UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): January 13, 2025

Olema Pharmaceuticals, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-39712**	**30-0409740**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**
780 Brannan Street **San Francisco, California**		**94103**
(Address of Principal Executive Offices)		**(Zip Code)**

Registrant's Telephone Number, Including Area Code: 415 651-3316

N/A
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, par value $0.0001 per share	OLMA	The Nasdaq Global Select Market

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

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

On January 13, 2025, Olema Pharmaceuticals, Inc. (the "Company") made available on its website a copy of the Company's presentation to be shared with investors and others from time to time. The presentation is being furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in Exhibit 99.1 attached hereto is intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Investor Presentation, dated January 13, 2025, of Olema Pharmaceuticals, Inc.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

OLEMA PHARMACEUTICALS, INC.

Date: January 13, 2025

By: /s/ Shane Kovacs
Shane Kovacs
Chief Operating and Financial Officer

EXHIBIT 99.1

Corporate Overview

Advancing medicines for breast cancer and beyond

January 2025

Forward-looking statements

This presentation contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements in this presentation that are not statements of historical fact are forward-looking statements. Words such as “anticipate,” “believe,” “estimate,” “expect,” “goal,” “intend,” “may,” “plan,” “potential,” “project,” “will,” and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements necessarily contain these identifying words. Such forward-looking statements include, without limitation, statements regarding our research and clinical development plans, the scope, progress, results and costs of developing our product candidates or any other future product candidates, strategy, market size and opportunity, clinical trial designs, regulatory matters, including the timing and likelihood of success of obtaining drug approvals, the timelines for potential initiation of clinical trials and the result of any such clinical trials of palazestrant (OP-1250) as a monotherapy and in combination trials, including OPERA-01, the Company’s pivotal Phase 3 monotherapy clinical trial, and OPERA-02, the Company's potential pivotal Phase 3 clinical trial of palazestrant in combination with ribociclib, the timelines for potential commercial launch and related preparatory work, the sufficiency and potential beneficial characteristics, profile, safety, tolerability, efficacy and therapeutic effects of palazestrant as a monotherapy and in combination trials, the progression-free survival rate under palazestrant in combination trials, the potential of palazestrant to become a therapeutic leader and a best-in-class treatment option for ER+/HER2- metastatic breast cancer and a backbone therapy for women living with breast cancer and beyond, the combinability of palazestrant with other drugs, the timelines for initiation of potential clinical trials for and the results of any such clinical trials in connection with our KAT6 inhibitor program, including OP-3136, the potential value and impact of our KAT6 inhibitor program, the best-in-class potential for OP-3136, including for breast and other solid tumor cancers, the potential beneficial characteristics, profile, safety, efficacy, tolerability, and therapeutic effects of OP-3136, our opportunity in breast, other solid tumor cancers, and beyond, our ability to impact treatment for endocrine-driven cancers, our financial condition, cash position, runway and the sufficiency of our financial resources, and the sufficiency and expertise of our management team. These forward-looking statements are based on the beliefs of the Company’s management as well as assumptions made by and information currently available to the Company. Such statements reflect the current views of the Company with respect to future events and are subject to known and unknown risks, including business, regulatory, economic and competitive risks, uncertainties, contingencies and assumptions about the Company, including, without limitation, risks inherent in developing products and technologies, future results from the Company’s ongoing and planned clinical trials, the Company’s ability to obtain adequate financing to fund its planned clinical trials and other expenses, trends in the industry, the legal and regulatory framework for the industry and future expenditures, and other risks and uncertainties affecting the Company, including those described under the caption "Risk Factors" and elsewhere in the Company's Quarterly Reports on Form 10-Q, Annual Report on Form 10-K, and other filings and reports the Company files with the Securities and Exchange Commission from time to time. In light of these risks and uncertainties, the events or circumstances referred to in the forward-looking statements may not occur. The actual results may vary from the anticipated results and the variations may be material. These forward-looking statements should not be taken as forecasts or promises nor should they be taken as implying any indication, assurance or guarantee that the assumptions on which such forward-looking statements have been made are correct or exhaustive or, in the case of the assumptions, fully stated in this presentation. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date this presentation is given.

This presentation discusses product candidates that are under clinical study and which have not yet been approved for marketing by the U.S. Food and Drug Administration. No representation is made as to the safety or effectiveness of these product candidates for the use for which such product candidates are being studied.

This presentation incorporates publicly-available third-party data that we have not independently verified. There are risks inherent in conducting cross-trial comparisons and the results should be interpreted with caution. The presentation of such third-party data does not represent a head-to-head comparison of how palazestrant, in monotherapy or in combination, or OP-3136 performed against any other third-party drug candidate or study. Rather, such third-party data has been pulled by us from publicly-available sources for supplemental informational purposes, only. We caution you that any comparisons against third-party data set forth herein should not be viewed as a side-by-side comparison, and you should not rely on the completeness or accuracy of our presentation of the results of any third-party drug candidate in these slides, due to differences in study design, how other companies quantify or qualify eligibility criteria, and how results are recorded, among other distinguishing factors and uncertainties. Because we may be unaware of or may not adequately present various distinguishing factors and uncertainties, the comparisons set forth herein may not properly present such third-party data, which may differ materially from the data as presented here. Investors are encouraged to independently review third party data and should not rely on our presentation of such data (including any such data placed in comparison with the performance of palazestrant) as a single measure to evaluate our business.

– We are on a mission to elevate patient care in breast cancer and beyond

Olema is a leader in developing therapies for endocrine driven-cancers with a mechanistically superior scientific approach that fully inactivates estrogen receptor signaling

STRATEGIC PRIORITIES

Palazestrant

Establish palazestrant as the best-in-class backbone therapy for ER+/HER2- breast cancer both as a monotherapy and in combination with other targeted anti-tumor agents

OP-3136

Advance the clinical development of OP-3136, a potential best-in-class KAT6 inhibitor, in breast and other solid tumor cancers

Pipeline

Further expand capabilities through drug discovery and development partnerships

- Headquartered in San Francisco, CA
- Offices in Cambridge, MA
- Leadership with Deep Oncology Experience
- ~100 Employees and Growing
- Collaborations in Place with Key Strategic Partners
- Potential Commercial Launch in 2027
- Strong Capital Position with $434.1M[1]

Olema ONCOLOGY

[1] *Estimated cash, cash equivalents, and marketable securities as of December 31, 2024 (unaudited).*

***ER** = estrogen receptor; **HER2** = human epidermal growth factor receptor 2; **KAT6** = lysine acetyltransferase 6*

Strategy driven by leaders positioned to go the distance

Oncology and industry experts with track record of advancing programs from clinical to commercial

Executive Committee

Sean Bohen, M.D., Ph.D.
President and CEO

Shane Kovacs
Chief Operating and Financial Officer

Naseem Zojwalla, M.D.
Chief Medical Officer

David Myles, Ph.D.
Chief Discovery and Non-Clinical Development Officer

Julie Dexter
Senior Vice President and Head of People

Experience

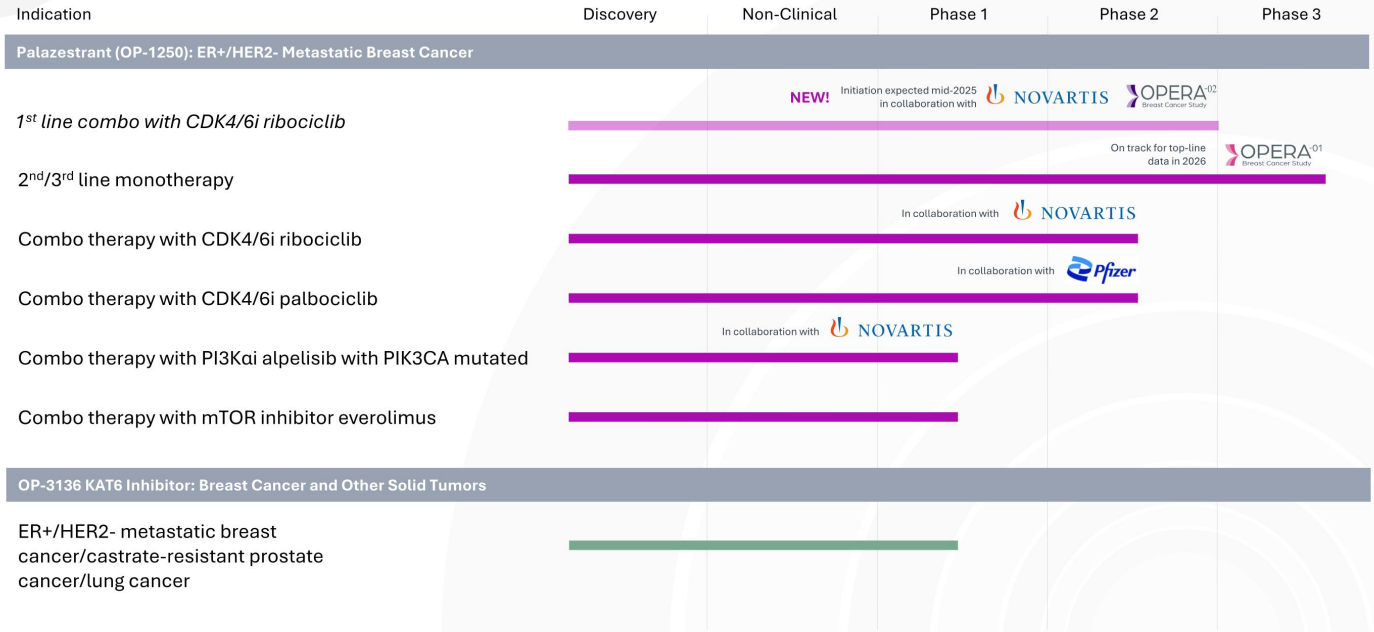
AstraZeneca
Genentech
BlueRock Therapeutics
Peloton Therapeutics
Abbott
ImClone Systems
KOSAN Biosciences
PTC Therapeutics
Eisai
Onyx Pharmaceuticals
Turning Point Therapeutics
Roche
RBC Capital Markets
Credit Suisse
pharmacyclics An AbbVie Company
CHIRON

Board of Directors

- Ian Clark
  Chairman of the Board
- Sean Bohen, M.D., Ph.D.
  President and CEO
- Sandra Horning, M.D., FACP, FASCO
- Cindy Butitta
- Scott Garland
- Cyrus Harmon, Ph.D.
- Gorjan Hrustanovic, Ph.D.
- Yi Larson
- Andy Rappaport
- Graham Walmsley, M.D., Ph.D.

Rapidly advancing clinical pipeline

Actively accruing patients in palazestrant mono and combo trials as OP-3136 enters the clinic



CDK4/6i *= cyclin-dependent kinase 4/6 inhibitor;* ***ER+*** *= estrogen receptor positive;* ***HER2-*** *= human epidermal growth factor receptor 2 negative;* ***KAT6*** *= lysine acetyltransferase 6;* ***mTORi*** *= mammalian target of rapamycin inhibitor;* ***PI3Kai*** *= phosphoinositide-3 kinase alpha-specific inhibitors;* ***PI3KCA*** *= phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha*

2024 ACHIEVEMENTS AND ANTICIPATED MILESTONES IN 2025 AND BEYOND

2024

- Continued accruing patients in the pivotal Phase 3 OPERA-01 clinical trial of palazestrant as a monotherapy in 2/3L metastatic breast cancer
- Presented OP-3136 non-clinical data at ENA 2024
- Announced new Novartis collaboration
- Presented palazestrant + ribociclib combination data at SABCS
- Received FDA clearance for OP-3136 Investigational New Drug application
- Initiated OP-3136 Phase 1 clinical trial

2025

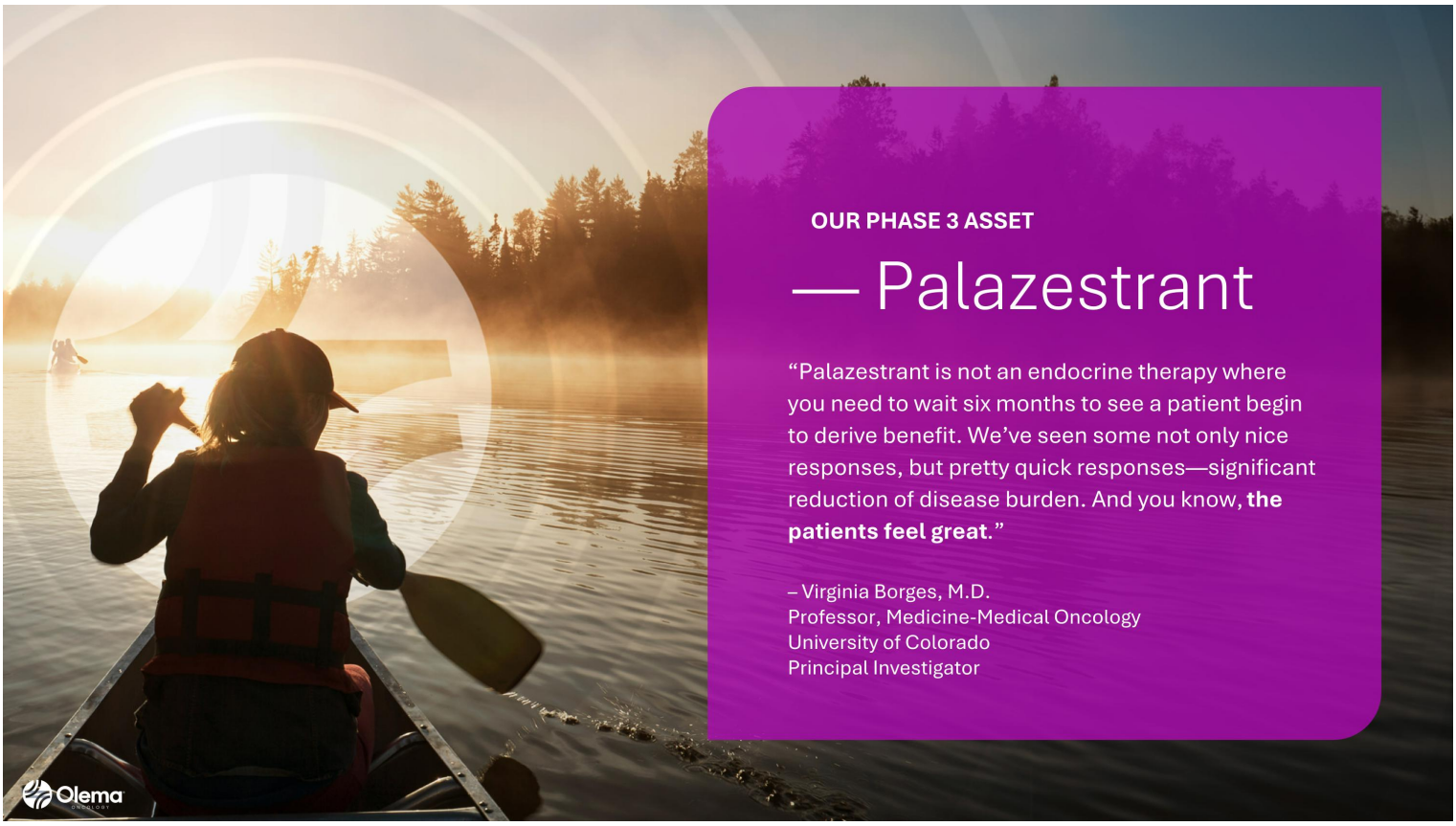
- Advance patient accrual in the pivotal Phase 3 OPERA-01 clinical trial
- Initiate the pivotal Phase 3 OPERA-02 clinical trial of palazestrant in combination with ribociclib in 1L metastatic breast cancer
- Present new non-clinical data for OP-3136
- Present mature Phase 1b/2 palazestrant + ribociclib combination data at major medical meeting

2026

- Present initial data from the Phase 1 clinical trial of OP-3136
- Announce top-line results from the pivotal Phase 3 OPERA-01 clinical trial
- Submit New Drug Application for the potential approval of palazestrant as a monotherapy in 2/3L metastatic breast cancer
- Prepare for the potential U.S. commercial launch of palazestrant

2027

- Anticipated U.S. commercial launch of palazestrant


OUR PHASE 3 ASSET
— Palazestrant
“Palazestrant is not an endocrine therapy where you need to wait six months to see a patient begin to derive benefit. We’ve seen some not only nice responses, but pretty quick responses—significant reduction of disease burden. And you know, **the patients feel great**.”
– Virginia Borges, M.D.
Professor, Medicine-Medical Oncology
University of Colorado
Principal Investigator
Olema

What drives us: we are all impacted by breast cancer

The most common cancer diagnosed and the second leading cause of cancer death among women

1 in 8*

Women in the U.S. will be diagnosed with invasive breast cancer in her lifetime

~311k*

Estimated women in the U.S. who were diagnosed with breast cancer in 2024

~42k*

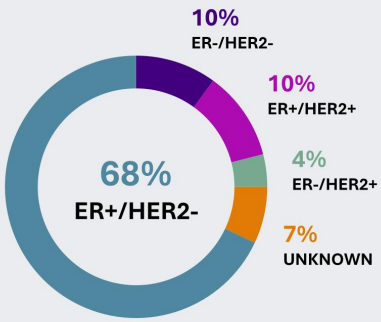
Estimated women in the U.S. who died of metastatic breast cancer in 2024

*Source: American Cancer Society

Today's therapies are insufficient to meet patient needs

Patient outcomes reflect limitations and discontinuations of currently available therapies

A majority of all breast cancers are estrogen receptor positive (ER+)*



Current ER targeting agents have significant deficiencies

AIs
SERMs
SERDs

- **Incomplete ER antagonism**
- **Sub-optimal PK profile**
- **Limited CNS penetration**
- **Tolerability issues**

Common targeted therapies used in combination with an endocrine agent

- abemaciclib (CDK4/6i)
- palbociclib (CDK4/6i)
- ribociclib (CDK4/6i)
- alpelisib (PI3Kai)
- everolimus (mTORi)
- capivasertib (AKTi)
- inavolisib (PI3Kai)

"Aromatase inhibitors are **life-saving** … but **life-eroding** and really difficult to be on."
– ER+/HER2- Stage 3A patient

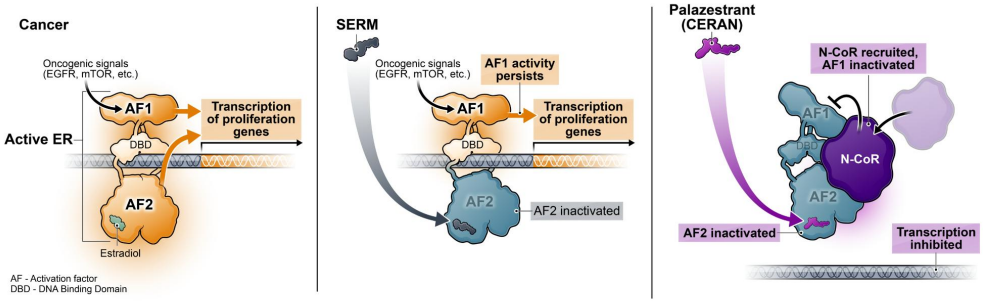
*Source: National Breast Cancer Foundation, World Health Organization; American Cancer Society. Facts and Figures 2024; SEER database.

AI *= aromatase inhibitor;* ***AKTi*** *= serine/threonine protein kinase 1;* ***CDK4/6i*** *= cyclin-dependent kinase 4/6 inhibitor;* ***CNS*** *= central nervous system;* ***ER*** *= estrogen receptor;* ***HER2*** *= human epidermal growth factor receptor 2;* ***mTORi*** *= mammalian target of rapamycin inhibitor;* ***PI3Kai*** *= phosphatidylinositol 3-kinase alpha inhibitor;* ***PK*** *= pharmacokinetic;* ***SERD*** *= selective estrogen receptor degrader;* ***SERM*** *= selective estrogen receptor modulator;* ***+*** *= positive;* ***-*** *= negative*

Palazestrant has the attributes of a potential therapeutic class leader

A differentiated oral CERAN/SERD targeting metastatic breast cancer with experience in over 400 patients to date

Growth and Proliferation Mechanism Driving ER+ Breast Cancer



Activated ER **drives cancer cell** growth

SERMs and SERDs **partially** inactivate ER

Palazestrant **completely** inactivates ER

Palazestrant delivers what patients need

- Complete ER antagonism
- Once-daily oral delivery
- Favorable tolerability
- Combinability
- Robust tumor shrinkage
- Attractive PK profile
- CNS penetration

Our goal: help patients **feel better, longer**

***AF** = activation factor; **CERAN** = complete estrogen receptor antagonist; **CNS** = central nervous system; **DBD** = NDA binding domain; **EGFR** = epidermal growth factor receptor; **ER** = estrogen receptor; **mTOR** = mammalian target of rapamycin; **N-CoR** = nuclear receptor corepressor; **PK** = pharmacokinetics; **SERD** = selective estrogen receptor degrader; **SERM** = selective estrogen receptor modulator; **+** = positive*

Significant opportunity for palazestrant across the spectrum of care

Estimated >$20B ER+/HER2- global metastatic breast cancer market[1]

2L/3L+ ER+/HER2- MBC

OPERA-01 Breast Cancer Study

Patients[2]	~150K
Duration of Therapy[3]	~2-12+ months
Global Market Potential[4]	$5B+

1L ER+/HER2- MBC

OPERA-02 Breast Cancer Study

Patients[2]	~115K
Duration of Therapy[3]	~6-36+ months
Global Market Potential[4]	$10B+

[1] 2025 opportunity estimates for total endocrine therapy market (US and EU5). Olema internal data. [2] 2025 incidence projection estimates. Olema internal data, Informa ER+/HER2- BC Prevalence Based Market Forecast. [3] Olema internal data. [4] Olema internal data.
ER+ = estrogen receptor positive; ***HER2-*** = human epidermal growth factor receptor 2 negative; ***MBC*** = metastatic breast cancer

Clinical development strategy to unlock the potential of palazestrant

Potential best-in-class backbone therapy designed to preserve and prolong a higher quality of life

Establishing palazestrant as the backbone endocrine therapy of choice across the metastatic setting

2/3L+

OPERA-01

- Ongoing 510-patient pivotal Phase 3 trial
- Monotherapy trial vs. SOC
- Phase 1/2 monotherapy data support potentially differentiated opportunity
- Top-line results expected 2026

1L

OPERA-02

- Proposed ~1,000 patient pivotal Phase 3 trial
- Palazestrant in combination with ribociclib vs. SOC
- Phase 1/2 palazestrant + ribociclib combination data demonstrate no significant DDI and tolerability profile consistent with the FDA-approved label of ribociclib; efficacy maturing
- Successfully conducted FDA interactions
- Preparing for initiation in 2025

[1] *Olema internal data.*

***DDI** = drug-drug interaction; **SOC** = standard of care*

Palazestrant monotherapy Phase 2 data supports ongoing Phase 3 trial

Data demonstrate palazestrant is well-tolerated with favorable PK and differentiated efficacy profile

Differentiated Efficacy Profile

- Median PFS of:
  - 7.3 months in 2/3L ±CT *ESR1*-mutant
  - 5.5 months in 2/3L ±CT *ESR1*-wild-type

Favorable Pharmacokinetics

- High oral bioavailability with daily dosing
- Dose proportional exposure
- Long half-life supports once-daily dosing

Summary Safety

- Well-tolerated
- Most AEs were low grade (1/2)

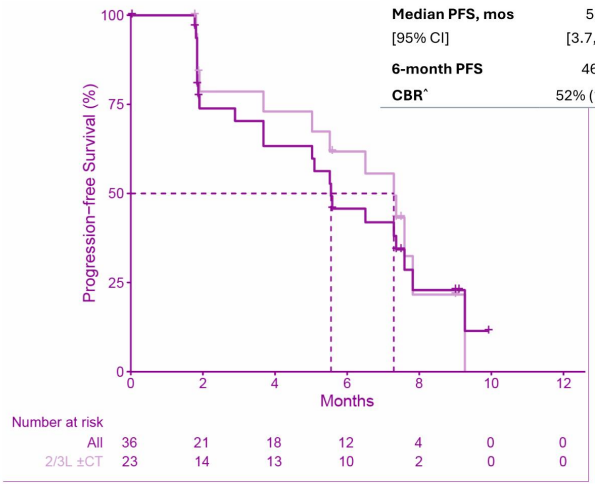
For more details on this data milestone, please refer to the oral presentation at this link. Data cutoff date: July 7, 2023
***AEs** = adverse events; **CT** = chemotherapy; **ESR1** = estrogen receptor 1 gene; **PK** = pharmacokinetics; **PFS** = progression free survival*

Compelling palazestrant Phase 2 data supports ongoing OPERA-01 trial

7.3 months mPFS in *ESR1*-mutant; 5.5 months in wild-type for EMERALD-eligible 2/3L ± CT Patients*

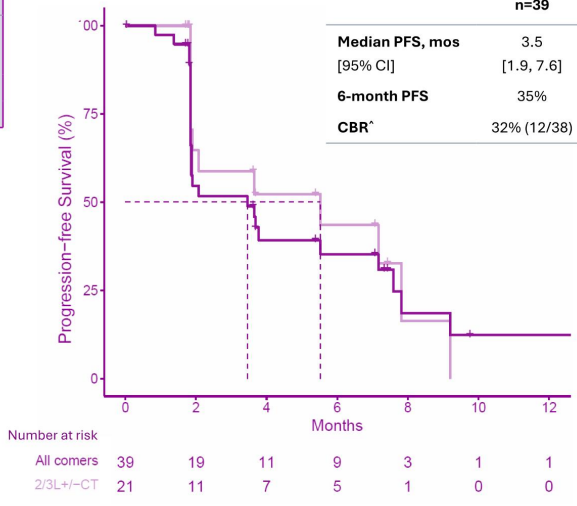
Patients with *ESR1* Mutation[1]

	ESR1 mut n=36	2/3L ±CT n=23
Median PFS, mos	5.6	**7.3**
[95% CI]	[3.7, 7.8]	[5.0, NA]
6-month PFS	46%	**62%**
CBR^	52% (17/33)	**59% (13/22)**



Patients with *ESR1* Wild-Type[2]

	ESR1 WT n=39	2/3L ±CT n=21
Median PFS, mos	3.5	**5.5**
[95% CI]	[1.9, 7.6]	**[1.9, NA]**
6-month PFS	35%	**44%**
CBR^	32% (12/38)	**38% (8/21)**



NOTE: This analysis is the aggregation of results across independent studies. There are risks inherent in conducting cross-trial comparisons. Refer to further disclaimers on slide 2.

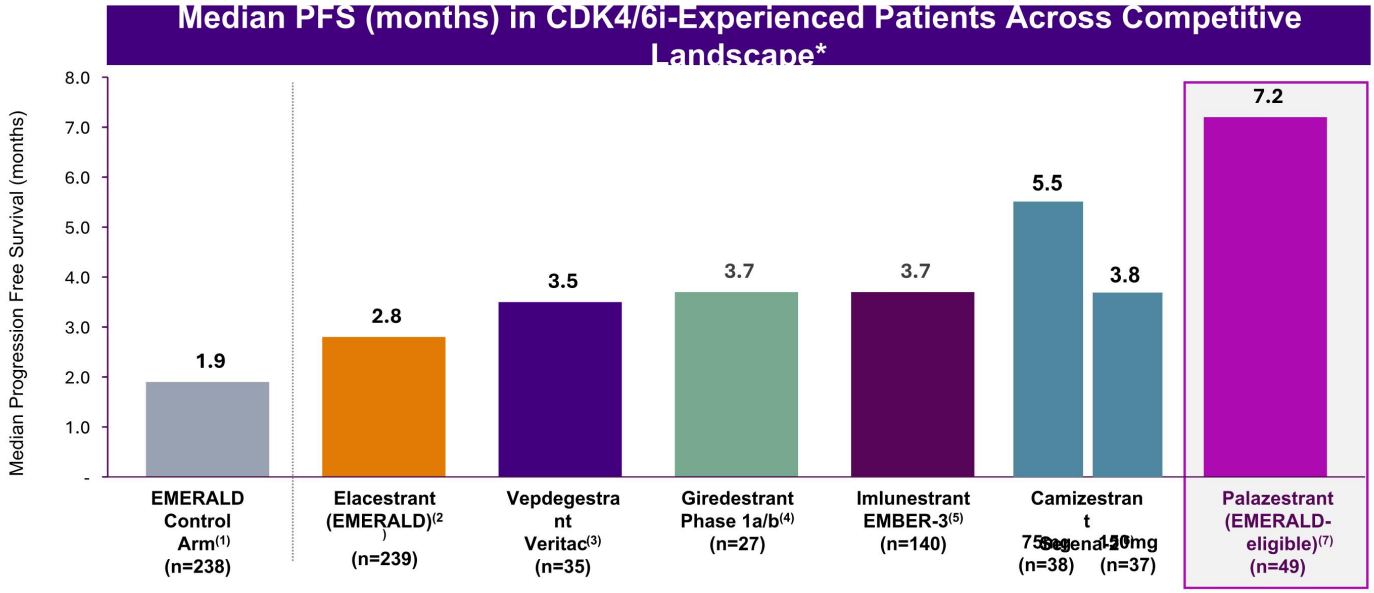
[1] *Palazestrant Phase 2 dataset with ESR1 mutations detected at baseline.* [2] *Palazestrant Phase 2 dataset with ESR1 mutations not detected at baseline.*

^ *Clinical Benefit Rate (CBR) is defined as the proportion of subjects who remained on OP-1250 treatment through at least 24 weeks with a confirmed CR or PR, or stable disease. The CBR analysis includes patients who received at least one evaluable post-baseline radiographic assessment. Data cut-off as of July 7, 2023.*

***2/3L** = second/third line; **± CT** = plus/minus chemotherapy; **CBR** = clinical benefit rate; **CI** = confidence interval; **ESR1** = estrogen receptor 1 gene; **mos** = months; **mPFS** = median progression-free survival; **mut** = mutation; **NA** = not applicable; **WT** = wild-type*

Palazestrant in the competitive landscape: best-in-class potential

Median progression-free survival across CDK4/6i-experienced patient populations*

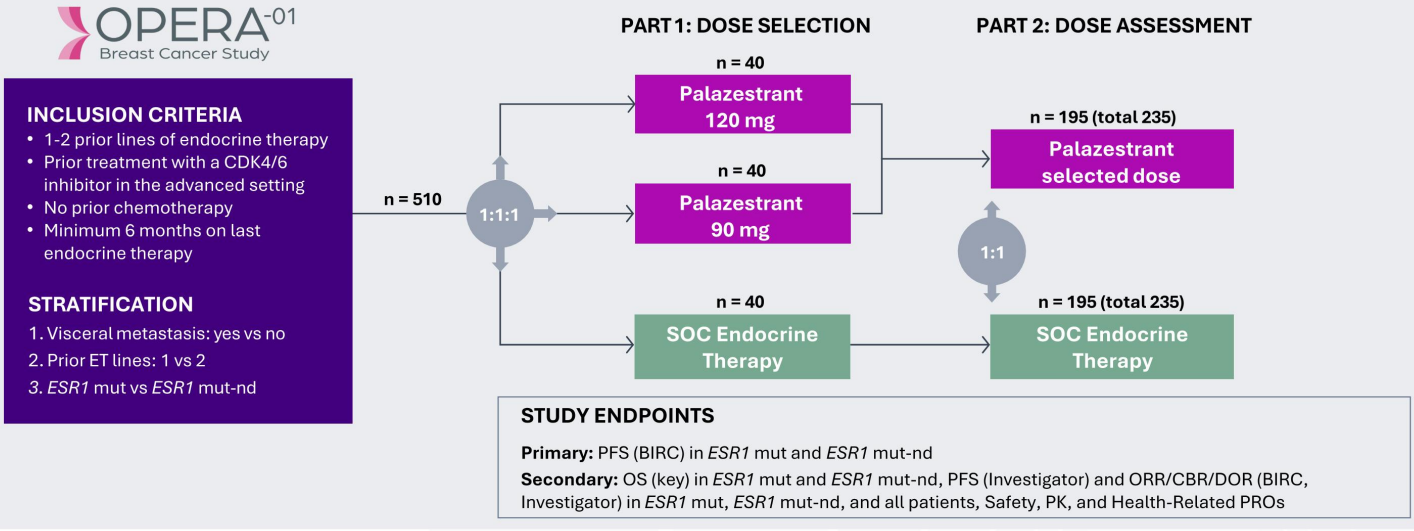


** NOTE: This analysis is the aggregation of results across independent studies. There are risks inherent in conducting cross-trial comparisons. Refer to further disclaimers on slide 2.*

[1] SABCS 2021 EMERALD data. Median PFS in control arm. Note: ORR of 4.4% (8/182). [2] SABCS 2021 EMERALD data. Median PFS in elacestrant 400 mg dose. Note: ORR of 4.5% (8/179). [3] SABCS 2023 Veritac data.Median PFS at 200 mg dose across all patients. Note: One cPR at 200 mg dose. [4] ASCO 2021 Phase 1a/b giredestrant results. Median PFS estimated based on subset of giredestrant patients at 30 mg dose with CDK4/6i experience (27 of 41). Note: Six cPRs at 30 mg were all in CDK4/6i-naïve patients. [5] SABCS 2024 EMBER data. Median PFS in CDK4/6i-experienced patients. [6] SABCS 2022 Serena-2 data. Median PFS in CDK4/6i-experienced patients at 75 mg (5.5 months) and 150 mg (3.8 months). Represents <2 prior lines of ET-only +/- CT. Note: Serena-1 data at 75 mg dose had 2 PRs out of 22 patients; both were CDK4/6i naïve. [7] Emerald-eligible patient population from palazestrant Phase 2 dataset (2/3L +/-CT) with ESR1 mutations detected at baseline.

CDK4/6i = cyclin-dependent kinase 4/6 inhibitor; PFS = progression-free survival

OPERA-01 Phase 3 monotherapy trial designed to show superior efficacy in *ESR1* mutant and/or *ESR1* wild-type patients

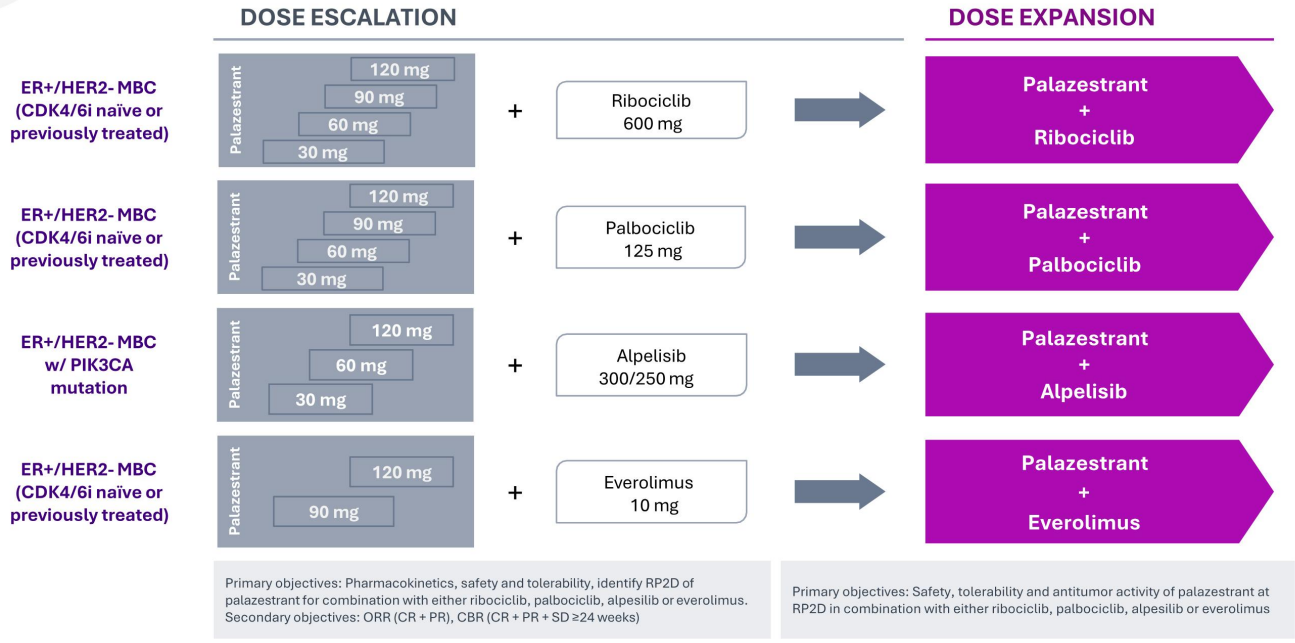


Study initiated in 4Q 2023. Results expected in 2026.

For more details on this trial, please visit www.opera01study.com.

***BIRC** = blinded independent review committee; **CBR** = clinical benefit rate; **CDK4/6i** = cyclin dependent kinase 4/6 inhibitor; **DOR** = duration of response; **ESR1** = estrogen receptor 1 gene; **ET** = endocrine therapy; **mut** = mutation; **mut-nd** = mutation not detected; **ORR** = objective response rate; **OS** = overall survival; **PFS** = progression free survival; **PK** = pharmacokinetics; **PROs** = patient reported outcomes; **SOC** = standard of care*

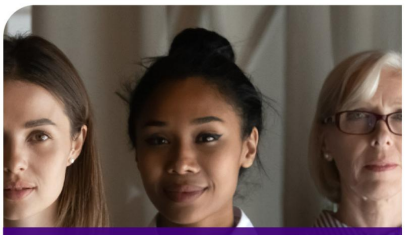
Palazestrant demonstrates combinability with other targeted agents in frontline and later lines of therapy



CDK4/6i *= cyclin dependent kinase 4/6 inhibitor;* ***CBR*** *= clinical benefit rate;* ***CR*** *= complete response;* ***ER+*** *= estrogen receptor positive;* ***HER2-*** *= human epidermal growth factor receptor 2 negative;* ***MBC*** *= metastatic breast cancer;* ***ORR*** *= objective response rate;* ***PIK3CA*** *= phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha;* ***PR*** *= partial response;* ***RP2D*** *= recommended Phase 2 dose;* ***SD*** *= stable disease*

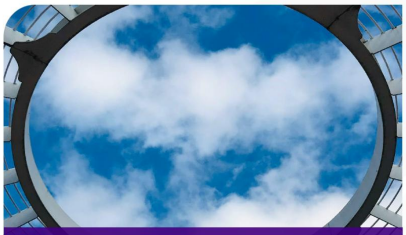
Palazestrant + ribociclib Phase 2 data supports planned Phase 3 trial

Palazestrant + ribociclib combination demonstrated promising clinical activity, a safety profile consistent with ribociclib + ET, and favorable tolerability



Differentiated Efficacy Profile

- Six-month PFS rate of:
  - 73% in all patients
  - 68% in patients with prior CDK4/6i
  - 81% in *ESR1*-mutant patients
  - 70% in *ESR1* wild-type patients



Favorable Pharmacokinetics

- No drug-drug interaction; palazestrant did not affect ribociclib drug exposure
- All patients received the combination with the full and approved dose of 600mg of ribociclib

Summary Safety

- Overall safety profile was consistent with the established safety profile of ribociclib 600 mg + AI

Olema ONCOLOGY

Data cutoff date: November 11, 2024

AEs *= adverse events;* ***AI*** *= aromatase inhibitor* ***ESR1*** *= estrogen receptor 1 gene;* ***ET*** *= endocrine therapy;* ***PFS*** *= progression free survival*

Well tolerated with no DLTs; safety profile consistent with ribociclib + ET

Treatment-emergent AEs

TEAEs in ≥25% of patients	Palazestrant + Ribociclib** (n = 62)			MONALEESA-2* Letrozole + Ribociclib† (n = 334)		
	All grades‡	Grade 3	Grade 4	All grades	Grade 3	Grade 4
Neutropenia§	51 (82%)	28 (45%)	6 (10%)	93%	49%	11%
Nausea	49 (79%)	2 (3%)	0%	52%	2%	0%
Fatigue	37 (60%)	2 (3%)	0%	37%	2%	<1%
Diarrhea	31 (50%)	2 (3%)	0%	35%	1%	0%
Anemia	27 (44%)	1 (2%)	0%	57%	2%	0%
WBC decrease	26 (42%)	10 (16%)	1 (2%)	93%	31%	3%
Constipation	24 (39%)	0%	0%	25%	1%	0%
Creatinine increased	20 (32%)	0%	0%	20%	1%	0%
Vomiting	20 (32%)	1 (2%)	0%	29%	4%	0%
ECG QT prolonged	19 (31%)	3 (5%)	0%	43%¶	8%¶	NR
Arthralgia	18 (29%)	0%	0%	27%	1%	NR
Lymphocyte count decreased	16 (26%)	5 (8%)	1 (2%)	51%	12%	2%
Cough	16 (26%)	0%	0%	20%	0%	0%
LDH increased	16 (26%)	0%	0%	NR	NR	NR

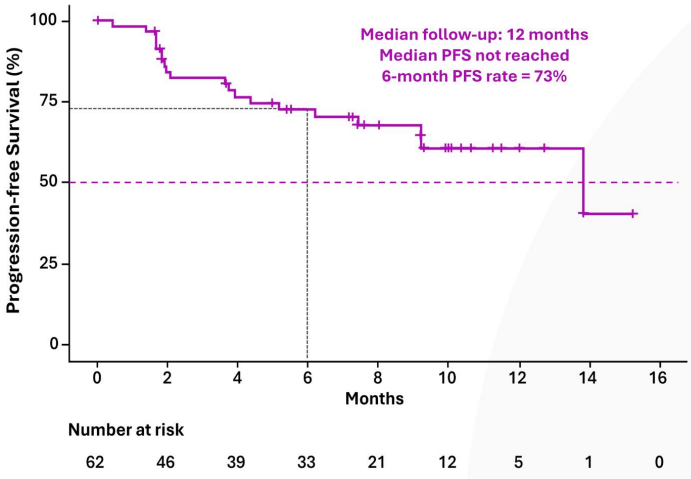
- No patients discontinued only palazestrant due to a treatment-emergent AE; 4 patients discontinued both treatments due to a TEAE; 2 patients discontinued ribociclib but stayed on palazestrant
- 30 (48%) patients still on treatment at the data cut-off
- Overall safety and tolerability profile consistent with ribociclib + endocrine therapy
- No DLTs were observed during dose escalation and the maximum tolerated dose was not reached

Data cutoff date: November 11, 2024. *Data shown are n or n (%).*
**** NOTE: This analysis is the aggregation of results across independent studies. There are risks inherent in conducting cross-trial comparisons and results should be interpreted with caution. Refer to further disclaimers on slide 2.***
***Includes 3 patients at each of 30 mg and 60 mg palazestrant and 56 patients at 120 mg palazestrant in combination with 600 mg ribociclib. †Adverse reactions reported in ≥10% of patients who received ribociclib plus letrozole in the MONALEESA-2 study.(KISQALI (ribociclib). Prescribing information. Novartis; 2022; Hortobagyi, 2016) ‡Two subjects experienced Grade 5 AEs, heart failure and depressed level of consciousness not related to study drugs but disease progression. §Combined term includes neutropenia, decreased neutrophil count and febrile neutropenia. These values were taken from MONALEESA-2 lab abnormalities data; source: KISQALI (ribociclib). Prescribing information. Novartis; 2022. ¶Ribociclib + fulvestrant in MONALEESA-3 per the Ribociclib Approval Package (NUMBER:209092Orig1s001, June 2018); ribociclib + non-steroidal aromatase inhibitors in MONALEESA-7: all grade QTcF prolongation was 46.5% (Grade 2, 5.3%; Grade 3, 9%). Aggregate analysis (n=1054 patients) .*
***AE** = adverse event; **DLTs** = dose-limiting toxicity; **ET** = endocrine therapy; **NR** = not reported; **TEAEs** = treatment-emergent adverse events; **WBC** = white blood cell*

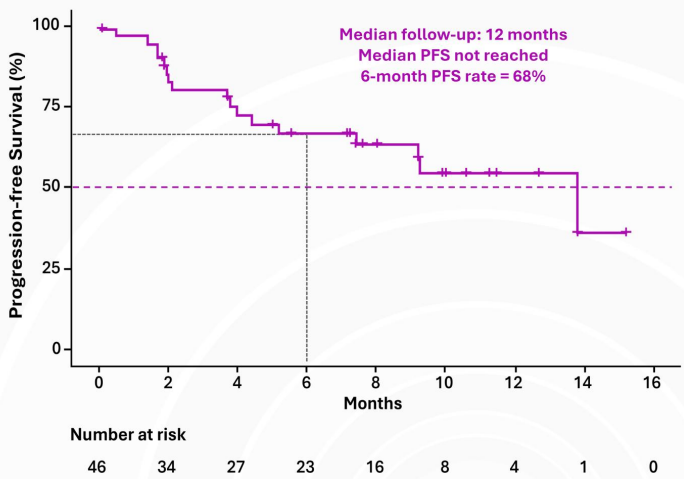
Six-month PFS rate of 73% in all patients, 68% in those with prior CDK4/6i

Median follow-up of 12 months; median PFS not yet reached; 48% of patients remain on study

All patients (N=62)



Patients with prior CDK4/6i plus ET (N=46)



Data cutoff date: November 11, 2024

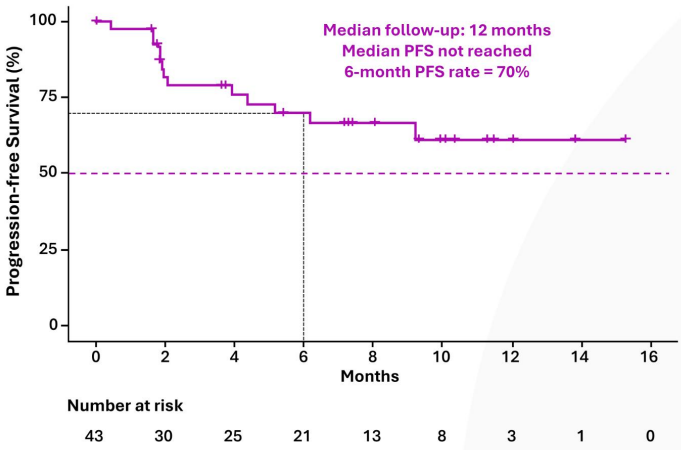
* *Follow up was calculated from first dose date to data cutoff date regardless of disease progression status.*

CDK4/6i = *cyclin-dependent kinase 4/6 inhibitor;* ***ET*** = *endocrine therapy;* ***PFS*** = *progression-free survival*

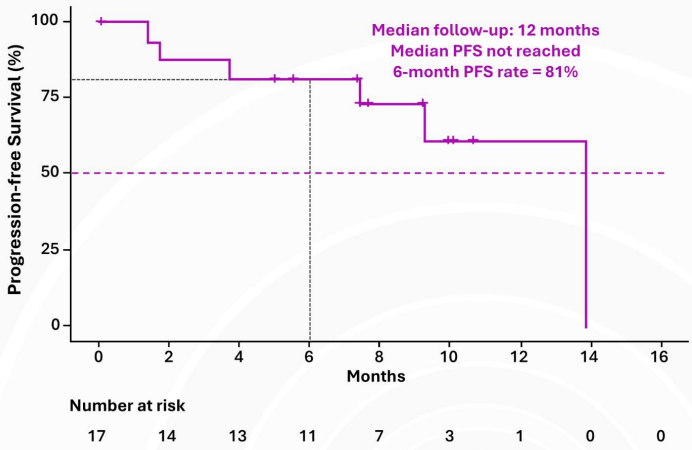
Six-month PFS rate of 81% in *ESR1*-mutant patients, 70% in *ESR1* wild-type

Median follow-up of 12 months; median PFS not yet reached; sustained efficacy regardless of *ESR1* status

***ESR1* wild-type (n=43)**



***ESR1*-mutant (n=17)**



Data cutoff date: November 11, 2024

** Follow up was calculated from first dose date to data cutoff date regardless of disease progression status.*

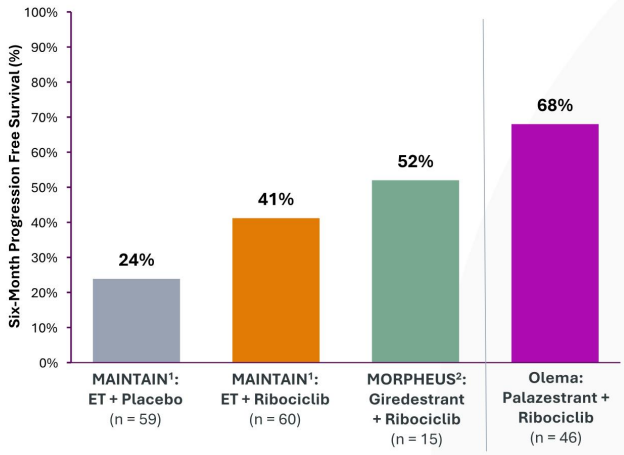
***ESR1** = estrogen receptor 1 gene; **PFS** = progression-free survival*

Efficacy comparison in 2/3L patients vs. competitive landscape

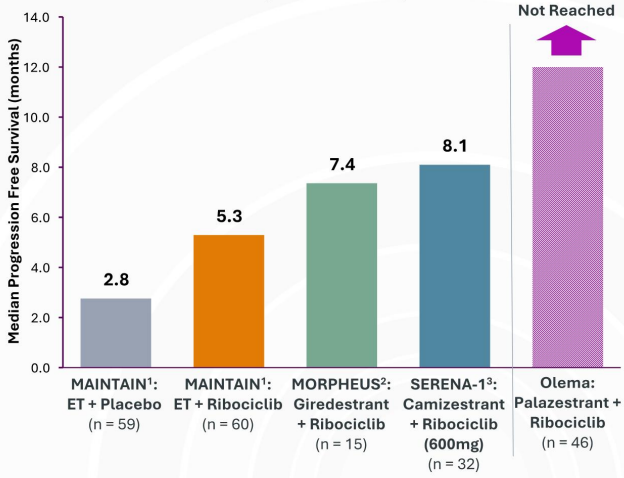
MAINTAIN study of ribociclib plus ET after CDK4/6i progression serves as best clinical benchmark*

Interim efficacy signals for palazestrant in combination with ribociclib

Six-Month PFS Rate* in CDK4/6i pre-treated patients



Median PFS (months)* in CDK4/6i pre-treated patients



** NOTE: This analysis is the aggregation of results across independent studies. There are risks inherent in conducting cross-trial comparisons and results should be interpreted with caution. Refer to further disclaimers on slide 2.*
Data cutoff date: November 11, 2024.
[1] *ASCO 2022 MAINTAIN data;* [2] *ASCO 2023 MORPHEUS data;* [3] *SABCS 2024 SERENA-1 data Parts K-L, ribociclib 600mg dose arm*
***CDK4/6i** = cyclin-dependent kinase 4/6 inhibitor; **ESR1-mut** = ESR1-mutant; **ESR1-wt** = ESR1 wild-type; **ET** = endocrine therapy; **PFS** = progression-free survival*

Proposed OPERA-02 1L Phase 3 pivotal trial in combination with ribociclib

~1,000-patient trial vs. standard of care; initiation expected in 2025

OPERA-02 Breast Cancer Study

INCLUSION CRITERIA

- ER+/HER2- MBC
- Any menopausal status
- No prior systemic therapy for MBC
- No prior CDK4/6 inhibitor for MBC
- Evaluable disease (measurable or non-measurable)
- Patients who relapsed within 2 years of adjuvant endocrine therapy are not eligible

STRATIFICATION

- Menopausal status: post vs. pre/male
- Visceral metastasis: yes vs. no
- *De novo* metastatic disease vs. recurrent disease after adjuvant ET

n ≈ 1,000

1:1

Palazestrant + ribociclib

Letrozole + ribociclib

Study Endpoints

Primary: PFS (BIRC)

Secondary : OS (key)
PFS (Investigator)
ORR/CBR/DOR (BIRC, Investigator)
Safety
PK
Health-related PROs

In collaboration with NOVARTIS

BIRC *= blinded independent review committee;* ***CDK4/6i*** *= cyclin-dependent kinase 4/6 inhibitor;* ***CBR*** *= clinical benefit rate;* ***DOR*** *= duration of response;* ***ER+*** *= estrogen receptor positive;* ***ESR1mut*** *= ESR1-mutant;* ***ET*** *= endocrine therapy;* ***HER2-*** *= human epidermal growth factor receptor 2 negative;* ***MBC*** *= metastatic breast cancer;* ***ORR*** *= objective response rate;* ***OS*** *= overall survival;* ***PFS*** *= progression-free survival;* ***PK*** *= pharmacokinetics;* ***PROs*** *= patient reported outcomes*

Building momentum for palazestrant as a potential backbone therapy

Registration-directed pivotal Phase 3 clinical trials underway and planned

Key factors driving palazestrant momentum

- Complete inhibition of key ER+ receptors
- Mono and combo potential
- Experience in 400+ patients and counting

OPERA-01 Breast Cancer Study

- 510-patient 2/3L Phase 3 monotherapy trial vs. standard of care
- Currently enrolling
- Visit opera01study.com for more information

OPERA-02 Breast Cancer Study

- ~1,000-patient 1L Phase 3 combination trial with ribociclib vs. standard of care
- Planned initiation in mid-2025

Olema ONCOLOGY

ER+ = estrogen receptor positive

Planning for palazestrant U.S. commercial launch in 2027

Initial launch anticipated in 2/3L setting with potential 1L launch following positive OPERA-02 trial

Annual U.S. incidence estimated at **~40K*** patients

Commercial launch planning beginning in 2025

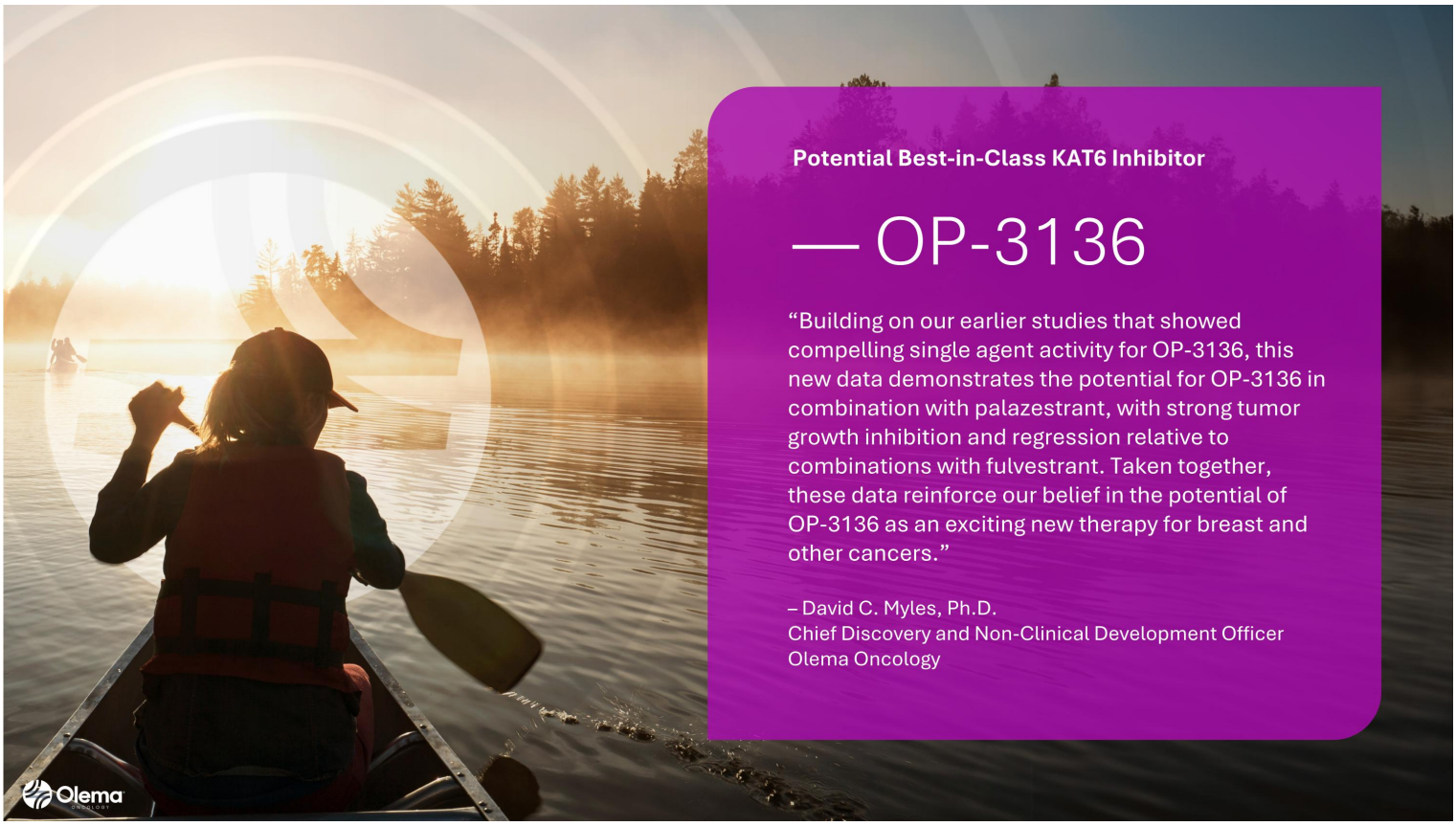
Early commercial leadership build in 2026

Establishing manufacturing supply and distribution for commercial use

Anticipated targeted field force of **~75–100 reps** to cover U.S. breast oncologists

U.S. market potential of **$3-5B*** in 2/3L setting

[1] *Olema internal data.*


Potential Best-in-Class KAT6 Inhibitor
— OP-3136
“Building on our earlier studies that showed compelling single agent activity for OP-3136, this new data demonstrates the potential for OP-3136 in combination with palazestrant, with strong tumor growth inhibition and regression relative to combinations with fulvestrant. Taken together, these data reinforce our belief in the potential of OP-3136 as an exciting new therapy for breast and other cancers.”
– David C. Myles, Ph.D.
Chief Discovery and Non-Clinical Development Officer
Olema Oncology
Olema

OP-3136: Olema's KAT6 inhibitor*

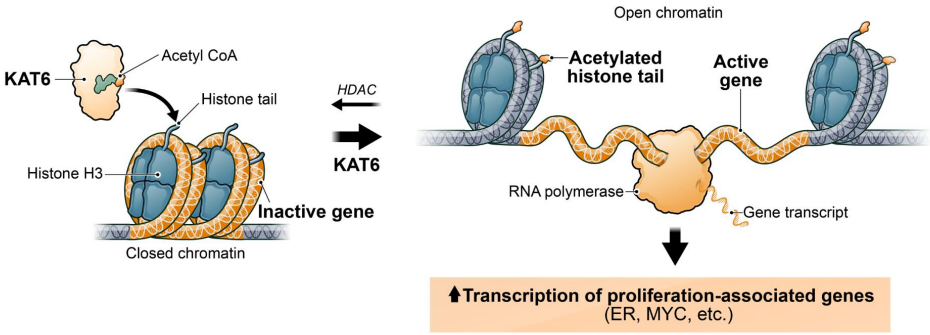
An exciting new and validated target^ for the treatment of ER+/HER2- metastatic breast cancer

- Highly potent and selective against KAT6A/B
- Orally bioavailable with high levels of free drug exposure
- OP-3136 synergizes with palazestrant and CDK4/6 inhibitors in preclinical models
- New data presented at the ENA meeting in October 2024
- IND cleared by FDA and Phase 1 clinical trial is recruiting patients

*Discovered in collaboration with Aurigene. ^Mukohara T, et al. Inhibition of lysine acetyltransferase KAT6 in ER+ HER2- metastatic breast cancer: a phase 1 trial. Nat Med (2024).
CDK4/6i *= cyclin-dependent kinase 4/6 inhibitor;* ***ER+*** *= estrogen receptor positive;* ***IND*** *= investigational new drug application;* ***KAT6*** *= lysine acetyltransferase 6*

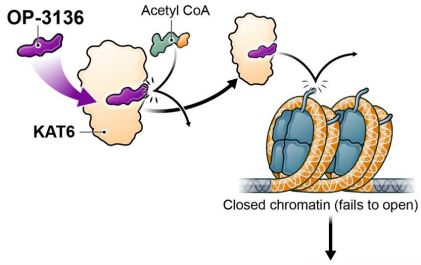
OP-3136 mechanism of action

KAT6 acetylates chromatin enabling transcription and proliferation



⬆Transcription of proliferation-associated genes
(ER, MYC, etc.)

OP-3136 prevents transcription

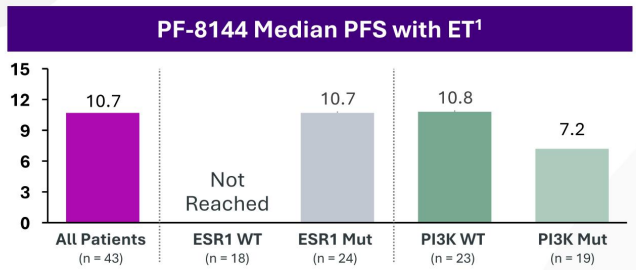


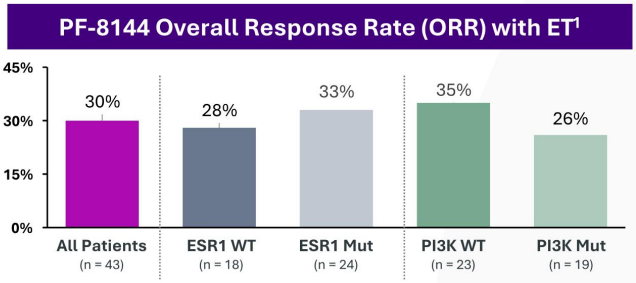
KAT6 inhibition by **OP-3136 stops acetylation** of histones and **blocks transcription of proliferation-associated genes**
(ER, MYC, etc.)

- KAT6 is a clinically validated target[1] and overexpression correlated with worse clinical outcomes in ER+ breast cancer[2]
- KAT6 inhibition downregulates genes involved **in estrogen receptor signaling** and other signaling pathways[3]
- Inhibition regulated gene expression through blockade of acetylation of histones

[1] *Sommerhalder D, et al. First-in-human phase 1 dose escalation study of the KAT6 inhibitor PF-07248144 in patients with advanced solid tumors. JCO. 2023. 41(16)1054-1054.*
[2] *Yu L, et, al. Identification of MYST3 as a novel epigenetic activator of ERα frequently amplified in breast cancer. Oncogene. 2017 May 18;36(20):2910-2918.*
[3] *Sharma S, et al. Discovery of a highly potent, selective, orally bioavailable inhibitor of KAT6A/B histone acetyltransferases with efficacy against KAT6A-high ER+ breast cancer. Cell Chemical Biology. 30, 1–20.*
Note: Olema KAT6 inhibitors discovered in collaboration with Aurigene.
***AR** = androgen receptor; **ER** = estrogen receptor; **ER+** = estrogen receptor positive; **KAT6i** = lysine acetyltransferase 6 inhibitor*

KAT6i validated as an active new target in metastatic breast cancer*





First-in-human clinical proof of concept for KAT6 inhibitor from Pfizer has important implications:

- **Validates KAT6 as an active new target for the treatment of metastatic breast cancer**
  - Activity demonstrated regardless of mutation status (*ESR1* and PI3K/AKT/PTEN)
- **Demonstrates promising avenue to have a significant impact on future standard of care**
  - Combination of KAT6 inhibitor + ET demonstrated synergistic activity, consistent with preclinical observations
- **Highlights opportunity for potential best-in-class KAT6 inhibitor OP-3136 in combination with potential best-in-class CERAN palazestrant**

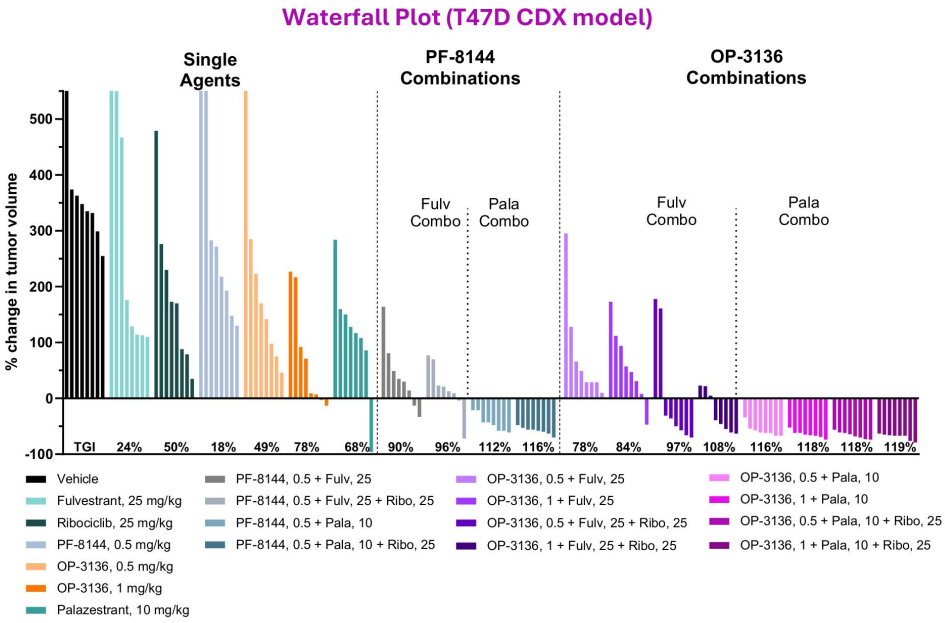
NOTE: Incorporates publicly-available third-party data that we have not independently verified. These results should be interpreted with caution. Such third-party data has been pulled by us from publicly-available sources for supplemental informational purposes, only. Refer to further disclaimers on slide 2.

[1] Mukohara T, et al. Inhibition of lysine acetyltransferase KAT6 in ER+/HER2- metastatic breast cancer: a phase 1 trial. Nat Med (2024).

CERAN = complete estrogen receptor antagonist; ***ER1*** = estrogen receptor 1gene; ***ER1 Mut*** = estrogen receptor 1 mutant; ***ESR1 WT*** = estrogen receptor 1 wild-type; ***ET*** = endocrine therapy; ***KAT6i*** = lysine acetyltransferase 6 inhibitor; ***PI3K Mut*** = phosphatidylinositol 3-kinase mutant; ***PI3K WT*** = phosphatidylinositol 3-kinase wild-type; ***PFS*** = progression-free survival

OP-3136 demonstrates synergistic activity in combination with palazestrant

OP-3136 + palazestrant combinations appear superior to OP-3136+fulvestrant combinations

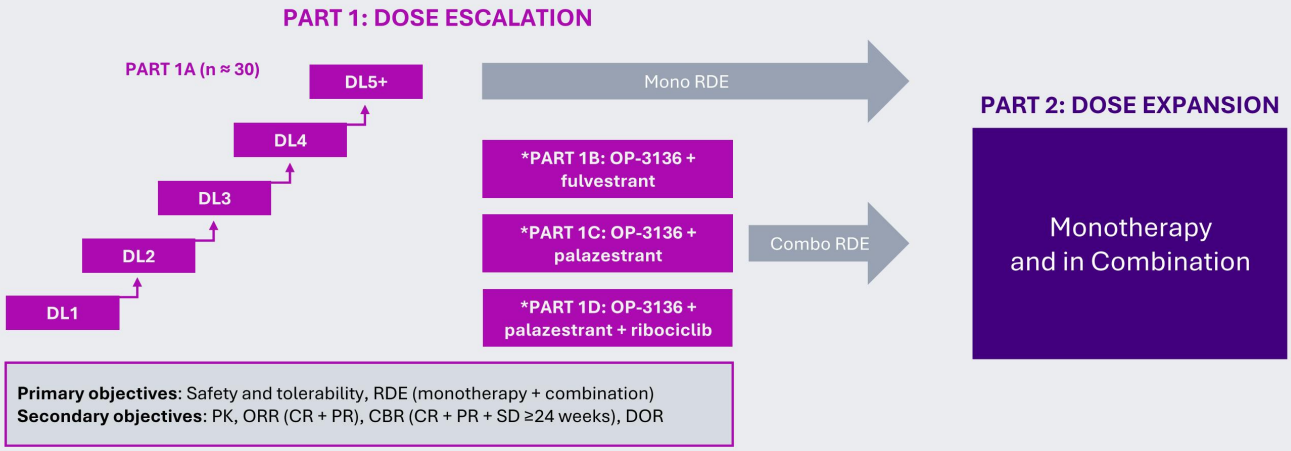


- Palazestrant in combination with either OP-3136 or PF-8144 resulted in strong tumor regression relative to fulvestrant combinations
- OP-3136 and palazestrant combinations showed significantly improved anti-tumor efficacy compared to PF-8144 in combination with fulvestrant
- All OP-3136 combinations were well tolerated, with no significant changes in body weight and no mortality

Source: 2024 EORTC-NCI-AACR Symposium on Molecular Targets and Cancer Therapeutics. Poster #230. T47D model (ER+, HER2-, KAT6A overexpressing, ESR1 wild type, PIK3CA H1047R cell line).
***Fulv** = fulvestrant; **Pala** = palazestrant*

OP-3136 Phase 1 study design

IND cleared by FDA and Phase 1 clinical trial is recruiting patients

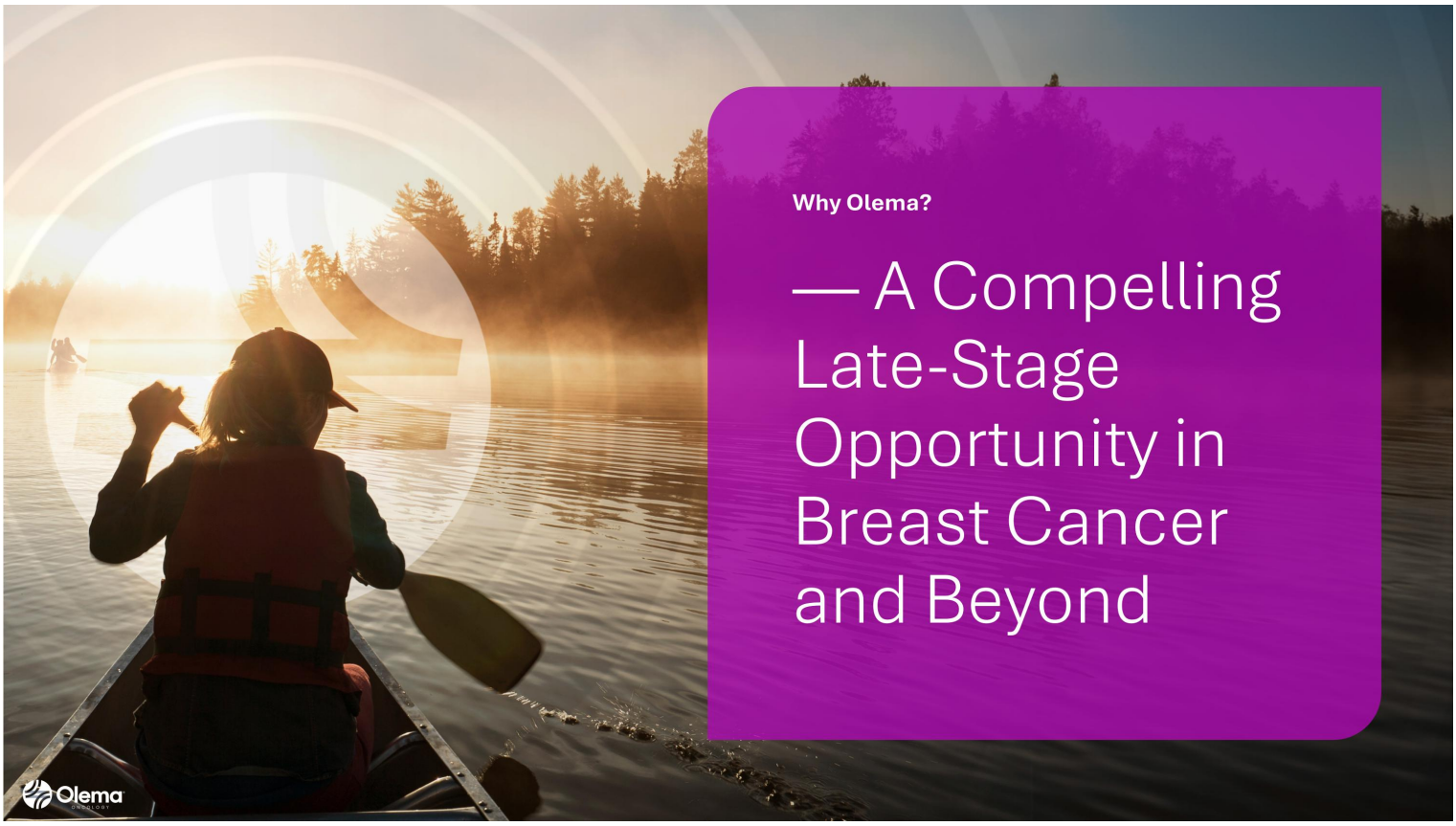


Primary objectives: Safety and tolerability, RDE (monotherapy + combination)
Secondary objectives: PK, ORR (CR + PR), CBR (CR + PR + SD ≥24 weeks), DOR

KEY ELIGIBILITY CRITERIA

- ER+/HER2- mBC (or mCRPC or mNSCLC for PART 1A)
- Post-SOC (PART 1A)
- At least 1 prior line with CDK4/6i + ET (PART 1B/1C/1D)

References: 1. Mukohara T, et al. Inhibition of lysine acetyltransferase KAT6 in ER+ HER2- metastatic breast cancer: a phase 1 trial. Nat Med (2024).
** Cohort to be added in the protocol amendment.*
***CBR** = clinical benefit rate; **CDK4/6i** = cyclin dependent kinase 4/6 inhibitor; **CR** = complete response; **DL** = dose level; **DOR** = duration of response; **ER+** = estrogen receptor positive; **ET** = endocrine therapy; mut = mutation; HER2- = **mCRPC** = metastatic castrate resistant prostate cancer; MBC = metastatic breast cancer; **mNSCLC** = metastatic non-small cell lung cancer; **ORR** = objective response rate; **PK** = pharmacokinetics; **PR** = partial response; **RDE** = recommended dose for expansion; **SD** = stable disease*



Why Olema?

— A Compelling Late-Stage Opportunity in Breast Cancer and Beyond

Olema: a compelling late-stage opportunity in breast cancer and beyond

Changing the treatment paradigm for endocrine-driven cancers

1. Palazestrant anchors Olema's breast cancer program as a potential backbone therapy for metastatic breast cancer
   - Highly differentiated as first oral CERAN/SERD endocrine agent
   - Ongoing 2/3L OPERA-01 Phase 3 trial on track for top-line data in 2026
   - Planned 1L OPERA-02 Phase 3 trial in combination with ribociclib enabled; initiation expected in 2025
   - Mature Phase 1b/2 palazestrant + ribociclib efficacy data to be presented at major medical meeting in 2025
   - Go-to-market strategy for potential U.S. launch in 2027
2. OP-3136 expands pipeline with novel and validated KAT6 target
   - IND cleared by FDA; Phase 1 clinical trial recruiting patients
3. Well-capitalized with $434.1M [1]

[1] *Estimated cash, cash equivalents, and marketable securities as of December 31, 2024 (unaudited).*

***CERAN** = complete estrogen receptor antagonist; **IND** = investigational new drug application; **KAT6** = lysine acetyltransferase 6; **SERD** = selective estrogen receptor degrader*

Thank You

— Advancing medicines for breast cancer and beyond

Olema ONCOLOGY