Puma Biotechnology

Corporate Presentation

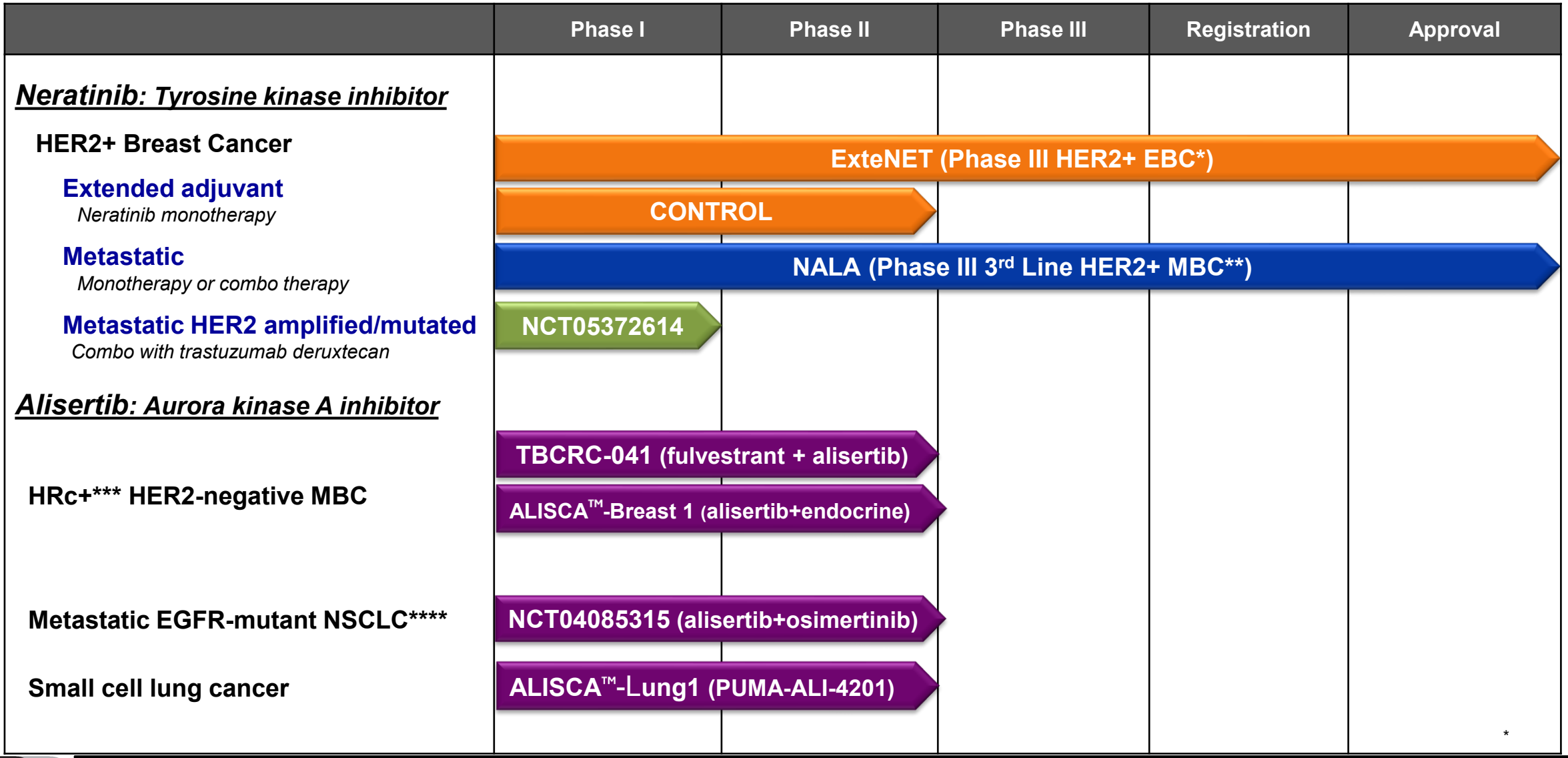
November 2025

Forward-Looking Safe-Harbor Statement

This presentation contains forward-looking statements, including statements regarding commercialization of NERLYNX® and the potential indications and development of our drug candidates. All forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are based on our current expectations, forecasts and assumptions, and actual outcomes and results could differ materially from these statements due to a number of factors, which include, but are not limited to, any adverse impact on our business or the global economy and financial markets, generally, from the global COVID-19 pandemic, and the risk factors disclosed in our periodic and current reports filed with the Securities and Exchange Commission from time to time, including our Annual Report on Form 10-K for the year ended December 31, 2024, and subsequent filings. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We assume no obligation to update these forward-looking statements except as required by law.

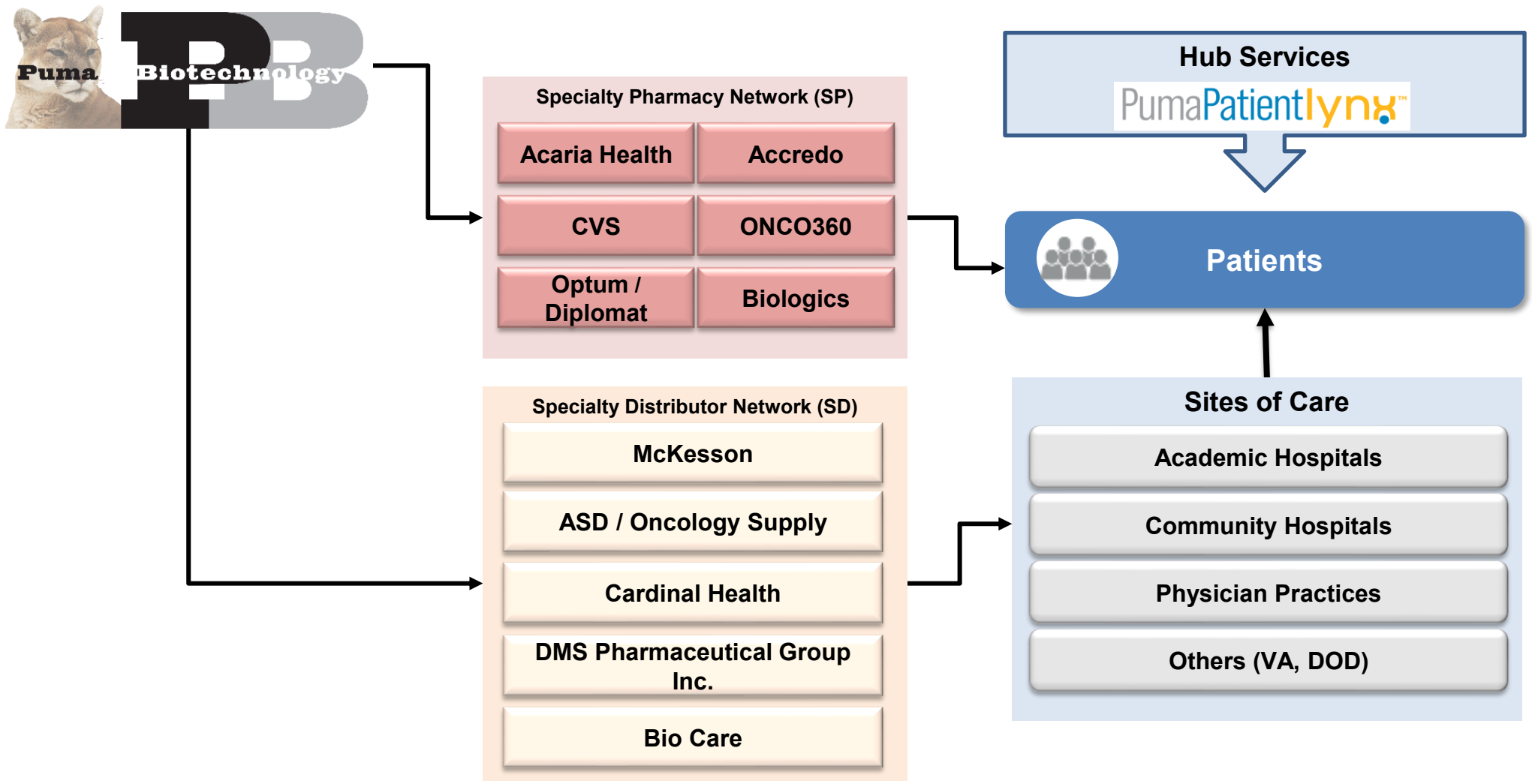
Puma Biotechnology

Product Pipeline



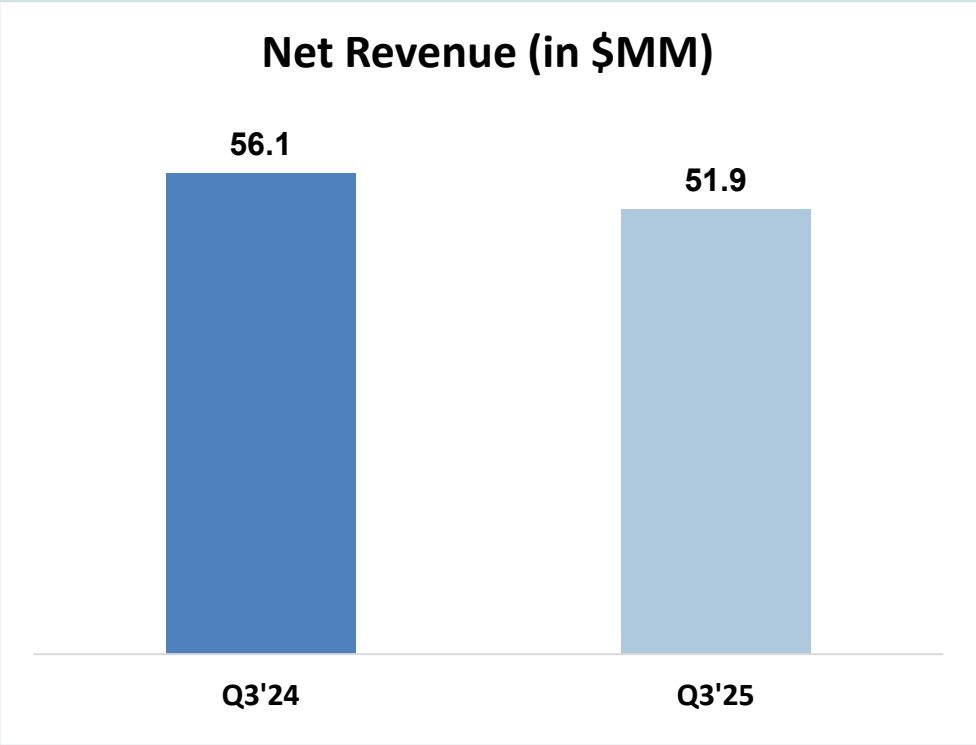
* ECB: Early breast cancer ** MBC: Metastatic breast cancer *** HRc+: Hormone receptor positive ****NSCLC: Non-small cell lung cancer

Puma's Pharmacy and Distributor Network



$51.9 Million Net NERLYNX Revenue in Q3’25

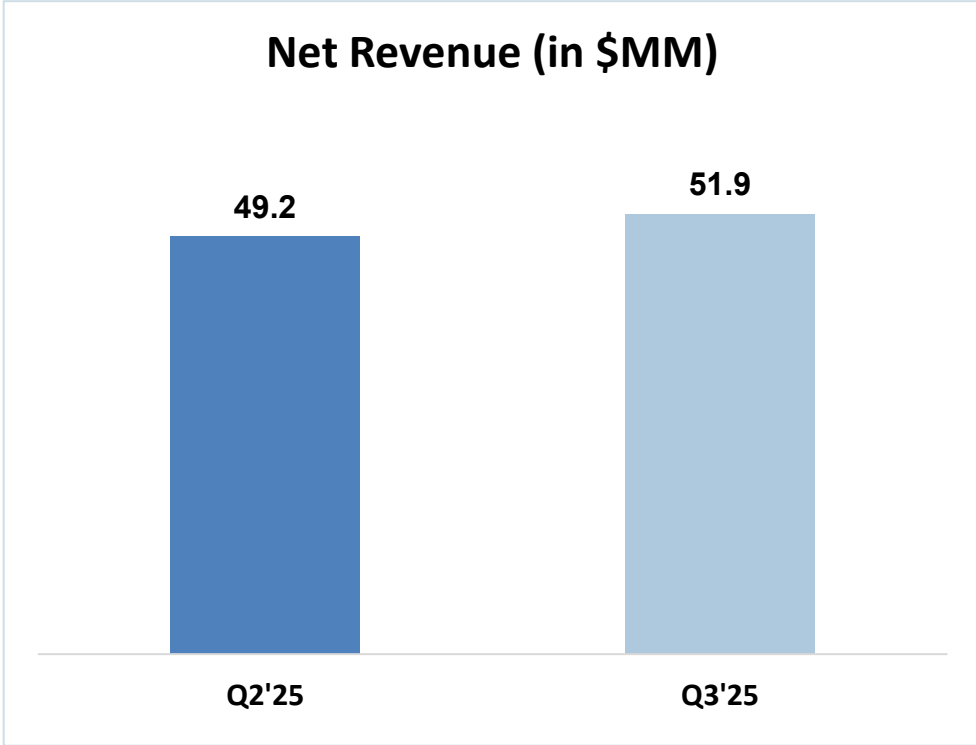
~8% decrease in Q3’25 compared to Q3’24



Inventory Change ($)

Q3’24	Q3’25
$0.7 mil	$3.1 mil

~6% increase in Q3’25 compared to Q2’25

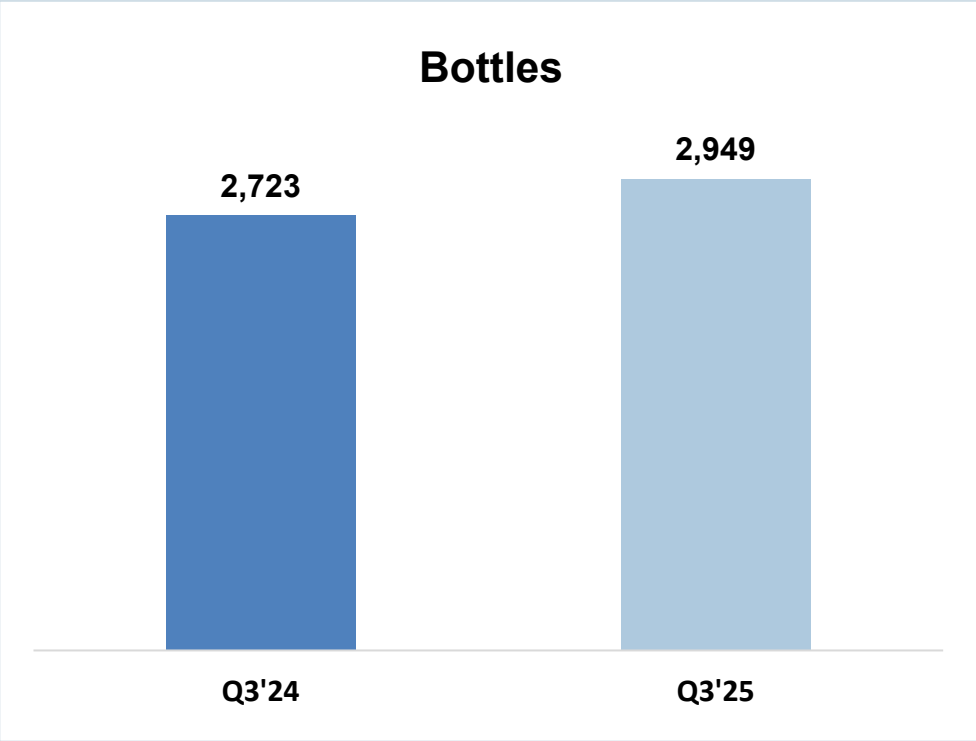


Inventory Change ($)

Q2’25	Q3’25
-$1.3 mil	$3.1 mil

2,949 Ex-Factory Bottles Were Sold in Q3’25

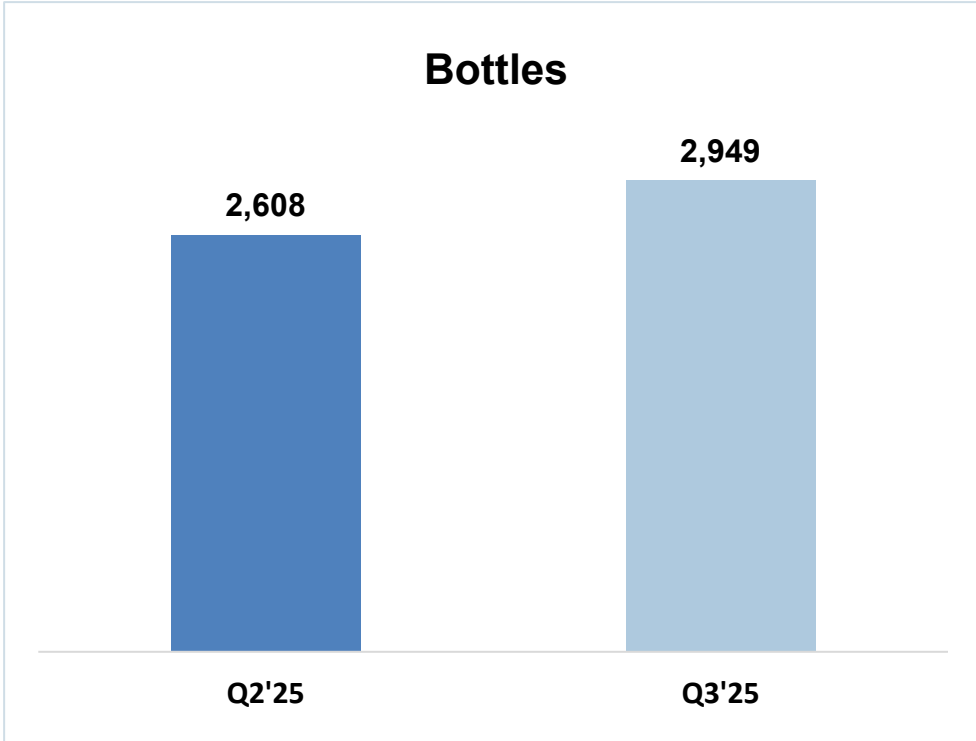
~8% increase in Q3’25 compared to Q3’24



Inventory Change Bottles

Q3’24	Q3’25
39	182

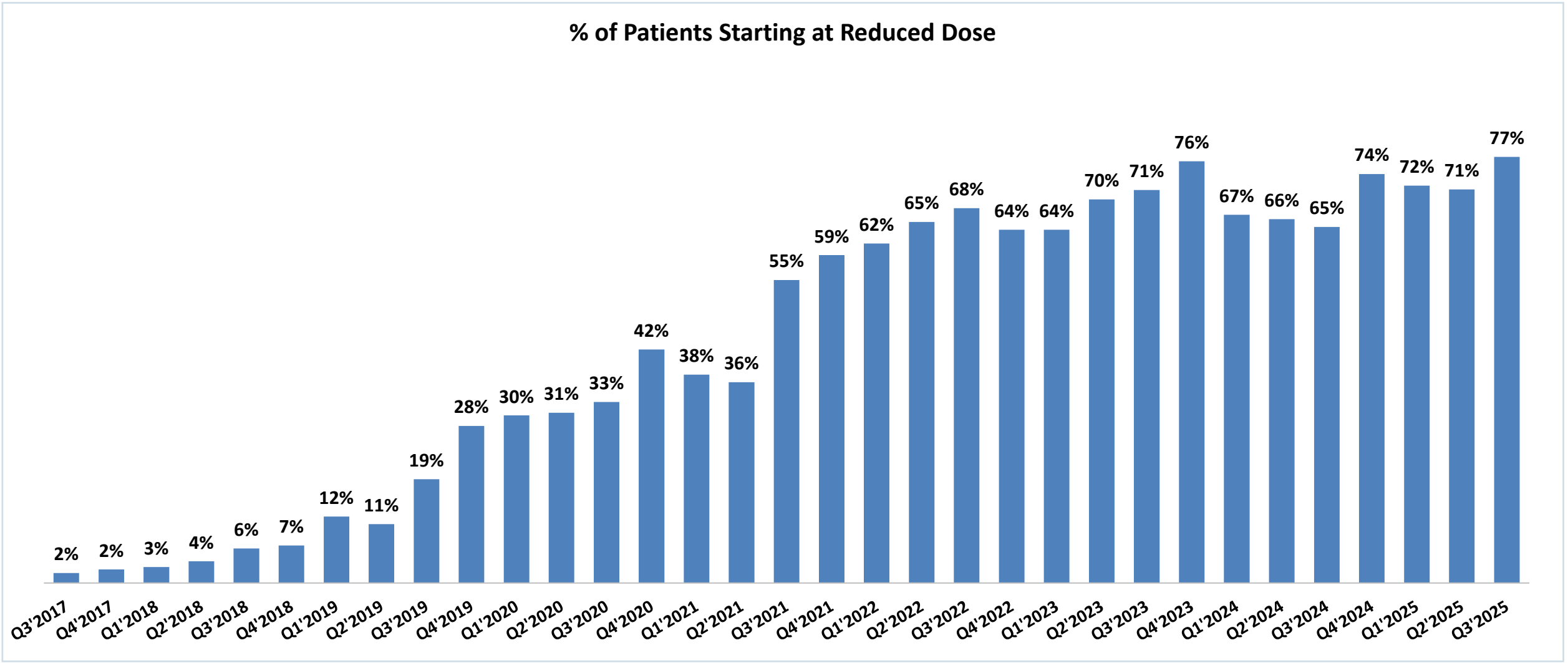
~13% increase in Q3’25 compared to Q2’25



Inventory Change Bottles

Q2’25	Q3’25
-85	182

~77% of Patients in Q3’25 Started at a Reduced Dose*



*Reduced dose defined as fewer than 6 pills per day

Rest of World Partnerships – Timelines

Region	Partner	Regulatory Approvals	Commercial Launches
Australia / SE Asia	Specialised Therapeutics	• 2019 – Ext. Adj. in Australia, Singapore • 2020 – Ext. Adj. in Brunei, Malaysia, New Zealand • 2022 – Ext. Adj. in the Philippines; mBC in Singapore • 2023 – mBC in Malaysia • 2024 – Ext. Adj. and mBC in Thailand	• 2020 – Singapore • 2021 – Malaysia, Brunei, New Zealand
Israel	MEDISON	• 2020 – Approved in Ext. Adj. and mBC	• 2020 – Launched
Canada	Knight	• 2019 – Ext. Adj. approved • 2021 – mBC approved	• 2020 – Launched
Latin America	PINT PHARMA	• 2019 – Ext Adj in Argentina • 2020 – Ext. Adj in Chile, Ecuador; mBC in Argentina • 2021 – Ext Adj. and mBC in Peru; mBC in Chile; Ext. Adj. in Brazil • 2022 – Ext. Adj. in Mexico; mBC in Ecuador • 2023 – mBC in Colombia and Mexico • 2024 – mBC in Brazil	• 2020 – Argentina • 2021 – Chile and Peru • 2022 – Brazil • 2023 – Mexico and Colombia
Europe Greater China Middle East North and West Africa South Africa Turkey	Pierre Fabre	• 2019 – Ext. Adj. EMA and Hong Kong • 2020 – Ext. Adj. in China, Taiwan • 2021 – mBC in Taiwan • 2023 – Ext. Adj. in Morocco, South Africa, and UAE • 2024 – Ext. Adj. in Syria, Saudi Arabia, Algeria, Turkey • **Q3 2025 – Ext. Adj. in Lebanon**	• 2019 – Germany, UK, Austria • 2020 – Sweden, Finland, Scotland, Switzerland, Denmark, HK • 2021 – China, Taiwan, Greece, Czech Republic, Luxembourg • 2022 – Ireland and Spain • 2023 – Slovakia • 2024 – Morocco, South Africa, UAE, Turkey, Saudi Arabia • Q1 2025 – Libya
South Korea	BIXINK THERAPEUTICS	• 2021 – Ext. Adj. in S. Korea	• 2022 – Launched
Russia/CIS	ER-KIM	• Distribution agreement executed	

NERLYNX® Extended Adjuvant HER2+ Breast Cancer Market Size

- Approximately 28,300 patients (US) with early stage HER2+ breast cancer treated with adjuvant treatment[1]
  - Approximately 6,000 patients (US) with HR positive early stage HER2+ breast cancer and no pathological complete response to neoadjuvant treatment (high risk disease)
- Approximately 37,000 patients (EU) with early stage HER2+ breast cancer treated with adjuvant treatment[1]
  - Approximately 65–70% of patients have HR positive disease

[1]Roche epidemiology slides 09/18

Puma Financial Guidance for Q4 and FY 2025

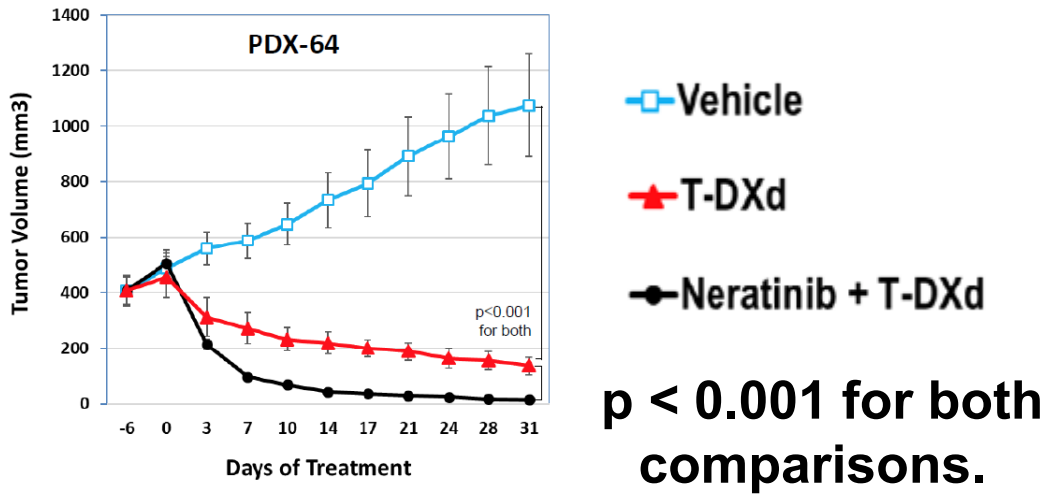
	Q4 2025	(prior) Full Year 2025	(updated) Full Year 2025
NERLYNX revenue guidance:	$54–$56 mil	$192–$198 mil	$198–$200 mil
NERLYNX royalty guidance:	$13–$14 mil	$20–$24 mil	$22–$23 mil
NERLYNX license revenue:	$0 mil	$0 mil	$0 mil
Total Revenue	$67–$70 mil	$212–$222 mil	$220–$223 mil
Net income (loss)*:	$9–$11 mil	$23–$28 mil	$27–$29 mil
Gross to net adjustment:	24%–25%	21.5%–22.0%	23%–23.5%

* The outlook above does not include any potential adjustments for tax valuation allowance

NCI ETCTN trial 10495 – Phase I safety study of Neratinib+T-DXd

Rationale

1. Neratinib enhances uptake of T-DXd.
2. Neratinib enhances the tumor regression from T-DXd in HER2 mutant breast cancer PDX's.



p < 0.001 for both comparisons.

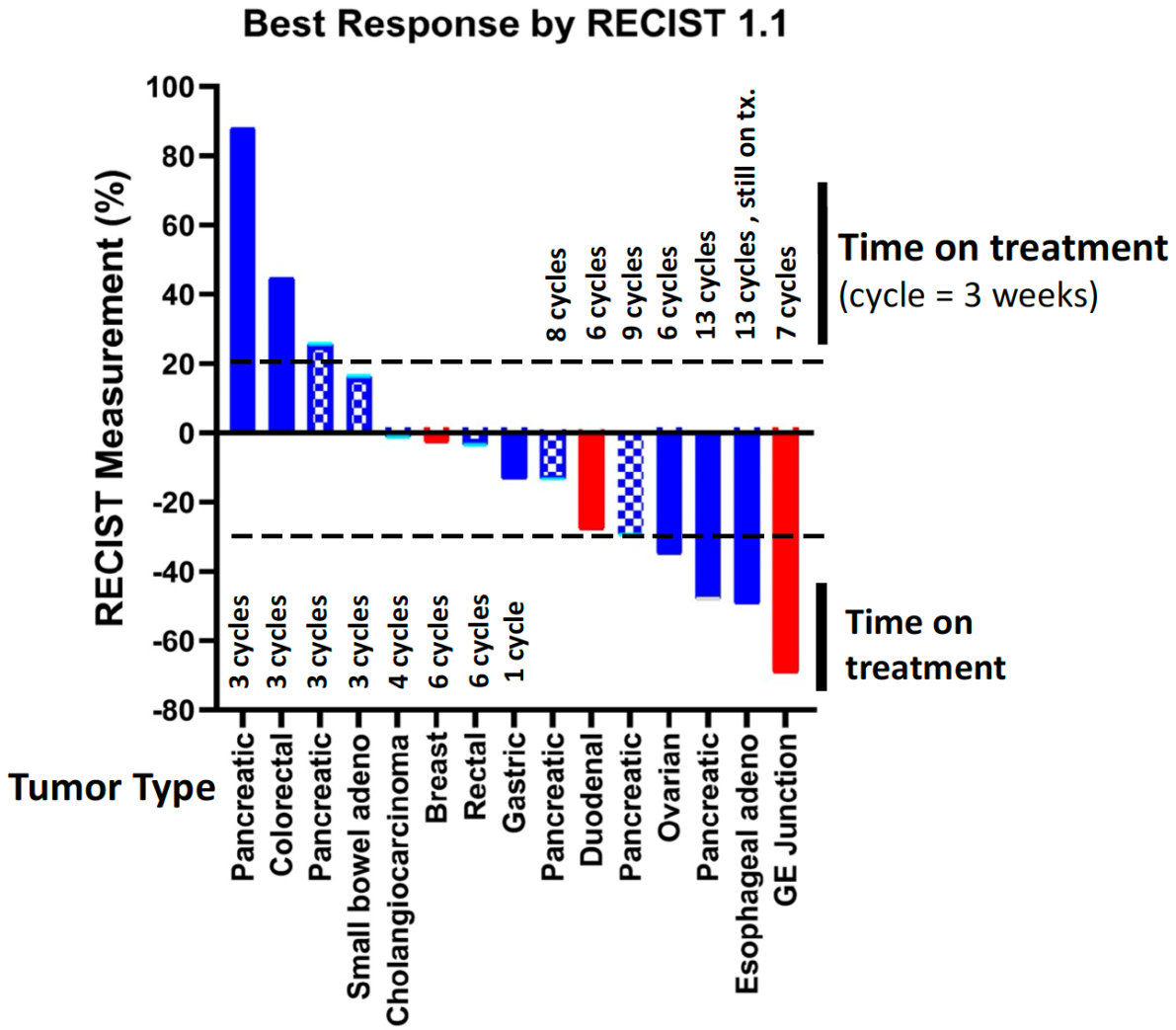
Bose et al., SABCS 2020

Dose escalation:

Dose Level	Neratinib	T-DXd
Level -1	120 mg PO, QD	5.4 mg/Kg, IV, q3 Week
Level 1*	120 mg PO, QD C1D1-7 160 mg, PO, QD C1D8 onward	5.4 mg/Kg, IV, q3 Week
Level 2	120 mg PO, QD C1D1-7 160 mg, PO, QD C1D8-14 200 mg, PO, QD C1D15 onward	5.4 mg/Kg, IV, q3 Week
Level 3	120 mg PO, QD C1D1-7 160 mg, PO, QD C1D8-14 240 mg, PO, QD C1D15 onward	5.4 mg/Kg, IV, q3 Week

Interim data reported H1 2025

Interim Data Presented at AACR 2025



Red = HER2 mutation

Solid Blue = HER2 3+ IHC

Hatched Blue = HER2 amplified by NGS or FISH

- Data cutoff 2/17/25
- There were 3 confirmed partial responses (PR) and 1 unconfirmed PR (ovarian cancer patient)

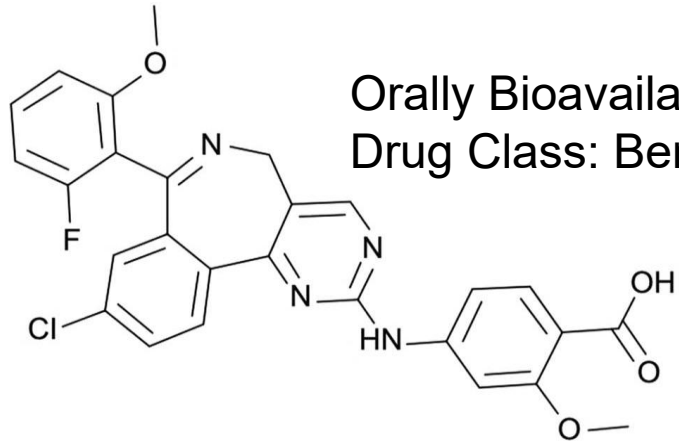
ALISERTIB

Breast Cancer and Small Cell Lung Cancer

Puma Biotechnology

Alisertib (MLN 8237)

Aurora Kinase A (AURKA) inhibitor

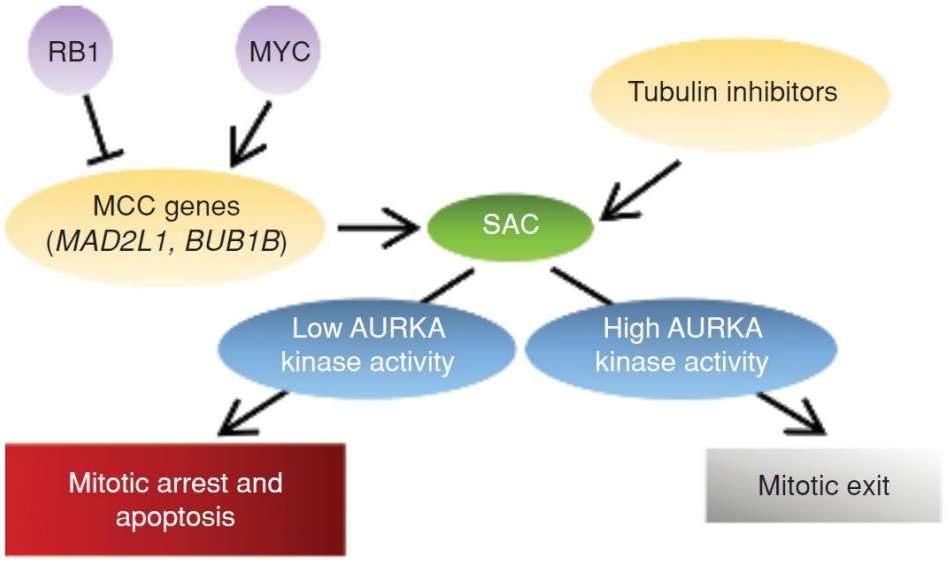


Orally Bioavailable
Drug Class: Benzazepine

- Single-agent and combinational clinical activity in solid tumors including hormone receptor-positive breast cancer (HR+ MBC), triple negative breast cancer (TNBC), small cell lung cancer (SCLC), and head and neck cancer
- Single-agent clinical activity in hematologic malignancies including peripheral T-cell lymphoma (PTCL) and aggressive non-Hodgkin's lymphoma (NHL)
- Well-characterized safety profile: ~1,300 patients treated across 22 company-sponsored trials

Synthetic Lethality of AURKA and Rb1

Cancers with a hypersensitive spindle assembly checkpoint (SAC) depend on AURKA for mitotic exit and survival[1]

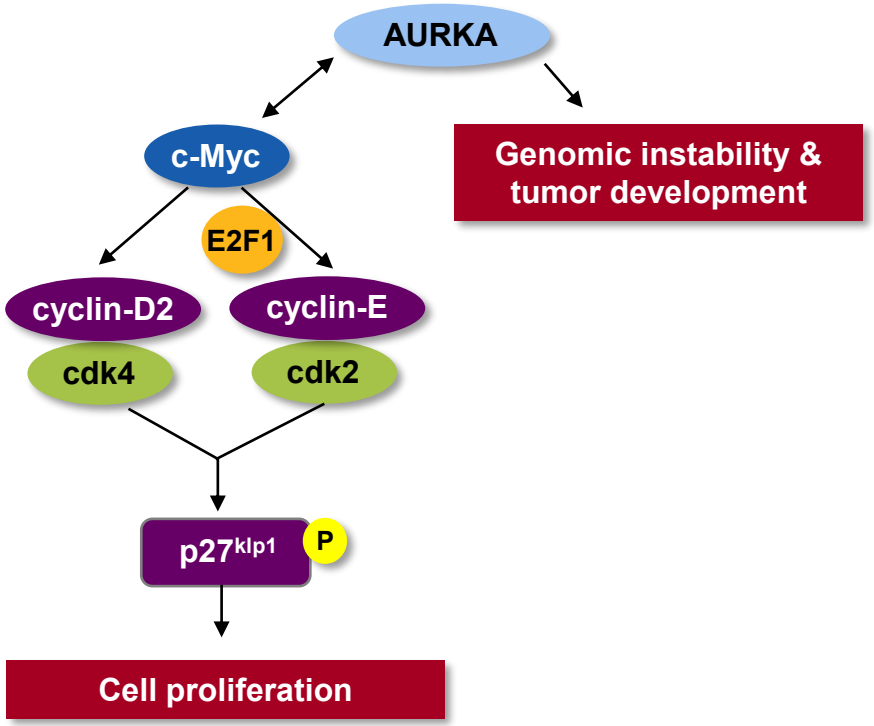


- Loss of function of Rb1 is a common event in cancer and can emerge as a mechanism of resistance to EGFR, CDK4, and ER-targeted therapies in breast and lung cancers
- Rb1 controls entry into S phase of mitosis, and loss of Rb1 function leads to a hyperactivated, primed, SAC
- Cancers with a hyperactivated SAC depend on AURKA in order to overcome SAC priming, which leads to stalled mitosis

[1]Dick F Cancer Discovery Feb 2019, Gong X Cancer Discov 2019

AURKA and c-Myc Co-regulate Each Other

Nuclear AURKA exerts kinase-independent functions by acting as a transcription factor



- AURKA and c-Myc transcriptionally upregulate each other, suggesting the existence of a positive feedback loop
- c-Myc upregulates Cyclin D2, CDK4, and cyclin-E, contributing to complex formation and subsequent phosphorylation of p27Kip1, which leads to cell proliferation

Naso FD Oncogene 2021, Tang A Oncotarget 2017

Clinical Development of Alisertib in Breast Cancer

Phase II Study of Alisertib Monotherapy in Solid Tumors

- Breast Cancer Cohorts

Study design:

- Pts had to have undergone ≤ 2 previous cytotoxic regimens, not including adjuvant or neoadjuvant treatments
- Alisertib administered orally in 21-day cycles at 50 mg twice daily for 7 days followed by a break of 14 days
- 1° Endpoint: Objective Response Rate (RECIST 1.1)

	All (n=49)	Hormone receptor-positive and HER2-negative (n=26)	HER2-positive (n=9)	Triple negative (n=14)
Median (range) number of cycles	4·0* (1–23)	8·0 (1–23)	6·0 (1–19)	2·0 (1–14)
Best response				
Objective response†	9 (18%) (9–32)	6 (23%)	2‡ (22%)	1 (7%)
Stable disease	25 (51%) (36–66)	17 (65%)	3 (33%)	5 (36%)
Stable disease for ≥6 months	10 (20%)	8 (31%)	1 (11%)	1 (7%)
Progressive disease	15 (31%) (18–45)	3 (12%)	4 (44%)	8 (57%)
Duration of response (months)	5·6 (2·8–12·0)	4·2	11·2	4·2
Progression-free survival (months)	5·4 (2·6–7·9)	7·9 (4·2–12·2)	4·1 (0·95–15·0)	1·5 (1·2–3·2)
Time to progression (months)	5·4 (2·6–7·9)	7·9 (4·2–12·2)	4·1 (0·95–15·0)	1·5 (1·2–3·2)

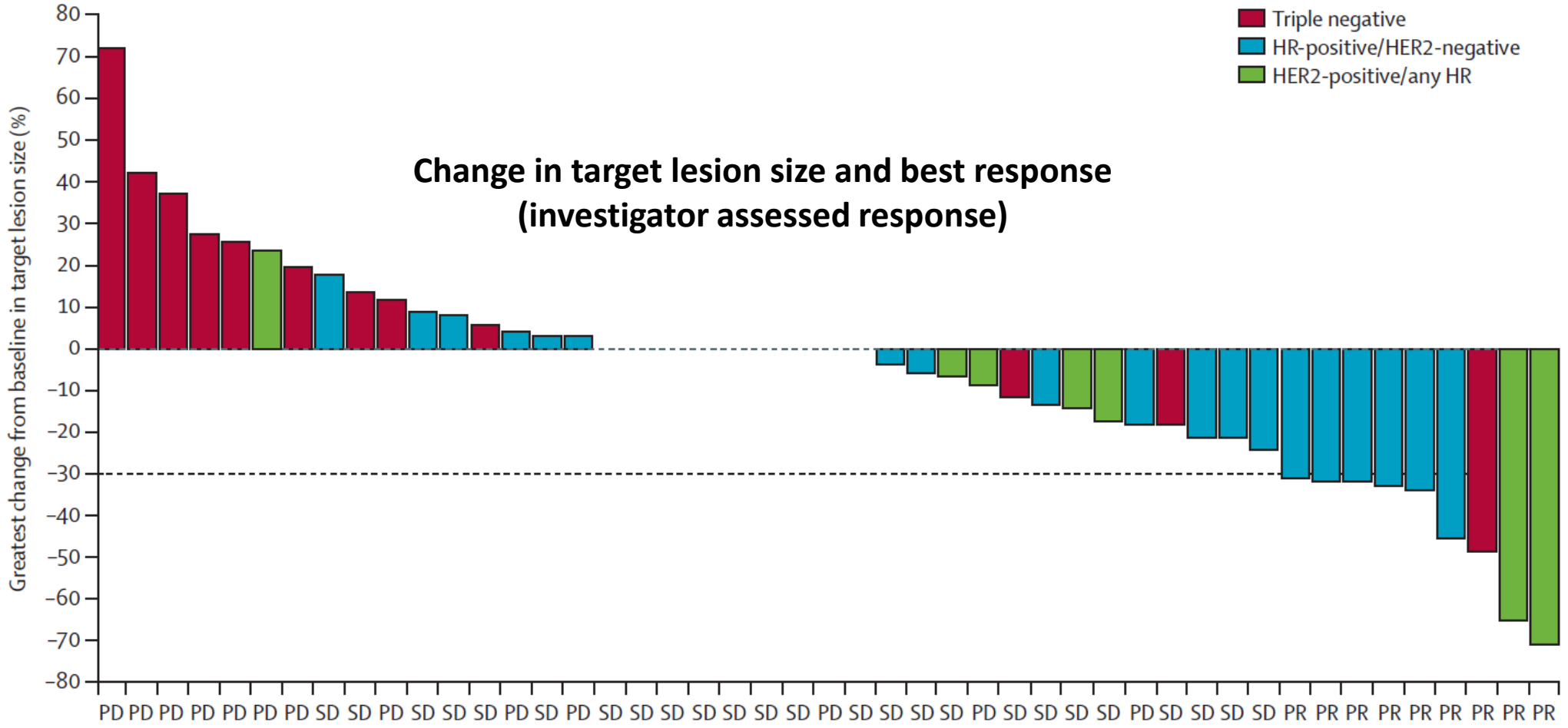
Data are either number of patients (%) (95% CI), or median (95% CI), unless otherwise stated. For the breast cancer subgroup, numbers of patients were too small to calculate 95% CIs. *Safety population. †All were partial responses. . ‡ These two patients had the only hormone receptor-negative tumors in the cohort. All responses were based on investigator tumor assessments (RECIST v1.1).

Melichar B Lancet Oncol 2015

Phase II Study of Alisertib Monotherapy in Solid Tumors

- Breast Cancer Cohorts

9 / 49 patients (18%; 95% CI 9–32) had an objective response; all responders achieved a partial response



PD=progressive disease. SD=stable disease. PR=partial response. Dotted line at –30% represents a partial response, according to RECIST 1.1 (investigator tumor assessments).

Melichar B Lancet Oncol 2015

Phase II Study of Alisertib Monotherapy in Solid Tumors

- Breast Cancer Cohorts

All-cause adverse events in safety evaluable breast cancer cohort (n=53)

	Grade 1–2	Grade 3–4
Any adverse event	8 (15%)	44 (83%)
Neutropenia	3 (6%)	30 (57%)
Fatigue	23 (43%)	6 (11%)
Anaemia	17 (32%)	4 (8%)
Alopecia	26 (49%)	NA
Diarrhoea	25 (47%)	2 (4%)
Nausea	15 (28%)	2 (4%)
Leukopenia	5 (9%)	19 (36%)
Stomatitis	16 (30%)	8 (15%)
Decreased appetite	13 (25%)	0
Vomiting	11 (21%)	1 (2%)
Thrombocytopenia	8 (15%)	4 (8%)
Somnolence	14 (26%)	1 (2%)
Dyspnoea	9 (17%)	3 (6%)
Constipation	9 (17%)	0
Pyrexia	4 (8%)	1 (2%)
Peripheral oedema	9 (17%)	0
Headache	11 (21%)	0
Insomnia	6 (11%)	0
Cough	8 (15%)	1 (2%)
Asthenia	2 (4%)	3 (6%)
Dehydration	5 (9%)	3 (6%)

Table adapted from Melichar B Lancet Oncol 2015. Data are number of patients with AE (%) for AEs of any grade in at least 10% of patients overall. NA = not applicable

Melichar B Lancet Oncol 2015

Phase II Randomized Trial of Alisertib + Fulvestrant vs Alisertib in Advanced HR+ Breast Cancer

Patients (n=96 randomized)

Inclusion Criteria

- Post-menopausal women
- Histologically-proven ER+ (>10% expression) and HER2 negative
- No more than two prior chemotherapy regimens
- Prior treatment with fulvestrant in the metastatic setting required
- Disease that is measurable as defined by the RECIST criteria

Regimen & Schedule

- **Alisertib + Fulvestrant**: Alisertib 50 mg PO BID on days 1-3, 8-10, 15-17 q 28-day cycle with fulvestrant 500 mg IM on days 1 and 15 of cycle 1 then day 1 of all subsequent cycles
- **Alisertib Alone**: Alisertib 50 mg PO BID on days 1-3, 8-10, 15-17 q 28-day cycle

Patient Characteristics

	Alisertib (n=46)	Alisertib + Fulvestrant (n=45)
Prior Chemotherapy (Neo)Adjuvant Setting Metastatic Setting	 27 (58.7%) 22 (47.8%)	 27 (60.0%) 31 (68.9%)
Prior (Neo)Adj Endocrine Therapy Aromatase Inhibitor SERM Fulvestrant	 30 (65.2%) 16 (34.8%) 7 (15.2%)	 26 (57.8%) 22 (48.9%) 2 (4.4%)
Prior Endocrine Therapy for MBC Anastrozole/Letrozole Exemestane Fulvestrant	 29 (63.0%) 16 (34.8%) 45 (97.8%)	 37 (82.2%) 26 (57.8%) 45 (100.0%)
Prior Targeted Therapy for MBC CDK 4/6 inhibitor Everolimus	 46 (100%) 17 (37.0%)	 45 (100%) 26 (57.8%)

Clinical Outcomes

	Alisertib (n=46)	Alisertib + Fulvestrant (n=45)
Confirmed Responses	**9 PR**	**1 CR; 8 PR**
Objective Response Rate	**19.6% (90% CI: 10.6-31.7%)**	**20.0% (90% CI: 10.9-32.3%)**
Clinical Benefit Rate (24-week)	**41.3% (90% CI: 29.0-54.5%)**	**28.9% (90% CI: 18.0-42.0%)**
Medan PFS (months)	**5.6 (95%CI: 3.9-10.0)**	**5.4 (95%CI: 3.9-7.8)**
Estimated mOS 12-month OS rate	**22.7 mos 75.1% (95% CI: 63.4-89.0%)**	**19.8 mos 62.7% (95% CI: 49.7-79.0%)**

Haddad TC *JAMA* Onc. 2023;9(6):815-824.

Phase II Randomized Trial of Alisertib + Fulvestrant vs Alisertib in Advanced HR+ Breast Cancer

Safety				
	Alisertib (n=46)		Alisertib + Fulvestrant (n=45)	
	Gr3	Gr4	Gr3	Gr4
Hematologic Adverse Events				
Anemia	15%	2%	9%	0%
Lymphocyte Count Decreased	4%	0%	13%	0%
Neutrophil Count Decreased	24%	17%	20%	22%
White Blood Cell Count Decreased	13%	4%	22%	9%
Non-Hematologic Adverse Events				
Fatigue	0%	0%	9%	0%

Reason for Treatment Discontinuation	Alisertib (n=46)^	Alisertib + Fulvestrant (n=45)^
Disease progression	38*	31
Intolerability	2	6
Patient Refusal	0	4
Physician Decision	1	0
Second Primary Cancer	0	1
Death	2	1

*17/37 patients who discontinued due to PD crossed over to alisertib + fulvestrant.
^3 patients continued on alisertib and 2 patients continued on alisertib + fulvestrant at time of data lock on January 10, 2022.

Haddad TC *JAMA* Onc. 2023;9(6):815-824.

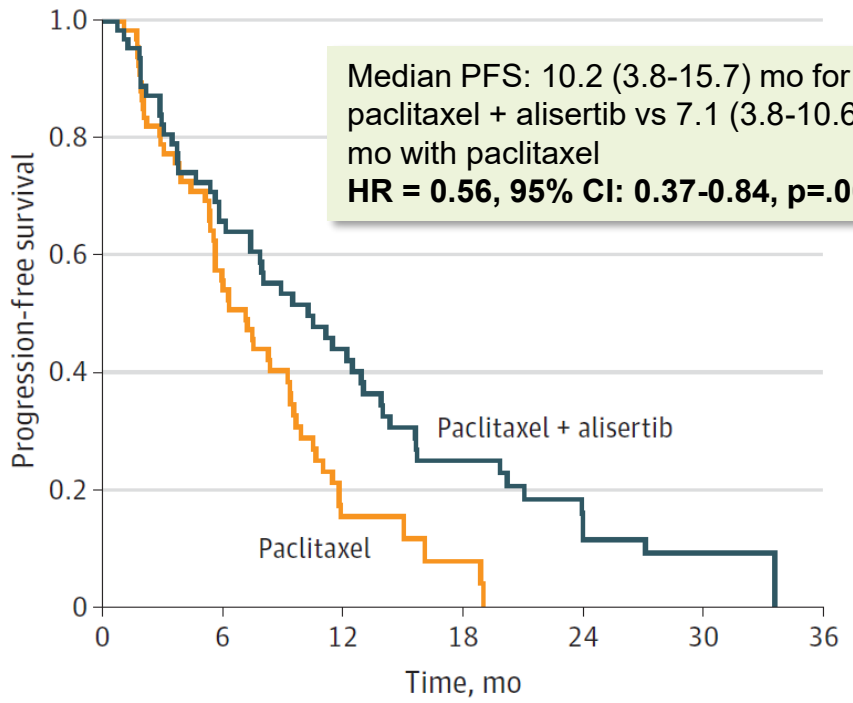
Phase II Randomized Study of Paclitaxel + Alisertib vs Paclitaxel Alone

- Efficacy in ER+/HER2- MBC Cohort

Study design:

- Patients with ER+/HER2- or triple negative metastatic breast cancer stratified by prior neo or adjuvant taxane and by line of metastatic therapy
- Randomized 1:1 to paclitaxel + alisertib or paclitaxel alone in 28-day cycles
- Paclitaxel 60mg/m2 intravenously (IV) on days 1, 8, and 15 plus alisertib 40 mg twice daily on days 1 to 3, 8 to 10, and 15 to 17 of a 28-day cycle or to single agent paclitaxel 90mg/m2 IV on days 1, 8, and 15 of a 28-day cycle
- 1° endpoint PFS

PFS in ER+/HER2- ITT



No. at risk

Paclitaxel + alisertib	69	39	23	12	5	2	0
Paclitaxel	70	32	8	2	0		

Median OS: 26.3 (12.4-37.2) mo for paclitaxel + alisertib vs 25.1 (11.0-31.4) mo for paclitaxel (HR, 0.89; 95%CI, 0.58-1.38; *P* = .61)

O'Shaughnessy J JAMA Netw Open 2021

Phase II Randomized Study of Paclitaxel + Alisertib vs Paclitaxel Alone

- Efficacy in ER+/HER2- MBC Cohort Pretreated with Palbociclib

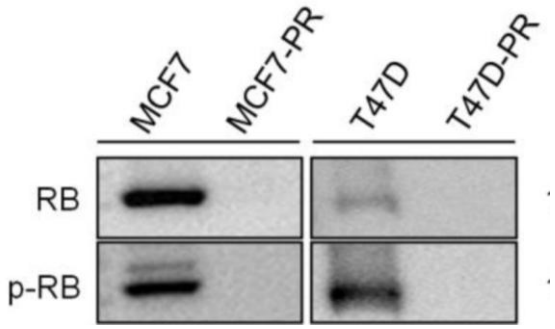
Efficacy in patients pretreated with palbociclib (n=30)

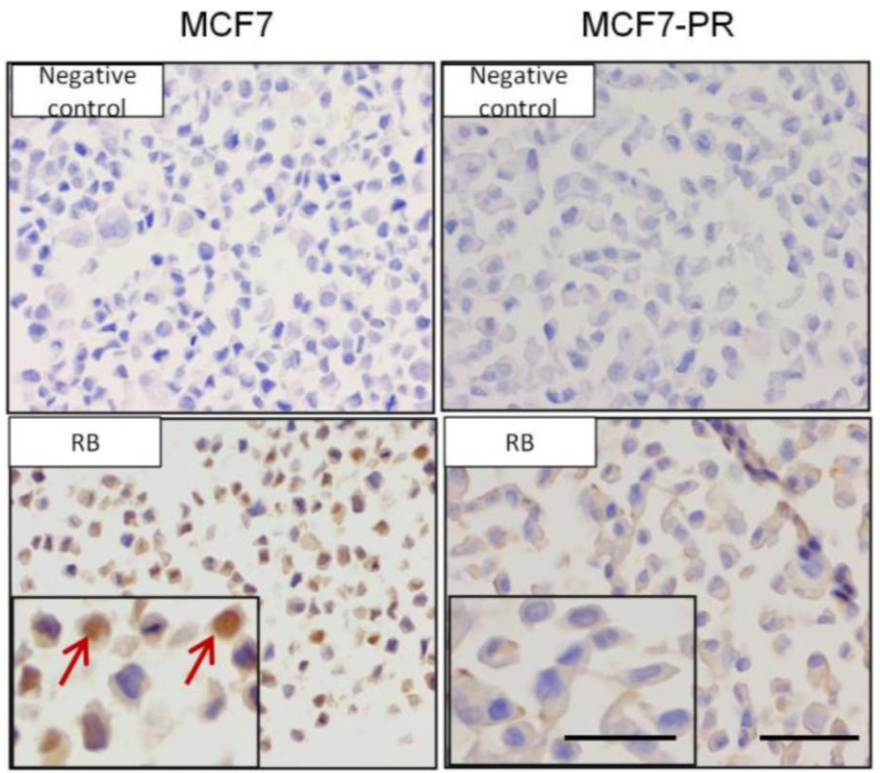
- Median PFS: 13.9 (5.6-15.6) mo (14 pts) w/ paclitaxel + alisertib vs 5.6 (3.0-10.6) mo (16 pts) w/ paclitaxel alone (HR, 0.58; 95%CI, 0.26-1.32; *P* = .19)
- CBR: 61.5% w/ paclitaxel + alisertib (95%CI,31.6%-86.1%) vs 37.5% (95%CI, 15.2%-64.6%) w/ paclitaxel alone

Rb1 Loss and *c-Myc* Upregulation Correlate with Palbociclib Resistance

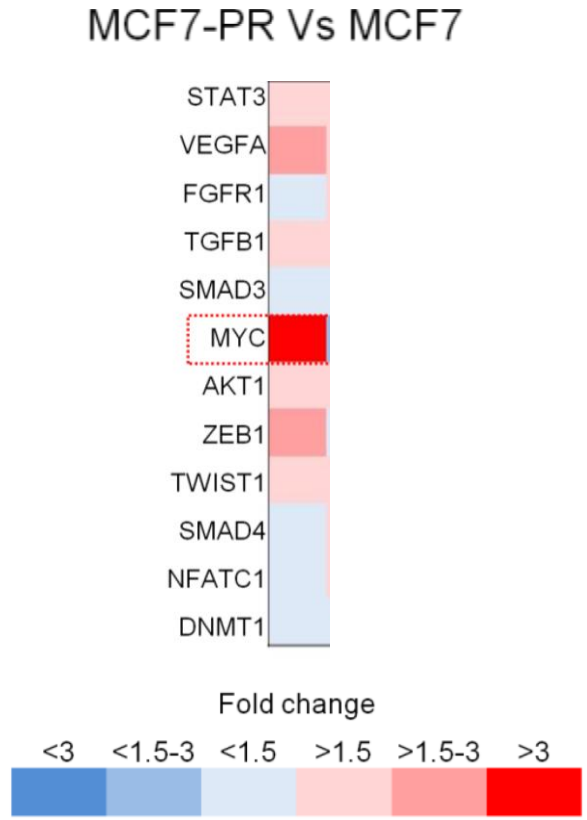
Both RB1 loss and MYC upregulation were observed in palbociclib-resistant HR+ breast cancer cell lines, supporting a role for alisertib in this setting

RB1 Loss





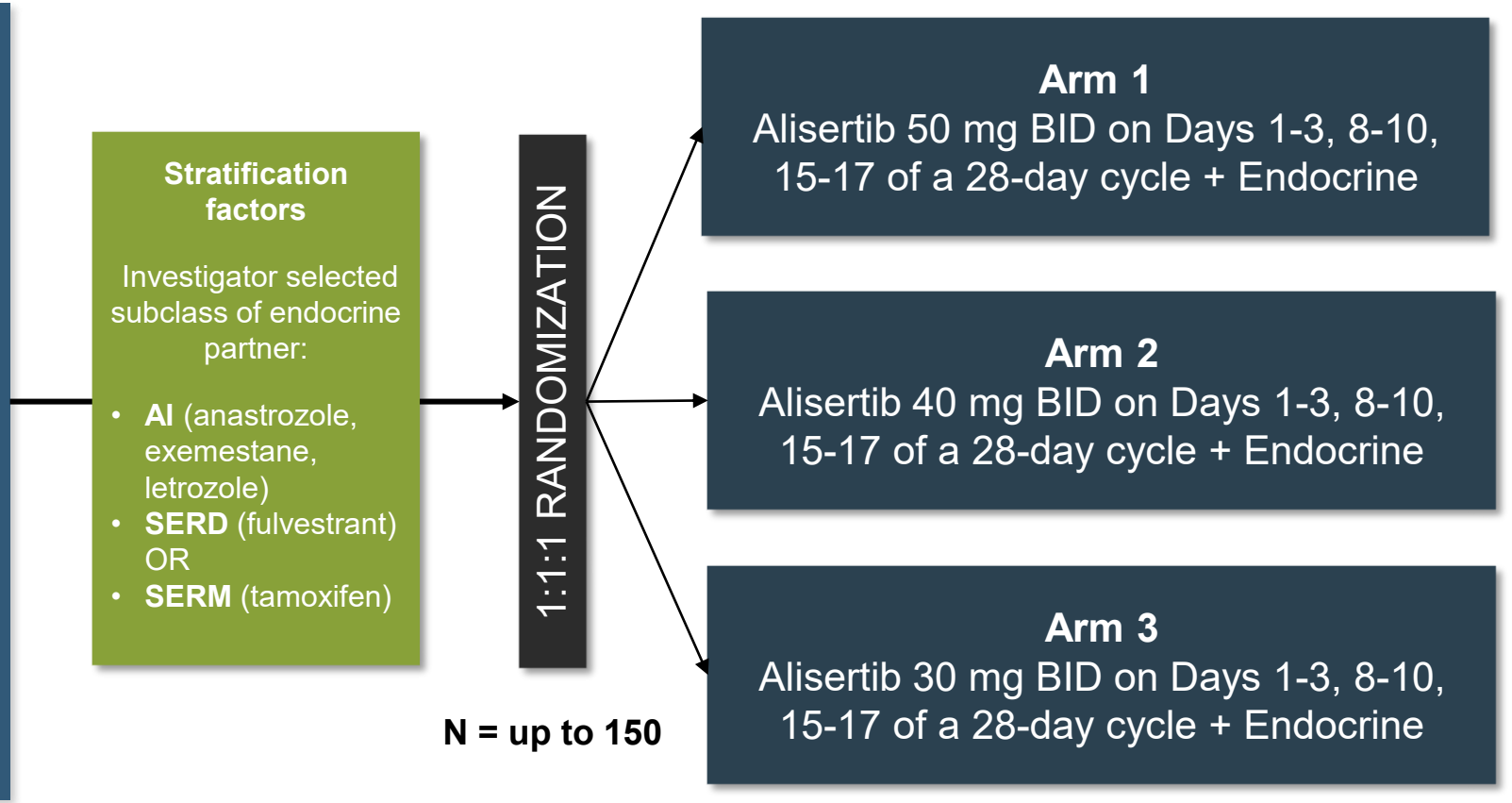
C-Myc Upregulation



ALISCA™-Breast1
Phase II dose optimization, biomarker evaluation in HR+/HER- MBC

Key inclusion criteria:

- HR+/HER2- mBC patients who have received at least 2 prior lines of endocrine therapy in the recurrent or metastatic setting
  - Must have received CDK4/6 inhibitors with endocrine therapy
  - Disease recurrence while receiving endocrine therapy in the adjuvant setting will count toward prior line of endocrine therapy
- RECIST v1.1 evaluable disease
- No prior chemotherapy



Primary objective: Dose optimization in combination based on safety and efficacy (ORR, DOR, DCR, PFS)

Secondary objective: PK/Dose response, biomarker selection based on efficacy

Interim data anticipated in H1 2026

Clinical Development in Small Cell Lung Cancer

Phase II Study of Alisertib Monotherapy in Solid Tumors

- SCLC Cohorts

Study design:

- Pts had to have undergone ≤ 2 previous cytotoxic regimens, not including adjuvant or neoadjuvant treatments
- Alisertib administration: orally in 21-day cycles at 50 mg twice daily for 7 days followed by a break of 14 days
- 1° Endpoint: Objective Response Rate (RECIST 1.1)

	All (n=48)	Chemotherapy-sensitive relapse (n=36)	Refractory or chemotherapy-resistant relapse (n=12)
Median (range) number of cycles	2·0* (1–17)	3·5 (1–17)	2·0 (2–6)
Best response			
Objective response†	10 (21%) (10–35)	7 (19%)	3 (25%)
Stable disease	16 (33%) (20–48)	13 (36%)	3 (25%)
Stable disease for ≥6 months	2 (4%)	2 (6%)	0
Progressive disease	22 (46%) (31–61)	16 (44%)	6 (50%)
Duration of response (months)	4·1 (3·1–NE)	3·1	4·3
Progression-free survival (months)	2·1 (1·4–3·4)	2·6 (1·4–3·7)	1·7 (1·2–3·9)
Time to progression (months)	2·6 (1·4–3·8)	2·8 (1·4–3·9)	1·4 (1·2–4·4)

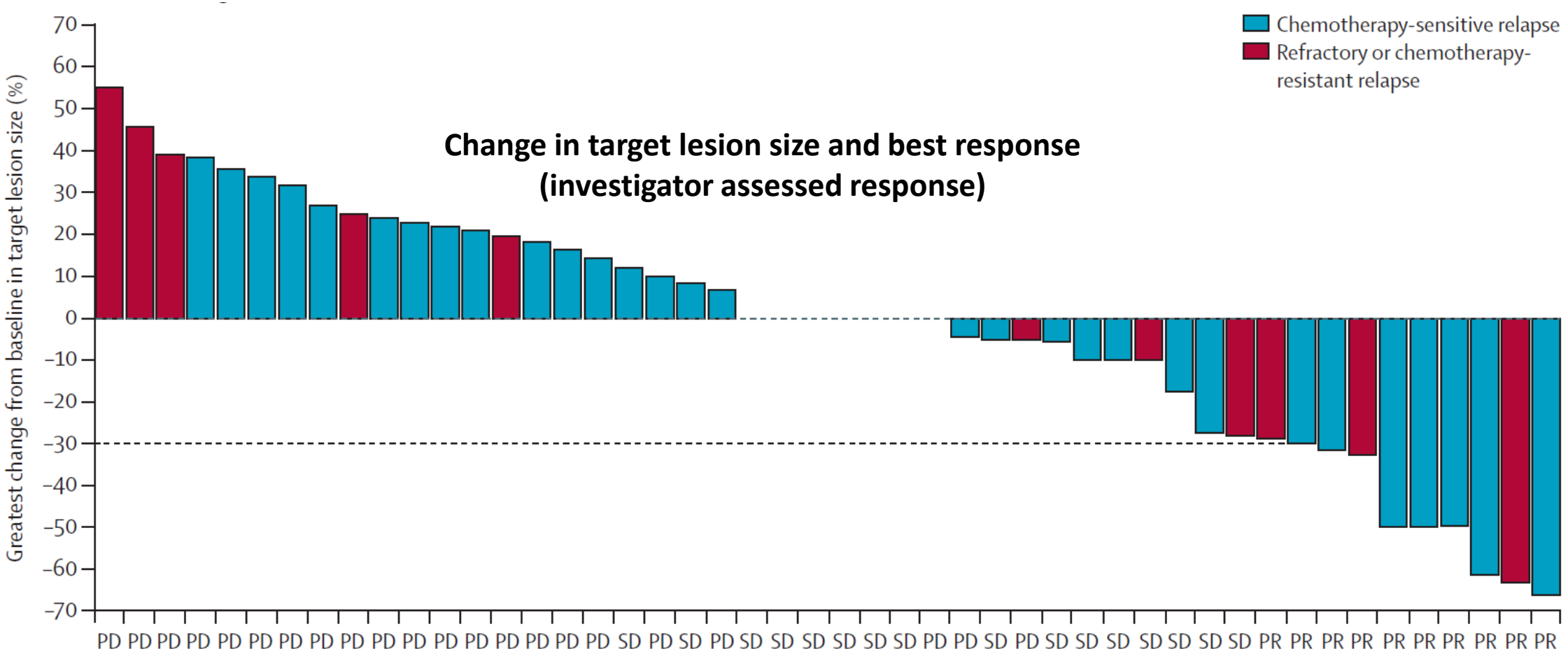
Table adapted from Melichar B Lancet Oncol 2015. Data are either number of patients (%) (95% CI), or median (95% CI), unless otherwise stated. NE=not estimable. *Safety population. †All were partial responses. All responses were based on investigator tumor assessments (RECIST v1.1).

Melichar B Lancet Oncol 2015

Phase II Study of Alisertib Monotherapy in Solid Tumors

- SCLC Cohorts

10 (21%; 95% CI 10–35) of 48 patients had an objective response; all responders achieved a partial response



PD=progressive disease. SD=stable disease. PR=partial response. Dotted line at –30% represents a partial response, according to RECIST 1.1 (investigator tumor assessments).

Melichar B Lancet Oncol 2015

Phase II Study of Alisertib Monotherapy in Solid Tumors

- SCLC Cohorts

All-cause adverse events in safety evaluable SCLC cohort (n=60)

	Grade 1–2	Grade 3–4
Any adverse event	14 (23%)	43 (72%)
Neutropenia	5 (8%)	22 (37%)
Fatigue	23 (38%)	5 (8%)
Anaemia	9 (15%)	10 (17%)
Alopecia	16 (27%)	NA
Diarrhoea	16 (27%)	2 (3%)
Nausea	18 (30%)	0
Leukopenia	4 (7%)	8 (13%)
Stomatitis	9 (15%)	4 (7%)
Decreased appetite	18 (30%)	0
Vomiting	10 (17%)	1 (2%)
Thrombocytopenia	5 (8%)	6 (10%)
Somnolence	8 (13%)	1 (2%)
Dyspnoea	10 (17%)	0
Constipation	5 (8%)	0
Pyrexia	4 (7%)	0
Peripheral oedema	4 (7%)	0
Headache	8 (13%)	1 (2%)
Insomnia	7 (12%)	0
Cough	5 (8%)	0
Asthenia	6 (10%)	1 (2%)
Dehydration	3 (5%)	3 (5%)

Table adapted from Melichar B Lancet Oncol 2015. Data are number of patients with AE (%) for AEs of any grade in at least 10% of patients overall. NA = not applicable

Melichar B Lancet Oncol 2015

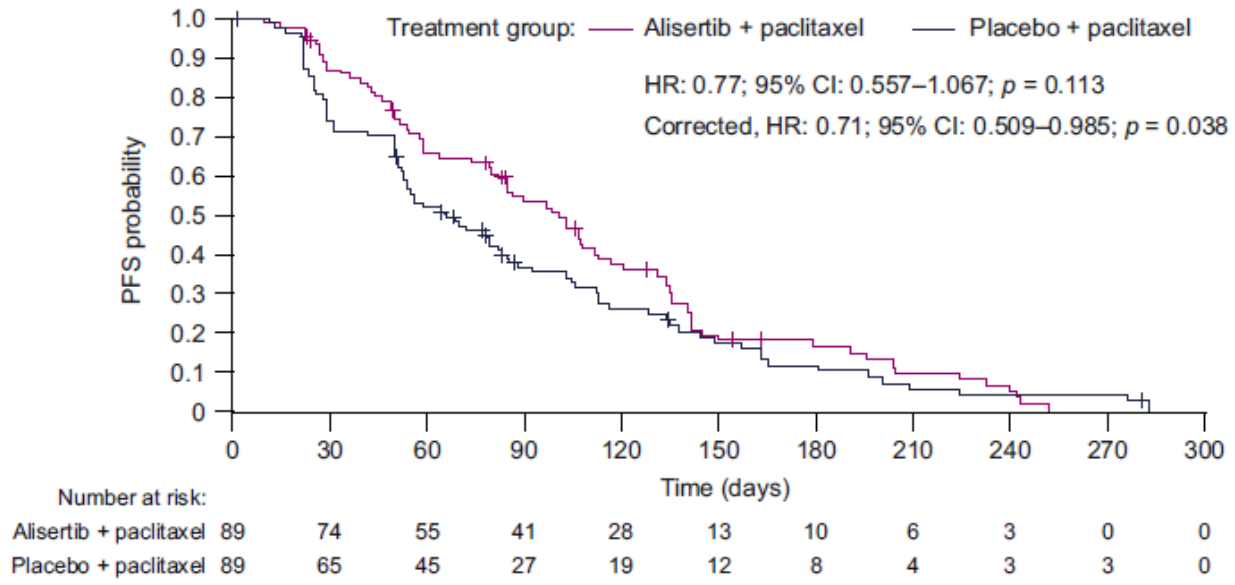
Randomized Phase II Study of Paclitaxel plus Alisertib vs Paclitaxel plus Placebo as Second-Line SCLC: Primary Analysis

Study design:

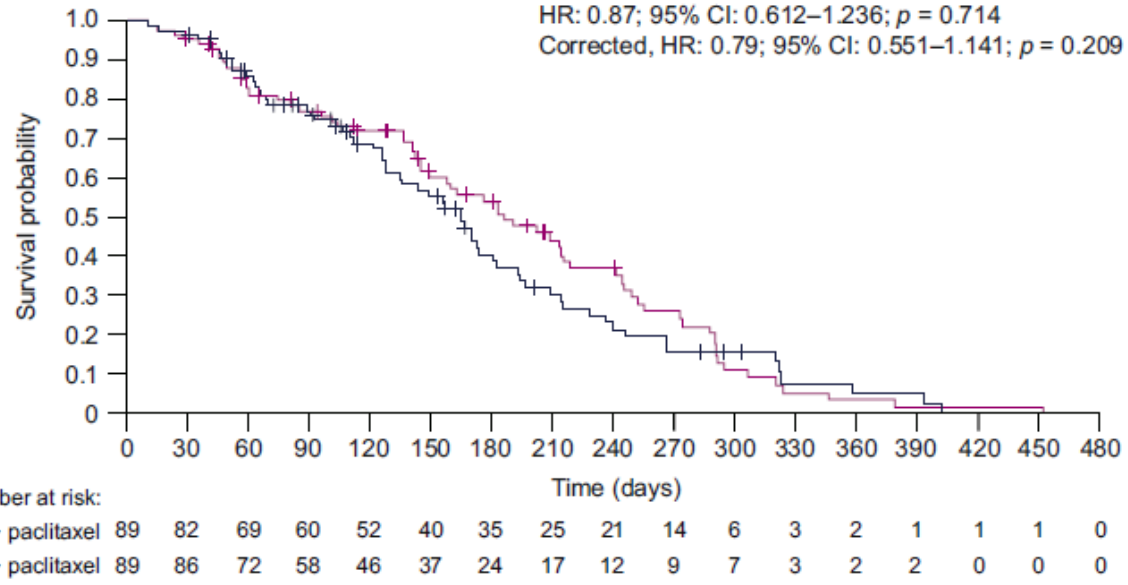
- Patients with relapsed or refractory SCLC stratified by relapse type (sensitive vs resistant or refractory)
- Randomized 1:1 to alisertib + paclitaxel or placebo + paclitaxel in 28-day cycles
- Alisertib (40 mg BID for 3 weeks on days 1–3, 8–10, and 15–17) plus paclitaxel (60 mg/m2 intravenously on days 1, 8, and 15) or placebo plus paclitaxel (80 mg/m2 intravenously on days 1, 8, and 15) in 28-day cycles
- 1° endpoint PFS

Biomarkers: associations between c-Myc expression in tumor tissue (prespecified) and genetic alterations in ctDNA (retrospective) with clinical outcome

PFS in ITT



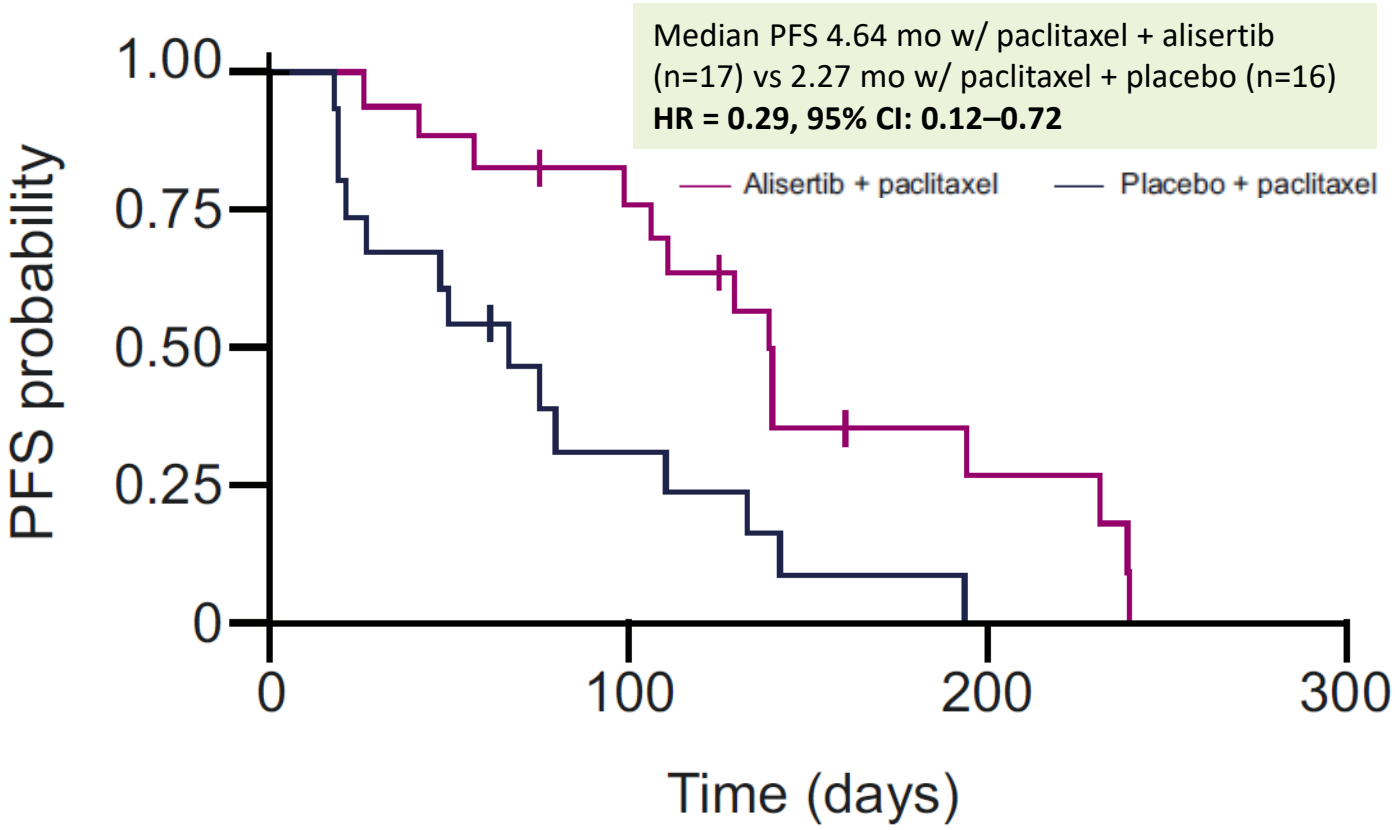
OS in ITT



Randomized Phase II Study of Paclitaxel plus Alisertib vs Paclitaxel plus Placebo as Second-Line SCLC: Correlative Biomarker Analysis

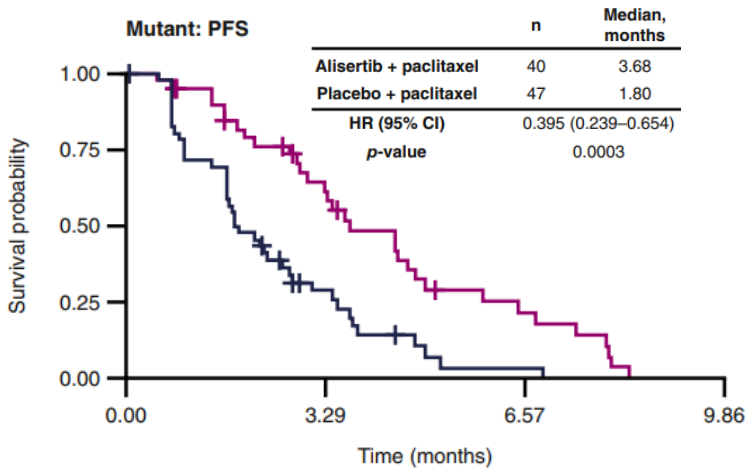
Improved PFS observed among patients positive versus negative for *c-Myc* expression

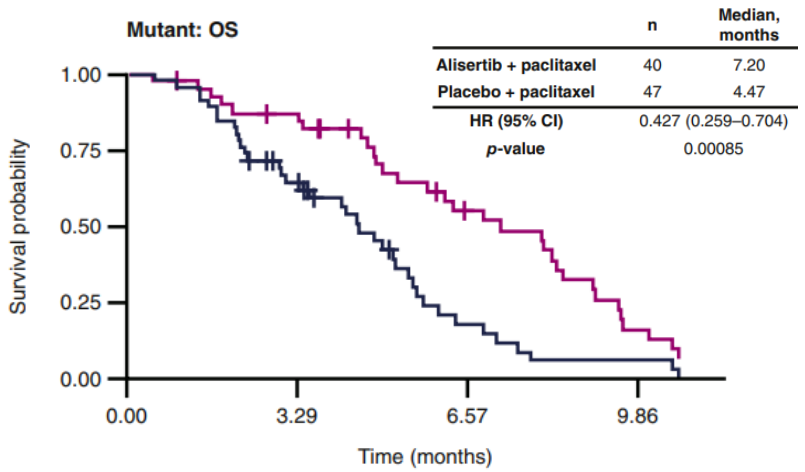
PFS in patients positive for *c-Myc* expression

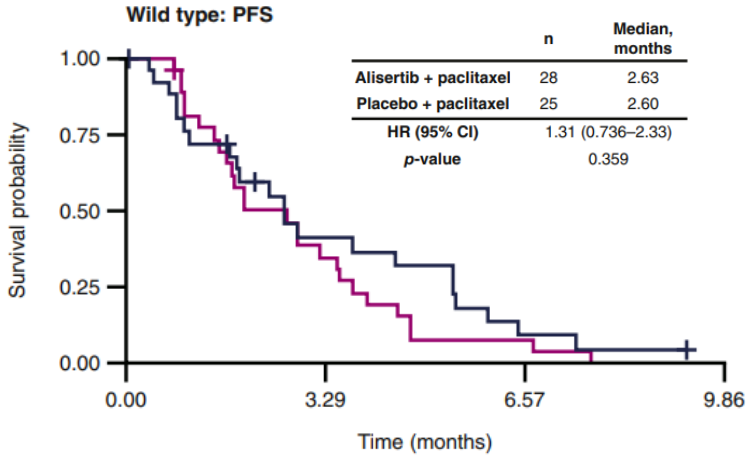


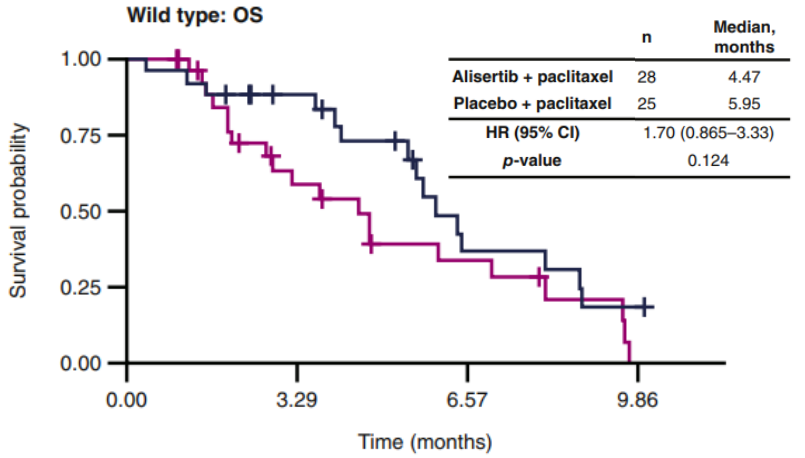
Randomized Phase II Study of Paclitaxel plus Alisertib vs Paclitaxel plus Placebo as Second-Line SCLC: Correlative Biomarker Analysis

Improved outcomes among pts with genetic alternations in cell cycle genes *CDK6*, *RBL1*, *RBL2*, and *RB1* (collectively referred to as "mutant")









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Randomized Phase II Study of Paclitaxel plus Alisertib vs Paclitaxel plus Placebo as Second-Line SCLC: Safety

Table 3. Most Frequently Reported All-Cause and Drug-Related Treatment-Emergent AEs, Occurring in at Least 15% (All-Cause) or at Least 10% (Drug-Related) of Patients Overall (Any Grade) in Either Arm, Respectively, with the Corresponding Grade 3 or higher AEs (Safety Population), and All Drug-Related Fatal AEs

	Alisertib/Paclitaxel (n = 87)		Placebo/Paclitaxel (n = 89)	
AE	Any Grade	Grade ≥3	Any Grade	Grade ≥3
All-cause AE, n (%)	86 (99)	66 (76)	85 (96)	45 (51)
Diarrhea	51 (59)	14 (16)	18 (20)	1 (1)
Fatigue	38 (44)	9 (10)	29 (33)	5 (6)
Nausea	29 (33)	2 (2)	30 (34)	4 (4)
Anemia	38 (44)	12 (14)	18 (20)	3 (3)
Neutropenia	43 (49)	35 (40)	7 (8)	5 (6)
Vomiting	28 (32)	2 (2)	21 (24)	3 (3)
Decreased appetite	29 (33)	3 (3)	19 (21)	3 (3)
Dyspnea	21 (24)	4 (5)	19 (21)	2 (2)
Stomatitis	29 (33)	12 (14)	6 (7)	2 (2)
Cough	17 (20)	0	17 (19)	0
Constipation	8 (9)	1 (1)	21 (24)	0
Asthenia	14 (16)	3 (3)	11 (12)	0
Dizziness	14 (16)	0	8 (9)	0
Alopecia	14 (16)	0	5 (6)	0
Leukopenia	13 (15)	7 (8)	5 (6)	2 (2)
Decreased neutrophil count	14 (16)	11 (13)	4 (4)	1 (1)
Weight decreased	13 (15)	0	5 (6)	0
Drug-related fatal AE, n (%)				
Neutropenic sepsis	–	1 (1)	–	0
Sepsis	–	1 (1)	–	0
Febrile neutropenia	–	1 (1)	–	0
Septic shock	–	1 (1)	–	0

AE, adverse event

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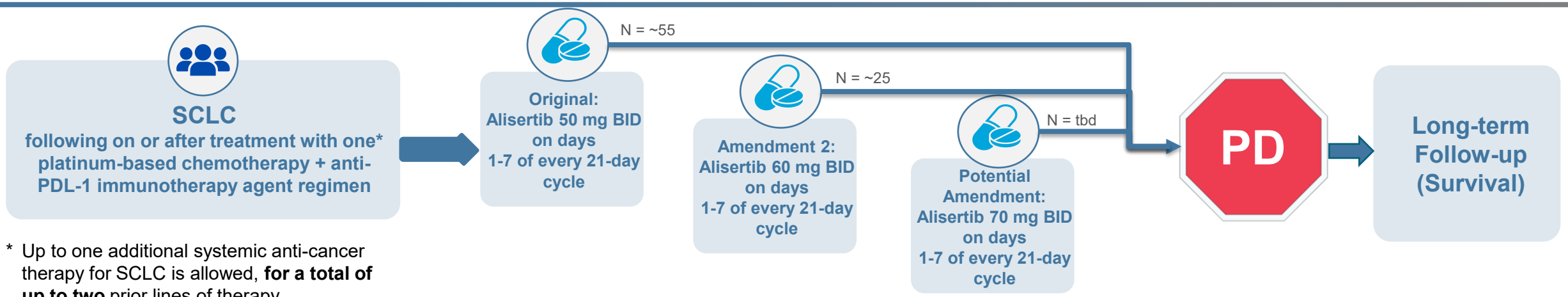
PUMA-ALI-4201 study design – alisertib monotherapy



* Up to one additional systemic anti-cancer therapy for SCLC is allowed, **for a total of up to two** prior lines of therapy

Primary prophylaxis with G-CSF following last dose of alisertib of each 21-day cycle and continuing through subsequent cycles

Study objectives and endpoints

Primary

- Determine whether any biomarker correlates with alisertib response by investigator-assessed ORR, DOR, DCR, PFS according to RECIST v1.1 within biomarker-defined subgroups from retrospectively evaluated patient samples

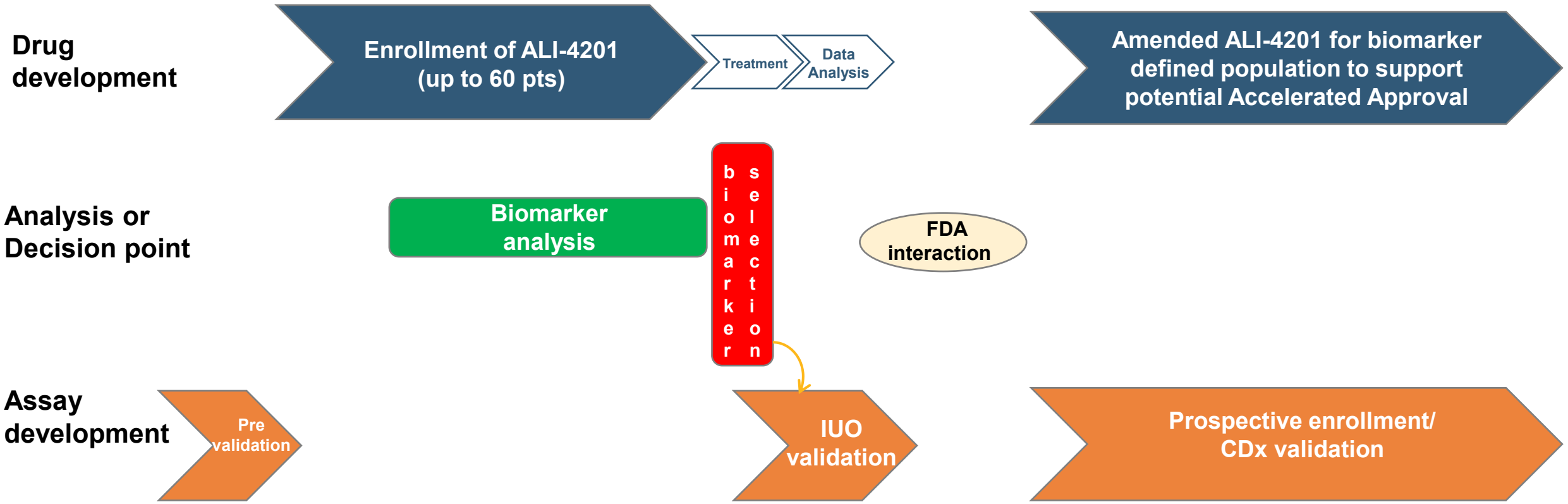
Secondary

- Determine investigator-assessed efficacy (ORR, DOR, DCR and PFS) according to RECIST v1.1
- Determine survival outcomes (OS)
- Determine the safety profile of alisertib (AE and SAEs per NCI CTCAE v 5.0)

Interim data anticipated in H1 2026

Parallel Clinical and Biomarker Development

- Comprehensive biomarker strategy supports clinical development and commercialization



Intellectual Property for NERLYNX (neratinib)

- Composition of matter patent issued (expires 2030)
  - Extended by USPTO in November 2021 per Hatch/Waxman
- Use in the treatment of cancer issued (expires 2025)
- Two polymorph patents issued (both expire 2028)
- Combination with capecitabine (expires 2031)
- Use in extended adjuvant breast cancer (expires 2030)
- Composition of specific salt of neratinib (recently issued)

Intellectual Property for alisertib

- Composition of matter patent issued (expires 2029)
- Use in the treatment of proliferative disorders (expires 2032)
- Use in the treatment of small cell lung cancer (expires 2033)
- Use in the treatment of breast cancer (expires 2034)
- Additional patents being filed and prosecuted

Potential for up to 5-year Hatch/Waxman extension on expiration date of above listed patents

Intellectual Property on *EGFR* T790M Mutations

- Issued claims in Europe, Asia, Australia (expires 2026)
  - Possibility to extend up to 5 years
- Issued claims in United States (expires 2026)
- Patent claims upheld after European Opposition Hearing (February 2014)
  - Patent claims upheld after Appeal to European Opposition (December 2020)
- Claims for the pharmaceutical composition comprising an irreversible EGFR inhibitor for use in treating cancer having a T790M mutation and for use in the treatment of cancer including lung cancer and non-small cell lung cancer
- A jury trial found the patents to be valid and infringed by AstraZeneca and awarded Plaintiffs $107.5 million in damages for past acts of infringement (May 2024)
- Judge ruled patent invalid for lacking enablement and adequate written description as to a particular claim limitation (August 2024)
- Appeal was filed in September 2024

Puma – Expected Milestones

- ✓ Present biomarker studies from the randomized trial of alisertib plus fulvestrant versus alisertib alone in hormone receptor-positive, HER2-negative breast cancer (Q2 2024)
- ✓ Update data from the clinical trial of alisertib in combination with osimertinib in patients with metastatic EGFR-mutant non-small cell lung cancer who have developed osimertinib resistance (Q2 2024)
- ✓ Initiate ALISCA™-Breast1, a Phase II trial of alisertib in combination with endocrine treatment in patients with chemotherapy-naïve HER2-negative, hormone receptor-positive metastatic breast cancer (Q4 2024)
- ✓ Present interim data from NCI Phase I trial of neratinib plus trastuzumab deruxtecan (H1 2025)
- ■ Report interim data from ALISCA™-Breast1, a Phase II trial of alisertib in combination with endocrine treatment in patients with chemotherapy-naïve HER2-negative, hormone receptor-positive metastatic breast cancer (H1 2026)
- ■ Additional interim data from ALISCA™-Lung1, a Phase II clinical trial of alisertib monotherapy for the treatment of extensive-stage small cell lung cancer (H1 2026)

Experienced Management Team

Alan H. Auerbach

Chairman, Chief Executive Officer, President, Founder

- *Chief Executive Officer, President, Founder, Cougar Biotechnology*

Maximo F. Nougues

Chief Financial Officer

- *Getinge AB, Boston Scientific, The Clorox Company*

Douglas Hunt

Chief Scientific Officer (interim)

Chief Regulatory Affairs, Medical Affairs and Pharmacovigilance Officer

- *ArmaGen, Baxter Healthcare, Amgen*

Heather Blaber

Senior Vice President, Marketing

- *Amgen, Wyeth, Pfizer*

Roger Storms

Senior Vice President, Sales

- *Amgen, Boehringer Ingelheim*

Board of Directors

Alan H. Auerbach
Chairman, Chief Executive Officer, President, Founder, Puma Biotechnology, Inc.

Alessandra Cesano, MD, PhD
Chief Medical Officer, ESSA Pharmaceuticals; NanoString; Cleave Biosciences; Nodality; Amgen; Biogen; SmithKline

Allison Dorval
CFO, AIRNA; CFO, Verve Therapeutics; CFO Voyager Therapeutics, Inc.; VP and Controller, Juniper Pharmaceuticals, Inc.

Michael Miller
Former EVP U.S. Commercial, Jazz Pharmaceuticals; VP, Sales & Marketing, Genentech

Jay Moyes
Former CFO, Sera Prognostics, Inc.; Former CFO, Myriad Genetics

Adrian Senderowicz, MD
Senior Advisor and former SVP and Chief Medical Officer, Constellation Pharmaceuticals; Ignyta; Sanofi; Astrazeneca; FDA (Division of Oncology Drug Products)

Brian Stuglich, R.Ph.
Former CEO, Verastem; Founder, Proventus Health Solutions; Former VP and Chief Marketing Officer, Eli Lilly Oncology

Troy Wilson, PhD, JD
President and CEO, Kura Oncology; CEO, Wellspring Biosciences; Chairman, Avidity Biosciences; Former CEO, President, Intellikine

Puma Biotechnology – Financial

- Currently trading on NASDAQ: PBYI
- Cash, cash equivalents and marketable securities at September 30, 2025: $94.4 million
- Net income in Q3 2025: $8.8 million
- Cash burn in Q3 2025: $1.6 million
- Private placements:
  - March 2022: 3,584,228 shares issued to Alan Auerbach and Athyrium Capital Management
  - December 2022: 568,181 shares issued to Alan Auerbach
- Shares issued and outstanding: 50.4 million

Company Highlights

- NERLYNX® – first HER2-directed drug approved by FDA for extended adjuvant treatment of early-stage HER2+ breast cancer in patients who have received prior trastuzumab
- NERLYNX® – first HER2-directed tyrosine kinase inhibitor approved in both early stage and metastatic HER2+ breast cancer
- Retain full U.S. commercial rights to NERLYNX®
- Clinical activity demonstrated for alisertib in Phase II clinical trials in HR-positive, HER2-negative breast cancer, Triple Negative Breast Cancer (TNBC), Small Cell Lung Cancer (SCLC)
- Potential for novel biomarker directed commercial opportunities with alisertib compared to other marketed drugs and drugs in development

Puma Biotechnology

Corporate Presentation

November 2025