

Next Generation
Cancer Therapies

October 2019

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.

Small molecule therapeutics for big oncology indications



First-in-class therapy

to improve outcomes for patients treated with chemotherapy

Potential best-in-class

oral SERD

for the treatment of ER+ breast cancer



Differentiated oral CDK4/6 inhibitor

for more effective combination treatment

\$325M cash and investments at end of 2Q 2019

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

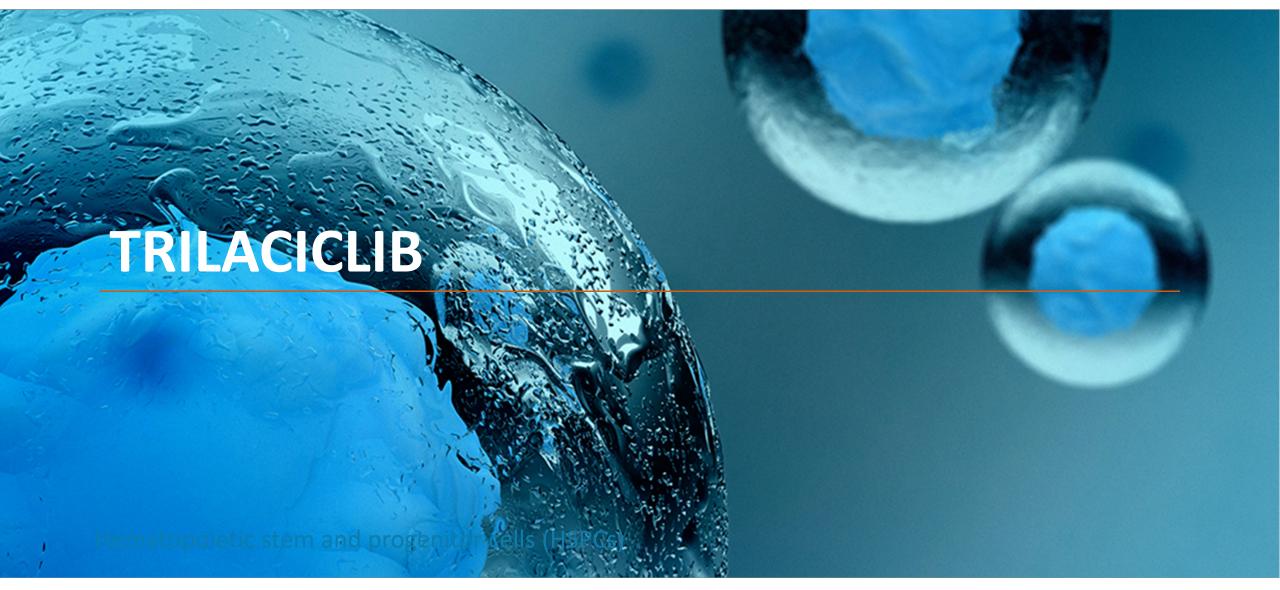
Catalysts across all programs in 2019/2020



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





Trilaciclib: improving outcomes for patients on chemo



(1

Substantial need

- ~1 million patients in
 U.S. receive
 chemotherapy each year
- Chemo to remain a cornerstone of cancer treatment
- Myelosuppression is common; impacts QoL, burdens HC system

2

Phase 2 program: improved patient outcomes

- Less neutropenia and anemia in SCLC
- Reduced G-CSF usage and transfusions in SCLC
- Topline OS benefit in mTNBC; data featured in ESMO oral presentation and published in The Lancet Oncology

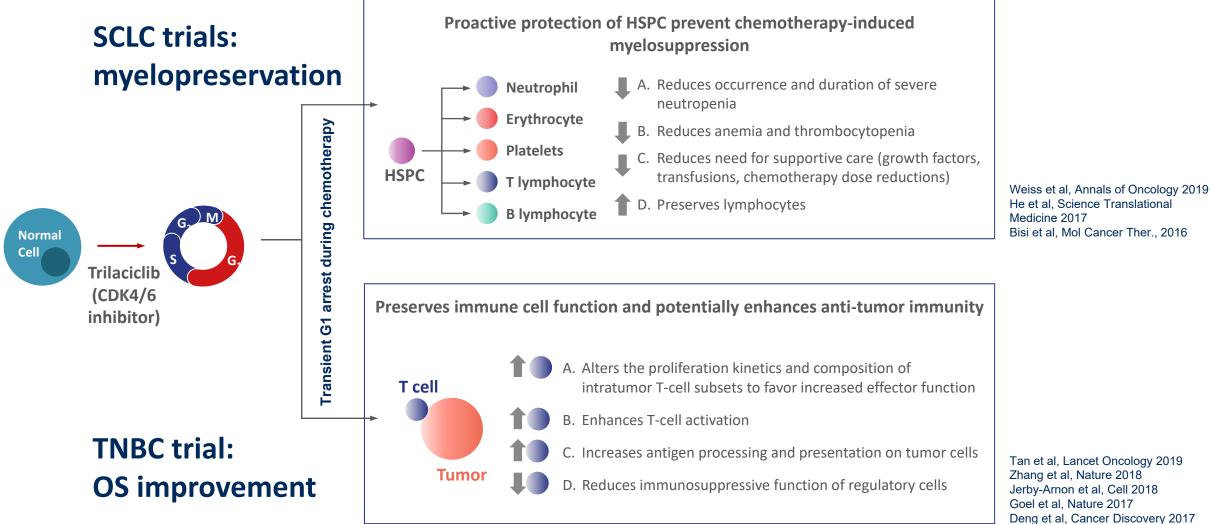
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Next steps

- SCLC myelopreservation NDA/MAA filings in 2020
- Initiating Phase 3 mCRC and mTNBC trials in 2H20
- Exploring partnerships to maximize access for patients globally

Trilaciclib: context-dependent efficacy





Tan et al, Lancet Oncology 2019 Zhang et al, Nature 2018 Jerby-Arnon et al, Cell 2018 Goel et al. Nature 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

Integrated analysis for three randomized SCLC trials: robust myelopreservation - neutrophils, RBCs, platelets

primary endpoints



	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

⁺ 2-sided p-value; data presented at MASCC 2019

PRO data in SCLC: trilaciclib improves the patient experience



Domain	No. of Events TRI/PLA	Median TTD, Months TRI/PLA	Hazard Ratio [95% CI]	
FACT-G	23/40	NYR/NYR	-	0.54 [0.29;0.99]
PWB	32/51	NYR/5.16		0.62 [0.37;1.04]
FWB	31/55	7.62/3.78		0.47 [0.29;0.78]
EWB	23/27	NYR/NYR	⊢	0.74 [0.39;1.42]
SWB	32/34	7.85/NYR	⊢	0.84 [0.48;1.47]
FACT-L	31/45	NYR/7.16		0.68 [0.41;1.13]
LCS	20/27	NYR/NYR	⊢	0.68 [0.34;1.39]
L-TOI	24/48	NYR/5.62		0.45 [0.26;0.77]
FACT-An	31/58	NYR/3.48		0.47 [0.29;0.77]
Fatigue	39/61	7.03/2.33		0.58 [0.37;0.90]
Anemia TOI	33/55	7.20/3.78		0.54 [0.33;0.89]
Threshold=3 for PW	/B,SWB,EWB,FWB,LCS and	- I Fatigue, =6 for FACT-L total, L	0.4 0.6 0.8 1 1.67 2.5	

- Trilaciclib improves
 symptoms and functions
 across multiple parameters
 over time compared to
 placebo
- Statistically significant improvements shown in:
 - fatigue
 - anemia
 - functional wellbeing

^{*}Pooled analysis across all three SCLC studies; data presented at MASCC 2019

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

Significant overall survival benefit with trilaciclib



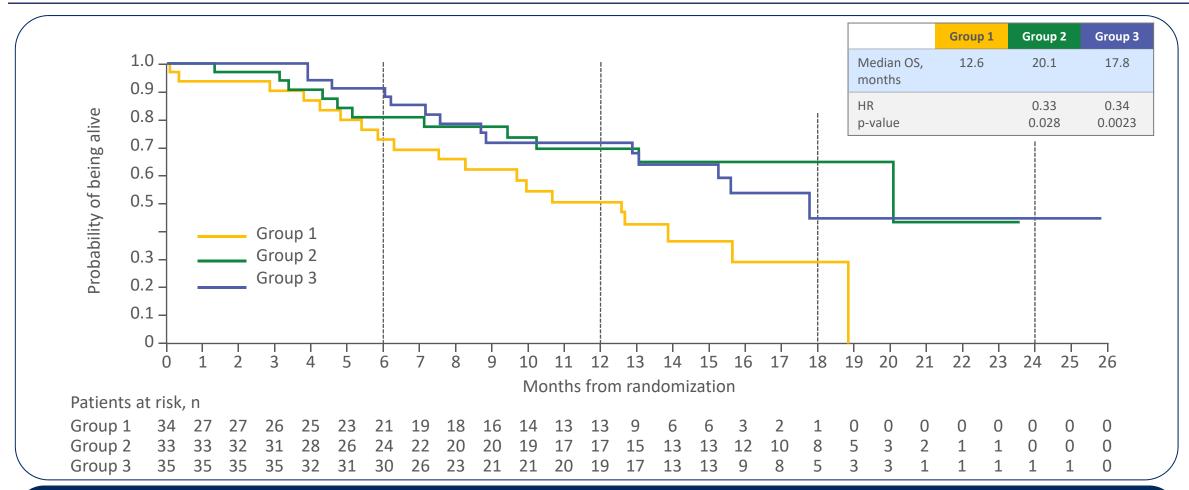
	Control (GC only) (Group 1)	Trilaciclib + GC (Group 2)	Trilaciclib + GC (Group 3)	Trilaciclib + GC (Group 2+3)
ITT population	N = 34	N = 33	N = 35	N = 68
Median OS (months)	12.6	20.1	17.8	20.1
HR		0.33	0.34	0.36
p-value		0.028	0.0023	0.0015
Median PFS (months)	5.7	9.4	7.3	8.8
HR		0.60	0.59	0.59
p-value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

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

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

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



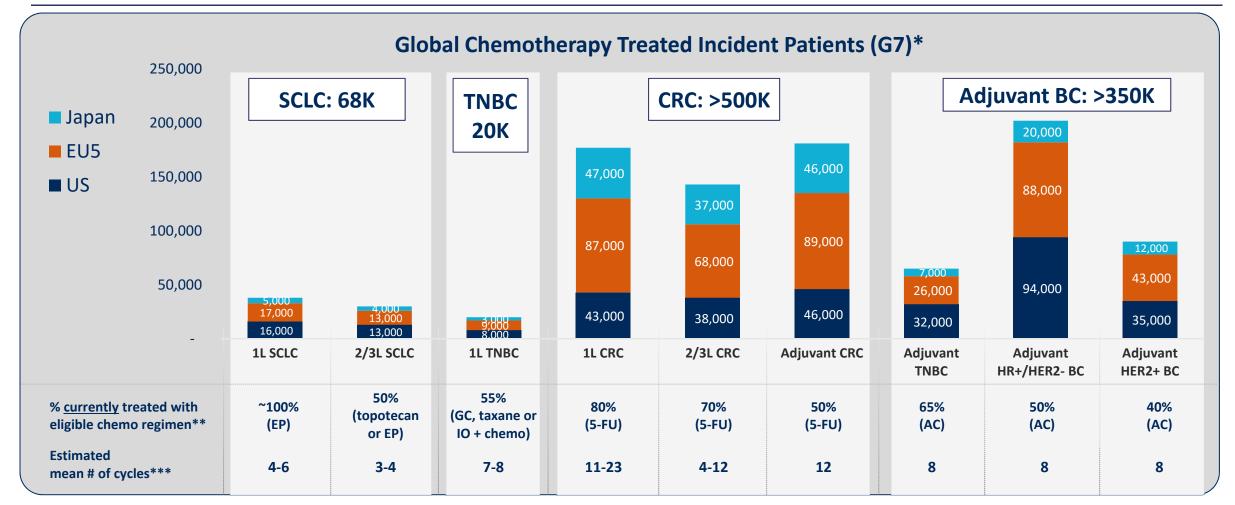
DISEASE OF INTEREST	CHEMO REGIMENS	2020	2021	2022	2023	2024	2025
Myelopreservation							
1L SCLC	Etoposide + platinum, topotecan		☆	 			
1L mCRC	5-FU regimens					☆	
Neoadj TNBC	Doxo + cyclo + taxane					☆	
Anti-tumor efficacy							
1L mTNBC	TBD +/- anti-PD-L1					☆	
1L mBC	Taxane						,

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.

~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)

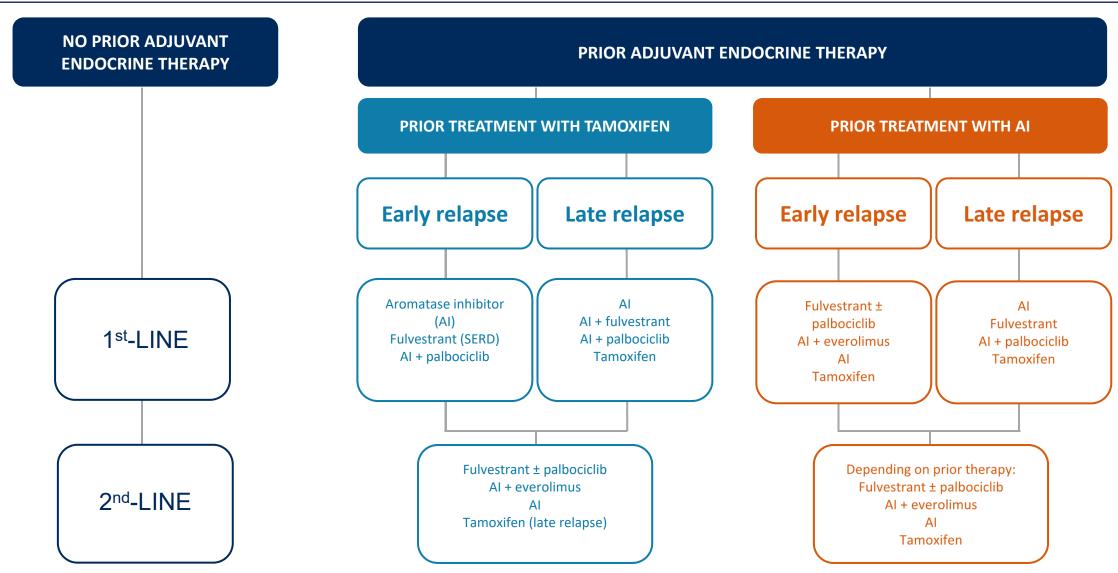
^{***}Source: SCLC and TNBC: G1 Therapeutics' completed trials; CRC and Adjuvant BC: number of cycles for eligible chemo regimens from Decision Resources Group Treatment Landscape and Forecast Assumptions 2018 Reports (CRC and BC)





Current ASCO guidelines for ER+ mBC



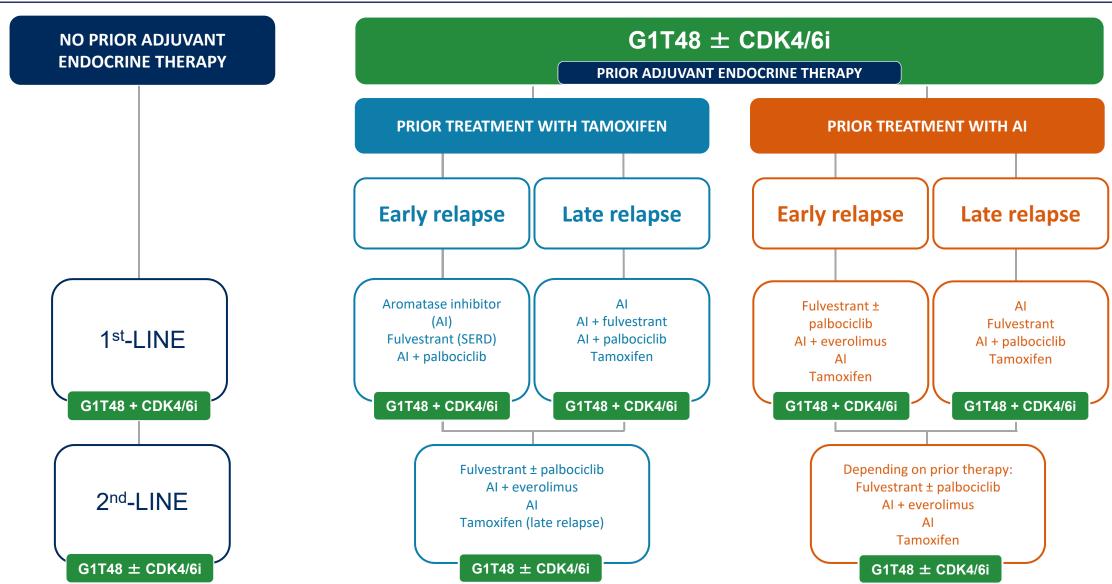


*Adapted from Rugo et al JCO 2016

Opportunity across multiple lines, including adjuvant



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*Adapted from Rugo et al JCO 2016

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



COMBO DRUG	2020	2021	2022	2023	2024	2025	2026	2027
CDK4/6i								☆
Everolimus						☆		
N/A								
NA								
Fulvestrant							X -	
Aromatase inhibitor								
	CDK4/6i Everolimus N/A NA Fulvestrant	CDK4/6i Everolimus N/A NA Fulvestrant	CDK4/6i Everolimus N/A NA Fulvestrant					

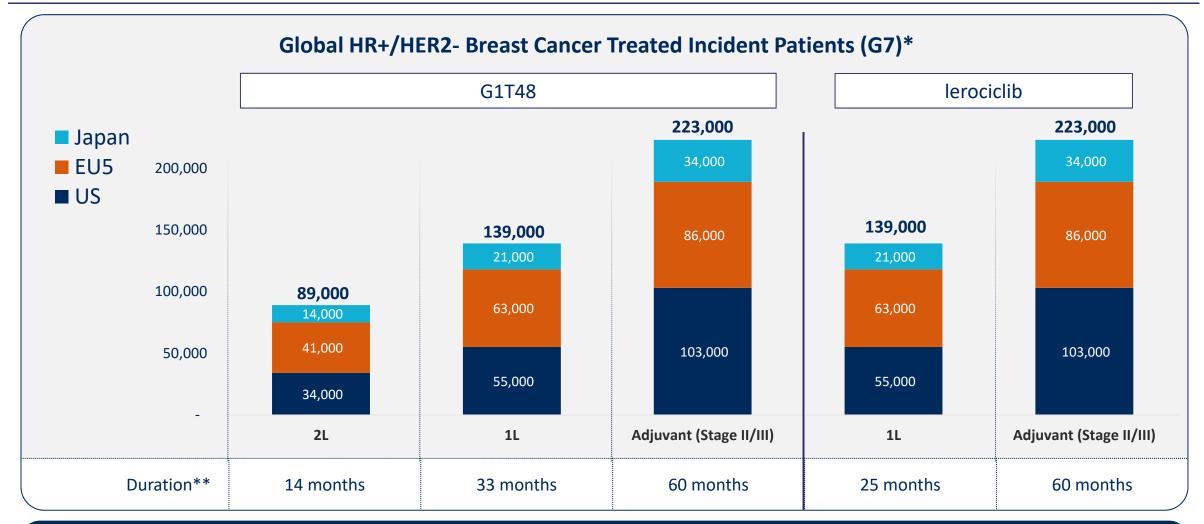
G1T48 and lerociclib partnering to enable expansion in other indications

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

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



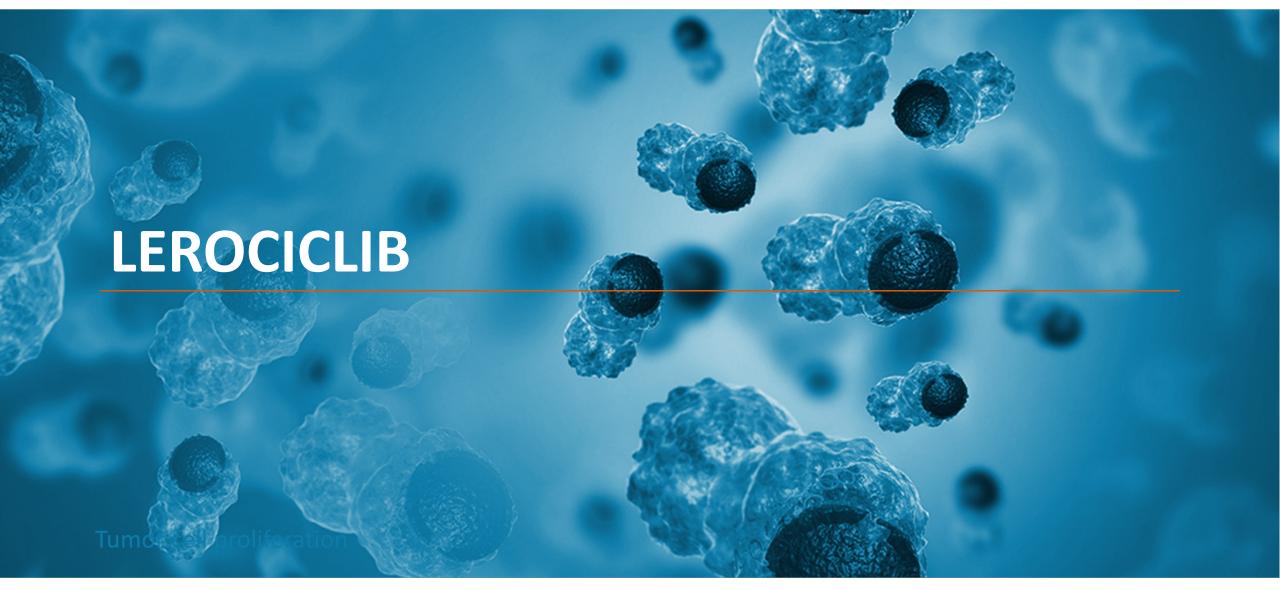


Adjuvant use: long treatment duration requires well tolerated profile

^{*}Source: Secondary epi sources, 2027 estimates

^{**}Duration estimates based on similar trial results in the same or similar patient populations as planned trials





Lerociclib: differentiated profile in CDK4/6 inhibitor landscape



Differentiated PK and tolerability profile

Continuous dosing

 (no holiday) with fewer
 dose-limiting toxicities

Potential for less CBC
 monitoring, reducing
 patient & physician burden

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

ER+, HER2- breast cancer lerociclib/fulvestrant combination Phase 1b/2a trial: enrollment completed – data 4Q19

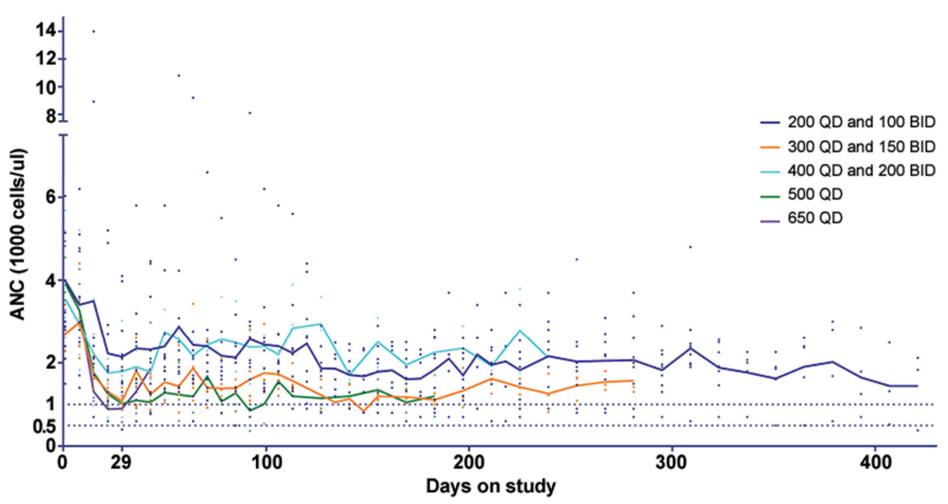


PRIMARY ENDPOINTS	Assess safety and dose-limiting toxicitiesIdentify dose for pivotal trial
SECONDARY ENDPOINTS	• PK, PD • ORR, PFS and OS
DESIGN	 Open-label, single-arm; continuous dosing of lerociclib + fulvestrant in ER+, HER2- breast cancer Phase 1b: dose escalation (QD and BID schedules), 3+3 design Phase 2a: dose expansion/selection
MILESTONE TIMING	 Preliminary Phase 1b data presented at ASCO 2018 Phase 2a enrollment completed Anticipate reporting Phase 1/2 data and dose selection in 4Q19

Continuously dosed lerociclib: less neutropenia



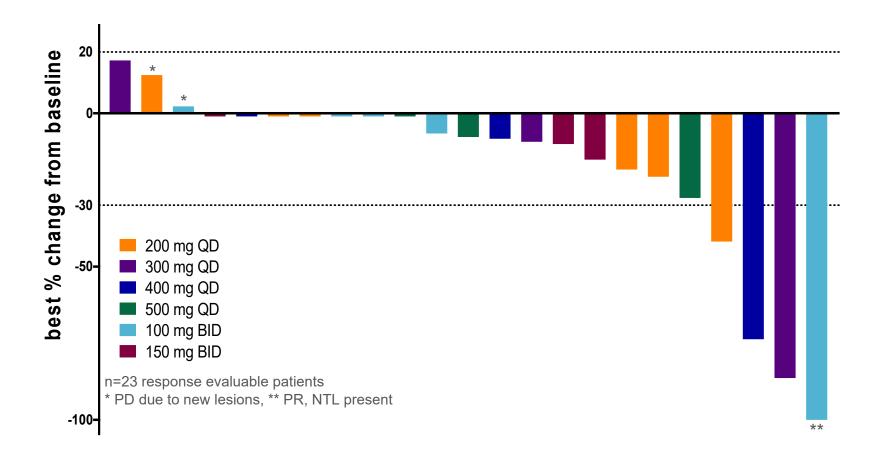
Less Gr 4 neutropenia: opportunity to reduce patient monitoring



Continuously dosed lerociclib: promising efficacy



Anti-tumor activity at all dose levels



Lerociclib: key takeaways



1

Differentiated oral CDK4/6i

- Less dose-limiting neutropenia; potential for less frequent blood count monitoring
- Favorable GI tolerability profile
- Advantages in the adjuvant BC setting

2

Opportunity in BC and other indications

- Additional data and dose selection in 4Q19
- Initiating pivotal BC trial in 2H20
- Ongoing trial in EGFRm NSCLC in combination with Tagrisso

3

Efficient BC clinical/ regulatory pathway

 Established development parameters for CDK4/6i therapies in breast cancer





G1T48: key takeaways



(1)

Established need for oral SERD

- > 300,000 women in U.S. and Europe diagnosed with ER+, HER2- BC each year
- Intramuscular (IM) SERD fulvestrant is effective but not indicated for adjuvant setting

2

Potential for oral SERD

- Oral delivery provides opportunity to move SERD into earlier lines of therapy, including adjuvant settings
- Monotherapy and combination regimens



G1T48: potential bestin-class oral SERD

- Differentiated chemistry, favorable tolerability
- Encouraging Phase 1 data presented @ ESMO 2019
- Initiating Phase 3 combination trial with CDK4/6i in 2H20

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

✓ ¹⁸F-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

Favorable tolerability and safety profile; AEs mostly Grade 1



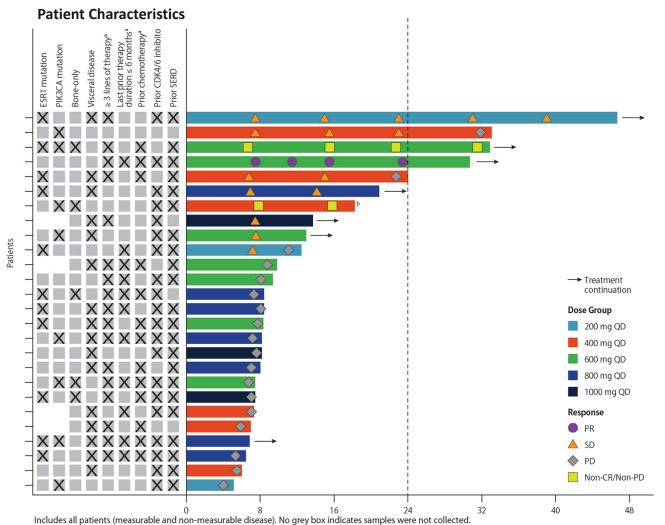
Drug-related adverse event	Grade 1	Grade 2	Grade 3	Grade 4	Total (N=26)
Fatigue	6 (23.1%)	1 (3.8%)	1 (3.8%)	0	8 (30.8%)
Hot flush	5 (19.2%)	2 (7.7%)	0	0	7 (26.9%)
Diarrhea	6 (23.1%)	1 (3.8%)	0	0	7 (26.9%)
Headache	4 (15.4%)	0	0	0	4 (15.4%)
Nausea	4 (15.4%)	0	0	0	4 (15.4%)
Muscle spasms	2 (7.7%)	1 (3.8%)	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

Efficacy demonstrated in heavily pre-treated population





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

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.

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