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): October 1, 2019 (September 28, 2019)

G1 THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	001-38096	26-3648180
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

700 Park Offices Drive
Suite 200
Research Triangle Park, NC **27709**
(Address of principal executive offices) (zip code)

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

79 T.W. Alexander Drive, 4501 Research Commons, Suite 100, Research Triangle Park, NC 27709
(former address)

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	Name of each exchange on which registered
Common stock, $0.0001 par value	**GTHX**	**The Nasdaq Stock Market**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

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. ☐

Item 8.01 Other Events.

On September 28, 2019, G1 Therapeutics, Inc. (the "Company") issued a press release announcing updated data at ESMO 2019 from randomized Phase 2 trial of trilaciclib in combination with chemotherapy in metastatic triple-negative breast cancer demonstrating significant improvement in overall survival. These data were presented at the European Society for Medical Oncology (ESMO) 2019 Congress in Barcelona, Spain. A copy of the press release is attached hereto as Exhibit 99.1.

On September 29, 2019, the Company issued a press release announcing preliminary results from a Phase 1/2a dose-escalation study of G1T48, an oral selective estrogen receptor degrader (SERD), in patients with estrogen receptor-positive, HER2-negative (ER+, HER2-) breast cancer. These data were presented at ESMO in Barcelona, Spain. A copy of the press release is attached hereto as Exhibit 99.2.

The Company held an Investor & Analyst Event on September 29, 2019 in Barcelona, Spain. A copy of the event materials is attached hereto as Exhibit 99.3.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release dated September 28, 2019
99.2	Press Release dated September 29, 2019
99.3	Investor & Analyst Event Materials dated September 29, 2019
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 thereunto duly authorized.

G1 THERAPEUTICS, INC.

By: */s/ James Stillman Hanson*
James Stillman Hanson
General Counsel

Date: October 1, 2019

EXHIBIT 99.1

G1 Therapeutics Presents Updated Data at ESMO 2019 from Randomized Phase 2 Trial of Trilaciclib in Combination with Chemotherapy in Metastatic Triple-Negative Breast Cancer Demonstrating Significant Improvement in Overall Survival

— Trial results published simultaneously in The Lancet Oncology —

— Company also to present updated Phase 2 results demonstrating myelopreservation benefits in small cell lung cancer (SCLC) patients receiving trilaciclib and chemotherapy in combination with Tecentriq® —

— Company to begin rolling New Drug Application (NDA) submission for SCLC in 4Q19 —

— Company to host investor and analyst event, webcast and conference call at 12:45 p.m. ET on September 29, 2019 —

RESEARCH TRIANGLE PARK, N.C. and BARCELONA, SPAIN, Sept. 28, 2019 (GLOBE NEWSWIRE) — G1 Therapeutics, Inc. (Nasdaq: GTHX), a clinical-stage oncology company, today reported preliminary overall survival (OS) data from the company's randomized Phase 2 trial of trilaciclib in combination with chemotherapy for the treatment of metastatic triple-negative breast cancer (mTNBC). In the trial, median overall survival for patients treated with trilaciclib in combination with a chemotherapy regimen of gemcitabine/carboplatin (GC) was 20.1 months, compared with 12.6 months for patients receiving chemotherapy alone. These data were reported as part of a late-breaking oral presentation (LBA22) at the European Society for Medical Oncology (ESMO) 2019 Congress and featured in a concurrent publication in *The Lancet Oncology*.

Updated data from a separate randomized Phase 2 trial of trilaciclib in small cell lung cancer (SCLC) will be presented during a poster session (1742PD) on Sunday, September 29 at ESMO 2019 in Barcelona, Spain.

"Triple-negative breast cancer is the most aggressive form of breast cancer and tends to have a poorer prognosis than other breast cancers. We need new therapeutic approaches that improve outcomes for women diagnosed with triple-negative breast cancer," said Joyce A. O'Shaughnessy, M.D., Baylor University Medical Center, Texas Oncology, U.S. Oncology, and lead investigator for the trial. "As an oncologist specializing in triple-negative breast cancer, I am encouraged that trilaciclib has the potential to improve the survival of patients diagnosed with this disease."

“Trilaciclib is a first-in-class therapy that has improved outcomes for people with cancer being treated with chemotherapy in four randomized Phase 2 trials. The findings from these trials in small cell lung cancer and triple-negative breast cancer indicate that the clinical benefits of trilaciclib are meaningful and context-dependent,” said Raj Malik, M.D., Chief Medical Officer and Senior Vice President, R&D. “In metastatic triple-negative breast cancer, the benefit manifests as improved overall survival. In small cell lung cancer, patients experience myelopreservation benefits, including reduced rates of neutropenia, anemia and other chemotherapy-related side effects, and a corresponding decrease in the use of rescue therapies required to address those toxicities. Importantly, patient-reported outcome measures across all of our trials showed that trilaciclib improved the patient experience on chemotherapy.”

Mark Velleca, M.D., Ph.D., Chief Executive Officer, added: “Based on feedback from our pre-NDA meeting with the FDA, we will begin a rolling NDA submission for small cell lung cancer in the fourth quarter of this year, which we expect to complete in the second quarter of 2020. We have also had initial discussions with the FDA regarding development of trilaciclib in triple-negative breast cancer, including the preliminary design of a Phase 3 trial. In 2020, we plan to initiate a Phase 3 trial in triple-negative breast cancer and a Phase 3 trial in colorectal cancer, with the goal of demonstrating the benefits of trilaciclib to patients receiving chemotherapy for multiple tumor types.”

Overall survival benefit in mTNBC

The randomized, open-label Phase 2 study (NCT02978716) of trilaciclib in combination with GC, a current standard of care for TNBC, enrolled 102 patients who had received up to two prior chemotherapy regimens for locally recurrent or metastatic TNBC. In this three-arm trial, all three groups received a chemotherapy regimen of GC. Patients were randomized to receive GC only (Group 1) or GC plus one of two dosing schedules of trilaciclib: trilaciclib administered on the day of chemotherapy (Group 2) or trilaciclib administered the day prior to and the day of chemotherapy (Group 3). Primary endpoints for the trial included myelopreservation measures; secondary endpoints included additional myelopreservation measures and anti-tumor efficacy measures of overall response rate (ORR), progression-free survival (PFS) and OS. Myelopreservation and preliminary anti-tumor efficacy results from the trial were reported at the 2018 San Antonio Breast Cancer Symposium (press release here). Topline OS findings were announced in June 2019 (press release here); detailed OS results were reported for the first time at ESMO 2019.

Updated results from the trial showed:

- **The addition of trilaciclib to chemotherapy resulted in a significant increase in OS in both treatment groups compared to chemotherapy alone.**
    - Compared to GC alone (Group 1), OS was improved for both trilaciclib arms (Groups 2 and 3) with median OS of 12.6 months, 20.1 months and 17.8 months, respectively (Group 2: HR=0.33, p=0.0283; Group 3: HR=0.34, p=0.0023). The median OS for Groups 2 and 3 combined was 20.1 months (HR=0.36, p=0.0015). The median OS for GC alone (Group 1, 12.6 months) was consistent with historical data.

- **PFS and ORR were consistent with previously reported data.**
- **The safety and tolerability of trilaciclib were consistent with previously reported data.**
  - There have been no serious adverse events attributed to treatment with trilaciclib in this trial.
- **Patient-reported outcome (PRO) measures related to anemia were improved in patients receiving trilaciclib versus patients receiving chemotherapy alone.**
- **As previously reported, primary endpoints (myelopreservation measures) were not met.**

Trilaciclib in SCLC

On Sunday, September 29, G1 Therapeutics will present updated results from its randomized, double-blind, placebo-controlled Phase 2 trial (NCT03041311) evaluating trilaciclib in extensive-stage SCLC patients receiving first-line chemotherapy and the checkpoint inhibitor Tecentriq® (atezolizumab). The findings were consistent with previously reported data (press release here):

- Trilaciclib demonstrated myelopreservation benefits, as shown by statistically significant and clinically meaningful improvement in reduction of myelosuppression endpoints, reduction of chemotherapy side effects and reduction of rescue interventions.
- Trilaciclib was well tolerated, with fewer ³ Grade 3 adverse events (AEs) compared to placebo.
- PRO measures related to anemia were improved in patients receiving trilaciclib versus patients receiving placebo.
- Trilaciclib did not adversely impact chemotherapy anti-tumor efficacy as measured by ORR, PFS and OS.

Additionally, data from another randomized Phase 1b/2 trial of trilaciclib in patients with SCLC receiving first-line chemotherapy were recently published in *Annals of Oncology*, the official journal of ESMO. Data in this trial demonstrated the myelopreservation benefits of trilaciclib as indicated by statistically significant reduction in clinically relevant consequences of myelosuppression compared to placebo, resulting in fewer supportive care interventions and dose reductions. Trilaciclib did not adversely impact the anti-tumor efficacy of chemotherapy.

Webcast and Conference Call Details

G1 Therapeutics will host a webcast and conference call of its investor and analyst event on Sunday, September 29, 2019, at 6:45 p.m. CEST (12:45 p.m. ET) to review the data being presented at ESMO 2019, as well as long-range development plans for all three of its clinical-stage therapies and commercial plans for trilaciclib. The live call may be accessed by dialing 866-763-6020 (domestic) or 210-874-7713 (international) and entering the conference code: 5878315. A live and archived webcast will be available on the Events & Presentations page of the company's website at www.g1therapeutics.com. The webcast will be archived on the same page for 90 days following the event.

About Trilaciclib

Trilaciclib is a first-in-class investigational therapy designed to improve outcomes for people with cancer treated with chemotherapy. Based on results from three randomized trials in patients with small cell lung cancer, trilaciclib has received Breakthrough Therapy Designation, and G1 Therapeutics expects to submit marketing applications in the U.S. and Europe for myelopreservation in small cell lung cancer in 2020. In a randomized trial of women with metastatic triple-negative breast cancer, trilaciclib improved overall survival when administered in combination with chemotherapy compared with chemotherapy alone. The company plans to initiate a Phase 3 clinical trial in triple-negative breast cancer and a Phase 3 clinical trial in colorectal cancer in 2020.

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 is a first-in-class therapy designed to improve outcomes for patients being treated with chemotherapy. Trilaciclib has received Breakthrough Therapy Designation from the FDA; a rolling NDA submission for small cell lung cancer will begin in 4Q19 and is expected to be completed in the second quarter of 2020. Lerociclib is a differentiated oral CDK4/6 inhibitor designed to enable more effective combination treatment strategies. G1T48 is a potential best-in-class oral selective estrogen receptor degrader (SERD) for the treatment of ER+ breast cancer. G1 Therapeutics also has an active discovery program focused on cyclin-dependent kinase targets.

G1 Therapeutics is based in Research Triangle Park, N.C. For additional information, please visit 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, the timing for the commencement and completion of marketing applications in the U.S. and Europe for trilaciclib in SCLC, and plans to initiate additional trials in colorectal cancer and TNBC, 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; 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.

Contact:

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G1 Therapeutics Presents First Clinical Data on Oral SERD G1T48 Demonstrating Safety and Tolerability in Patients with Advanced Breast Cancer at ESMO 2019

— Company to host investor and analyst event, webcast and conference call today at 12:45 p.m. ET —

RESEARCH TRIANGLE PARK, N.C. and BARCELONA, SPAIN, Sept. 29, 2019 (GLOBE NEWSWIRE) – G1 Therapeutics, Inc. (Nasdaq: GTHX), a clinical-stage oncology company, today announced preliminary results from a Phase 1/2a dose-escalation study of G1T48, an oral selective estrogen receptor degrader (SERD), in patients with estrogen receptor-positive, HER2-negative (ER+, HER2-) breast cancer. In the trial, G1T48 was well tolerated and demonstrated evidence of anti-tumor activity in heavily pre-treated patients. These data were presented as part of a poster session (340P) at the European Society for Medical Oncology (ESMO) 2019 Congress in Barcelona, Spain.

"Based on the promising safety and tolerability of G1T48 shown in this trial and the established efficacy of the SERD class, we believe that G1T48 has the potential to offer women with ER+, HER2- breast cancer an important new treatment option," said Mark Velleca, M.D., Ph.D., Chief Executive Officer. "The findings in this trial support further development of G1T48, including in first-line and adjuvant settings, and we expect to initiate a first-line Phase 3 pivotal trial in 2020."

Raj Malik, M.D., Chief Medical Officer and Senior Vice President, R&D added: "The FDA-approved SERD fulvestrant has been shown to be superior to aromatase inhibitors, the current standard of care in adjuvant ER+, HER2- breast cancer. However, the intramuscular route of administration for fulvestrant can be painful for patients and has precluded its use in the adjuvant setting. Our goal in developing G1T48 is to give patients an opportunity to benefit from the efficacy of a SERD at the earliest stages of their disease."

Results of Phase 1 dose-escalation trial of G1T48 in ER+, HER2- breast cancer

Safety, tolerability, pharmacokinetics (PK), pharmacodynamics (PD) and anti-tumor activity of G1T48 were evaluated in an open-label, dose-escalation Phase 1 trial. The data reported are from 26 post-menopausal women with ER+, HER2- breast cancer who were eligible to receive up to three lines of prior chemotherapy in the metastatic setting and up to three endocrine therapies, including fulvestrant, aromatase inhibitors and tamoxifen, in the metastatic setting. This was a difficult to treat, heavily pre-treated population: 65% of patients had received ³ 3 lines of therapy, 85% of patients had prior treatment with fulvestrant and most had received one or more targeted therapies (e.g., CDK4/6 inhibitor).

Preliminary findings showed:

- G1T48 was well tolerated with no dose-limiting toxicities (DLTs) reported at any of the five dose levels (200 mg, 400 mg, 600 mg, 800 mg and 1,000 mg) studied; maximum tolerated dose (MTD) was not reached.
- No patient experienced a serious adverse event (SAE) related to G1T48.
- Treatment emergent adverse events (TEAEs) were mostly Grade 1 and included fatigue, hot flush, diarrhea, headache, nausea and muscle spasms.
- Seven patients remain on treatment.
- There was a dose-dependent increase in drug exposure; dosing with food reduced variability and increased exposure.
- Significant decreases (70-92%) in ^{18}F-FES PET uptake during G1T48 treatment indicated target engagement for all doses tested.
- Of 19 patients with RECIST measurable tumors:
  - The clinical benefit rate (complete response + partial response + stable disease for at least 24 weeks) across all doses was 15.8% (three out of 19 patients).
  - Seven patients (36.8%) experienced stable disease across all doses.
  - One patient (5.3%) experienced a confirmed partial response (600 mg).

Based on safety and tolerability findings in the Phase 1b portion of this trial, the company selected the 600 mg and 1,000 mg doses of G1T48 for evaluation in the ongoing Phase 2a portion and will use these data to select the dose for pivotal trials. The company plans to initiate a first-line Phase 3 trial of G1T48 in combination with an oral CDK4/6 inhibitor for the treatment of ER+, HER2- breast cancer in 2020.

Webcast and Conference Call Details

G1 Therapeutics will host a webcast and conference call of its investor and analyst event on Sunday, September 29, 2019, at 6:45 p.m. CEST (12:45 p.m. ET) to review the data being presented at ESMO 2019, as well as long-range development plans for all three of its clinical-stage therapies and commercial plans for trilaciclib. The live call may be accessed by dialing 866-763-6020 (domestic) or 210-874-7713 (international) and entering the conference code: 5878315. A live and archived webcast will be available on the Events & Presentations page of the company's website at www.g1therapeutics.com. The webcast will be archived on the same page for 90 days following the event.

About G1T48

G1T48 is a potential best-in-class oral selective estrogen receptor degrader (SERD) in development for the treatment of estrogen receptor-positive (ER+) breast cancer. Preclinical data have shown that G1T48 is more potent than Faslodex® (fulvestrant), currently the only FDA-approved SERD treatment. Unlike Faslodex®, which is administered as an intramuscular injection, G1T48 has the potential to significantly improve the patient experience with once-daily oral dosing. The Phase 1/2a trial of G1T48 in estrogen receptor-positive, HER2-negative (ER+, HER2-) breast cancer (NCT03455270) is ongoing.

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 is a first-in-class therapy designed to improve outcomes for patients being treated with chemotherapy. Trilaciclib has received Breakthrough Therapy Designation from the FDA; a rolling NDA submission for small cell lung cancer will begin in 4Q19 and is expected to be completed in the second quarter of 2020. Lerociclib is a differentiated oral CDK4/6 inhibitor designed to enable more effective combination treatment strategies. G1T48 is a potential best-in-class oral selective estrogen receptor degrader (SERD) for the treatment of ER+ breast cancer. G1 Therapeutics also has an active discovery program focused on cyclin-dependent kinase targets.

G1 Therapeutics is based in Research Triangle Park, N.C. For additional information, please visit www.g1therapeutics.com and follow us on Twitter @G1Therapeutics.

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Contact:

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Exhibit 99.3

ESMO 2019 Update

29 September 2019

NASDAQ: GTHX

Agenda

6:45 – 6:50 p.m.	**Welcome & G1 Overview** **Mark Velleca, M.D., Ph.D.,** *Chief Executive Officer*
6:50 – 7:05 p.m.	**Breast Cancer State of the State c. 2019** **Lisa Carey, M.D., FASCO,** *Chief of Hematology/Oncology and Physician-in-Chief, N.C. Cancer Hospital* *Associate Director of Clinical Sciences, Lineberger Comprehensive Cancer Center*
7:05 – 7:15 p.m.	**ESMO Data Review: Trilaciclib and G1T48** **Raj Malik, M.D.,** *Chief Medical Officer and Senior Vice President, R&D*
7:15 – 7:30 p.m.	**Q&A with Dr. Carey, Dr. Malik and Dr. Velleca**
7:30 – 7:40 p.m.	**Pipeline Development Strategy and Regulatory Milestones** **Raj Malik, M.D.,** *Chief Medical Officer and Senior Vice President, R&D*
7:40 – 7:50 p.m.	**Commercial Opportunity and Strategy** **John Demaree,** *Chief Commercial Officer*
7:50 – 8:05 p.m.	**Q&A with Dr. Malik, Mr. Demaree and Dr. Velleca**
8:05 – 8:10 p.m.	**Upcoming Catalysts and Closing Remarks** **Mark Velleca, M.D., Ph.D.,** *Chief Executive Officer*

Forward-looking statements

This presentation 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 presentation include, but are not limited to, the therapeutic potential of trilaciclib, lerociclib and G1T48, the expected timing of data availability from ongoing clinical trials, the expected timing of initiation of future clinical trials, and the timing for the commencement and completion of marketing applications in the U.S. and Europe for trilaciclib in SCLC, and are based on the Company's expectations and assumptions as of the date of this presentation. 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 presentation 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.

Welcome & G1 Overview

Mark Velleca, M.D., Ph.D.
Chief Executive Officer

Small molecule therapeutics for big oncology indications

Trilaciclib

- ✓ Breakthrough Therapy Designation; begin rolling NDA submission for SCLC in 4Q19, expect to complete in 2Q20
- ✓ Preliminary OS benefit in mTNBC; initiating Phase 3 trial in 2H20
- ✓ Initiating Phase 3 mCRC trial in 2H20

G1T48

- ✓ Best-in-class potential
- ✓ Differentiated chemistry, favorable tolerability
- ✓ Initiating Phase 3 1L combo trial with CDK4/6i in 2H20

Lerociclib

- ✓ Less neutropenia and favorable tolerability – advantages in breast cancer (BC) adjuvant setting
- ✓ Data + dose identification in 4Q19 to support pivotal trials
- ✓ Initiating Phase 3 1L BC trial in 2H20

All three therapies have potential to **improve outcomes for women with breast cancer** in advanced/ metastatic and adjuvant settings

Trilaciclib regulatory update

Small cell lung cancer

- Breakthrough Therapy Designation (BTD)
- Pre-NDA meeting with Hematology Division completed
- **Will begin rolling NDA submission in 4Q19; expect to complete submission in 2Q20**
- Anticipate MAA submission in 2H20

Triple-negative breast cancer

- Productive interactions with Oncology Division
- Received feedback on Phase 2 data and comments on preliminary Phase 3 trial design
- **Expect to initiate Phase 3 trial in 2H20**

Catalysts across all programs in 2019/2020

	INDICATION/COMBO	4Q19	1H20	2H20
trilaciclib IV - CDK4/6i	1st-line SCLC (+ etop/carbo)	Begin rolling NDA submission for SCLC	Complete NDA submission for SCLC	MAA filing for SCLC
	1st-line SCLC (+ etop/carbo/Tecentriq)			
	2nd/3rd-line SCLC (+ topotecan)			
	Metastatic TNBC (+ gem/carbo)			Initiate Phase 3 TNBC trial
	Metastatic CRC (5-FU regimens)			Initiate Phase 3 mCRC trial
lerociclib Oral - CDK4/6i	ER+, HER2- BC (+ Faslodex)	Present additional Phase 1b/2a data		Initiate Phase 3 BC trial
	EGFRm NSCLC (+ Tagrisso)			
G1T48 Oral - SERD	ER+, HER2- BC			Initiate Phase 3 CDK4/6i combination trial + Present additional data

Well funded with $325M cash at end of 2Q19; anticipate 2019 YE cash of $260-270M

UNC | LINEBERGER COMPREHENSIVE CANCER CENTER

UNC CANCER CARE

Breast Cancer State of the State c. 2019

Lisa A. Carey M.D., FASCO
University of North Carolina
Lineberger Comprehensive Cancer Center

Disclosures

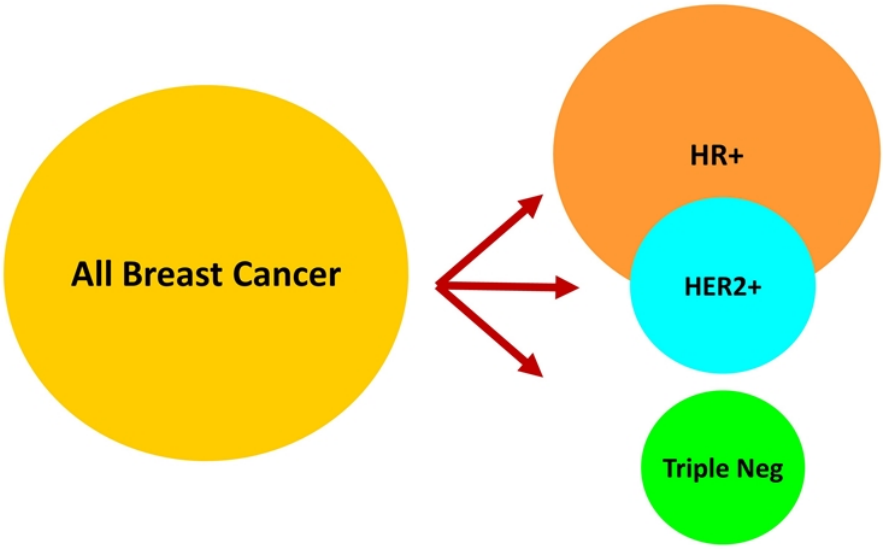
- **Research funding (to my institution): Innocrin, Nanostring, Novartis, Roche, Seattle Genetics**

- **Advisory or consultant role (no personal compensation): G1 Therapeutics, Innocrin, Lilly, Novartis, Seattle Genetics**

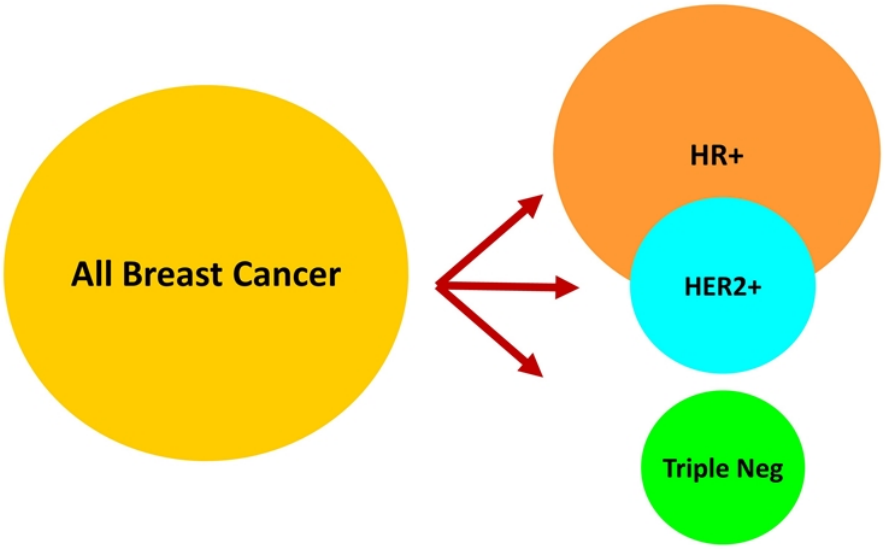
Epidemiology of Breast Cancer

- ~ 270,000 new cases per year in the U.S. (+2,500 men) in 2018
- 85% curable
- 3.5 million breast cancer survivors (currently in treatment and completed treatment) in the U.S.

Clinical Receptor Phenotype



Clinical Receptor Phenotype: Systemic Therapy



Primary Rx:

Endocrine-based

Anti-HER2-based

Chemo-based

Goals of Therapy

Stages I-III / Nonmetastatic

- Cure
- No long-term toxicity

Stage IV / Metastatic

- Control
- Tolerability (acute and chronic)

Goals of Therapy

Stages I-III / Nonmetastatic

- Cure
- No long-term toxicity

Metastatic

- Control
- Tolerability (acute and chronic)

Goals of therapy markedly differ

Willing to tolerate more acute toxicity in order to complete Rx

Balance toxicity and outcome

Decision-making Regarding Need for Medical Therapy

If distant metastases present, mainstay of lifelong therapy is medical.

If nonmetastatic, type and aggressiveness of treatment vary by:

- Tumor size and appearance (grade)
- Local lymph node involvement
- Targetable receptors (ER, PR, HER2)
- Patient factors (comorbidities, age, etc.)
- Genomic assays (in ER+ HER2-)
  - E.g. Oncotype Dx Recurrence Score, Prosigna, Mammaprint

Medical therapy given to reduce risk of recurrence in nonmetastatic disease = "neoadjuvant" or "adjuvant" therapy

Modern (Neo) Adjuvant Therapy

Hormone receptor (ER, PR) + (regardless of HER2):

- Antiestrogen pills (5-10 years)
- Chemotherapy (several months) if high risk

HER2+ (regardless of hormone receptors):

- Chemotherapy (several months)
- Anti-HER2 therapy (1-3 drugs for 1-2 years)

“Triple negative” (all receptors negative):

- Chemotherapy for up to 1 year

Modern (Neo) Adjuvant Therapy

Hormone receptor (ER, PR) + (regardless of HER2):

- Antiestrogen pills (5-10 years)
- Chemotherapy (several months) if high risk

HER2+ (regardless of hormone receptors):

- Chemotherapy (several months)
- Anti-HER2 therapy (1-3 drugs for 1-2 years)
  - Trastuzumab + pertuzumab + neratinib
  - Trastuzumab emtansine in residual disease after neoadjuvant chemotherapy + trastuzumab

"Triple negative" (all receptors negative):

- Chemotherapy for up to 1 year
  - Capecitabine x 6m in residual disease after neoadjuvant chemotherapy

Future directions:

Tailoring (less vs more) in all

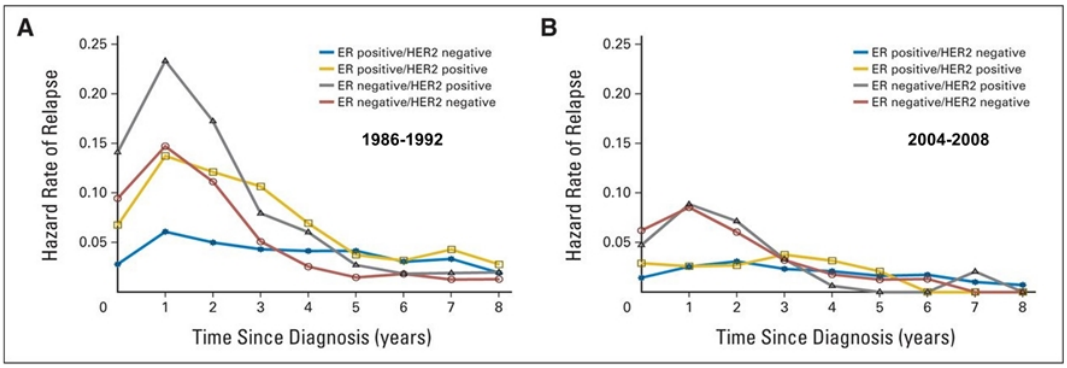
CDK4/6 inhibitors (soon!)
PI3K / mTOR inhibitors
Better endocrine Rx (oral SERDs!)
Genomics to determine duration of Rx

Better anti-HER2 drugs
CDK4/6 inhibitors
Immunotherapy
Molecular assays to determine Rx

Immunotherapy
Optimized management of toxicities

Breast Cancer Outcomes Have Improved

- **Better chemotherapy drugs and approaches**
- **Better endocrine therapy**
- **Development of anti-HER2 therapy**

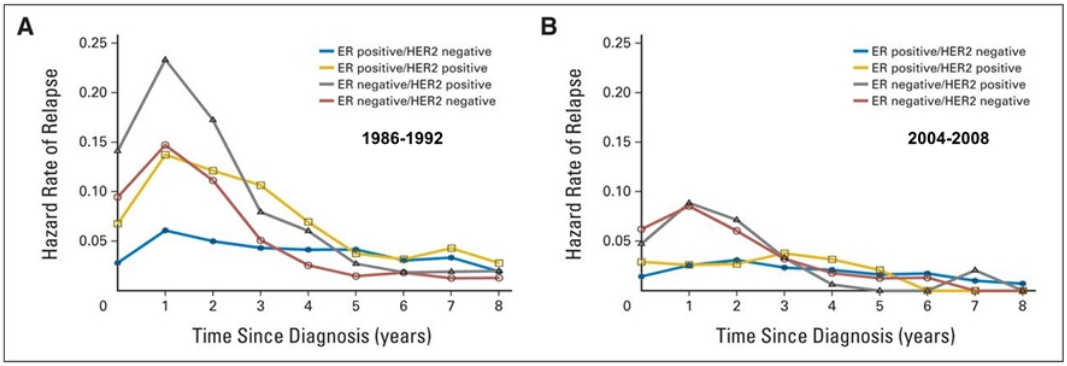


Cossetti R J et al. JCO 2015

Nonmetastatic Breast Cancer Outcomes Have Improved

- **Better chemotherapy drugs and approaches**
- **Better endocrine therapy**
- **Development of anti-HER2 therapy**

Cost has also increased! Reason for focus on rational Rx

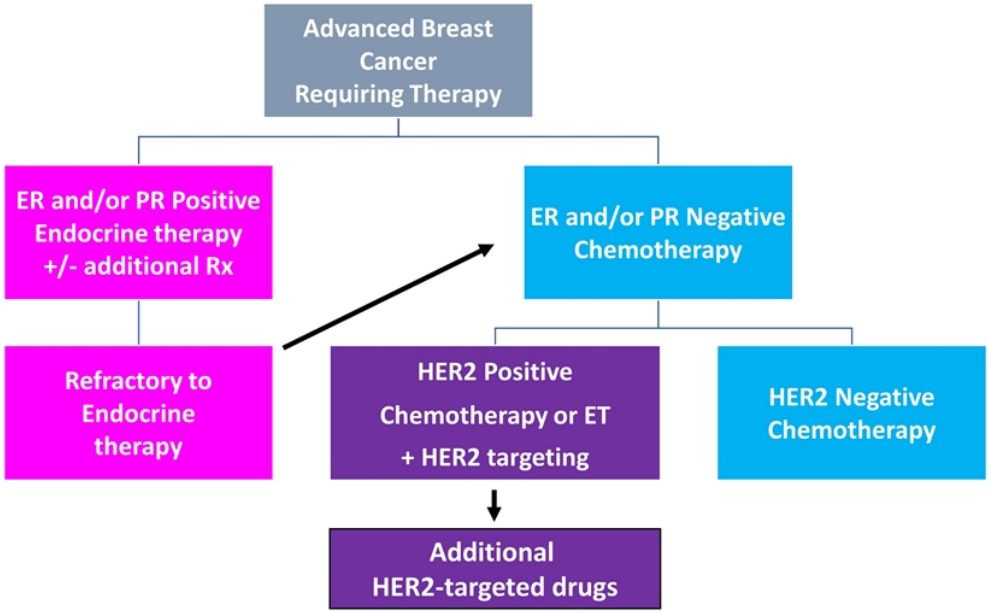


Cossetti R J et al. JCO 2015

Epidemiology of Metastatic Breast Cancer

- **Approximately 40,000 deaths per year in the U.S., but declining because of advances in therapy, especially in HER2+ disease**
- **Median survival ~3 years, but highly variable**
- **Prevalent population in U.S. ≈200,000 women**

Treatment Based on Tumor Phenotype



ASCO Guidelines: General Principles

ER+ HER2-

- Endocrine (usually) preferable to chemotherapy in 1st line
- Targeted agents added to ET (CDK4/6, mTOR, PI3K inhibitors)

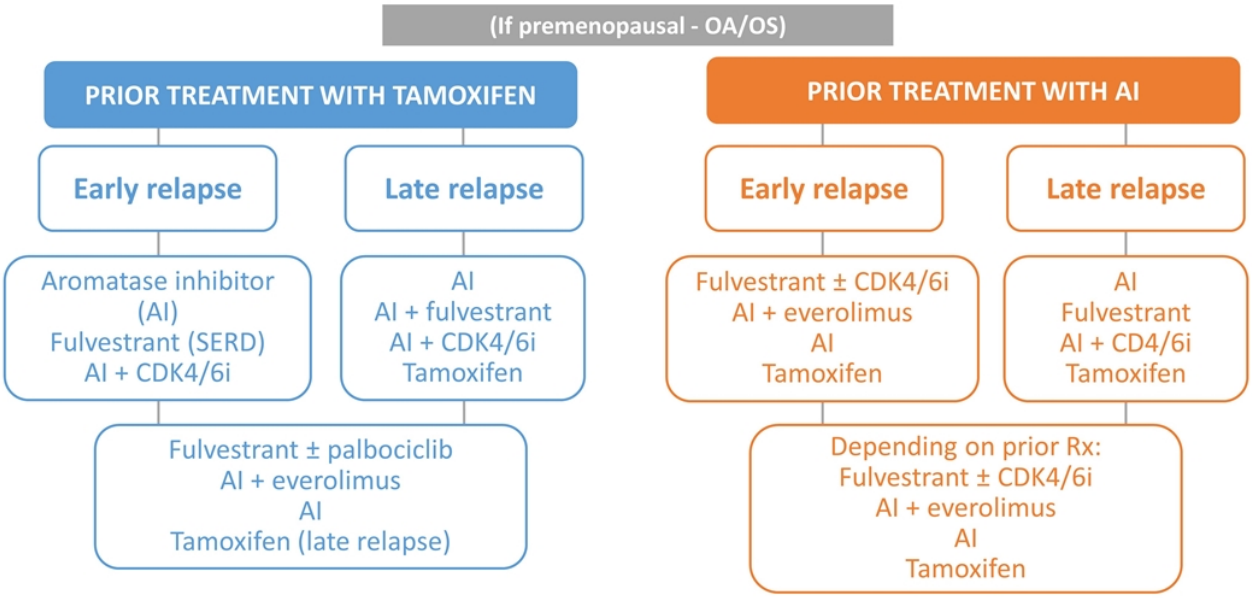
Any HER2- receiving chemotherapy

- Single agent chemotherapy preferable to combination
  - Exception: symptomatic, immediately life-threatening
- Longer duration ↑ outcome but must be balanced against ↑ toxicity
- No single optimal 1st or later chemotherapy
  - Factors: prior Rx, toxicity, performance status, comorbidity, patient preference

HER2+

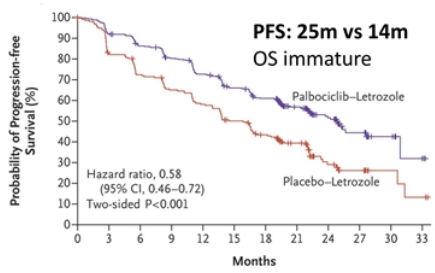
- HER2-directed Rx is mainstay
- 1st-line: taxane + trastuzumab + pertuzumab; 2nd-line: T-DM1
- HR+ HER2+ may consider ET + HER2-Rx or ET alone in selected cases

Endocrine Rx Algorithm in ER+/HER2-



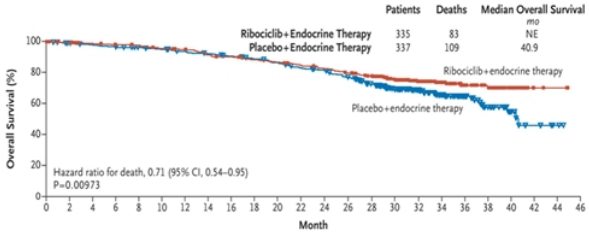
CDK4/6 Inhibitor Effect in HR+ HER2-

PALOMA2: Ph 3 letrozole ± palbo 1stL

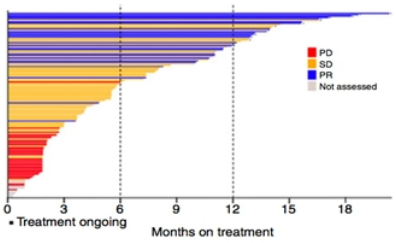


- **Similar PFS impact CDK 4/6i across lines of Rx (~ HR 0.50)**
- **OS ↑ in pretreated pts with abemaciclib, ribociclib, (palbo trial immature). HR ~ 0.70-75.**
- **No apparent interaction with PIK3CAmt, ESR1mt etc.**
- **Abemaciclib single agent activity, different toxicity profile**
- **Widely used. More toxic than ET alone.**
- **Being studied in (neo)adjuvant, HER2+**

MONALEESA7: Ph 3 ET ± ribo 1stL pre/perimen

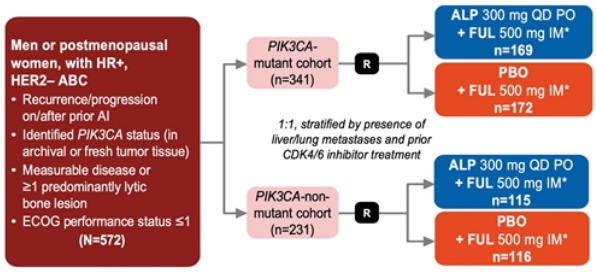


MONARCH1: Abema single agent

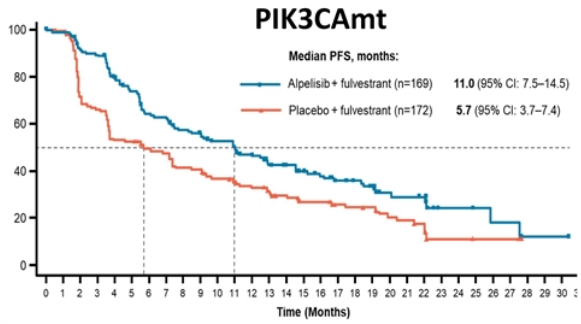


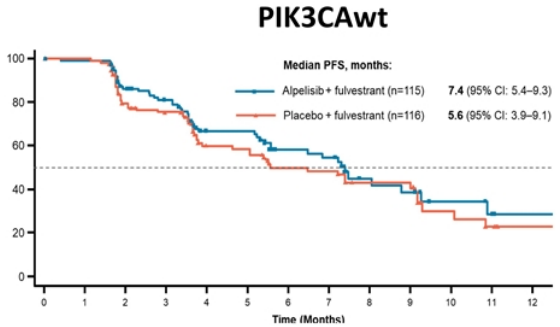
Alpelisib Added to Fulvestrant in PreRx PIKC3CA mt HR+ HER2-

SOLAR1



PFS HR 0.65 in mutant group. No OS yet.
Toxicity – hyperglycemia (40%), rash (10%)





Andre F, NEJM 2019

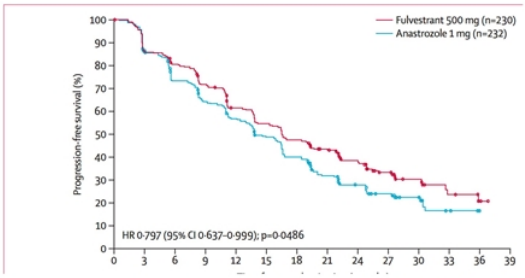
UNC LINEBERGER COMPREHENSIVE CANCER CENTER

Fulvestrant vs AI: 1st-Line

FALCON study: Phase III trial

	Fulvestrant	Anastrozole	P-value
CR+ PR	46%	45%	NS
CBR	78%	74%	NS
PFS*	17m	14m	0.049

ET-naïve!
OS 5.5m improvement in Phase II FIRST trial



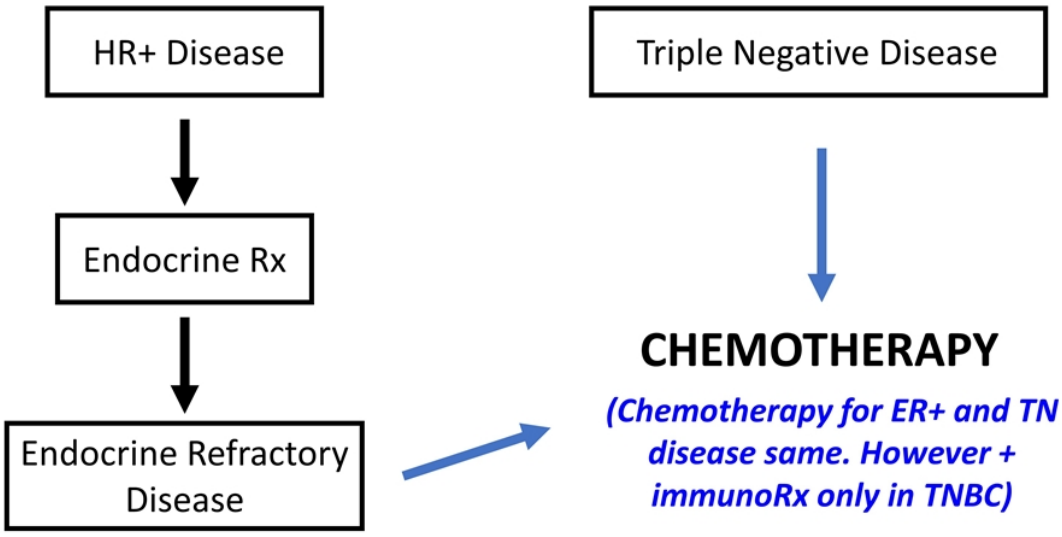
Robertson JFR et al, Lancet 2016

Fulvestrant as single agent =/> AI in 1st line endocrine Rx

Considerations:

1. **Prior adjuvant AI (if anything) should augment difference**
2. **CDK 4/6i trials usually AI 1st-line, fulvestrant later**
3. **IM administration is an obstacle – little enthusiasm for adjuvant setting**

Chemotherapy in HER2-Negative Breast Cancer



Chemotherapy Options

Anthracyclines
- **Doxorubicin**
- **Epirubicin**
- **Liposomal doxorubicin**

Taxanes
- **Paclitaxel**
- **Docetaxel**
- **Nab-paclitaxel**

Vinca alkaloids
- **Vinorelbine**

Other anti-tubule
- **Eribulin**

Antimetabolites
- **Methotrexate**
- **5-FU**
- **Capecitabine**
- **Gemcitabine**

Alkylating agents
- **Cyclophosphamide**
- **Platinum agents**

Epothilones
- **Ixabepilone**

Alone or in combinations

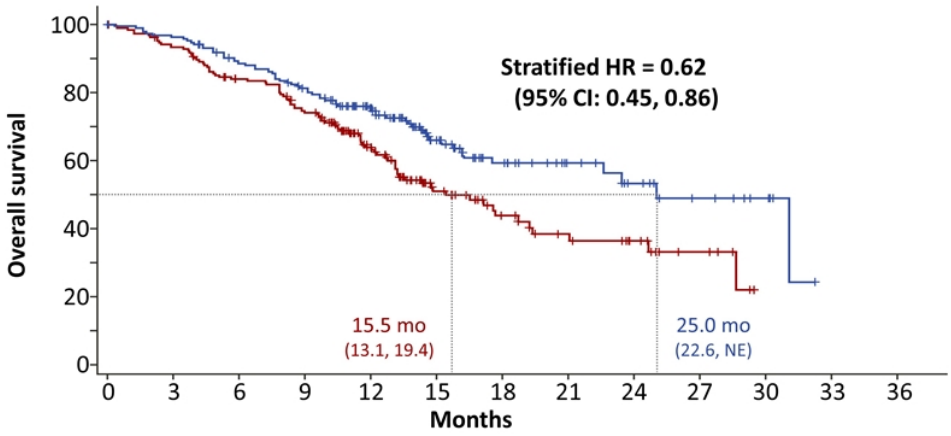
General principles TNBC:
- Taxanes = platinums 1st-line
  - If PDL1+, use nab paclitaxel + atezolizumab immunoRx
- Combination chemo more toxic but higher response

General principles ET-refractory:
- Same
- + oral agent (cape) good transition drug

Overall Survival in PD-L1+ Tumors with ImmunoRx added to Chemo

Impassion 130
1st-line TNBC

	Atezo + nab-P (n = 185)	Plac + nab-P (n = 184)
OS events, n	64	88
2-year OS (95% CI), %	54% (42, 65)	37% (26, 47)



- 1st line setting – first immunotherapy approval in breast cancer
- Many many trials pending
- Less tractable than melanoma, NSCLC, etc.
- Effect markedly lower in pretreated patients

Schmid et al, NEJM 2019

UNC LINEBERGER COMPREHENSIVE CANCER CENTER

Summary

- **Nonmetastatic breast cancer is common and curable. Mainstays of therapy = chemotherapy, endocrine therapy, anti-HER2 depending on risk and type of cancer.**
  - Challenges – tailoring therapy, identifying if agents active in metastatic disease help reduce risk of recurrence if used (neo)adjuvantly.

- **Metastatic breast cancer is 40,000 women per year in U.S. Longevity after diagnosis increasing, now ~ 3y overall, but not curable.**
  - Challenges – reducing toxicity, improving targeted therapies, role of immunotherapy

Thank you!

ESMO Data Review: Trilaciclib and G1T48

Raj Malik, M.D.
Chief Medical Officer and Senior Vice President, R&D

Trilaciclib mTNBC randomized Phase 2 trial: key findings

- 102-patient three-arm trial; all groups received gemcitabine/carboplatin (GC), a single-day regimen
  - Group 1 – GC only
  - Group 2 – GC + trilaciclib on day of GC
  - Group 3 – GC + trilaciclib on day prior to and day of GC
- ***Both trilaciclib arms showed significant OS improvement compared to control***
- Endpoints for myelopreservation were not achieved in this trial
- Trilaciclib was well tolerated with improvement in anemia-related PRO measures

THE LANCET Oncology

Trilaciclib plus chemotherapy versus chemotherapy alone in patients with metastatic triple-negative breast cancer: a multicentre, randomised, open-label, phase 2 trial

Antoinette R Tan, Gail S Wright, Anu R Thummala, Michael A Danso, Lazar Popovic, Timothy J Pluard, Hyo S Han, Željko Vojnović, Nikola Vasev, Ling Ma, Donald A Richards, Sharon T Wilks, Dušan Milenković, Zhao Yang, Joyce M Antal, Shannon R Morris, Joyce O'Shaughnessy

Lancet Oncol 2019; September 28, 2019
http://dx.doi.org/10.1016/S1470-2045(19)30616-3
Now **Online First** at TheLancet.com: 10.15 CEST, September 28, 2019

ESMO 2019: Trilaciclib improves overall survival when given with gemcitabine/carboplatin (GC) in patients with metastatic triple negative breast cancer (mTNBC) in a randomized Phase 2 trial; Abstract #6255

Significant overall survival benefit with trilaciclib

ITT population	Control (GC only) (Group 1) N = 34	Trilaciclib + GC (Group 2) N = 33	Trilaciclib + GC (Group 3) N = 35	Trilaciclib + GC (Group 2+3) N = 68
Median OS (months)	12.6	20.1	17.8	20.1
HR		0.33	0.34	0.36
p-value		0.028	0.0023	0.0015
Median PFS (months)	5.7	9.4	7.3	8.8
HR		0.60	0.59	0.59
p-value		0.13	0.12	0.063

Overall Response Rate (ORR): 33% (Group 1), 50% (Group 2), 37% (Group 3)

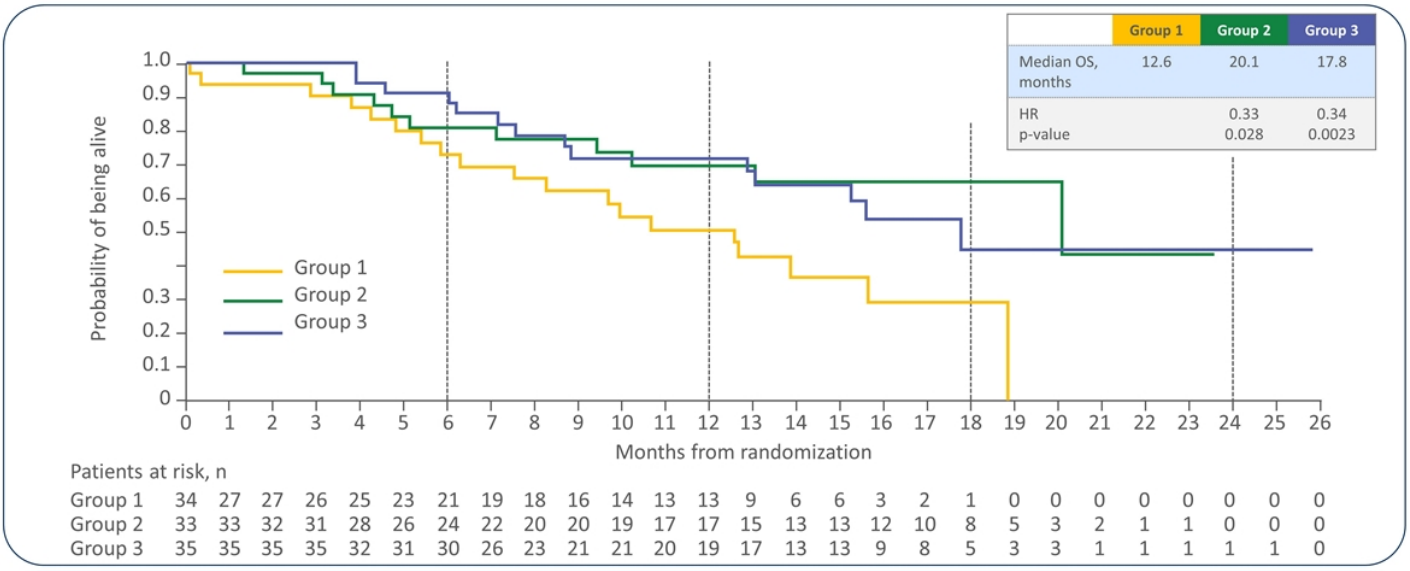
Patients with death - Group 1: 20/34 (58.8%); Group 2: 11/33 (33.3%); Group 3: 14/35 (40.0%)

Group 1: GC only (Day 1/8) (n=34); Group 2: trilaciclib + GC (Day 1/8) (n=33); Group 3: trilaciclib + GC (Day 1/2/8/9) (n=35)

ESMO 2019: Trilaciclib improves overall survival when given with gemcitabine/carboplatin (GC) in patients with metastatic triple negative breast cancer (mTNBC) in a randomized Phase 2 trial; Abstract #6255

Results published concurrently in *The Lancet Oncology*

Significant overall survival benefit with trilaciclib



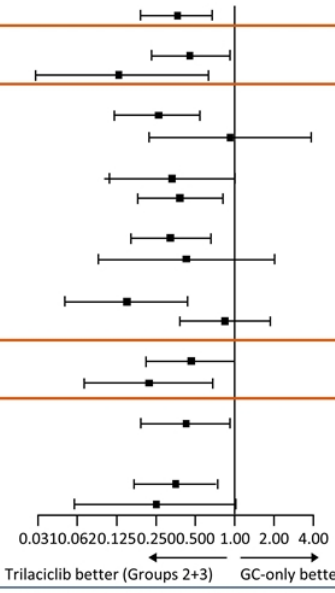
OS benefit greater than PFS suggests immune-mediated effect

Based on data as of 17 May 2019
Group 1: GC only (Day 1/8) (n=34); Group 2: trilaciclib + GC (Day 1/8) (n=33); Group 3: trilaciclib + GC (Day 1/2/8/9) (n=35)
ESMO 2019: Trilaciclib improves overall survival when given with gemcitabine/carboplatin (GC) in patients with metastatic triple negative breast cancer (mTNBC) in a randomized Phase 2 trial; Abstract #6255
Results published concurrently in *The Lancet Oncology*

OS benefit across all subgroups

Pre-specified subgroup analyses

Subgroup	No. of patients	No. of events	HR	95% CI
Overall (ITT)	102 (100)	45	0·36	(0·19–0·67)
Age				
<65 years	76 (74·5)	36	0.45	(0·23–0.91)
≥65 years	26 (25·5)	9	0.13	(0·03–0·63)
Race				
White	78 (76·5)	33	0.26	(0·12–0·54)
Non-white	24 (23·5)	12	0.92	(0·22–3·84)
Liver involvement				
Yes	26 (25·5)	17	0.33	(0·11–1·01)
No	76 (74·5)	28	0.38	(0·18–0·81)
Region				
USA	83 (81·4)	37	0.32	(0·16–0·65)
Ex-USA	19 (18·6)	8	0.42	(0·09–2·02)
ECOG PS				
0	53 (52)	18	0.15	(0·05–0·44)
1	49 (48)	27	0.72	(0·33–1·61)
Number of prior lines therapy				
0	64 (62·7)	28	0.46	(0·21–0·99)
1 or 2	38 (37·3)	17	0.22	(0·07–0·67)
BRCA classification				
Unknown	66 (64·7)	28	0.42	(0·19–0·92)
Positive	8 (7·8)	3	NE	(NE–NE)
Histological TNBC classification				
Always	71 (69·6)	31	0.35	(0·17–0·74)
Acquired	25 (24·5)	12	0.25	(0·06–1·02)



Based on data as of 17 May 2019 • Group 1: GC (Day 1/8) (n=34); Group 2: GC + trilaciclib (Day 1/8) (n=33); Group 3: GC + trilaciclib (Day 1/2/8/9) (n=35)
CI, confidence interval; ECOG PS, Eastern Cooperative Oncology Group performance status; HR, hazard ratio; ITT, intention-to-treat; NE, not estimable
ESMO 2019: Trilaciclib improves overall survival when given with gemcitabine/carboplatin (GC) in patients with metastatic triple negative breast cancer (mTNBC) in a randomized Phase 2 trial; Abstract #6255
Results published concurrently in *The Lancet Oncology*

G1T48 (Oral SERD) Update

G1T48 Phase 1 trial: key findings

✓Well tolerated; favorable safety profile at all dose levels

✓No dose-limiting toxicities observed; maximum tolerated dose not reached

✓AEs mostly Grade 1

✓^{18}F-FES PET scans – ER occupancy ≥ 80% in doses ≥ 400 mg

✓Preliminary evidence of anti-tumor activity in heavily pre-treated population

✓Phase 1 completed; 600 mg and 1,000 mg dose expansion cohorts enrolling

Dose-escalation study of G1T48, an oral selective estrogen receptor degrader (SERD), in postmenopausal women with ER+/HER2- locally advanced or metastatic breast cancer (ABC); Abstract #3587

Favorable tolerability and safety profile; AEs mostly Grade 1

Drug-related adverse event	Grade 1	Grade 2	Grade 3	Grade 4	Total (N=26)
Fatigue	6 (23.1%)	1 (3.8%)	1 (3.8%)	0	8 (30.8%)
Hot flush	5 (19.2%)	2 (7.7%)	0	0	7 (26.9%)
Diarrhea	6 (23.1%)	1 (3.8%)	0	0	7 (26.9%)
Headache	4 (15.4%)	0	0	0	4 (15.4%)
Nausea	4 (15.4%)	0	0	0	4 (15.4%)
Muscle spasms	2 (7.7%)	1 (3.8%)	0	0	3 (11.5%)
Myalgia	3 (11.5%)	0	0	0	3 (11.5%)
Abdominal distension	1 (3.8%)	1 (3.8%)	0	0	2 (7.7%)
Musculoskeletal stiffness	1 (3.8%)	1 (3.8%)	0	0	2 (7.7%)
Cough	0	1 (3.8%)	0	0	1 (3.8%)
Hypoglycemia	0	1 (3.8%)	0	0	1 (3.8%)
Lymphopenia	0	1 (3.8%)	0	0	1 (3.8%)
Pain (musculoskeletal chest)	0	1 (3.8%)	0	0	1 (3.8%)

AEs occurring in ≥3 patients or ≥CTCAE Grade 2; All TEAEs; AEs regardless of causality

Data cut: 12 August 2019

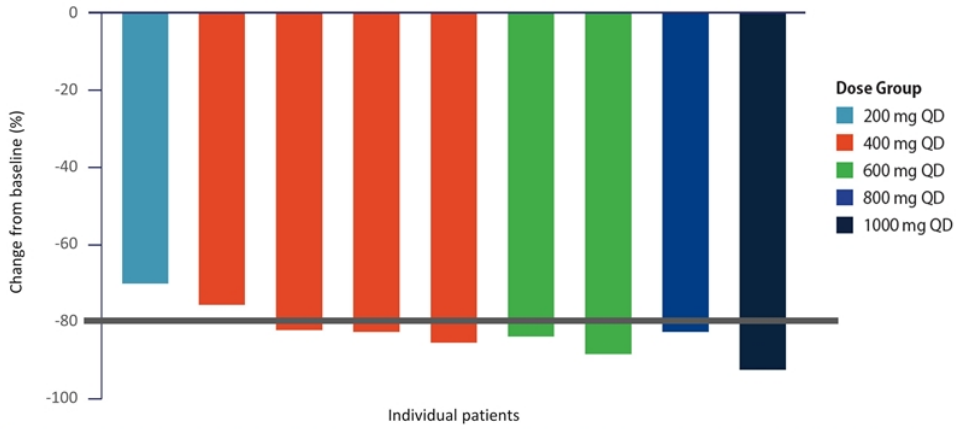
Dose-escalation study of G1T48, an oral selective estrogen receptor degrader (SERD), in postmenopausal women with ER+/HER2- locally advanced or metastatic breast cancer (ABC); Abstract #3587

PK/PD profile: robust target engagement

PK summary

- Generally dose-dependent increases in exposure
- Food decreased variability and increases exposure
- Patients in expansion cohorts being dosed with food

PD: ^{18}F-FES PET uptake in tumors



≥ 80% decrease in uptake at doses ≥ 400 mg

Dose-escalation study of G1T48, an oral selective estrogen receptor degrader (SERD), in postmenopausal women with ER+/HER2- locally advanced or metastatic breast cancer (ABC); Abstract #3587

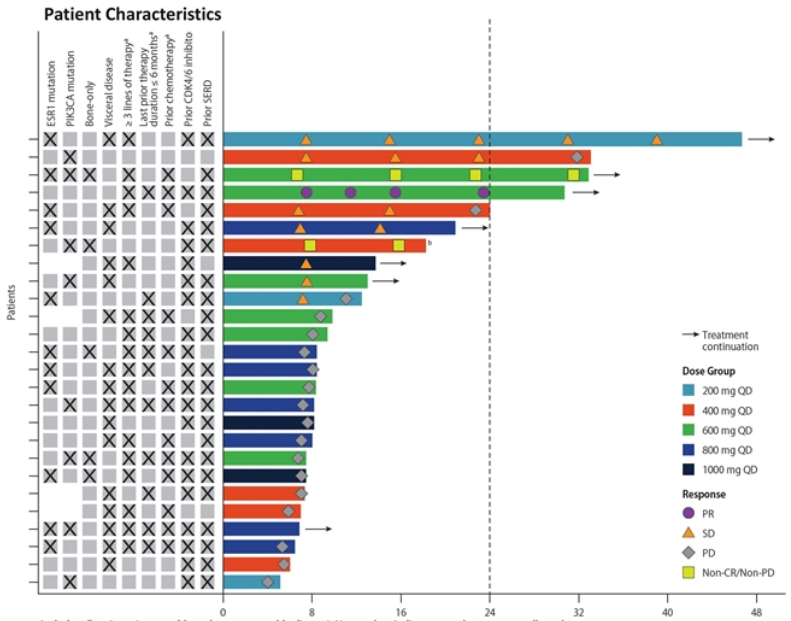
Heavily pre-treated patient population

N = 26	Patients	%
Prior fulvestrant	22	84.6%
Prior CDK4/6 inhibitor	20	76.9%
Prior chemotherapy	13	50.0%
Last prior therapy duration ≤ 6mos	11	42.3%
≥ 3 lines of therapy	17	65.4%
Visceral disease	16	61.5%

~85% of patients had prior fulvestrant therapy
~65% of patients had received at least three lines of therapy

Dose-escalation study of G1T48, an oral selective estrogen receptor degrader (SERD), in postmenopausal women with ER+/HER2- locally advanced or metastatic breast cancer (ABC); Abstract #3587

Efficacy demonstrated in heavily pre-treated population



Includes all patients (measurable and non-measurable disease). No grey box indicates samples were not collected.
[a] In advanced/metastatic setting; [b] One patient discontinued treatment due to Grade 2 gastrointestinal symptoms.
CDK, cyclin-dependent kinase; CR, complete response; ESR1, estrogen receptor 1; PD, progressive disease; PIK3CA, phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha; PR, partial response; QD, once daily; SD, stable disease; SERD, selective estrogen receptor degrader.

Response evaluable pts (N=19)	
ORR	1 (5.3%)
CBR	3 (15.8%)

ORR=(CR+PR); CBR=(CR+PR+SD≥24 weeks)

- Patient characteristics associated with PD by 8 weeks:
  - Visceral disease
  - ≥ 3 lines of prior therapy
  - ≤ 6 months on most recent prior therapy
  - Prior chemotherapy in metastatic setting

Dose-escalation study of G1T48, an oral selective estrogen receptor degrader (SERD), in postmenopausal women with ER+/HER2- locally advanced or metastatic breast cancer (ABC); Abstract #3587

ESMO 2019: key findings

Trilaciclib: mTNBC

- Trilaciclib improved overall survival when added to GC regimen
- Well tolerated with improvement in anemia-related PRO measures
- Phase 3 trial beginning in 2H20

G1T48

- Favorable safety and tolerability profile
- Evidence of anti-tumor efficacy in heavily pre-treated population
- Phase 3 trial beginning in 2H20

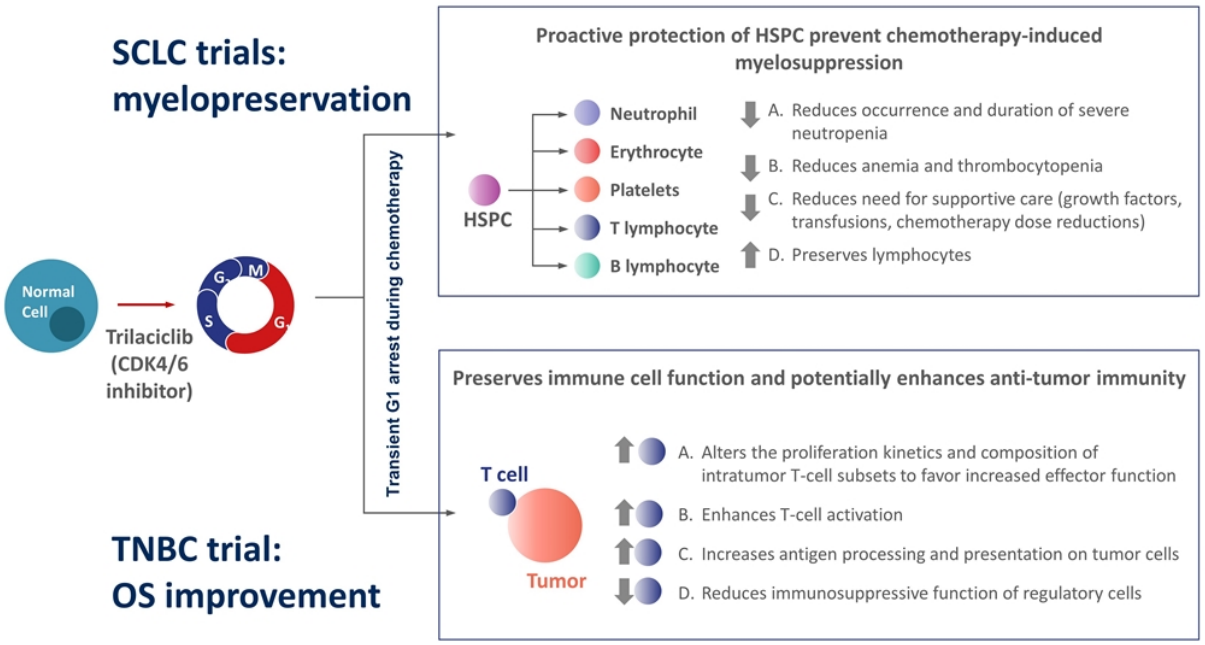
Q&A

Dr. Carey, Dr. Malik & Dr. Velleca

Pipeline Development Strategy and Regulatory Milestones

Raj Malik, M.D.
Chief Medical Officer and Senior Vice President, R&D

Trilaciclib: context-dependent efficacy



Weiss et al, Annals of Oncology 2019
He et al, Science Translational Medicine 2017
Bisi et al, Mol Cancer Ther., 2016

Tan et al, Lancet Oncology 2019
Zhang et al, Nature 2018
Jerby-Arnon et al, Cell 2018
Goel et al, Nature 2017
Deng et al, Cancer Discovery 2017

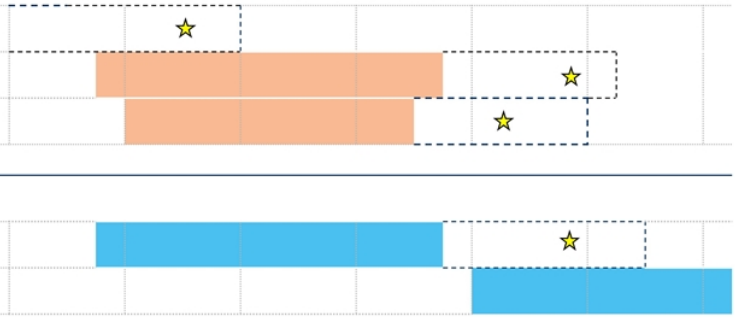
Trilaciclib benefits linked to setting

	Primary Benefit: Myelopreservation	Primary Benefit: Anti-Tumor Efficacy
Chemotherapy schedule	Multi-day regimens	Single-day regimens
Tumor type	---	Tumor microenvironments more favorable to immune modulation
Settings/indications:	✓ **SCLC (etoposide + platinum, topotecan)** ✓ **1L mCRC (5-FU regimens)** ✓ **Neoadjuvant TNBC (doxorubicin + cyclophosphamide + taxane)**	✓ **1L mTNBC (TBD +/- anti-PD-L1)** ✓ **1L mBC (taxane)**

Two-pronged development strategy: myelopreservation and anti-tumor efficacy

Development plan targets broad myelopreservation label and anti-tumor efficacy label for specific tumors

DISEASE OF INTEREST	CHEMO REGIMENS
Myelopreservation	
1L SCLC	Etoposide + platinum, topotecan
1L mCRC	5-FU regimens
Neoadj TNBC	Doxo + cyclo + taxane
Anti-tumor efficacy	
1L mTNBC	TBD +/- anti-PD-L1
1L mBC	Taxane



Partnering to enable expansion in other tumor types: e.g. NSCLC

☆ Denotes timing for completion of FDA review and potential U.S. approval; RoW is ~2Q later for all indications except SCLC. End of shading highlights data readout; dashed box indicates preparing, filing and regulatory review period.

Lerociclib and G1T48: improving patient care in advanced/metastatic and adjuvant settings

DISEASE OF INTEREST	COMBO DRUG	2020	2021	2022	2023	2024	2025	2026	2027
G1T48									
1L ER+ mBC	CDK4/6i								☆
2L ER+ mBC	Everolimus						☆		
Neoadjuvant BC*	N/A								
Adjuvant ER+ BC	NA								
lerociclib									
1L ER+ mBC	Fulvestrant							☆	
Adjuvant ER+ BC	Aromatase inhibitor								

G1T48 and lerociclib partnering to enable expansion in other indications

☆Denotes timing for completion of FDA review and potential U.S. approval; RoW is ~2Q later for all indications. End of shading highlights data readout; dashed box indicates preparing, filing and regulatory review period.
* Neoadjuvant trial enables adjuvant trial

Commercial Opportunity and Strategy

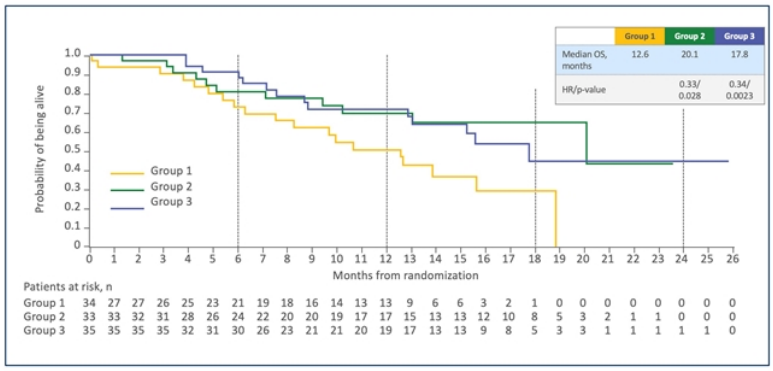
John Demaree
Chief Commercial Officer

Trilaciclib provides context-dependent efficacy: myelopreservation or improved survival

SCLC: Myelopreservation

	PLACEBO + CHEMOTHERAPY	TRILACICLIB + CHEMOTHERAPY	
Patients (intent-to-treat population)	120	125	P-VALUE*
Mean duration (in days) of severe neutropenia in cycle 1 (SD)	4 (5.2)	1 (2.3)	**<0.0001**
Occurrence of severe neutropenia	64 (53.3%)	16 (12.8%)	**<0.0001**
Occurrence of RBC transfusions on/after 5 weeks	32 (26.7%)	19 (15.2%)	**0.0207**
Cumulative incidence RBC transfusions on/after 5 wks: event rate per 100 wks	3.2	1.5	**0.0020**
Occurrence of Grade 3/4 anemia	39 (32.5%)	26 (20.8%)	**0.0188**
Occurrence of Grade 3/4 thrombocytopenia	44 (36.7%)	26 (20.8%)	**0.0081**

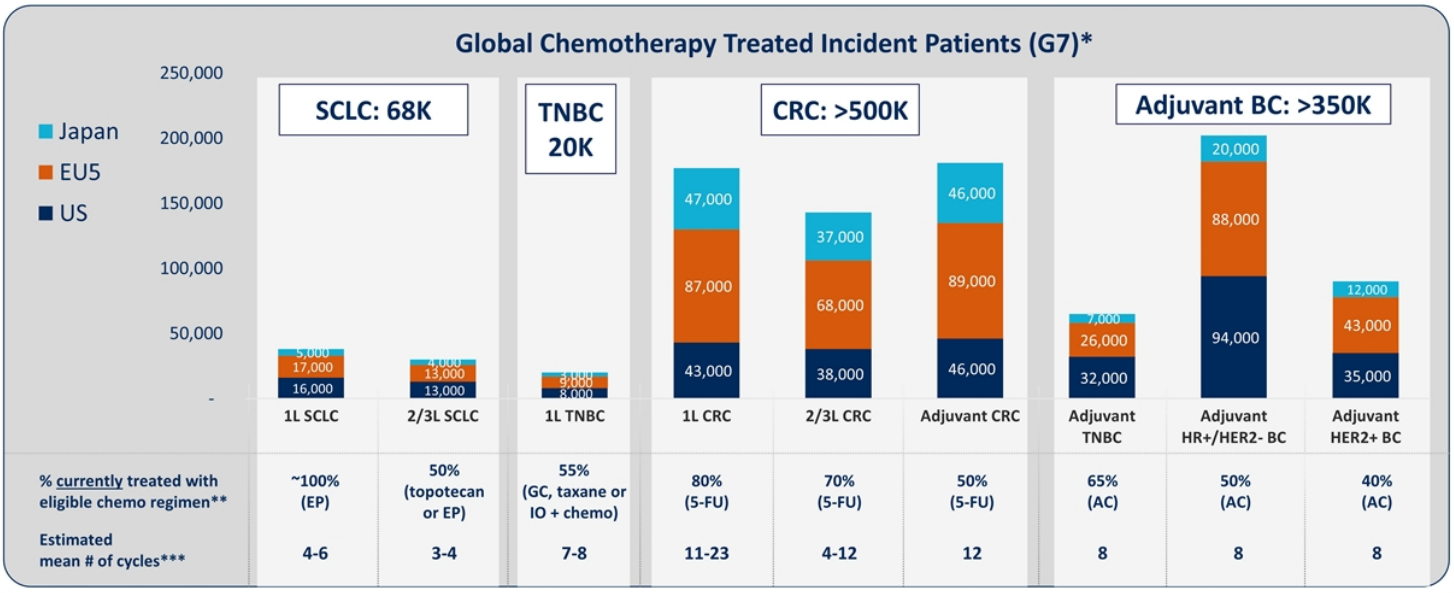
TNBC: OS Improvement



Improved patient experience

- Trilaciclib is a first-in-class investigational therapy designed to improve outcomes for people with cancer treated with chemotherapy
- G1 market research suggests substantial share uptake in all indicated patients

~1 million chemo-treated patients in planned indications



Potential to be used for myelopreservation in the same patient across multiple lines of therapy

*Source: Secondary epi sources, 2027 estimates

**EP refers to any regimen that includes etoposide + platinum; GC refers to gemcitabine/carboplatin; AC refers to any regimen that includes Adriamycin and cyclophosphamide; 5-FU refers to any regimen that includes fluorouracil (e.g., FOLFOX). In addition to CRC, pancreatic cancer, gastroesophageal cancer and squamous cell carcinoma of the head and neck (SCCHN) are also treated with 5-FU regimens (% currently treated with 5-FU regimens varies by tumor type and region)

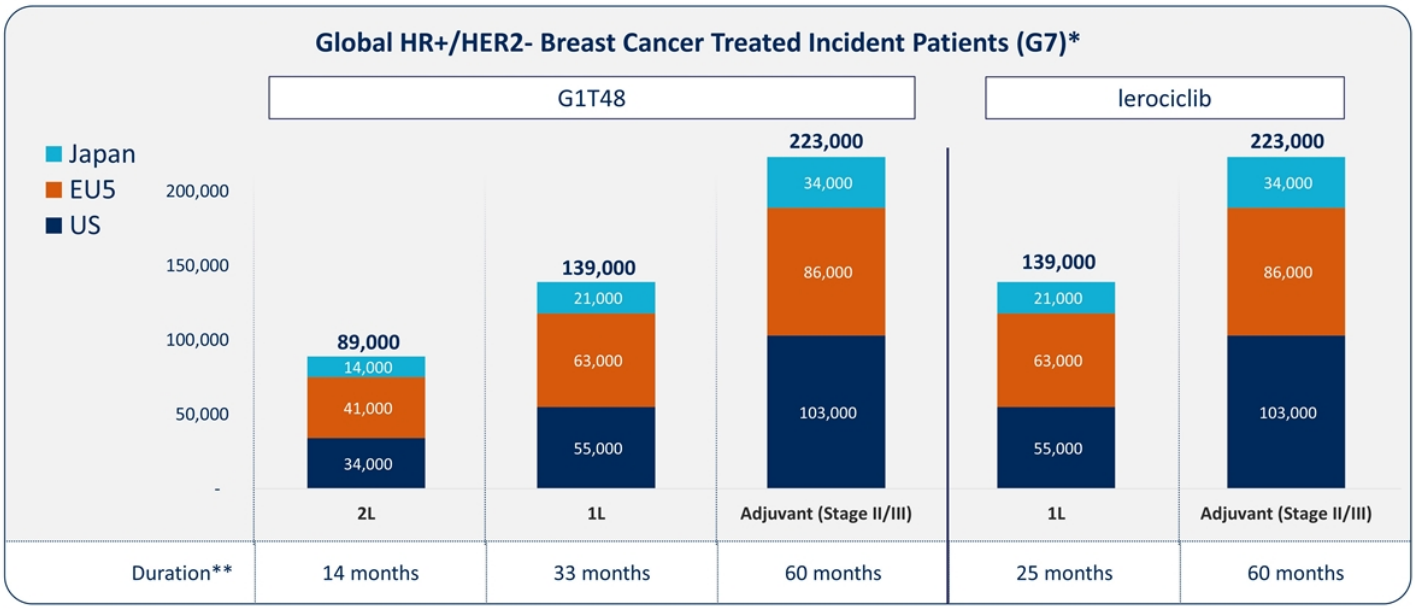
***Source: SCLC and TNBC: G1 Therapeutics' completed trials; CRC and Adjuvant BC: number of cycles for eligible chemo regimens from Decision Resources Group Treatment Landscape and Forecast Assumptions 2018 Reports (CRC and BC)

Trilaciclib go-to-market strategy

Capabilities	Planning	Partner
✓ Hired experienced key functional talent at G1 ✓ Utilizing contractors for initial functional-level buildouts, including sales ✓ Maintaining strategic agility to scale as needed for future launches	✓ Comprehensive launch plans across all functions ✓ All milestones on schedule ✓ Trilaciclib supply will be available at approval	▪ Leverage partner's capabilities and scale to maximize uptake and expand development ▪ G1 partner to commercialize ex-US ▪ G1 intends to maintain a significant US role

Commercial team: significant oncology launch experience (XTANDI, Tagrisso, Tecentriq, Femara)

G1T48 and lerociclib: >350,000 1L and adjuvant BC patients



Adjuvant use: long treatment duration requires well tolerated profile

*Source: Secondary epi sources, 2027 estimates
**Duration estimates based on similar trial results in the same or similar patient populations as planned trials

Q&A

Dr. Malik, Mr. Demaree & Dr. Velleca

Upcoming Catalysts and Closing Remarks

Mark Velleca, M.D., Ph.D.
Chief Executive Officer

Catalysts across all programs in 2019/2020

	INDICATION/COMBO	4Q19	1H20	2H20
trilaciclib IV - CDK4/6i	1st-line SCLC (+ etop/carbo)	Begin rolling NDA submission for SCLC	Complete NDA submission for SCLC	MAA filing for SCLC
	1st-line SCLC (+ etop/carbo/Tecentriq)			
	2nd/3rd-line SCLC (+ topotecan)			
	Metastatic TNBC (+ gem/carbo)			Initiate Phase 3 TNBC trial
	Metastatic CRC (5-FU regimens)			Initiate Phase 3 mCRC trial
lerociclib Oral - CDK4/6i	ER+, HER2- BC (+ Faslodex)	Present additional Phase 1b/2a data		Initiate Phase 3 BC trial
	EGFRm NSCLC (+ Tagrisso)			
G1T48 Oral - SERD	ER+, HER2- BC			Initiate Phase 3 CDK4/6i combination trial + Present additional data

Well funded with $325M cash at end of 2Q19; anticipate 2019 YE cash of $260-270M

Lisa Carey, M.D., FASCO

Chief of Hematology/Oncology and Physician-in-Chief, N.C. Cancer Hospital

Associate Director of Clinical Sciences, Lineberger Comprehensive Cancer Center

Lisa A. Carey, M.D., FASCO is the Richardson and Marilyn Jacobs Preyer Distinguished Professor in Breast Cancer Research in the Department of Medicine at the University of North Carolina (UNC). She graduated from Wellesley College, then received her medical degree from the Johns Hopkins University School of Medicine where she remained for her residency in Internal Medicine followed by a fellowship in Medical Oncology and an advanced degree in Clinical Investigations. Dr. Carey joined the UNC faculty and Lineberger Comprehensive Cancer Center in 1998. Currently she is the Chief of the Division of Hematology and Oncology and Physician-in-Chief of the North Carolina Cancer Hospital. In addition, she has a role at Lineberger Comprehensive Cancer Center as the Associate Director for Clinical Sciences.

Dr. Carey has a longstanding research interest in the clinical application of laboratory findings in breast cancer, with a particular interest in the clinical implications of different molecular subtypes of breast cancer. She designs and leads clinical trials of novel drugs and approaches, and is a close collaborator with several laboratory investigators and epidemiologists. Dr. Carey has served in many roles for the American Society of Clinical Oncology (ASCO), the American Association for Cancer Research (AACR) and the NCI. She was awarded the Doris Duke Clinician Scientist Award in 1999, a Career Development Award from the National Cancer Institute (NCI) in 2000, was inducted into the Johns Hopkins Society of Scholars in 2008, was awarded the NCI Director's Service Award in 2011, and was named co-chair of the Alliance National Cooperative Group Breast Committee in 2016. Dr. Carey was honored to become a member of the Komen Scientific Advisory Board as of April 2018 and in June 2019 earned the distinction of Fellow of the American Society of Clinical Oncology (FASCO).

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