

Investor Day March 6, 2019

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Forward-looking statements



This presentation and the accompanying oral commentary contain "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 following: the therapeutic potential of trilaciclib, lerociclib and G1T48; initial success in our ongoing clinical trials may not be indicative of results obtained when these trials are completed or in later stage trials; our development of trilaciclib to reduce chemotherapy-induced myelosuppression is novel, unproven and rapidly evolving and may never lead to a marketable product; our product candidates may cause undesirable side effects that could delay or prevent their marketing approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any; we may not have the ability to recruit, enroll and complete clinical trials for, obtain approvals for, or commercialize any of our product candidates; we face substantial competition, which may result in others discovering, developing or commercializing competing products before or more successfully than we do; we may incur additional costs or experience delays in completing clinical trials; future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain; and market conditions. Each of these forward-looking statements involves risks and uncertainties and are based on our expectations and assumptions as of the date of this presentation. Factors that may cause our actual results to differ from those expressed or implied in the forward-looking statements in this presentation are further discussed in our filings with the U.S. Securities and Exchange Commission (SEC), including the "Risk Factors" section in our annual report on Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC. Such factors may be amended or updated from time to time in our subsequent periodic and other filings with the SEC, which are accessible on the SEC's website at www.sec.gov. We assume no obligation to update any forward-looking statement after the date of this presentation to reflect any change in expectations or future developments, even as new information becomes available.

Housekeeping items



Q&A sessions will follow the trilaciclib and lerociclib/G1T48 sections of the agenda

- please use microphones in the room
- •webcast participants: submit questions via "Ask a Question" link on top right of screen

Full presentation and speaker bios available at

→ http://investor.g1therapeutics.com/events-and-presentations

Please contact Jeff Macdonald with questions/requests

→ jmacdonald@g1therapeutics.com





Vision: improve the lives of those affected by cancer



1

Three wholly-owned investigational therapies with potential to improve patient care and generate significant value for shareholders

2

Relentless focus on patients, operational efficiency and financial discipline

3

Explore value-creating partnerships as we move toward commercialization of our product candidates

Robust clinical-stage pipeline



Three wholly-owned product candidates addressing distinct multi-billion dollar markets

Trilaciclib

First-in-class myelopreservation therapy

- ✓ Backbone with chemo
- ✓ 2018: positive SCLC data in three randomized Ph 2 trials

Next milestone in 2Q19: regulatory update

Lerociclib

Oral CDK4/6 inhibitor

- ✓ Combine with targeted Rx
- ✓ 2018: demonstrated POC in ER+ BC Ph 1 trial

Next milestones in 2H19: Clinical data updates in ER+ BC and EGFRm NSCLC trials

G1T48

Oral SERD ER+ breast cancer

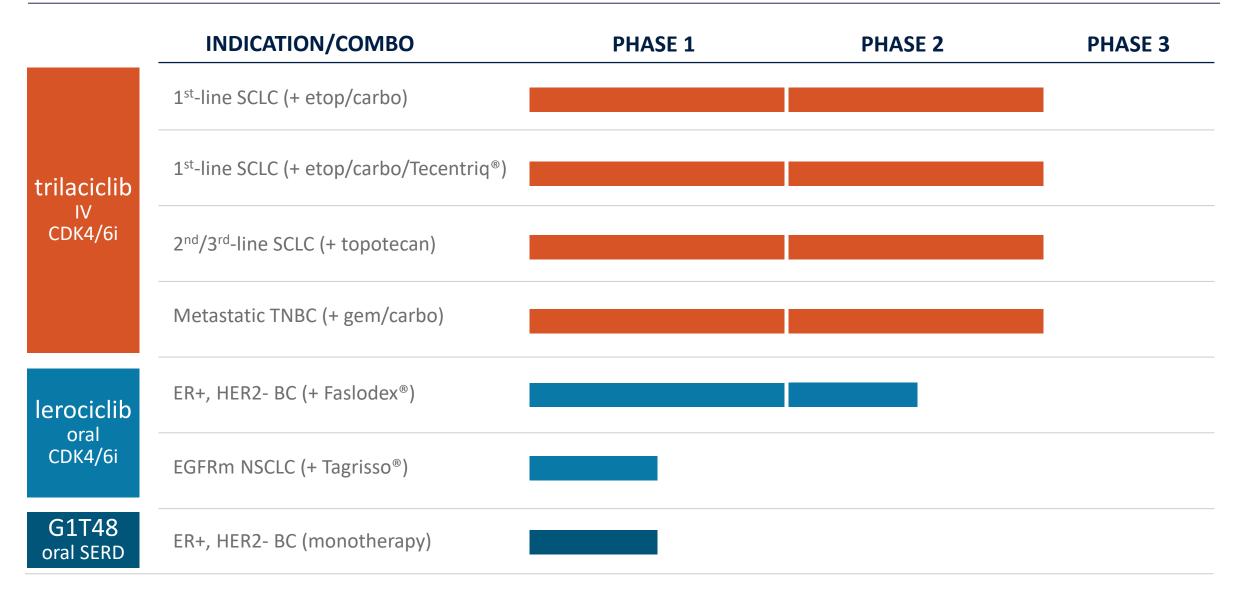
- ✓ Monotherapy & lero combo
- ✓ 2018: initiated ER+ BC
 Ph 1 trial

Next milestone in 4Q19:

Phase 1 data

Delivered on all clinical milestones in 2018





Experienced management team



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

Chief Executive Officer





John Demaree

Chief Commercial Officer









J. Stillman Hanson

General Counsel







Raj Malik, M.D.

Chief Medical Officer and SVP, R&D









Terry Murdock

Chief Operating Officer









Buck Phillips

Chief Financial Officer and SVP, Corporate Development









Jay Strum, Ph.D.

Chief Scientific Officer



Today's agenda



Consequences of chemotherapy in the cancer patient

 Jeff Crawford, M.D., George Barth Geller Professor for Research in Cancer Co-Director, Solid Tumor Therapeutics Program, Duke Cancer Institute

Trilaciclib development update

Raj Malik, M.D., G1 Chief Medical Officer and Senior Vice President, R&D

Myelopreservation and trilaciclib: implications for clinical practice

Lowell Hart, M.D., Scientific Director of Clinical Research, Florida Cancer Specialists
 Associate Professor of Medicine, Hematology and Oncology, Wake Forest University School of Medicine

Trilaciclib commercial strategy

John Demaree, G1 Chief Commercial Officer

Lerociclib and G1T48 development update

- Raj Malik, M.D., G1 Chief Medical Officer and Senior Vice President, R&D

DUKE CANCER INSTITUTE

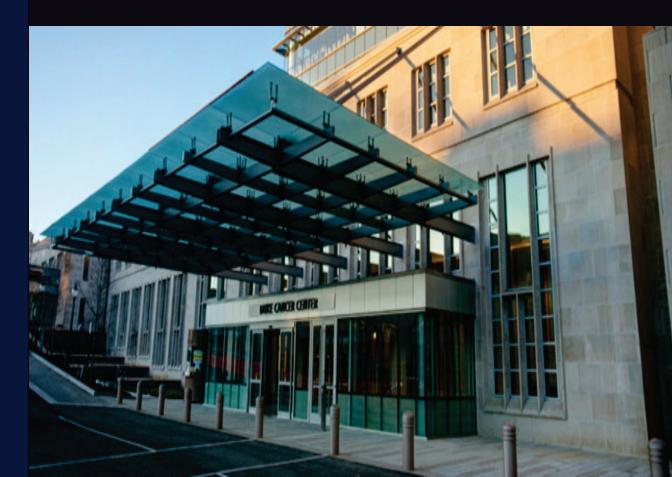
A National Cancer Institute-designated Comprehensive Cancer Center



The Consequences of Chemotherapy in the Cancer Patient

Jeffrey Crawford, MD

George Barth Geller Professor for Research in Cancer Co-Director, Solid Tumor Therapeutics Program Duke Cancer Institute



Disclosures Jeffrey Crawford, M.D.

Scientific Advisor: AstraZeneca, Coherus, Enzychem,
 G1 Therapeutics, Merck, Pfizer, Spectrum

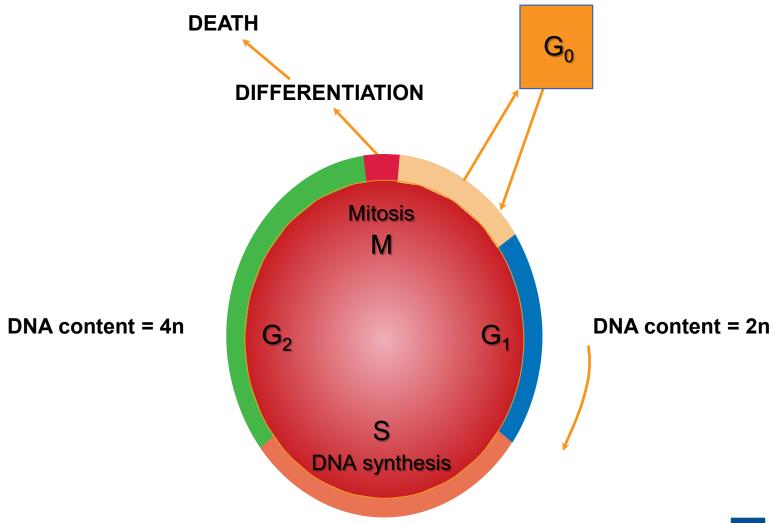
DSMB Member: BeyondSpring, Mylan, Roche

 Principal Investigator/Institutional Research Funding: AstraZeneca, Genentech, Helsinn

Scientific Background

- Medical Oncologist with focus in lung cancer and thoracic malignancies
- Longstanding clinical and academic interest on supportive care in cancer, particularly hematopoietic growth factors and biosimilars in conjunction with chemotherapy
- PI for registrational trial of G-CSF (filgrastim) leading to FDA approval and subsequent NEJM publication
- Chair of NCCN Myeloid Growth Factor Committee for 15 Years
- Member of ASCO and ESMO Guidelines on CSFs
- Member of ANC Steering Committee, focused on outcomes research regarding neutropenia and chemotherapy dosing

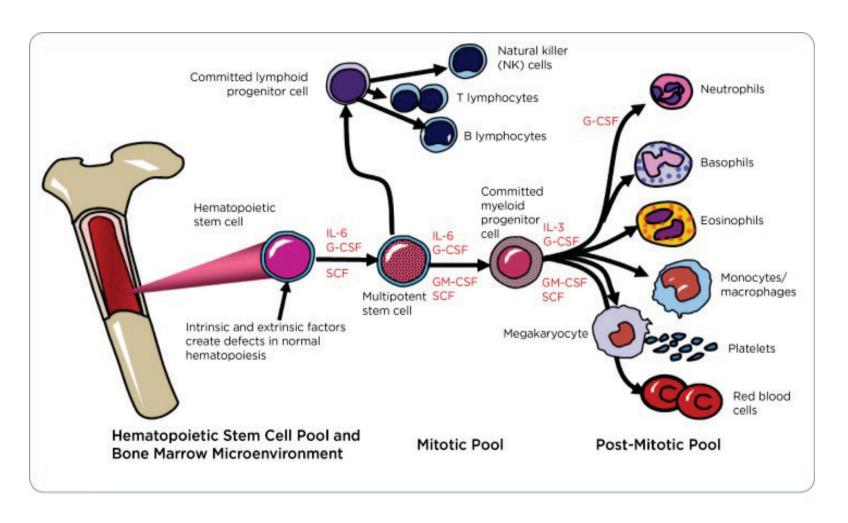
Chemotherapy Disrupts the Cell Cycle of Cancer and Normal Cells



Chemotherapy and the Bone Marrow

- Chemotherapy remains the most common systemic cancer treatment in both the curative and palliative settings
- Myelosuppression, or decreased blood cell production from the bone marrow, is a direct result of the cytotoxic effect of chemotherapy
- Myelosuppression is the most common dose limiting and life threatening complication of chemotherapy
- Therapies to reduce myelosuppression to date have focused on stimulation of the production of bone marrow cells by the use of growth factors after chemotherapy

Normal Hematopoiesis

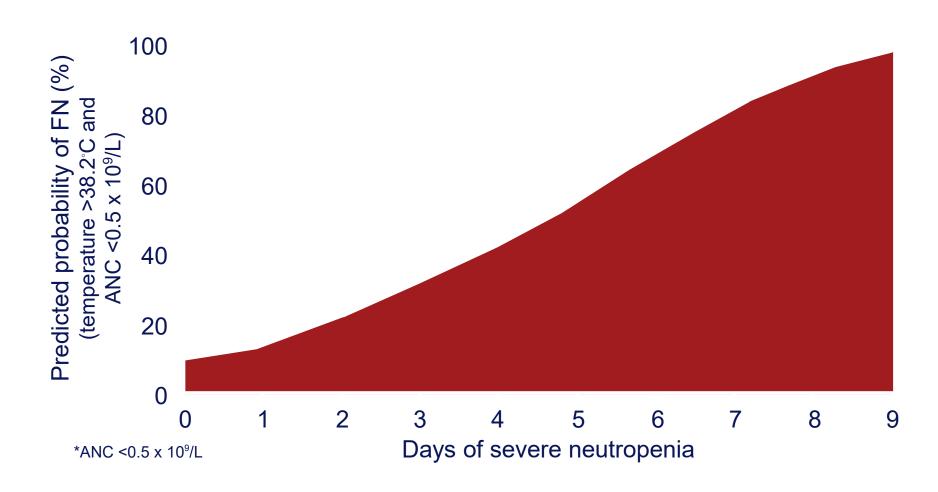


Kurtin S. J Adv Pract Oncol. 2012 Jul-Aug; 3(4): 209–224.

Chemotherapy-induced neutropenia and its complications

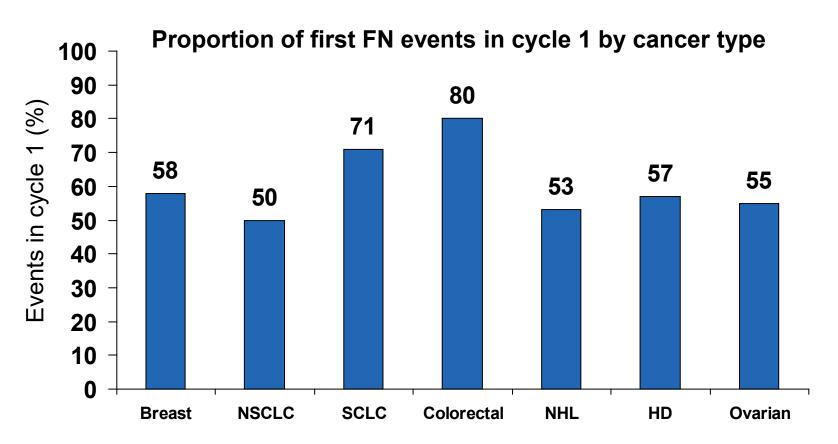
Myelosuppressive chemotherapy Neutropenia Febrile neutropenia (FN) Chemotherapy dose delays and dose reductions Complicated life-threatening infection and prolonged Decreased relative dose hospitalization intensity (RDI) Reduced survival

Risk of FN increases with duration of severe neutropenia*





Most initial FN events occur during the first cycle of chemotherapy

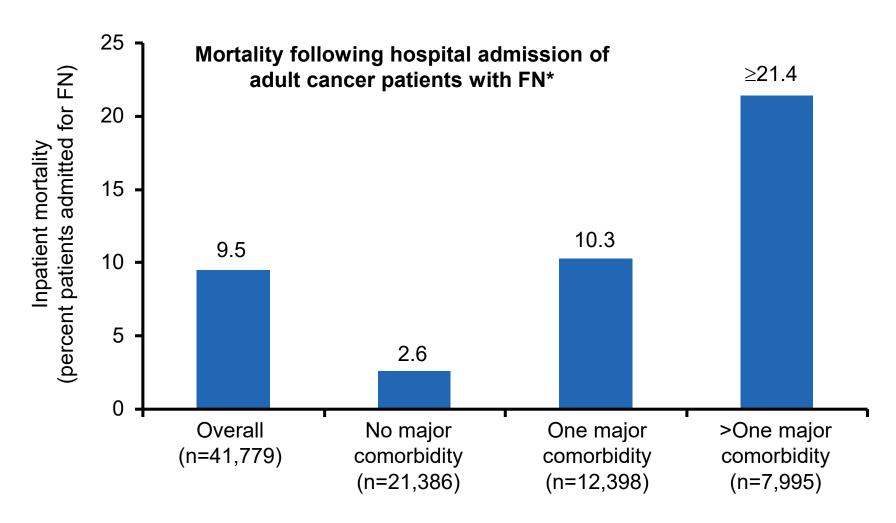


• FN events documented in 287/2692 (10.7%) of adult cancer patients during the 1st three cycles of chemotherapy

NSCLC – non-small cell lung cancer; SCLC – small cell lung cancer; NHL - non-Hodgkin's lymphoma; HD – Hodgkin disease



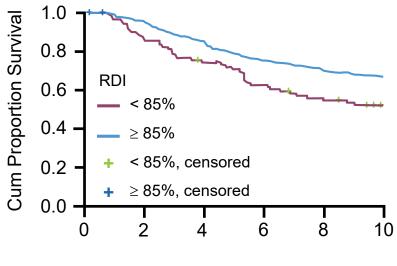
Death as a result of FN hospitalization



^{*}Data based on a single admission per patient Kuderer NM et al. *Cancer* 2006;106:2258–2266

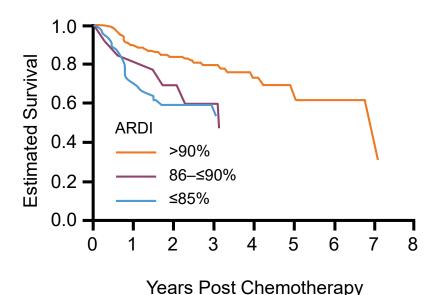
Clinical consequences of neutropenia and febrile neutropenia

Reduction in relative dose intensity (RDI) of chemotherapy is associated with survival



Disease-Free Survival (years)

 Reduced RDI was associated with lower OS in ESBC receiving anthracycline-containing chemotherapy¹



 Reduced RDI was associated with lower OS in patients with DLBCL receiving CHOP-21 chemotherapy²

OS, overall survival; ARDI, average relative dose intensity

Strategies For Management of Chemotherapy-Induced Neutropenia

Prevention (Primary vs. Secondary)

- Chemotherapy dose reduction/delay
- Myeloid growth factors
 - G-CSF (filgrastim, tbo-filgrastim, filgrastim-sndz) [Cat. 1]
 - Pegfilgrastim [Cat. 1]
 - GM-CSF (sargramostim)

Antibiotics

Treatment

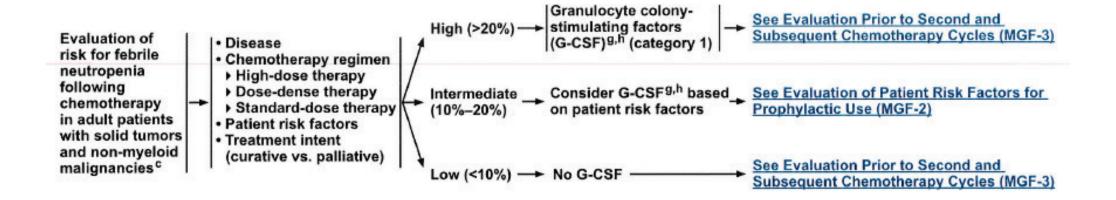
- Observation if afebrile
- Antibiotics
- Myeloid growth factors



NCCN Guidelines Version 2.2018 Myeloid Growth Factors

NCCN Guidelines Index Table of Contents Discussion

EVALUATION PRIOR TO FIRST CHEMOTHERAPY CYCLE^{a,b} RISK ASSESSMENT^d FOR FEBRILE NEUTROPENIA^e OVERALL FEBRILE NEUTROPENIA RISK PROPHYLACTIC USE OF G-CSF FOR FEBRILE NEUTROPENIA CURATIVE/ADJUVANT OR PALLIATIVE SETTING^f



NCCN Guidelines Version 2.2018 Myeloid Growth Factors

NCCN Guidelines Index
Table of Contents
Discussion

TOXICITY RISKS WITH MYELOID GROWTH FACTORS

Filgrastim and Derivative Products Including Pegfilgrastim a,b,c

- Warnings
- ▶ Allergic reactions
 - ♦ Skin: rash, urticaria, facial edema
 - ♦ Respiratory: wheezing, dyspnea
 - ♦ Cardiovascular: hypotension, tachycardia, anaphylaxis
- Bleomycin-containing regimens: pulmonary toxicity^d
- ▶ Splenic rupture d
- ▶ Acute respiratory distress syndrome
- Alveolar hemorrhage and hemoptysis
- > Sickle cell crises (only in patients with sickle cell disease)
- MDS and AMLe
- Precautions
- ▶ Cutaneous vasculitis
- ▶ Immunogenicity
- Adverse reactions
- ▶ Bone pain

Sargramostim^{a,c}

- Warnings
- Fluid retention: edema, capillary leak syndrome, pleural and/or pericardial effusion
- Respiratory symptoms: Sequestration of granulocytes in pulmonary circulation, dyspnea
- Cardiovascular symptoms: Occasional transient supraventricular arrhythmia. Use with caution in patients with preexisting cardiac disease.
- Renal and hepatic dysfunction: Elevation of serum creatinine or bilirubin and hepatic enzymes. Monitor patients who display renal or hepatic dysfunction prior to initiation of treatment.
- Adverse events occurring in >10% of patients receiving sargramostim in controlled clinical trials and reported in a higher frequency than placebo
- AML fever, skin reactions, metabolic disturbances, nausea, vomiting, weight loss, edema, anorexia
- Autologous hematopoietic cell transplant or peripheral blood progenitor cell transplant - asthenia, malaise, diarrhea, rash, peripheral edema, urinary tract disorder
- Allogeneic hematopoietic cell transplant or peripheral blood progenitor cell transplant abdominal pain, chills, chest pain, diarrhea, nausea, vomiting, hematemesis, dysphagia, Gl hemorrhage, pruritus, bone pain, arthralgia, eye hemorrhage, hypertension, tachycardia, bilirubinemia, hyperglycemia, increased creatinine, hypomagnesemia, edema, pharyngitis, epistaxis, dyspnea, insomnia, anxiety, high blood urea nitrogen (BUN), and high cholesterol

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

MGF-E



^aSee full prescribing information for specific product information.

bNot all of the toxicities listed have been seen with each preparation, but similar toxicities are expected with filgrastim and pegfilgrastim.

cThe toxicities listed are from the prescribing information and are based on studies from different patient populations. For filgrastim and derivative products, the toxicities are based on non-myeloid malignancies. For sargramostim, the toxicities are based primarily on studies from leukemia and transplant patients, and the listed toxicities may reflect intravenous route of administration and may differ from those of subcutaneous administration.

dSee Discussion for details.

eLyman et al reported an increase in absolute and relative risk of AML/MDS of 0.41% and 1.92, respectively, related to G-CSF. Overall mortality was decreased. See Discussion for details and reference.

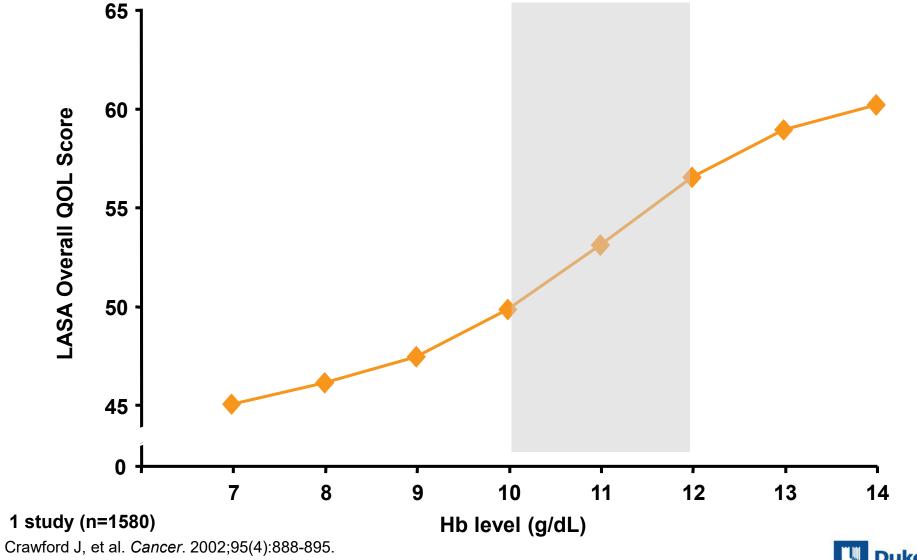
Anemia in the Cancer Patient

 Anemia is common in the cancer patient secondary to both cancer and myelosuppressive chemotherapy

 Symptoms of anemia include fatigue, shortness of breath, dizziness, pale skin, rapid heart rate, and impaired mental function

• In patients with cardiovascular disease and other conditions, anemia can lead to myocardial infarction, arrhythmias or stroke

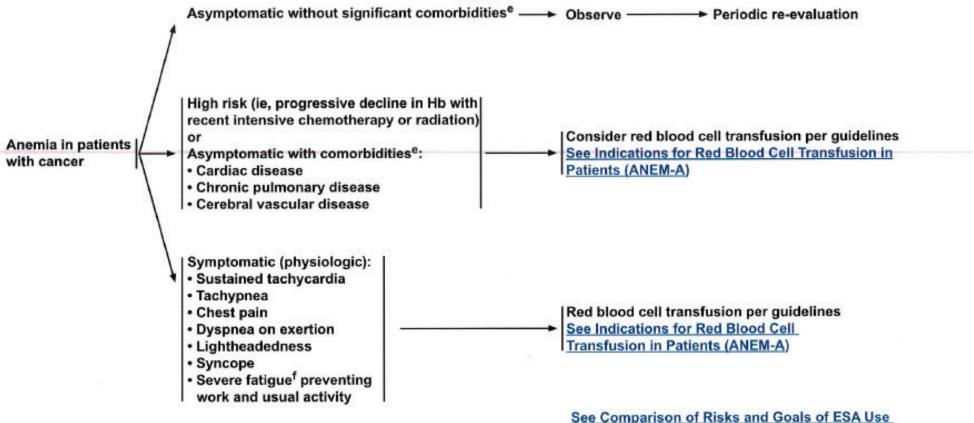
Higher Hb is Associated with Higher HRQoL



NCCN Guidelines Version 3.2018 Cancer- and Chemotherapy-Induced Anemia

NCCN Guidelines Index Table of Contents Discussion

RISK ASSESSMENT AND INDICATIONS FOR INITIAL TRANSFUSION IN ACUTE SETTING



See Comparison of Risks and Goals of ESA Use Versus Red Blood Cell Transfusion (ANEM-3)

See Special Categories in Considering ESA Use (ANEM-4)

NCCN Guidelines Version 3.2018 Cancer- and Chemotherapy-Induced Anemia

NCCN Guidelines Index Table of Contents Discussion

COMPARISON OF RISKS AND GOALS OF ESA USE VERSUS RED BLOOD CELL TRANSFUSION⁹

Discuss the following risks and goals with patients when considering anemia treatment options:

	ESA in the Cancer Setting	Red Blood Cell Transfusion
Risks	Increased thrombotic events Possible decreased survival Time to tumor progression shortened	Transfusion reactions (eg, hemolytic, febrile, non-hemolytic, lung injury) Transfusion-associated circulatory overload (TACO) Virus transmission (eg, hepatitis, HIV) Bacterial contamination Iron overload
		Increased thrombotic events Possible decreased survival Alloimmunization Increased risk of poor response to future platelet transfusions due to HLA immunization
Goals	Transfusion avoidance Gradual improvement in anemia- related symptoms	Rapid increase of Hb and hematocrit levels Rapid improvement in anemia-related symptoms

See Erythropoietic Therapy - Dosing, Titration, and Adverse Effects (ANEM-B)

When considering ESAs:

- Discuss the risks of ESAs with patients including the potential for tumor growth, death, blood clots, and serious heart problems.
- Refer patients to the following medication guides for more information on the benefits and risk of ESAs:

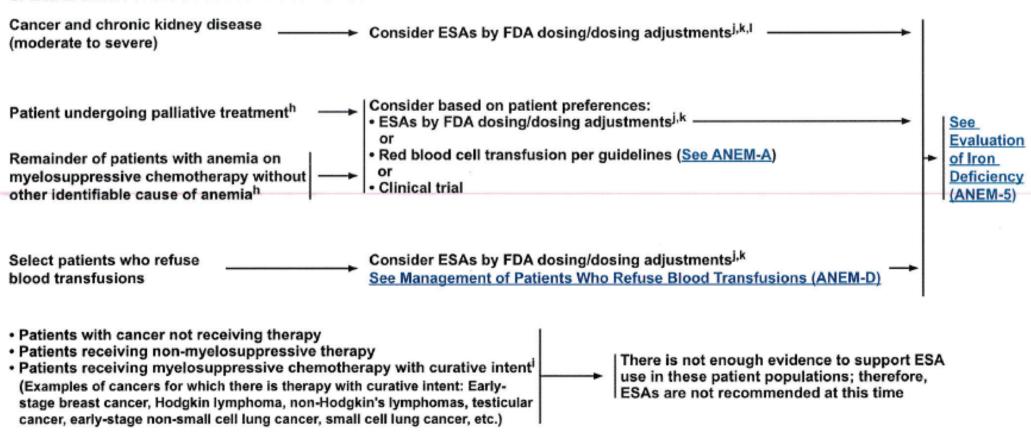
 Epoetin Alfa Medication Guide, Epoetin Alfa-epbx Medication Guide and Darbepoetin Alfa Medication Guide



NCCN Guidelines Version 3.2018 Cancer- and Chemotherapy-Induced Anemia

NCCN Guidelines Index Table of Contents Discussion

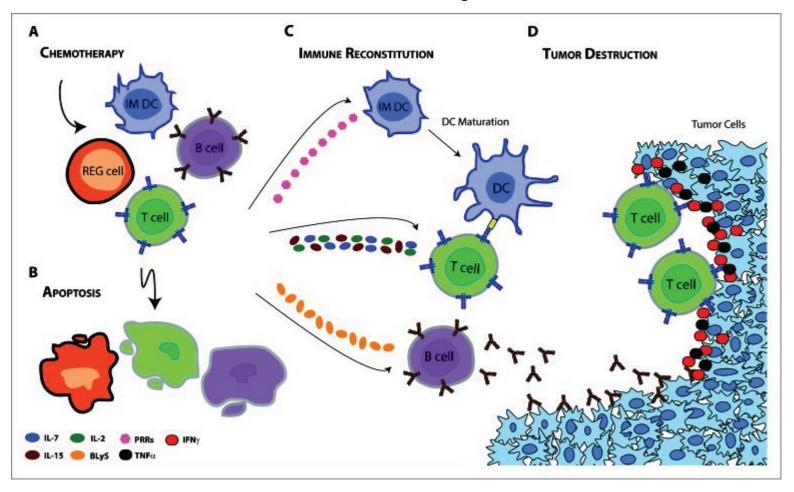
SPECIAL CATEGORIES IN CONSIDERING ESA USE



Thrombocytopenia in the Cancer Patient

- Thrombocytopenia (low platelet count) is less prevalent than neutropenia or anemia in the cancer patient
- It occurs more commonly in highly myelosuppressive regimens, and in patients with myeloid malignancies and those that received prior chemotherapy
- Thrombocytopenia increases the risk of bleeding and may limit chemotherapy dose and frequency
- Thrombopoietic agents are available for treatment of benign platelet disorders, but they have not been shown to be clinically effective in reducing thrombocytopenia in cancer patients
- Platelet transfusion is the standard treatment intervention

Chemotherapy, Lymphopenia and The Immune Response



Sanchez-Perez L. Oncoimmunology. 2014; 3(7): e944054.

Key Points

- Chemotherapy is the most common systemic treatment in both the curative and palliative settings for cancer patients
- Myelosuppression from chemotherapy limits its effectiveness and places cancer patients at significant risk of neutropenia and infections, anemia and cardiovascular complications, and thrombocytopenia and bleeding
- The consequences of lymphopenia are not well studied, but may contribute to certain types of infection and impaired antitumor responses, particularly in the era of immuno-oncology
- Currently available treatments for myelosuppression include growth factors resulting in bone marrow stimulation that may have adverse clinical effects, and/or transfusion with other resultant risks
- Alternative strategies are needed



TRILACICLIB DEVELOPMENT UPDATE

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

Hematopoietic stem and progenitor cells (HSPCs)

Key takeaways



1

Substantial unmet need

- ~1 million patients in
 U.S. receive
 chemotherapy each year
- chemo to remain a cornerstone of cancer treatment
- myelosuppression still prevalent

2

Phase 2 program showed benefits across different indications, lines of therapy and chemotherapy regimens

- myelopreservation in SCLC
- PFS in mTNBC

(3)

Next steps in trilaciclib development

- meet with U.S. and European regulators
- target initial indication:SCLC
- additional trials initiating in 2H19

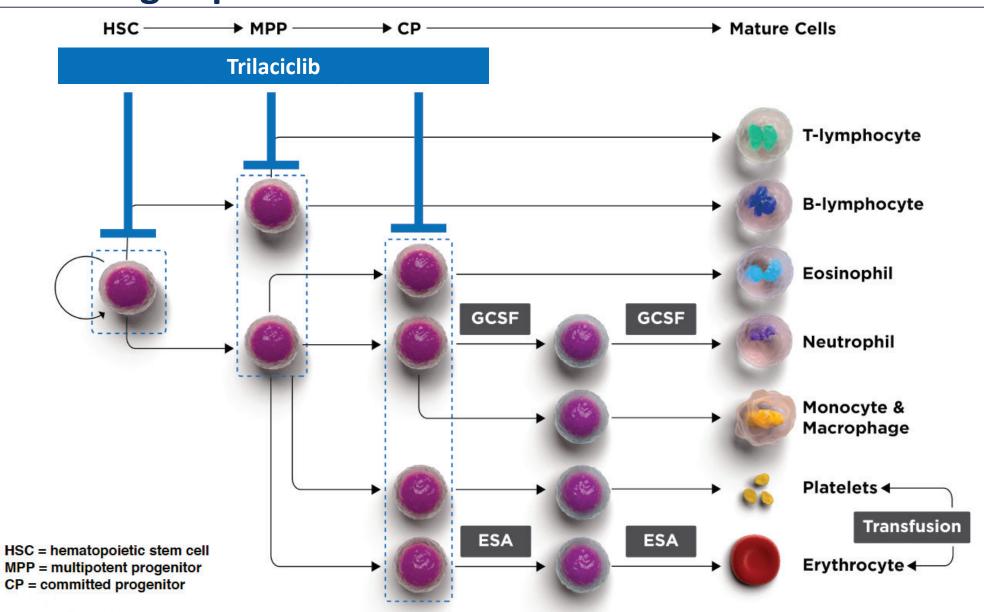
Evolution of cancer care with myelosuppressive chemotherapy



ANTI-CANCER THERAPY	1st generation (before growth factors)	2nd generation (after growth factors)	3 rd generation (after HSPC protectant added to SOC)
REGIMEN	Cytotoxic chemotherapy	Chemotherapy + growth factors, supportive care	Chemotherapy + trilaciclib, OR Chemotherapy + immuno-oncology agents + trilaciclib
LIMITATIONS AND CHALLENGES	Chemotherapy-induced hematologic and non-hematologic toxicities were dose limiting and thereby limiting of the ability to deliver more efficacious chemotherapy doses. Broad HSPC damage impacts hematopoietic health of the patient	Hematologic dose-limiting toxicity (DLT) is reduced but dose reductions/ delays, hospitalizations, transfusions are not eliminated. Broad HSPC damage impacts hematopoietic health of the patient and use of growth factors leads to HSC exhaustion and reduced immune system function.	Protection of HSPCs; hematologic toxicity is no longer a primary DLT. Fewer supportive care measures including fewer RBC transfusions/ESAs, fewer dose reductions/hospitalizations, and potential for overall improved patient outcomes through improved immune-mediated efficacy due to preserved HSPCs and reduction of HSC exhaustion.

Trilaciclib's MOA provides multi-lineage benefits vs. current lineage-specific interventions





Positive multi-lineage myelopreservation results from three randomized SCLC Phase 2 trials in 2018

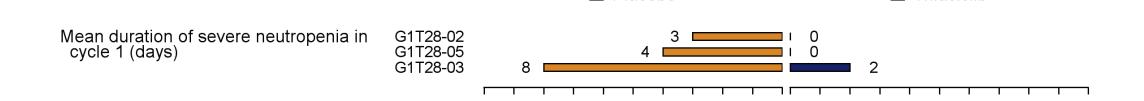


TRIAL/TUMOR TYPE	REGIMEN	TRIAL DESIGN
1 st -line Small Cell Lung Cancer (G1T28-02)	+ etoposide/ carboplatin (EP)	• 77 patients, randomized, placebo-controlled, double-blind
1 st -line Small Cell Lung Cancer (G1T28-05)	+ EP/Tecentriq®	• 107 patients, randomized, placebo-controlled, double-blind
2 nd /3 rd -line Small Cell Lung Cancer (G1T28-03)	+ topotecan	• 92 patients, randomized, placebo-controlled, double-blind

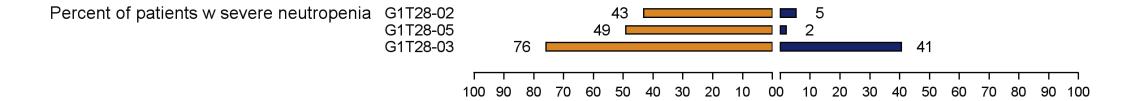
Achieved statistical significance on primary endpoints: duration and occurrence of severe neutropenia



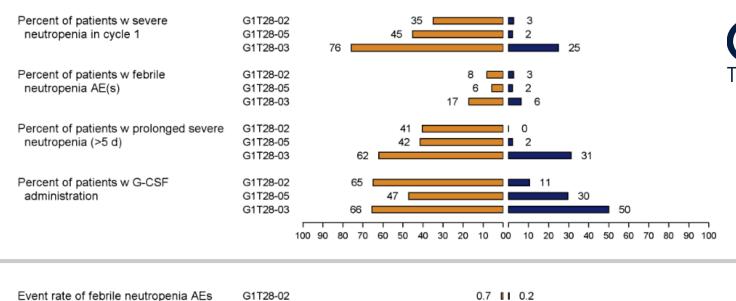
Trilaciclib

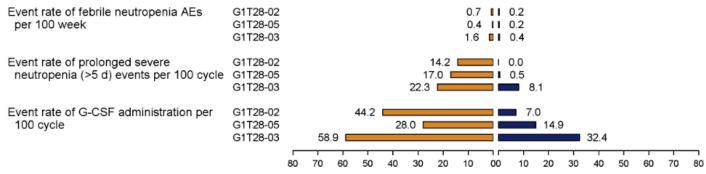


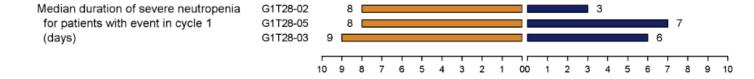
Placebo



Neutrophil endpoints favored trilaciclib



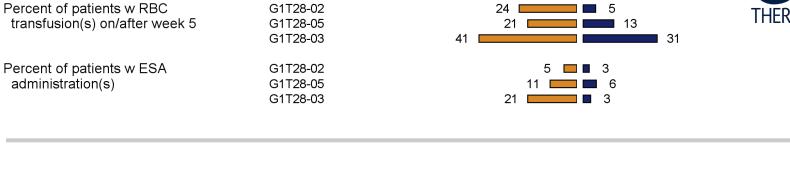


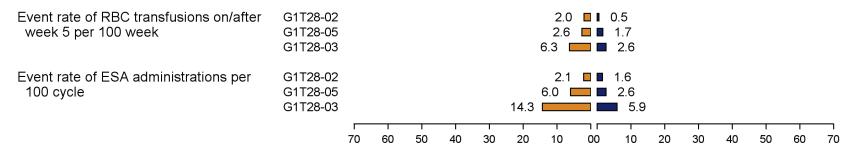


■ Placebo■ Trilaciclib

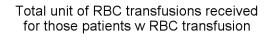


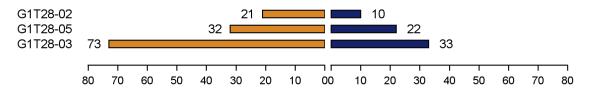
RBC endpoints favored trilaciclib



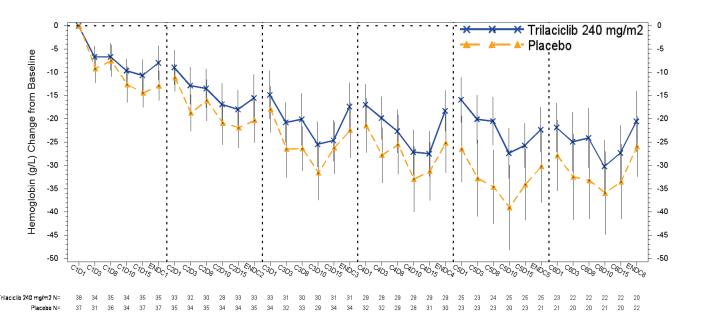






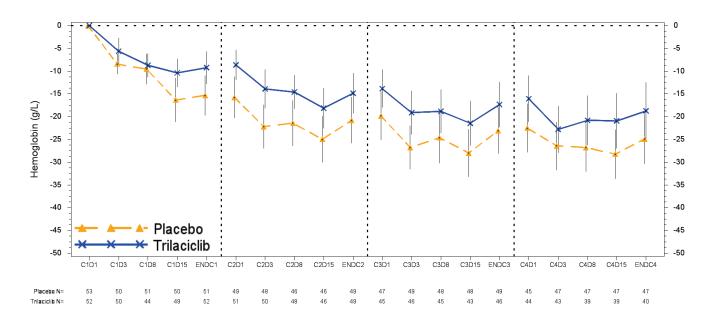


Trilaciclib maintained hemoglobin levels in 1st-line SCLC patients





Trila + chemo
Mean change
from baseline
for
hemoglobin
over time

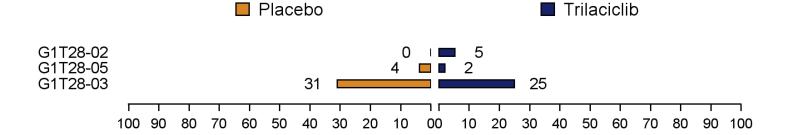


Trila + chemo + Tecentriq Mean change from baseline for hemoglobin over time

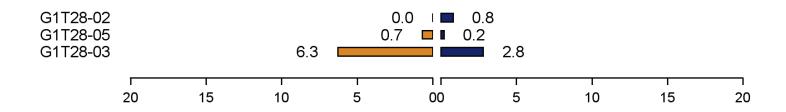
Platelet endpoints favored trilaciclib



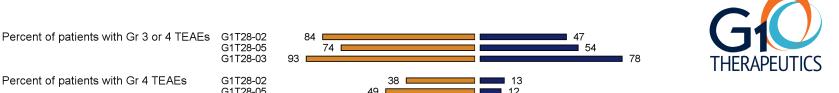
Percent of patients w platelet transfusion(s)



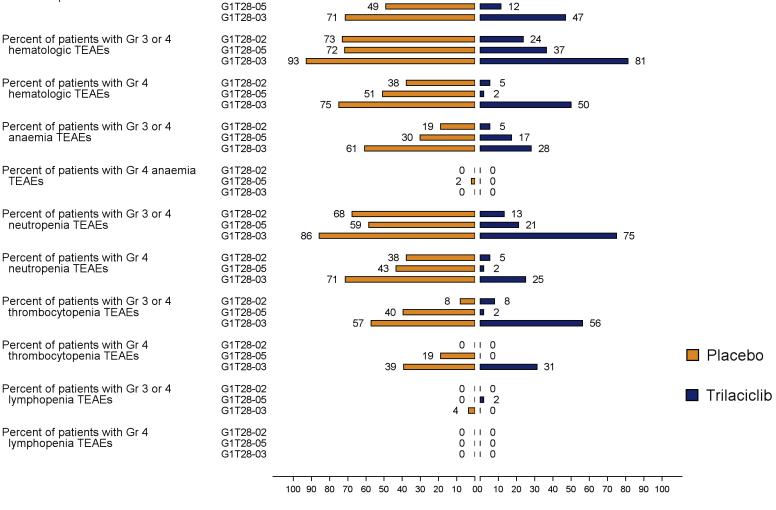
Event rate of platelet transfusions per 100 week











Patient reported outcomes (PRO) in SCLC trials



FACT-G, FACT-An and FACT-L were assessed in all three SCLC studies

FACT-G measures healthrelated quality of life (HRQoL) and includes assessments of:

- physical well being (PWB)
- emotional well being (EWB)
- social well being (SWB)
- functional well being (FWB)

FACT-An is a module that can be added to FACT-G to assess the impact of fatigue and other anemia-related symptoms for patients with cancer **FACT-L** is a module that can be added to FACT-G to measure the impact of lung cancer-specific symptoms for patients with cancer

Data collected in the context of randomized, double-blind, placebo-controlled trials; instrument completion rates were high and comparable between arms

Preliminary PRO results show meaningful benefit for trilaciclib across SCLC Phase 2 trials



 Preliminary analyses suggest trilaciclib + SOC demonstrated healthrelated quality of life (HRQoL) benefits over placebo + SOC during the treatment period in both treatment-naïve and previously treated SCLC patients

• Strongest trends (or statistical significance) favoring trilaciclib were reported primarily in functional well being (FWB) and physical well being (PWB) domains and some related symptoms, including fatigue and feeling tired

Anticipate data presentation at medical meeting in 2019

Trilaciclib does not impair efficacy of chemotherapy



	trila/chemo 1 st -line			trila/chemo/Tecentriq 1 st -line			trila/chemo 2 nd /3 rd -line		
	placebo N = 37	trila N = 38	HR* or historical RR	placebo N = 53	trila N = 54	HR* or historical RR	placebo N = 29	trila N = 32	HR* or historical RR
Median OS (months)	10.6	10.9	HR=0.87		immature			immature	
Median PFS (months)	5.0	6.1	HR=0.71	5.4	5.9	HR=0.78	4.2	4.2	HR=0.85
Overall Response Rate	56.8%	66.7%	52%	63.5%	56.0%	60.2 - 64.4%	23.1%	16.7%	10.1 - 16.9%
Clinical Benefit Rate	86.5%	91.7%	75%	90.4%	96.0%	81.1 - 85.7%	61.5%	60.0%	61.5 - 73.4%

 Lack of efficacy impairment measured by HR ("do no harm")

- Trilaciclib achieves comparable OS and PFS
- Response rates (RR) within historical ranges**

^{*}HR=hazard ratio

^{**} Socinski et al. *J Clin Oncol* 2009; 27: 4787-92; Horn et al. *N Engl J Med* 2018; 379:2220-2229; von Pawel et al. *J Clin Oncol* 2014; 32:4012-4019; Evans et al. *J Thorac Oncol* 2015; 10: 1221–1228 Data cut: December 21, 2018

Preliminary results in randomized mTNBC Phase 2 trial demonstrated trilaciclib improved PFS



|--|

Metastatic Triple-Negative Breast Cancer (G1T28-04)

+ gemcitabine/carboplatin

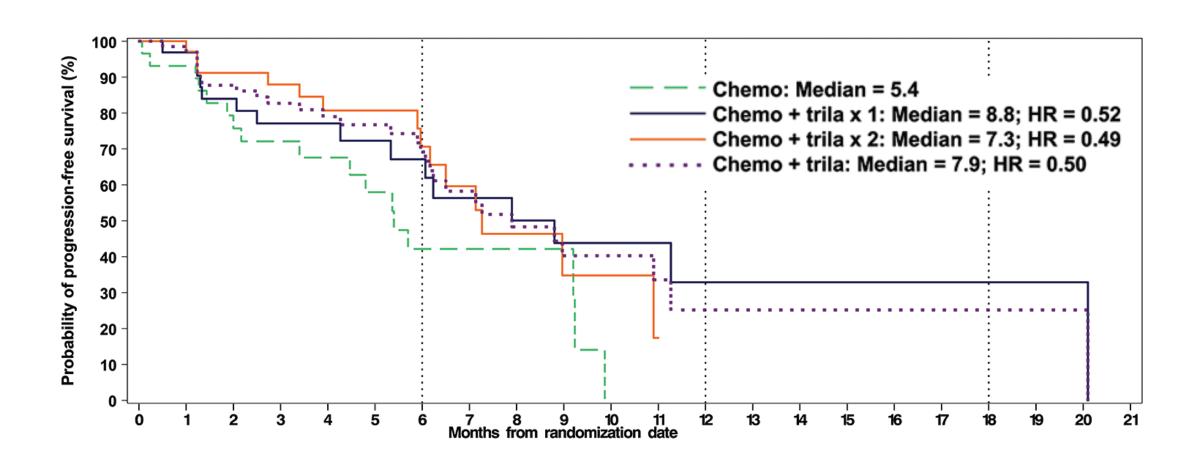
102 patients, randomized, open-label

 Patients on trilaciclib received more chemotherapy cycles than those in the control arm Safety profile consistent with previously reported trials; no trilaciclib-related serious adverse events reported

TRIAL DESIGN

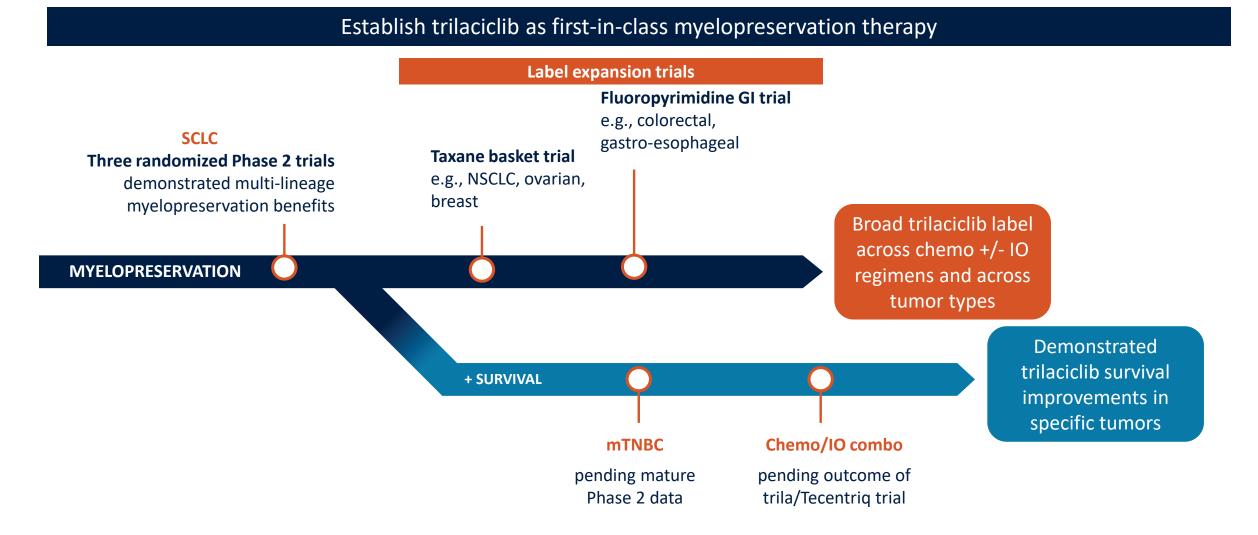
Preliminary results demonstrated median PFS is longer when trilaciclib is added to chemotherapy





Development strategy: two pathways to establish trilaciclib as an essential part of chemo and chemo/IO treatment





Summary and next steps for trilaciclib development





Compelling data from four randomized Phase 2 trials

- achieved primary endpoints in SCLC trials
- PRO benefits seen across
 SCLC trials
- PFS benefit in mTNBC
- well tolerated safety profile in ~300 participants across all trials

2

Meetings with U.S. and European regulators in 1H19 to discuss next steps for trilaciclib development

update in 2Q19



Evaluating anti-tumor efficacy in ongoing SCLC/Tecentriq and mTNBC trials

 additional anti-tumor efficacy development pending mature data



Myelopreservation and trilaciclib: implications for clinical practice

Lowell L. Hart, MD FACP Scientific Director of Clinical Research

Disclosures

- Advisory or Consulting: Genentech, Novartis, Lilly, Merck, Pharmacyclics, Nanostring, Guardant Health and G1
- Speakers Bureau: Lilly, Pfizer and Genentech
- Research funding to Florida Cancer Specialists: Novartis, Genentech, Merck, BI and G1



Professional background

- Training: undergraduate at Columbia University; M.D. from State University of NY Upstate
 Medical College in Syracuse; residency at University of Miami in internal medicine; fellowship
 in hematology and oncology at Duke
- Co-founder and Scientific Director of Clinical Research, Florida Cancer Specialists
- Associate Professor of Medicine, Hematology and Oncology, Wake Forest University School of Medicine
- Treating 100+ cancer patients per week
- Investigator on 200+ oncology clinical trials since 2010
 - Clinical investigator on all four Phase 2 trilaciclib trials



Florida Cancer Specialists & Research Institute Research Department

Our Mission

To be the preferred choice for patients and referral sources for superior, compassionate, community based cancer care in Florida; providing the most advanced cancer treatment, utilizing cutting edge technologies and research, in a setting where patients can be close to home, surrounded and supported by family and friends.

- 71,000 new patients 296,000 total visits in 2018
- 200+ oncologists on staff
- 200+ oncology nurses/nurse practitioners/ physician assistants on staff
- 85 clinic sites





FDA Oncology Approvals with FCS Participation

In the past 3 years, the majority of new cancer drugs approved for use in the U.S. were studied in clinical trials with Florida Cancer Specialists participation.















































Treating cancer with chemotherapy in a community setting

- Intake/patient evaluation process
- Treatment options
- Use of rescue interventions for myelosuppression
- Patient experience on current standard of care



Trilaciclib in clinical trial setting

- Florida Cancer Specialists enrolled 45 patients; personally treated 22 patients
- Integration into standard treatment paradigm
- Potential patient benefits
- Patient experience



Key takeaways on trilaciclib

- Improved patient outcomes through proactive patient care
- In clinical trials, reduced use of rescue interventions (G-CSF, transfusions) and need for hospitalizations/unscheduled office visits
- Integrated into existing treatment paradigm convenient for patient and practice





TRILACICLIB COMMERCIAL STRATEGY

John Demaree
Chief Commercial Officer

Hematopoietic stem and progenitor cells (HSPCs)

Physicians describe the substantial unmet need for patients with SCLC



"If a patient is doing well it means that they are not having too many side effects from treatment. Our goal for incurable cancer is to prolong survival without negatively impacting their quality of life."

-Dr. B., lung cancer specialist

"Being on chemo over the long term is awful for patients; every patient dreads chemo because of what it does to the body."

–Dr. I., breast cancer specialist



"SCLC is a terrible disease for patients; finding something that tolerates well –that's at least preventing a problem instead of reacting to it."

-Dr. W., lung cancer specialist

Key takeaways for trilaciclib



1

There is still substantial unmet need for patients experiencing myelosuppression, despite the availability of rescue interventions like G-CSF, ESAs and transfusions

- no significant innovations for chemotherapy-induced myelosuppression
- chemotherapy will remain a cornerstone of treatment

2

Multi-lineage myelopreservation in SCLC represents an advance for patients and a significant opportunity: \$500M - \$1B WW at peak

- physicians see proactive myelopreservation as a better approach and anticipate significant use
- payers value the patient benefits and are willing to pay without significant restrictions

3

Expanding the label across tumors to a broad myelopreservation indication may add >\$2B to peak sales

- myelopreservation launch in SCLC meets a substantial unmet need and serves as proof of concept in other tumor types
- efficacy enhancement, OS or PFS data, would provide additional patient benefit and revenue upside, but is not required to generate use in a high % of patients

Patients' Unmet Need



Still substantial need for SCLC patients despite availability of rescue interventions like G-CSF, ESAs and transfusions



With current SOC, a significant percentage of patients still experience severe myelosuppression and the associated consequences:

	Incidence of Grade 3/4 ¹	Current Treatments	Current Treatment Unmet Needs
Neutropenia	23%	G-CSF rescue	~70% bone pain (~25% severe²) induced by G-CSFs (severe pain treated with NSAIDs and opioids)
Anemia	14%	ESA rescue, transfusion rescue	Black Box warning for shortened overall survival and increased risk of tumor progression
Thrombocytopenia	10%	Transfusion rescue	No options other than transfusions

Trilaciclib has the potential to address multi-lineage myelosuppression and reduce the need for rescue therapies and their associated side effects

¹IMpower133 Trial, atezolizumab + E/P arm (n=198), NEJM, 2018

²Kirshner et al: Prevention of pegfilgrastim-induced bone pain. JCO, 2012.

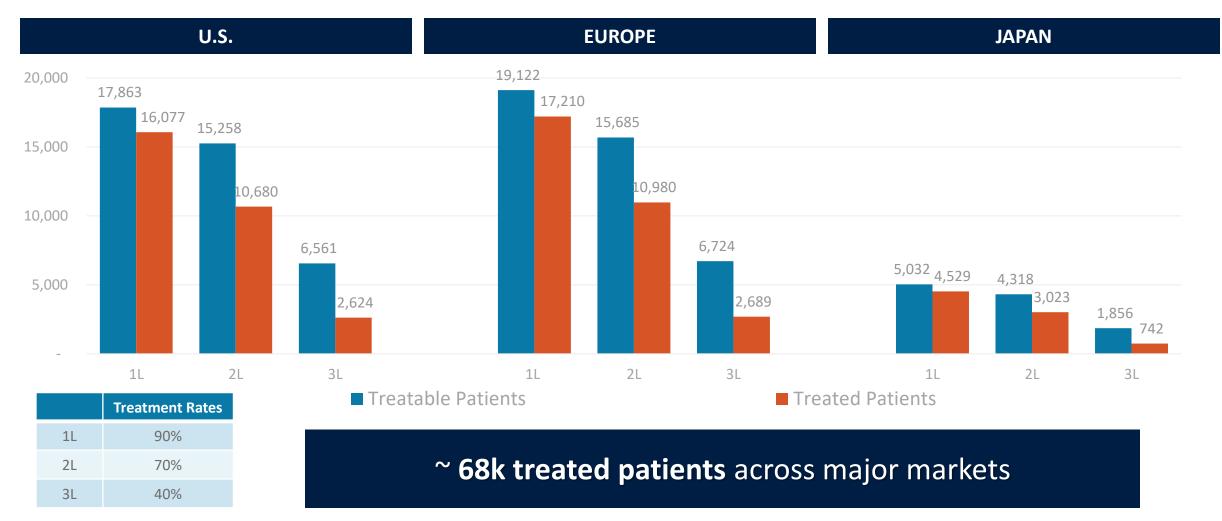
Opportunity



There are a significant number of ES-SCLC treated patients that could benefit from multi-lineage myelopreservation



ES-SCLC Patients



1. 2030 estimates, secondary epi source & ZS forecast model

The value of the single-lineage focused, growth factors market for myelosuppression is ~\$7B



G-CSF Market	2017 Worldwide Sales*		
Neulasta [®]	\$4.5B		
Neupogen®/Zarxio®/Granix®	\$0.7B		
Total Worldwide	\$5.2B		

ESA Market	2017 Worldwide Sales*		
Aranesp [®]	\$2.1B		
Epogen®	\$1.1B		
Procrit [®]	\$0.6B		
Total Worldwide	\$3.8B		



^{*} Sales from Annual reports; includes sales for all indications.

^{**} Future Market Insights, 2018 valuation of global chemotherapy-induced myelosuppression treatment market.

Market Research & Forecast



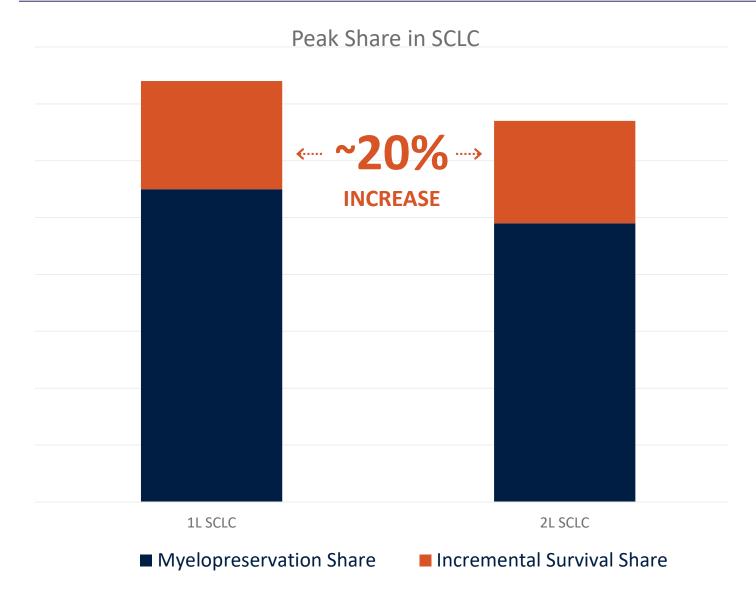
100+ PHYSICIANS AND 15+ PAYORS ACROSS 5 COUNTRIES

interviewed using target product profile based on the actual data from trilaciclib + chemo 1st-line SCLC trial



Myelopreservation alone, without a survival benefit, drives significant share in SCLC

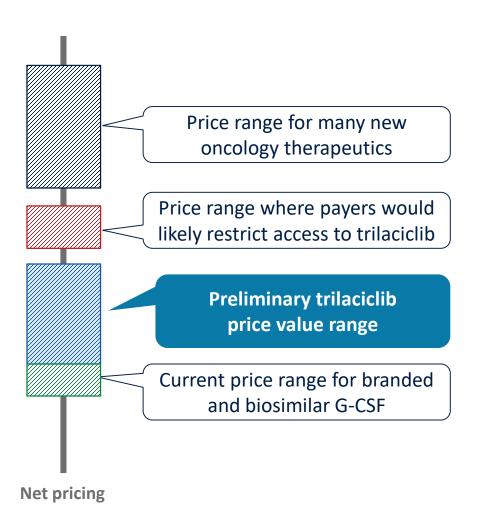




- Physicians were shown a profile based on the actual myelopreservation data from the first line trial of trilaciclib + chemo and asked to allocate share
- Physicians were then shown a second profile with a three-month survival benefit added and asked to allocate share
- Given physicians would treat a high percentage of patients based on the myelopreservation data alone, a survival benefit, if seen, would have a smaller incremental impact on share

Preliminary price range where payers believe trilaciclib provides value and they will not restrict patient access





- Payers were shown the trilaciclib profile based on actual first-line data and asked about various pricing scenarios
- Given the multi-lineage benefits, initial payer research suggested a price premium above G-CSF, but below new therapeutics, would appropriately reflect the value trilaciclib provides patients
- The preliminary price range for trilaciclib is based on the value trilaciclib provides patients and is below the range where payors suggested significant access restrictions like step edits would be utilized
- Additional payer research and interactions are planned in 2019 and 2020

Trilaciclib does not add significant costs to the standard of care given the cost offsets trilaciclib provides





Cost Drivers with Trilaciclib

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Cost Savers with Trilaciclib

Cost of trilaciclib

Administration costs

Decrease in granulocyte colony stimulating factor (G-CSF) costs

Decrease in hospitalizations

Decrease in erythropoiesis stimulating agent (ESA) costs

Decrease in red blood cell transfusion costs

Decrease in platelet transfusion costs

Decrease in incremental physician visits

- Payer research suggested the price range appropriately reflected trilaciclib's value, even before accounting for the cost offsets
- Given these cost offsets, the Budget Impact Model shows a de minimis impact on payer per member, per month (PMPM) drug costs

Trilaciclib market research highlights a substantial global commercial opportunity



Broad myelopreservation label >\$2 billion (fluoropyrimidines and taxanes)

\$500 million - \$1 billion

- Proactive myelopreservation is seen as a better approach for patients
- Physicians anticipate significant use of trilaciclib based on its myelopreservation benefits alone
- Payers see the multi-lineage benefits of trilaciclib as unique

Value Proposition



First and only therapy to improve Benefit/Risk Ratio by proactively reducing adverse events across all lineages









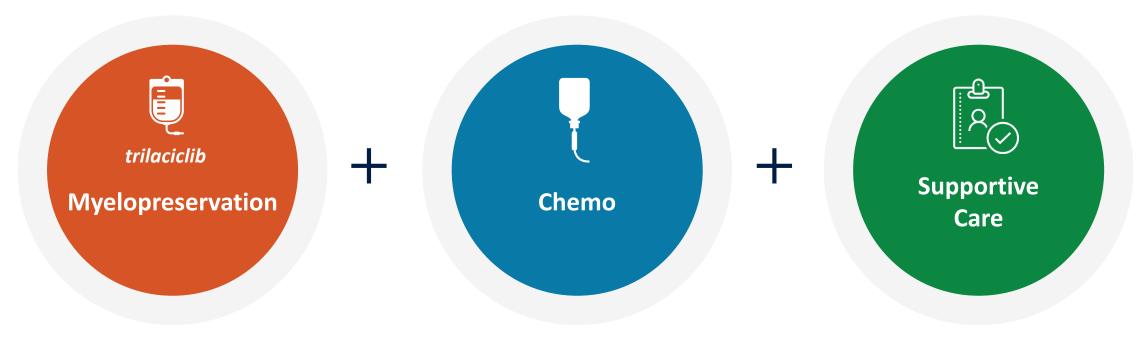
First and only therapy to improve Benefit/Risk Ratio by proactively reducing adverse events across all lineages





Trilaciclib optimally positioned as first-in-class, multi-lineage myelopreservation therapy that is complementary to SOC





Differentiating and motivating positioning

Proactively reduces myelotoxicity by preserving HSPC & immune system function

Does not compete with the current SOC

Potential for broad use across tumors/chemo

Convenient 30 min IV infusion prior to chemo

Rescue measures following chemotherapy

(G-CSF, ESAs and transfusions)

Trilaciclib: first-in-class multi-lineage myelopreservation therapy



BRAND VISION:

Transform patient outcomes across multiple tumors by establishing trilaciclib based multi-lineage myelopreservation as an essential part of chemo and chemo/IO treatment regimens

CURRENT STATE

Chemotherapyinduced myelosuppression treated with rescue supportive care measures Proactive
approach
that is
complementary
to standard
of care

experience lower rates of neutropenia and anemia

Patients

FUTURE STATE

Patients experience multi-lineage myelopreservation benefits with trilaciclib

Reduces use of rescue measures, such as G-CSF and transfusions

Fewer chemotherapy dose delays and reductions

Improved safety; reduced high-grade AEs

Does not compromise anti-tumor activity

Summary



Key takeaways for trilaciclib



1

There is still substantial unmet need for patients experiencing myelosuppression, despite the availability of rescue interventions like G-CSF, ESAs and transfusions

- no significant innovations for chemotherapy-induced myelosuppression
- chemotherapy will remain the backbone of treatment

2

Multi-lineage myelopreservation in SCLC represents an advance for patients and a significant opportunity: \$500M - \$1B WW at peak

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Q&A





LEROCICLIB and G1T48 DEVELOPMENT UPDATE

Raj Malik, M.D.

Chief Medical Officer and Senior Vice President, R&D

Tumor cell proliferation

Key takeaways



1

Lerociclib – potential in multiple tumor types

- ongoing trials in breast and non-small cell lung cancer
- differentiated profile =
 "partner of choice" in
 CDK4/6i combo regimens

2

G1T48 – oral SERD offers significant patient benefit

- oral delivery provides opportunity to move SERD into earlier lines of therapy
- monotherapy and combination regimens

3

Lerociclib + G1T48 – all-oral BC regimen

 all-oral regimen offers significant differentiation in crowded breast cancer space

Lerociclib development opportunities





Breast Cancer

- ✓ Differentiated profile
- Partnership opportunities to maximize value



Combined with G1T48

 ✓ Wholly-owned all-oral CDK4/6i + SERD combination in ER+ breast cancer



Beyond Breast Cancer

- ✓ Tolerability profile supports combination with other targeted agents
- Significant opportunity in multiple tumors

Lerociclib profile differentiated in CDK4/6 landscape



Differentiated PK and tolerability profile vs. competitors

- Continuous dosing (no holiday) with fewer dose-limiting toxicities
- Highly potent and selective with demonstrated anti-tumor POC

	DOSE-LIMITING NEUTROPENIA	MONITORING REQUIREMENT	DOSING HOLIDAY	QT PROLONGATION	DILI	GRADE 3/4 DIARRHEA	VTE
lerociclib	_	Potential for less monitoring	_	_	_	_	_
Ibrance®	X	X	X	_	_	_	_
Kisqali®	X	X	X	X	X	_	_
Verzenio [®]	X	X	_	_	X	X	X

lerociclib data from ASCO 2018

Lerociclib differentiated safety and tolerability profile: CDK4/6i partner of choice for combo regimens



CANCER	INDICATION	lerociclib +	STATUS
BREAST	ER+/HER2-	Faslodex® (fulvestrant)	Phase 2a enrolling; Phase 1b data update 4Q19
DREAST	ER+/HER2-	G1T48	Phase 1b/2 trial planned for 2019/2020
LUNG	EGFRm	Tagrisso	Phase 1b data in 3Q19
PROSTATE	CRPC	AR-antagonist	Exploring
LYMPHOMA	Mantle Cell	BTKi	Exploring
BLADDER	Urothelial	FGFRi	Exploring
GI	Pancreatic	MAPKi	Exploring

ER+, HER2- breast cancer Faslodex® combination Phase 1b/2a trial

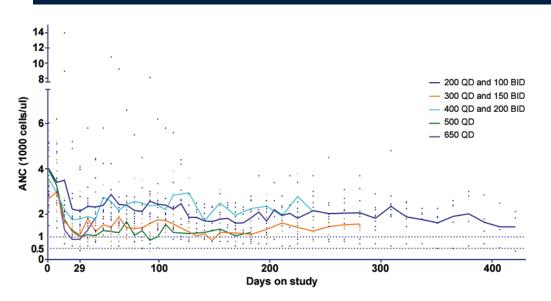


PRIMARY ENDPOINTS	 Assess safety, dose-limiting toxicities, and identify recommended Phase 2 dose/schedule 		
SECONDARY ENDPOINTS	• PK, PD • ORR, PFS and OS		
DESIGN	 Open-label, single-arm; continuous dosing of lerociclib + Faslodex in ER+, HER2- breast cancer Phase 1b: dose escalation (QD and BID schedules), 3+3 design Phase 2a: dose expansion at RP2D/schedule 		
MILESTONE TIMING	 Phase 1b dose escalation completed; preliminary data presented at ASCO 2018 Enrolling expansion phase to identify differentiated clinical profile Anticipate reporting additional Phase 1b data in 4Q19 		

Continuously dosed lerociclib: promising early data



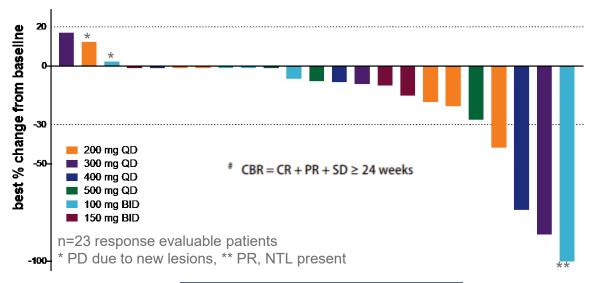
Continuous dosing with less Gr 4 neutropenia



Dose	N	Day 29 mean % change
200mg QD	6	-48%
300mg QD	3	-66%
400mg QD	3	-50%
500mg QD	4	-74%
650mg QD	6	-76%

ANC decreases ~50-60% for approved CDK4/6 inhibitors

Anti-tumor activity at all dose levels



Best Response lerociclib + fulvestrant (n=23)			
PR	4/23 (17%)		
SD	16/23 (70%)		
PD	3/23 (13%)		
SD ≥ 24 weeks	11/23 (48%)		
CBR 24	15/23 (65%)		

EGFRm NSCLC Tagrisso combination Phase 1b dose-finding/Phase 2 randomized trial



PRIMARY ENDPOINTS	 Assess safety, dose-limiting toxicities, and identify recommended Phase 2 dose PFS
SECONDARY ENDPOINTS	• PK, PD • ORR and OS
DESIGN	 EGFRm NSCLC Phase 1b: single-arm dose-finding, lerociclib + Tagrisso in 1st/2nd-line setting Phase 2: lerociclib + Tagrisso, or Tagrisso; randomized (1:1)
• Phase 1b enrollment ongoing • Preliminary Phase 1b data expected in 3Q19	

Strong rationale for lerociclib + Tagrisso



1

Goal is to extend time to resistance and improve PFS

2

In ER+ breast cancer, CDK4/6 inhibitors as a class extend PFS when added to endocrine therapy

 addition of lerociclib to osimertinib follows this same paradigm of adding a CDK4/6 inhibitor to a growth signaling inhibitor as a means to extend progression free survival 3

Lerociclib combined with osimertinib could extend time to resistance

- osimertinib resistance
 mechanisms include activating
 mutations in PIK3CA, BRAF and
 KRAS; amplifications in MET,
 HER2, FGFR1, CCND, CDK4/6; and
 EGFR C797S mutation, many of
 which are "upstream" of CDK4/6
- preclinical data demonstrated prolongation of time to resistance by the addition of lerociclib to EGFR TKIs (Sorrentino et al 2018)





G1T48: strong strategic fit and patient need



1

Selective estrogen receptor degrader (SERD): validated approach for ER+ breast cancer

2

Faslodex (IM SERD): approved as monotherapy and in combination with CDK4/6i

 > \$1B sales despite painful intramuscular (IM) injections; oral SERD addresses unmet patient need

3

All-oral lerociclib/G1T48 combination regimen offers potential competitive advantages

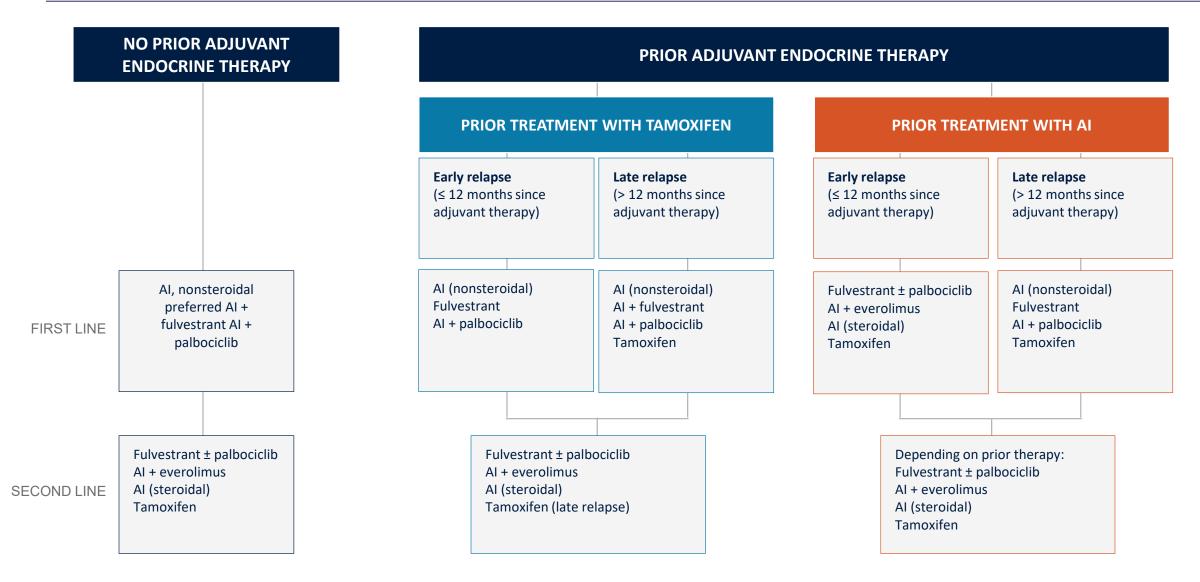


Phase 1 trial in ER+ breast cancer (G1T48 monotherapy)

- initiated in 2018
- preliminary data expected in 4Q19
- plan to combine with lerociclib in 2019/2020, pending monotherapy trial results

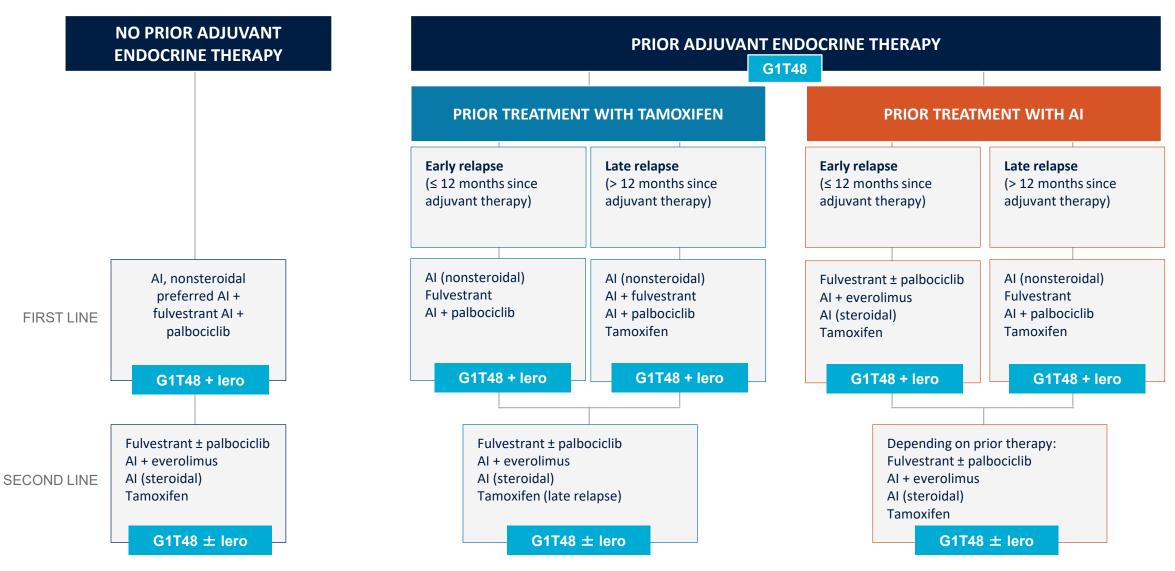
ASCO guidelines for HR+ mBC: Oral SERD creates opportunity across lines of therapy





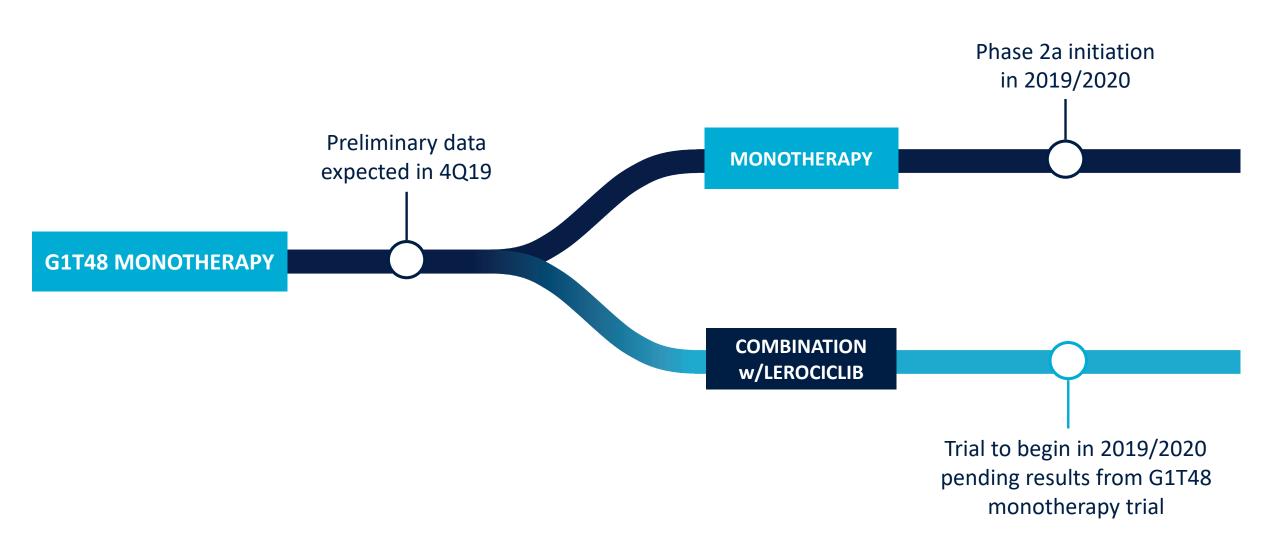
ASCO guidelines for HR+ mBC: Oral SERD creates opportunity across lines of therapy





Development pathways





ER+, HER2- breast cancer Phase 1/2a trial



PRIMARY ENDPOINTS	 Assess safety, dose-limiting toxicities, and identify recommended Phase 2 dose 		
SECONDARY ENDPOINTS	PK, PDORR and OSFood effect on bioavailability		
DESIGN	 Open-label, ER+, HER2- breast cancer, enrolling up to 104 patients Phase 1: dose-finding, G1T48 monotherapy in 2nd/3rd-line setting Phase 2a: dose expansion at RP2D 		
MILESTONE TIMING	 Phase 1 enrollment ongoing Report preliminary Phase 1 data in 4Q19 		

Key takeaways



1

Lerociclib – potential in multiple tumor types

- ongoing trials in breast and non-small cell lung cancer
- differentiated profile =
 "partner of choice" in
 CDK4/6i combo regimens

2

G1T48 – oral SERD offers significant patient benefit

- oral delivery provides opportunity to move SERD into earlier lines of therapy
- monotherapy and combination regimens



Lerociclib + G1T48 – all-oral BC regimen

 all-oral regimen offers significant differentiation in crowded breast cancer space

Q&A



Key anticipated milestones



	INDICATION/COMBO	2Q	19	3Q19	4Q19
trilaciclib IV - CDK4/6i	1 st -line SCLC (+ etop/carbo)				
	1 st -line SCLC (+ etop/carbo/Tecentriq)		Provide	Present additional Phase 2 data (pending mature OS)	
	2 nd /3 rd -line SCLC (+ topotecan)	Present additional Phase 2 data	regulatory update		
	Metastatic TNBC (+ gem/carbo)				Present additional Phase 2 data (pending mature PFS)
lerociclib Oral - CDK4/6i	ER+, HER2- BC (+ Faslodex)				Report additional Phase 1b data
	EGFRm NSCLC (+ Tagrisso)			Report preliminary Phase 1b data	
G1T48 Oral - SERD	ER ⁺ , HER2- BC (monotherapy)				Report preliminary Phase 1 data



Investor Day March 6, 2019

www.g1therapeutics.com

SPEAKER BIOS



Jeffrey Crawford, M.D.

Co-Director, Solid Tumor Therapeutics Program, Duke Cancer Institute



Jeffrey Crawford, M.D., is George Barth Geller Professor for Research in Cancer and Duke University Medical Center and Co-Director of the Solid Tumor Therapeutics Program in the Duke Cancer Institute (DCI) in Durham, North Carolina. He earned his medical degree from Ohio State University and completed his internship, residency and hematology/oncology fellowship at Duke University Medical Center. He is board certified in internal medicine, hematology and oncology.

Dr. Crawford is Principal Investigator for the National Clinical Trials Network Lead Academic Site Grant at Duke. He is a member of the executive committee for the Alliance and served as Chair of NCCN Myeloid Growth Factors Panel for 15 years.

Dr. Crawford's research interests include new treatment approaches to lung cancer, supportive care therapies, including hematopoietic growth factors, and agents that impact muscle wasting. He has published more than 180 manuscripts and chapters. As NCCN panel chair, he helped develop the guidelines for the first FDA approved biosimilar, filgrastim-Sndz. Due to his experience with growth factors and other biologics, Dr. Crawford has participated in the review process for several other biosimilars in development, as well as helped develop national educational programs for the incorporation of biosimilars into oncology.





Lowell Hart, M.D.

Scientific Director of Clinical Research, Florida Cancer Specialists



As the Scientific Director of Clinical Research, Lowell Hart, M.D. oversees the extensive clinical trial and research program at Florida Cancer Specialists & Research Institute. As a strategic research site for the largest community-based clinical trial organization in the nation, Florida Cancer Specialists & Research Institute can offer our patients more access to clinical trials than any other oncology practice, hospital, or academic medical center program in the state of Florida. Dr. Hart graduated with a B.A. from Columbia University in New York City, and completed his Internship and Residency at the University of Miami Hospitals.

His Fellowship in Hematology & Oncology was with Duke University Medical Center in Durham, N.C., and he later served at Duke as an Attending Physician in the Breast Oncology Clinic. Dr. Hart joined Florida Cancer Specialists in 1989 and was named Research Director in 2003. He has served as a sub-investigator or principal investigator in well over 100 clinical trials, and has extensively published the results of his research. He has served on the Board of Directors for the Florida Society of Clinical Oncology.

Since 2016, Dr. Hart has also been Associate Professor of Internal Medicine, Oncology and Hematology at Wake Forest School of Medicine and Co-Director of the Phase 1 Program at Wake Forest Baptist Comprehensive Cancer Center in North Carolina. He currently serves on the Young Investigator Award Review Committee for the American Society of Clinical Oncology.



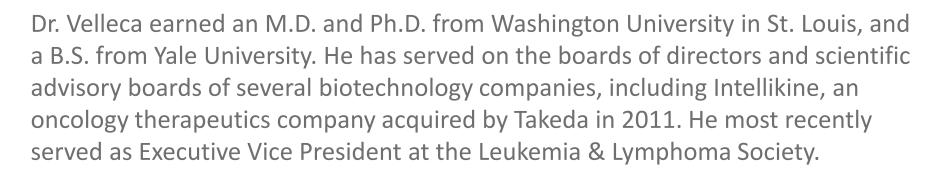


Mark Velleca, M.D., Ph.D.

Chief Executive Officer



Mark Velleca, M.D., Ph.D., joined G1 as Chief Executive Officer in 2014. Previously, he was at CGI Pharmaceuticals, where he guided the company from its inception through its establishment as a drug discovery company that brought multiple drug candidates into clinical trials. After Gilead Sciences acquired CGI, Dr. Velleca served as a senior advisor to Gilead in R&D Strategy and Corporate Development. Earlier in his career, Dr. Velleca was an attending physician at Yale New Haven Hospital and on the faculty of the Yale University School of Medicine.





Raj Malik, M.D.

Chief Medical Officer and Senior Vice President, R&D



Raj Malik, M.D. joined G1 in 2014. In his role as Chief Medical Officer and Senior Vice President, R&D, he leads the company's clinical development, medical affairs, regulatory affairs, biometrics, translational medicine and preclinical teams. Previously, he served as Chief Medical Officer and management board member at Agennix AG, where he was responsible for research and development. Prior to Agennix AG, he served as Chief Medical Officer at Adherex Technologies, where he directed the company's global regulatory strategy and clinical development programs. Dr. Malik also served in oncology clinical development positions at EMD Pharmaceuticals and Bristol-Myers Squibb. Dr. Malik currently serves on the board of directors of Meryx, Inc.



Dr. Malik received his M.D. from the University of Sheffield Medical School in the UK. He completed his residency at Duke University Medical Center and fellowships at the Children's Hospital of Philadelphia and Duke University Medical Center. During his academic career, he was an assistant professor at the University of Virginia, where he conducted basic science and clinical research in addition to patient care and teaching.

John Demaree

Chief Commercial Officer



John Demaree joined G1 as Chief Commercial Officer in 2018. In this role, he is responsible for all aspects of product commercialization, including marketing, sales, market access and commercial operations. Previously, Mr. Demaree served as Vice President, Oncology Marketing for Astellas where he led several product launches. He has worked for more than 20 years in oncology including roles of increasing leadership at Eli Lilly, Novartis and Abbott.

Mr. Demaree brings to G1 a strong history of building commercial capabilities and leading multiple successful new product and new indication launches. His areas of expertise include strategy, commercialization, new product launches, market access and reimbursement strategy, internal and external collaboration leadership, and business development and licensing.

Mr. Demaree received his B.S. in Marketing and his MBA in Marketing & Finance from Indiana University.

