe neutropenia in cycle 1 (SD)*	4 (4.7)	0 (1.0)	100.0%	<0.0001**	3 (3.9)	0 (0.5)	100.0%	0.0003
	Pts w Grade 4 neutropenia*	26 (49.1%)	1 (1.9%)	96.1%	<0.0001**	16 (43.2%)	2 (5.3%)	87.7%	0.0001
	Pts w G-CSF administration	25 (47.2%)	16 (29.6%)	37.3%	0.0686	24 (64.9%)	4 (10.5%)	83.8%	<0.0001
	Number of G-CSF administrations per cycle	0.28	0.149	46.8%	0.0135	0.44	0.07	84.1%	<0.0001
	Pts w febrile neutropenia	3 (5.7%)	1 (1.9%)	66.7%	0.3105	3 (8.1%)	1 (2.6%)	67.9%	0.2773
<b>RBCs</b>	Pts w Grade 3/4 anemia	15 (28.3%)	10 (18.5%)	34.6%	0.3243	7 (18.9%)	4 (10.5%)	44.4%	0.2879
	RBC transfusions on/after 5 weeks on study	11 (20.8%)	7 (13.0%)	37.5%	0.2671	8 (21.6%)	2 (5.7%)	73.6%	0.0615
<b>Platelets</b>	Pts w Grade 3/4 thrombocytopenia	20 (37.7%)	1 (1.9%)	95.0%	0.0026	5 (13.5%)	4 (10.5%)	22.2%	0.6888
	Pts w Grade 4 thrombocytopenia	9 (17.0%)	0 (0.0%)	100.0%	0.0017	0 (0.0%)	0 (0.0%)	NE	NE
	Pts w chemo dose reductions	14 (26.4%)	3 (5.6%)	78.8%	0.0127	13 (35.1%)	3 (7.9%)	77.5%	0.0033
	Pts w Grade 3/4 hematologic TEAEs	38 (71.7%)	19 (36.5%)+	49.1%	0.0016	27 (73.0%)	9 (23.7%)	67.5%	<0.0001

\* Primary endpoint in trilaciclib/chemotherapy/Tecentriq trial

\*\* Adjusted for multiplicity with one-sided significance level set at 0.025 by design; all other p-values are two-sided

+ 52 patients were included in the safety population; 2 randomized patients did not receive treatment

### Preliminary Anti-Tumor Efficacy Findings

Trilaciclib's potential to preserve immune system function during chemotherapy may enhance overall survival (OS) in this trial. OS data are immature and will be reported when available.



There was no statistical difference between the trilaciclib and placebo groups in overall response rate (ORR) (trilaciclib 56.0%, placebo 63.5%) and median duration of response (DOR) (trilaciclib 5.2 months, placebo 4.2 months). Preliminary median progression-free survival (PFS) was 5.7 months for trilaciclib versus 5.4 months for placebo (hazard ratio 0.74,  $p=0.3025$ ; less than 80% of events).

“We now have positive myelopreservation results from two randomized trials of trilaciclib in first-line small cell lung cancer, and later this year will report findings from two additional trials in different indications, metastatic triple-negative breast cancer and second-/third-line small cell lung cancer,” said Mark Velleca, M.D., Ph.D., Chief Executive Officer. “We plan to request meetings with U.S. and European regulatory agencies in early 2019 to discuss the totality of our clinical data and potential pathways to approval.”

### **Trial Design**

This randomized, double-blind, placebo-controlled trial enrolled participants with a confirmed diagnosis of extensive-stage 1L SCLC. The trial randomized 107 treatment-naïve patients in a 1:1 ratio. Patients with ECOG Performance Status of 0-2 and asymptomatic brain metastases were eligible. All patients received a chemotherapy regimen of etoposide and carboplatin plus the checkpoint inhibitor Tecentriq (up to four cycles), followed by Tecentriq maintenance therapy. Patients were randomized to receive trilaciclib or placebo administered intravenously prior to each dose of chemotherapy.

Participants in both trial arms were able to receive standard supportive care as recommended by the clinical investigator. Growth factors, including granulocyte colony-stimulating factor (G-CSF) and erythropoietin, were available per American Society of Clinical Oncology (ASCO) guidelines.

### **About Trilaciclib**

Trilaciclib is a first-in-class myelopreservation therapy designed to improve outcomes of patients who receive chemotherapy by preserving hematopoietic stem and progenitor cell (HSPC) and immune system function. Trilaciclib is a short-acting intravenous CDK4/6 inhibitor administered prior to chemotherapy.

Trilaciclib is being evaluated in four randomized Phase 2 clinical trials. G1 has reported positive results from two of these trials, showing myelopreservation benefits in newly diagnosed, treatment-naïve SCLC patients. In the first trial, trilaciclib was administered in combination with a chemotherapy regimen of etoposide and carboplatin ([NCT02499770](#)); [topline data](#) were released in March and [additional data](#) were reported at the European Society of Medical Oncology 2018 Congress. In the second trial, trilaciclib was administered in combination with the same chemotherapy regimen and the checkpoint inhibitor Tecentriq® (atezolizumab) ([NCT03041311](#)); topline data were reported in November. The company plans to report data from two other randomized Phase 2 trials in 2018. Results from a trial in combination with chemotherapy in metastatic triple-negative breast cancer ([NCT02978716](#)) will be presented at the San Antonio Breast Cancer Symposium on December 5, 2018. The company plans to release topline data from a trial in combination with chemotherapy in previously treated SCLC ([NCT02514447](#)) by the end of 2018.



## Webcast and Conference Call

The management team will host a webcast and conference call at 4:30 p.m. ET today to provide an overview of the trial findings and next steps for the trilaciclib development program. The live call may be accessed by dialing 866-763-6020 (domestic) or 210-874-7713 (international) and entering the conference code: 4156078. A live and archived webcast will be available on the [Events & Presentations](#) page of the company's website: [www.g1therapeutics.com](http://www.g1therapeutics.com).

## About G1 Therapeutics

G1 Therapeutics, Inc. is a clinical-stage biopharmaceutical company focused on the discovery, development and delivery of innovative therapies that improve the lives of those affected by cancer. The company is advancing three clinical-stage programs, [trilaciclib](#), [lerociclib](#) and [G1T48](#), that are designed to enable more effective combination treatment strategies and improve patient outcomes across multiple oncology indications.

G1 is based in Research Triangle Park, NC. For additional information, please visit [www.g1therapeutics.com](http://www.g1therapeutics.com) and follow us on Twitter @G1Therapeutics.

## Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “may,” “will,” “expect,” “plan,” “anticipate,” “estimate,” “intend” and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. Forward-looking statements in this news release include, but are not limited to, the therapeutic potential of trilaciclib, lerociclib and G1T48, and are based on the Company's expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties. Factors that may cause the Company's actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in the Company's filings with the U.S. Securities and Exchange Commission, including the “Risk Factors” sections contained therein and include, but are not limited to, the Company's ability to complete clinical trials for, obtain approvals for and commercialize any of its product candidates; the Company's initial success in ongoing clinical trials may not be indicative of results obtained when these trials are completed or in later stage trials; the inherent uncertainties associated with developing new products or technologies and operating as a development-stage company; the Company's development of a CDK4/6 inhibitor to reduce chemotherapy-induced myelosuppression is novel, unproven and rapidly evolving and may never lead to a marketable product; and market conditions. Except as required by law, the Company assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

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