

*Lilly*

**A MEDICINE COMPANY**

# LILLY ONCOLOGY ASCO INVESTOR EVENT

JUNE 2, 2024

*Lilly*

# Safe Harbor Provision

**This presentation contains forward-looking statements that are based on management's current expectations, but actual results may differ materially due to various factors. The company's results may be affected by factors including, but not limited to, the risks and uncertainties in pharmaceutical research and development; competitive developments; regulatory actions; litigation and investigations; business development transactions; economic conditions; and changes in laws and regulations, including healthcare reform.**

**For additional information about the factors that affect the company's business, please see the company's latest Form 10-K and subsequent Forms 10-Q and 8-K filed with the Securities and Exchange Commission. These materials are not intended to promote the products referenced herein or otherwise influence healthcare prescribing decisions. The safety and efficacy of the agents under investigation have not been established. There is no guarantee that the agents will receive regulatory approval or become commercially available for the uses being investigated.**

**The company undertakes no duty to update forward-looking statements except as required by applicable law**

# Agenda



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## Introduction, Lilly Oncology R&D Turnaround and Commercial Performance

Jake Van Naarden, President

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## Lilly Oncology Portfolio

Lillian Smyth, M.D., Global Head, Breast Cancer

John Pagel, M.D., Ph.D., Global Head, Hematology

Geoff Oxnard, M.D., Global Head, Thoracic Cancer

Arjun Balar, M.D., Global Clinical Development

Barry Taylor, Ph.D., Chief Scientific Officer

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## Q&A Session

# Lilly Oncology Leadership Team



**Jake Van Naarden**  
President



**Barry Taylor, Ph.D.**  
Chief Scientific Officer



**Kara Clinton**  
Global Medical Affairs



**Winselow Tucker**  
Chief Commercial Officer



**Arjun Balar, M.D.**  
Global Clinical Development



**Lillian Smyth, M.D.**  
Global Head, Breast Cancer



**John Pagel, M.D., Ph.D.**  
Global Head, Hematology



**Geoff Oxnard, M.D.**  
Global Head, Thoracic Cancer

# Oncology R&D Turnaround

Jake Van Naarden, President

# Lilly's History in Oncology

## CHEMOTHERAPY ERA



- **Oncovin®** and **Velban®** approved in **1960s**
- Still in use today

## MONOCLONAL ANTIBODIES



- **Erbixut®** acquired as part of **2008** ImClone acquisition
- Among the first mAbs approved for use with solid tumors

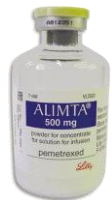
## TARGETED THERAPY



- **Verzenio®** first approved in **2017** for metastatic breast cancer
- First CDK4/6 inhibitor approved in early breast cancer



- **Gemzar®** approved in **1995**
- First active drug in pancreatic cancer



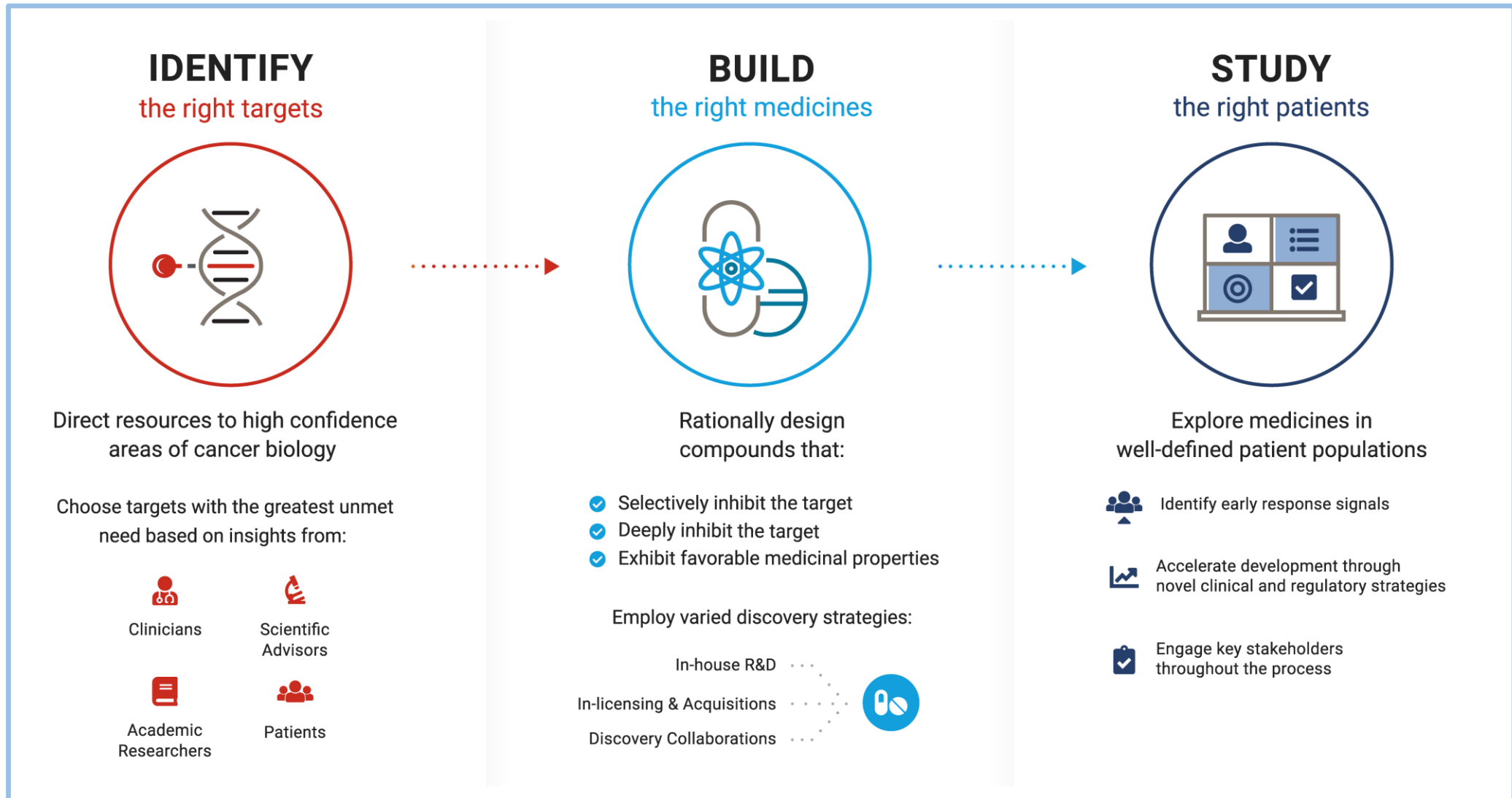
- **Alimta®** approved in **2004**
- Mainstay of chemo combinations, maintenance therapy, and backbone for IO



- **Cyramza®** approved in **2014**
- Mainstay in post-KEYNOTE-189 lung cancer

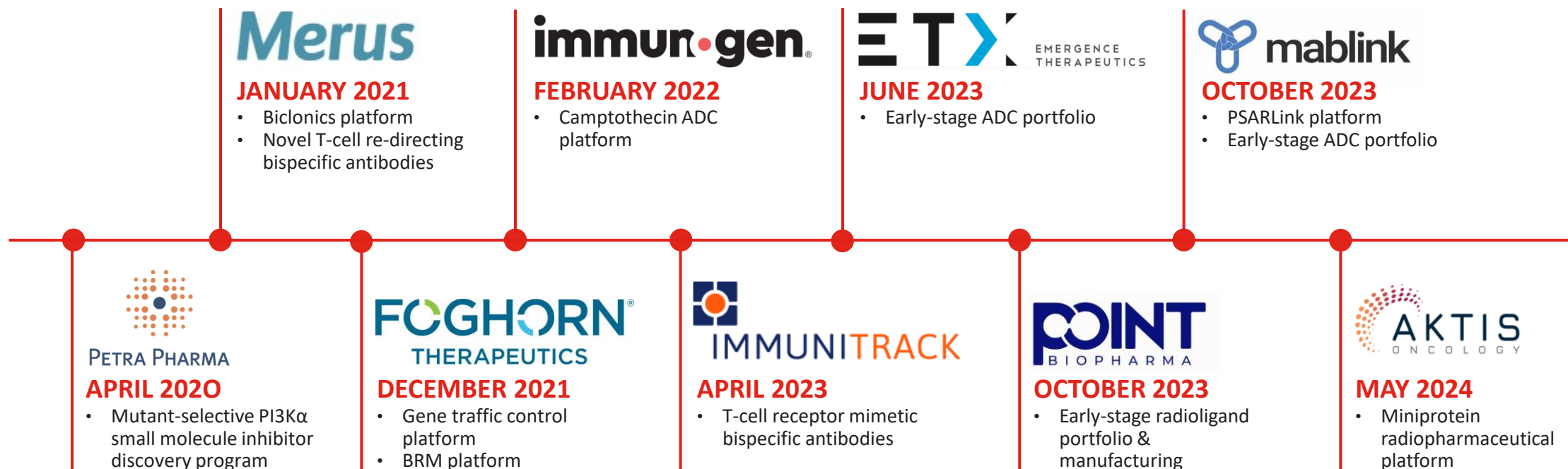
CDK = cyclin-dependent kinase; IO = immuno-oncology; mAb = monoclonal antibody.

# Drug Development Approach at Lilly

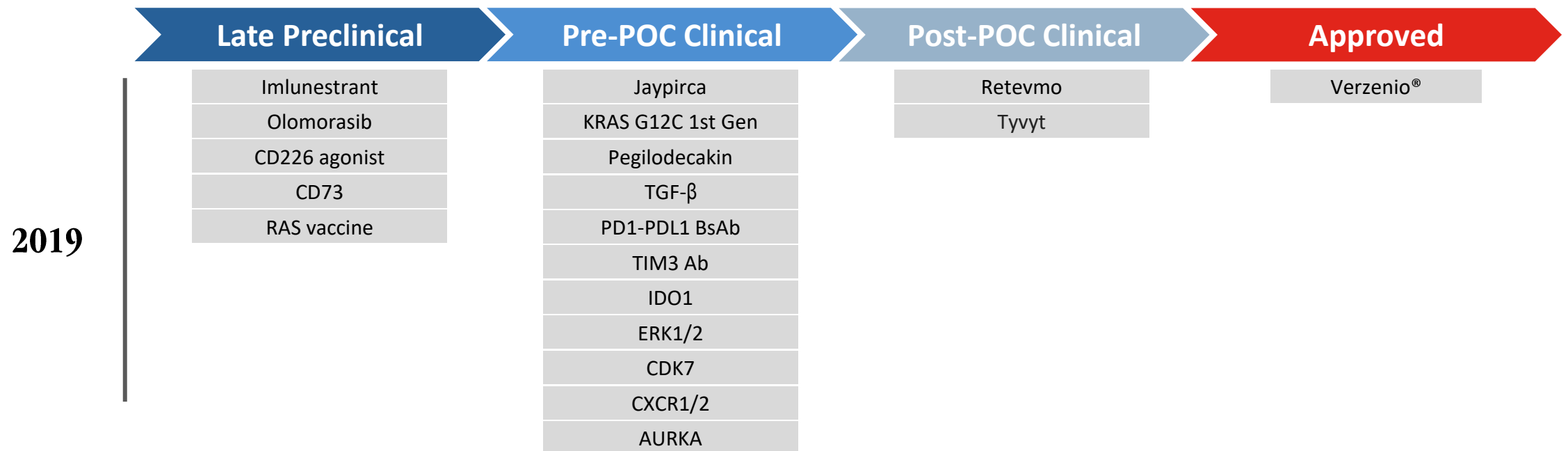




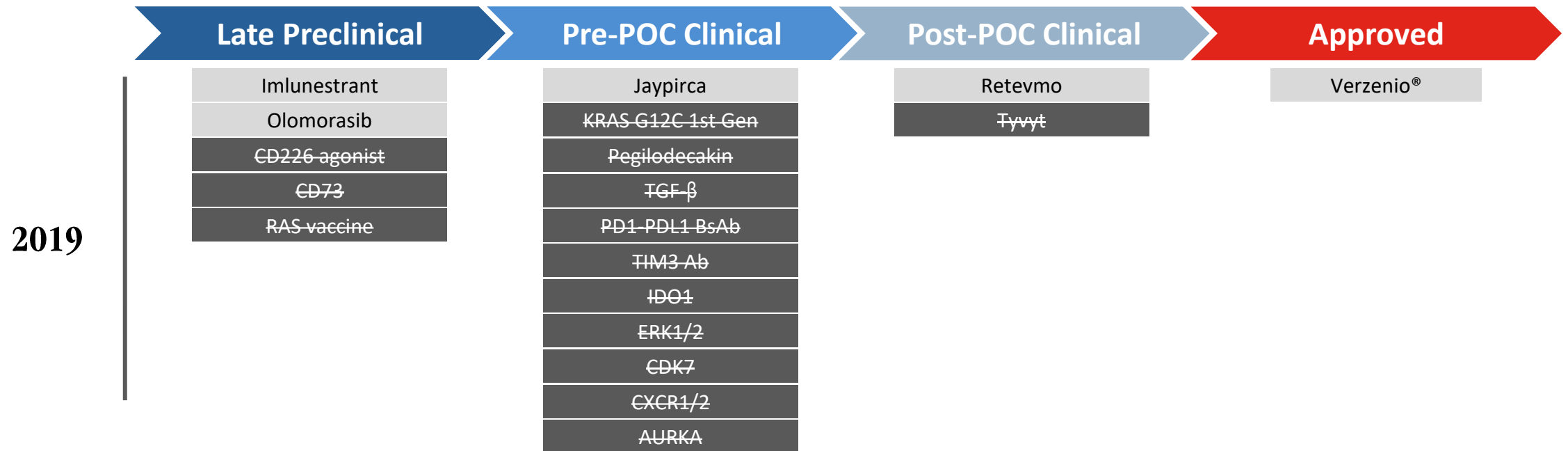
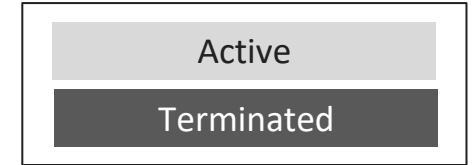
# External Innovation Focus After Loxo Acquisition



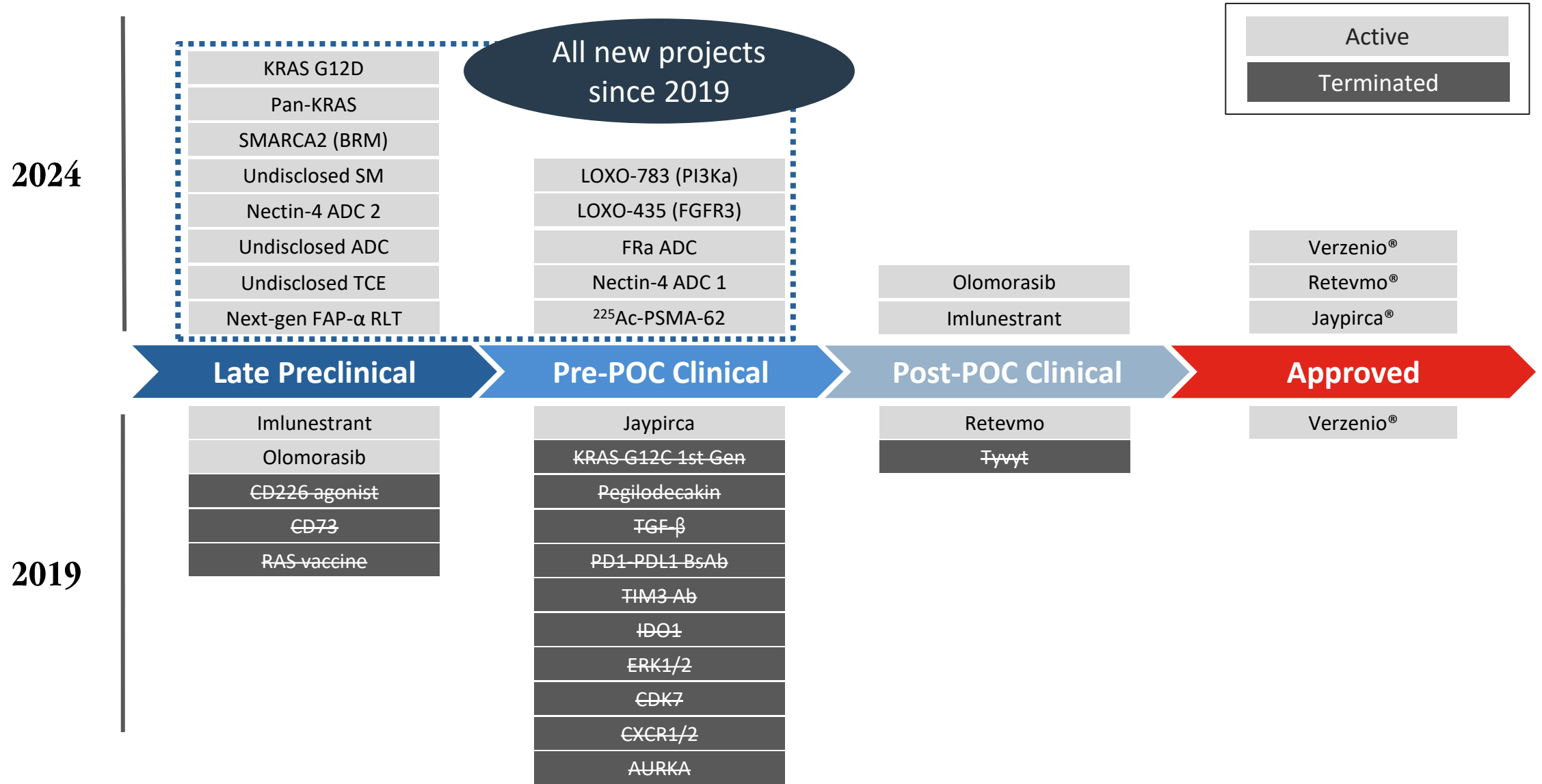
# Oncology R&D Turnaround Since 2019



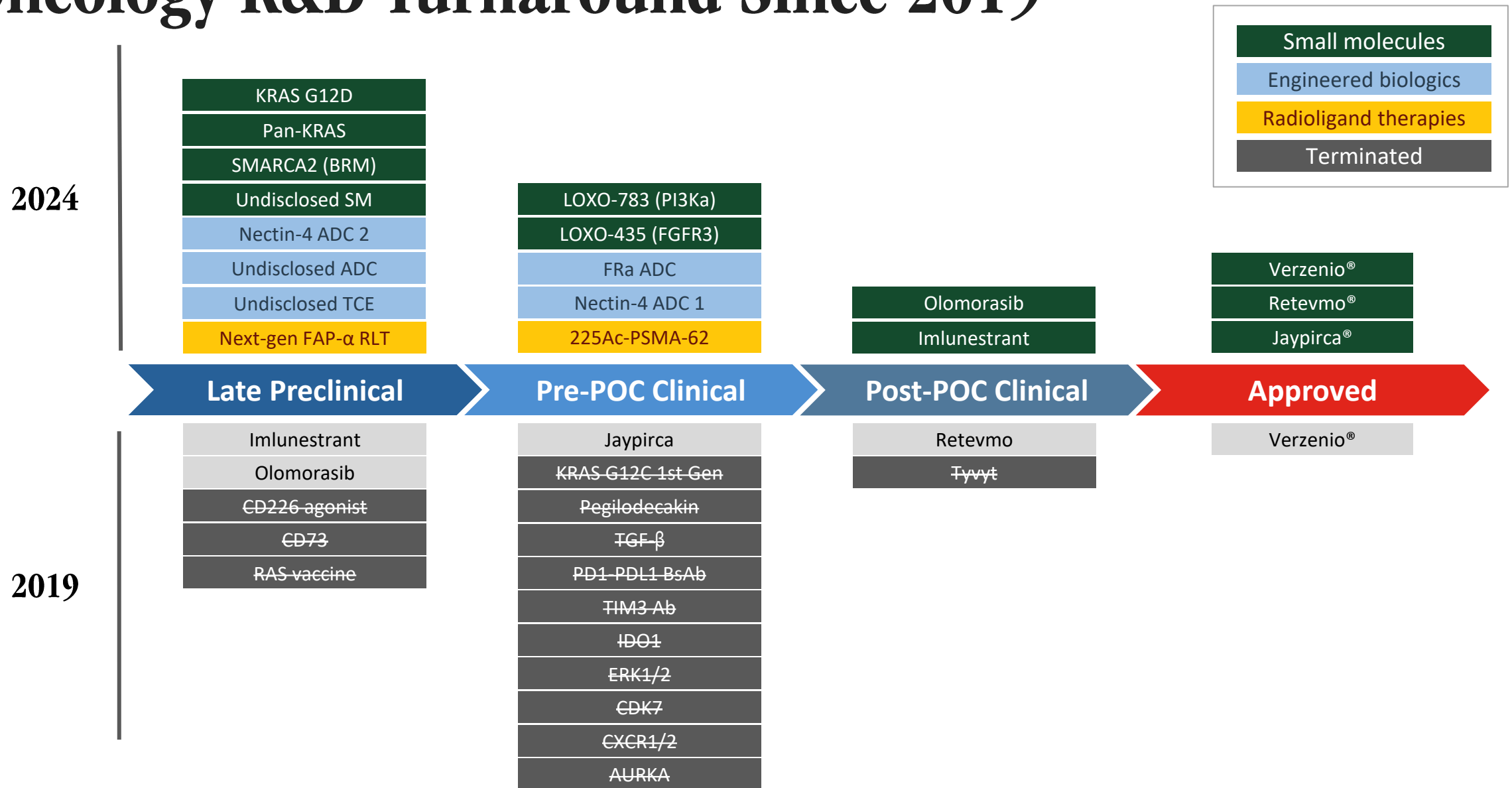
# Oncology R&D Turnaround Since 2019



# Oncology R&D Turnaround Since 2019



# Oncology R&D Turnaround Since 2019



# Portfolio Momentum

8 Pivotal Randomized Trial Readouts

Outcome	Medicine	Study	Readout Timing
✓	Retevmo®	LIBRETTO-431	Jul '23
✓	Retevmo®	LIBRETTO-531	Aug '23
✓	Verzenio®	MonarchE 5-year data	Aug '23
✗	Verzenio®	Monarch-3 Overall Survival	Aug '23
✓	Jaypirca®	BRUIN-CLL-321	Nov '23
✗	Verzenio®	CYCLONE-2/3	Feb '24
✓	Verzenio®	PostMonarch	Q2 '24
	Imlunestrant	EMBER-3	2H '24

# Portfolio Momentum

Active First Human Dose (FHD) Agenda for 2024

FHD Achieved	Target/Program	Patient Focus
✓	<sup>225</sup> Ac-PSMA-62	Prostate cancer
✓	Nectin-4 ADC 1	Bladder cancer
	Nectin-4 ADC 2	Bladder cancer
✓	FRa ADC	Ovarian cancer
	SMARCA2 (BRM) Inhibitor	Non-small cell lung cancer (BRG1 loss)
	KRAS G12D	Pancreatic cancer, Colorectal cancer, Non-small cell lung cancer
	Pan-KRAS	Pancreatic cancer, Colorectal cancer, Non-small cell lung cancer
	Next-Gen FAPi RLT	Multiple solid tumors

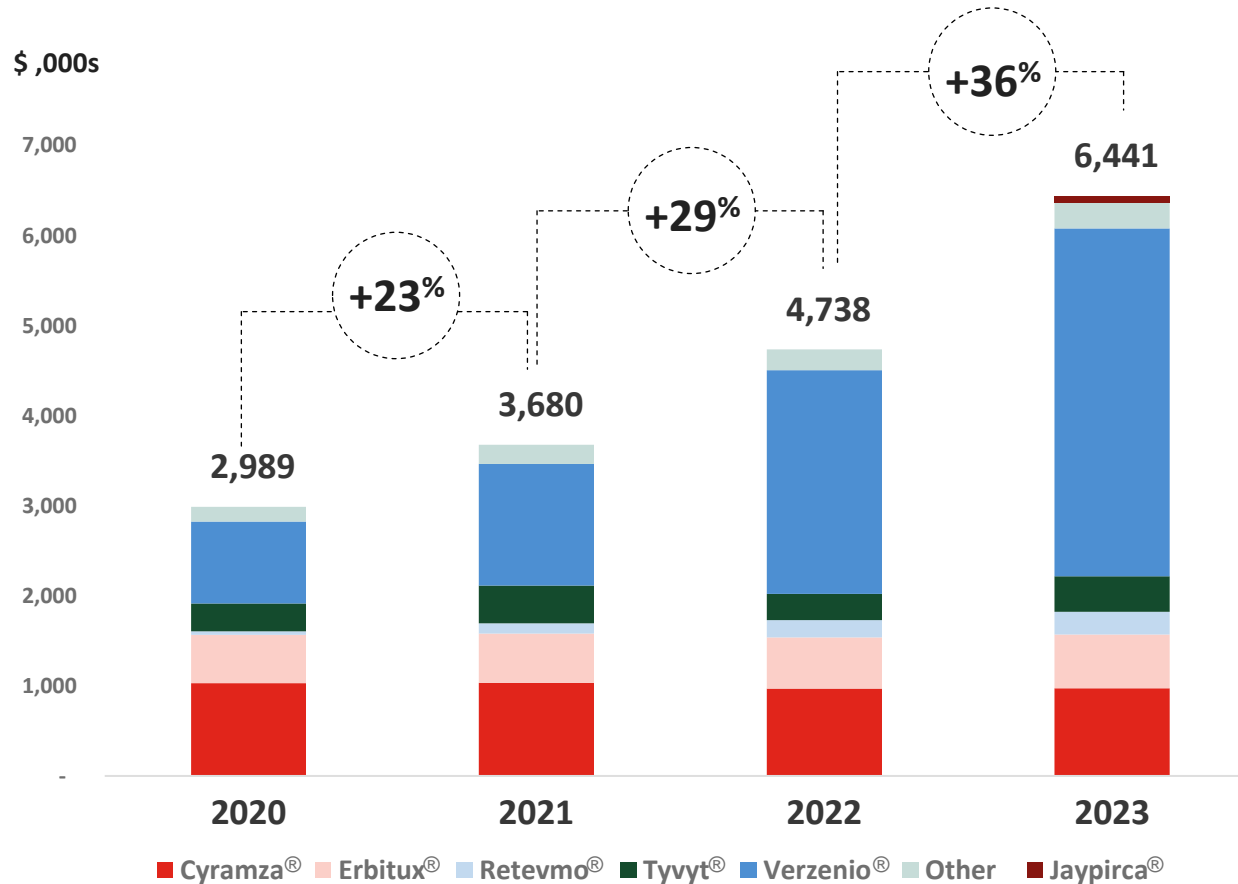
# Oncology Commercial Performance

Jake Van Naarden, President



# Lilly Oncology Commercial Performance

## ONCOLOGY REVENUE GROWTH<sup>1</sup>



## KEY PRODUCTS



CDK4/6 market leader with 2023 worldwide revenue growth of **+56%** and U.S. growth of **+52%**; Approved across metastatic and early breast cancer indications



Market-leading RET inhibitor with positive uptake since 2020 launch

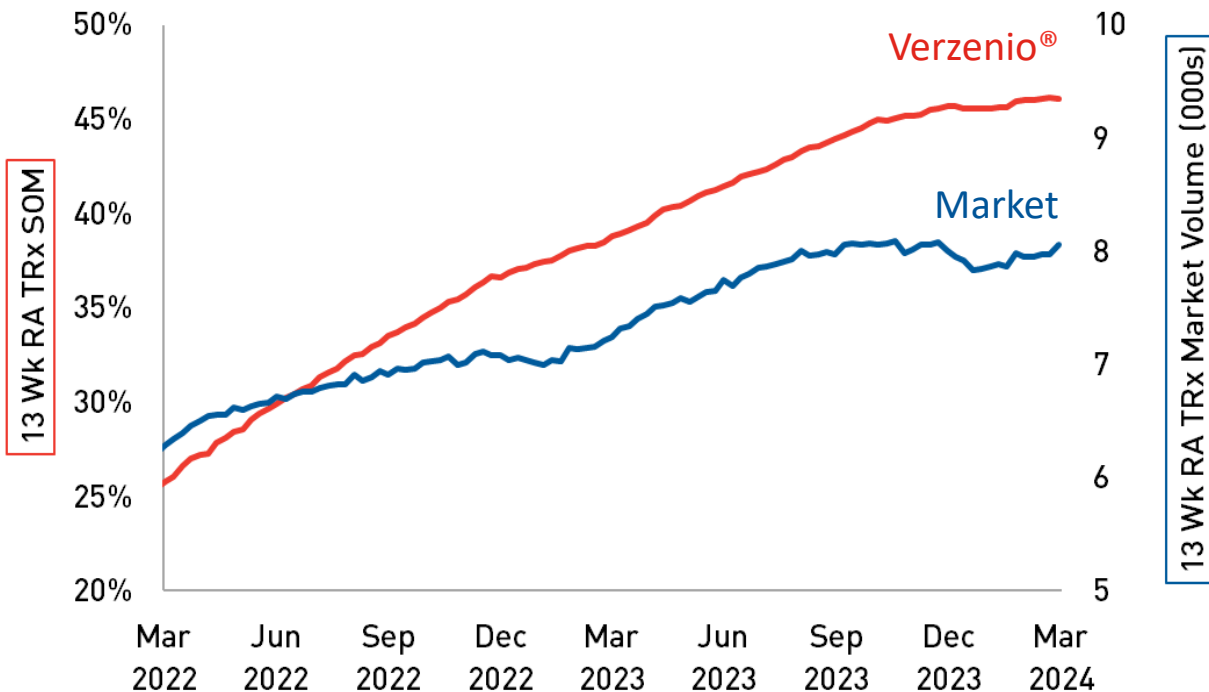


Received accelerated approval for both MCL and CLL patients in 2023; Future potential growth driver as Jaypirca® moves into earlier lines of therapy

1. Excludes Alimta® revenue. CDK = cyclin-dependent kinase; CLL = chronic lymphocytic leukemia; MCL = mantle cell lymphoma; RET = rearranged during transfection.

# Verzenio® Performance

## U.S. TRx SOM and Market Volume<sup>1</sup>



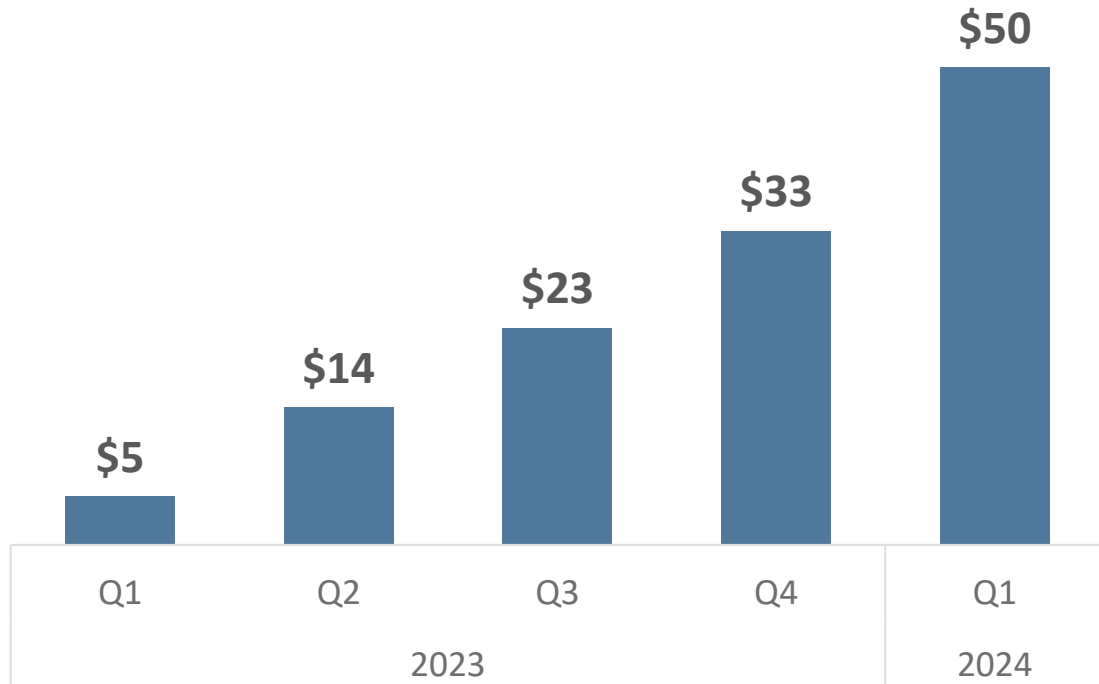
## PERFORMANCE DRIVERS

- Strong worldwide sales growth of 40% in Q1 2024 driven by the early breast cancer indication
- Verzenio® has strong market penetration in the U.S., with nearly 60% of high-risk early breast cancer patients receiving Verzenio®
- Q1 2024 U.S. TRx growth of over 32%, which is outpacing growth of the overall CDK4/6 market

<sup>1</sup> IQVIA NPA TRx 3MMA, weekly data March 29, 2024. RA = rolling average; SOM = share of market; TRx = total prescriptions.

# Jaypirca<sup>®</sup> Performance

## REVENUE PERFORMANCE (\$M)



## PERFORMANCE DRIVERS

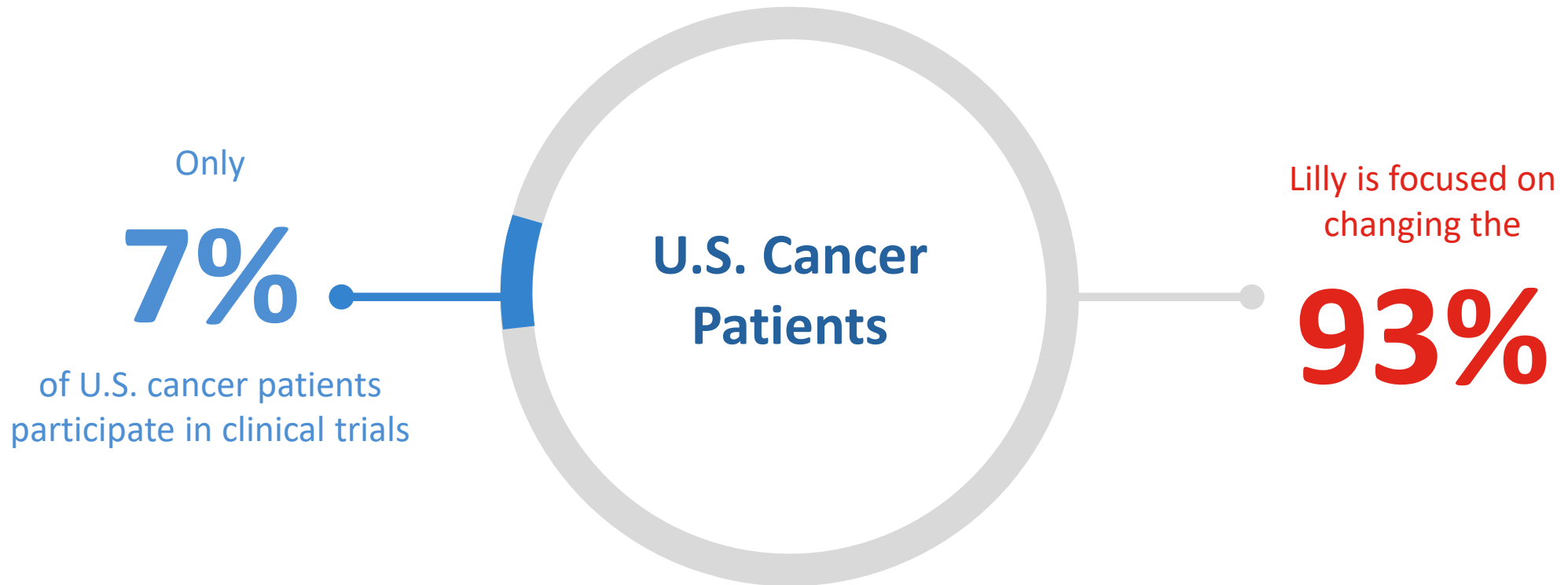
Jaypirca<sup>®</sup> received accelerated approval for MCL in January 2023 and CLL in December 2023; CLL indication makes up the majority of new patient starts

With the growth of BTKi and BCL2 usage, there is a growing number of CLL patients previously treated with both classes of medicines

NCCN Clinical Practice Guidelines in Oncology gives a 2A recommendation for Jaypirca's<sup>®</sup> labeled population<sup>1</sup>

1. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines<sup>®</sup>) for Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma V.3.2024. B-Cell Lymphomas v.2.2024 © National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed May 29, 2024]. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way. BCL2 = B-cell lymphoma; BTKi = Bruton tyrosine kinase inhibitor; MZL = marginal zone lymphoma; NCCN = National Comprehensive Cancer Network<sup>®</sup>; SLL = small lymphocytic lymphoma.

# Working to Speed New Treatments to Patients



# Lilly Oncology Portfolio

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Lillian Smyth, M.D., Global Head, Breast Cancer

John Pagel, M.D., Ph.D., Global Head, Hematology

Geoff Oxnard, M.D., Global Head, Thoracic Cancer

Arjun Balar, M.D., Global Clinical Development

Barry Taylor, Ph.D., Chief Scientific Officer

# Verzenio<sup>®</sup> Imlunestrant LOXO-783 (PI3K $\alpha$ H1047R Inhibitor)

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Lillian Smyth, M.D.  
Global Head, Breast Cancer

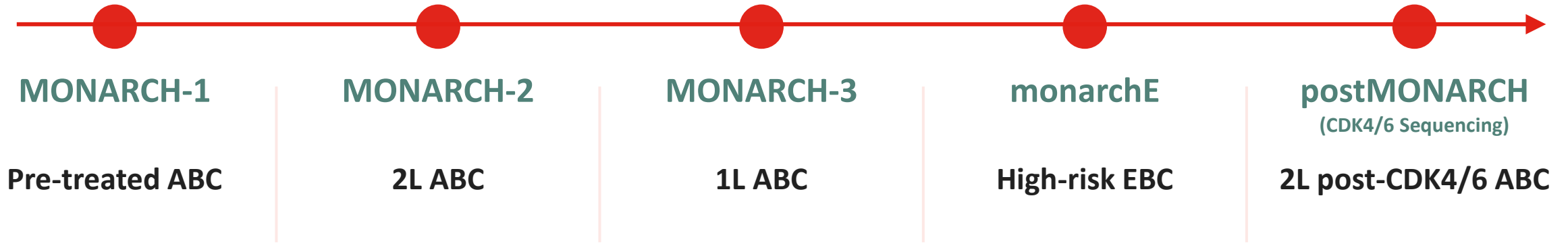


# Verzenio® Pivotal Studies in HR+, HER2- BC

Abemaciclib is an oral, potent CDK4/6i with greater selectivity for CDK4 than CDK6 which allows continuous dosing due to less myelosuppression

Results presented

2024 ASCO ANNUAL MEETING

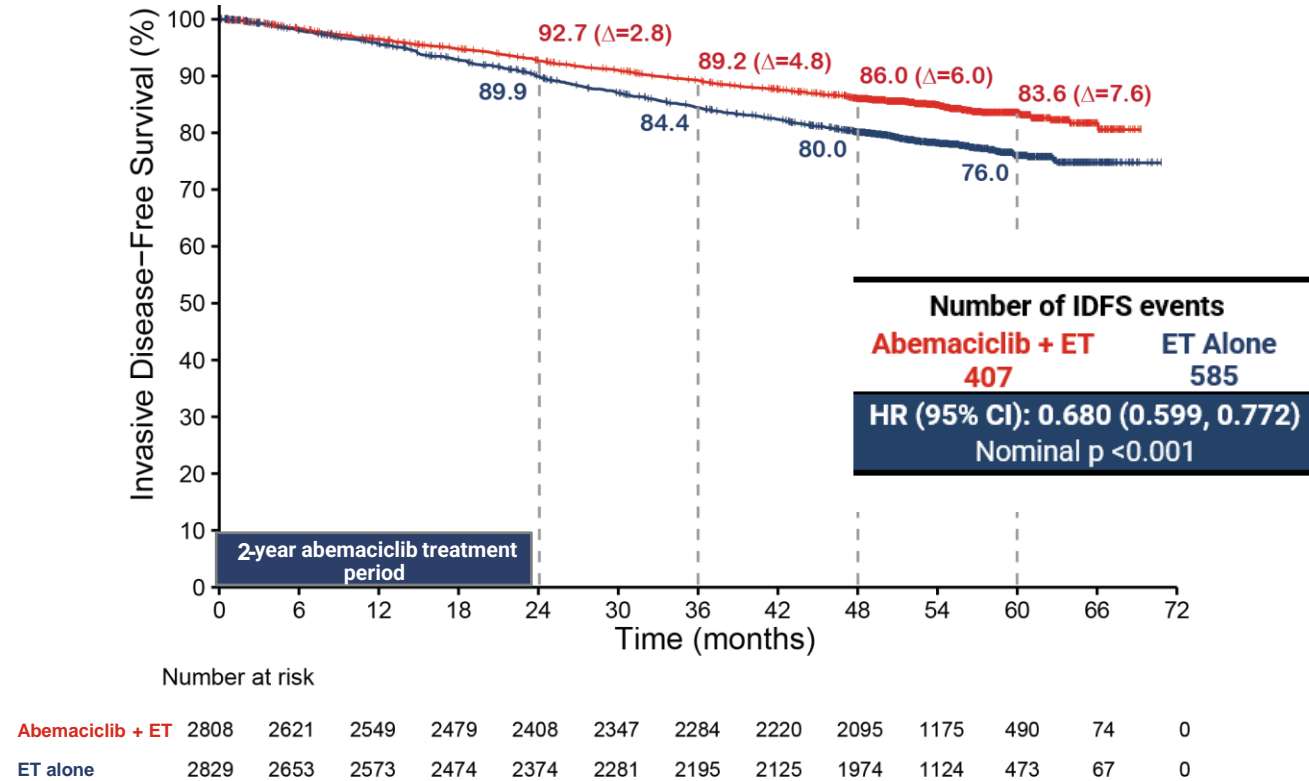


Abemaciclib is approved in ABC as monotherapy and in combination with an AI or fulvestrant, and is the first and only CDK4/6 inhibitor approved for high-risk EBC

Common adverse events for Verzenio® include: diarrhea, nausea, infections, anemia, decreased appetite, headache, alopecia, abdominal pain, tiredness, leukopenia, vomiting, and thrombocytopenia

ABC = advanced breast cancer; AI = aromatase inhibitor; BC = breast cancer; CDK = cyclin-dependent kinase; EBC = early breast cancer; HR+ = hormone receptor positive; HER2- = human epidermal growth factor receptor 2; 1L = first line; 2L = second line.

# MonarchE: 5-Year Efficacy Results<sup>1</sup>



32% reduction in the risk of developing IDFS event

Continued KM curve separation beyond the treatment period

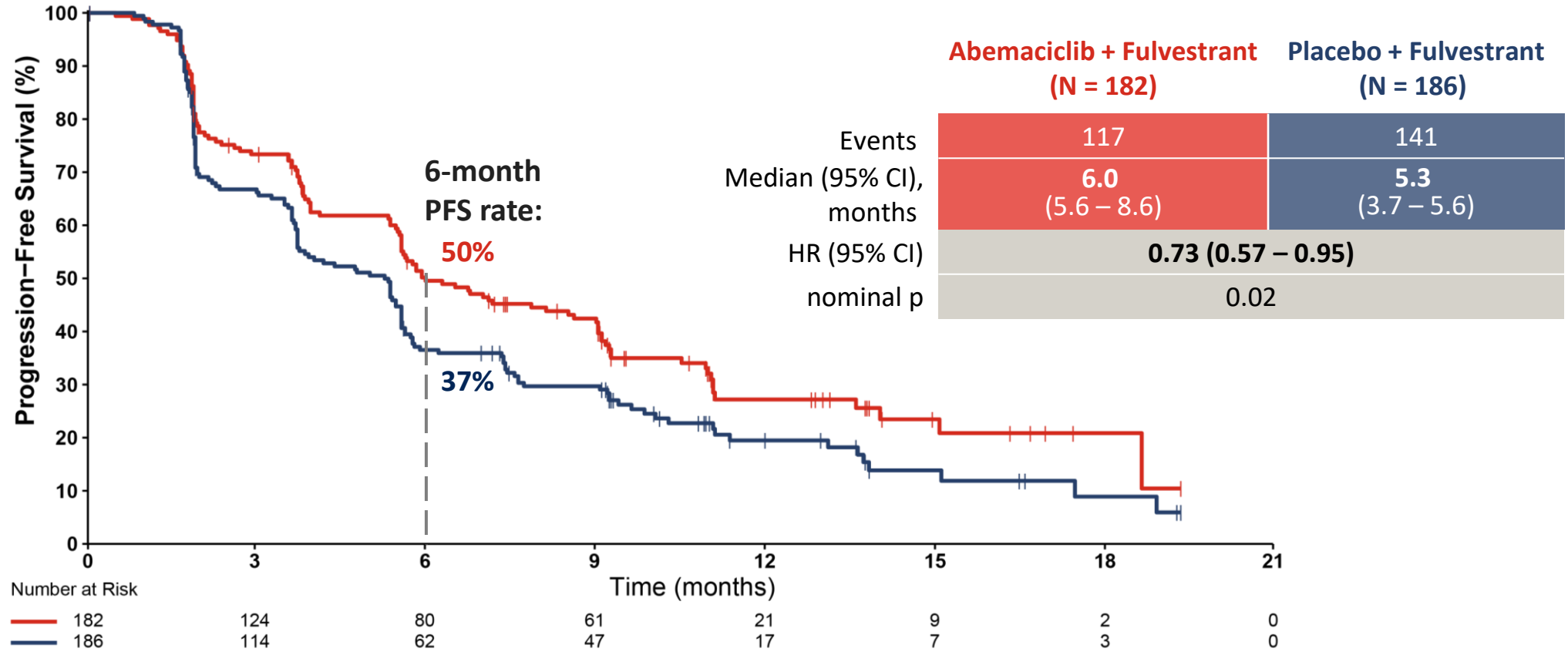
7.6% absolute difference at 5 years

Abemaciclib + ET is the globally approved, standard adjuvant treatment for high-risk EBC (NCCN Category 1 rating<sup>2</sup>, strong ASCO guideline recommendation)

1. Nadia Harbeck, MD. ESMO, Madrid, Spain. 20 October 2023. 2. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines<sup>®</sup>) for Breast Cancer V.2.2024. © National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed May 29, 2024. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way. ASCO = American Society of Clinical Oncology; ET = endocrine therapy; HR = hazard ratio; IDFS = invasive disease-free survival; KM = Kaplan Meier; NCCN = National Comprehensive Cancer Network.



# postMONARCH: Primary Analysis



Abemaciclib improved investigator-assessed PFS leading to a 27% reduction in the risk of developing an event

Kallinsky K. Presented at ASCO; May 31 – June 4, 2024. Abstract #LBA1001. PFS = progression-free survival.

# postMONARCH: Conclusions

- postMONARCH is the first randomized, placebo-controlled Phase III study to demonstrate benefit of continued CDK4/6 inhibition beyond progression on a CDK4/6i
- Abemaciclib improved PFS in patients with HR+, HER2- ABC with disease progression on prior CDK4/6i + ET, despite the control arm performing better than expected
  - 27% risk reduction for developing a PFS event (HR: 0.73 [0.57 – 0.95])
  - Consistent benefit across multiple prespecified and clinically relevant subgroups, including key biomarker subgroups
  - Consistent improvement across key secondary efficacy endpoints, including PFS by BICR and ORR
- Safety was consistent with the known abemaciclib profile and discontinuation rate was low

Abemaciclib + fulvestrant offers a targeted therapy option after disease progression on a CDK4/6i for patients with HR+, HER2- ABC, not selected for biomarker status

# Imlunestrant

A brain-penetrant oral SERD designed for continuous ER target inhibition (including ESR1-mutant breast cancer)

## Current Treatment Landscape

- No clear SOC after progression on 1L therapies in ER+, HER2- ABC
  - Recent evidence (postMonarch) for abemaciclib in this setting
- No SERD approved in combination with CDK4/6i OR in the adjuvant setting

## Program Thesis

- Develop an oral SERD to differentiate in ABC by combining with abemaciclib
- Displace SOC endocrine therapy in the adjuvant setting

## Program Background

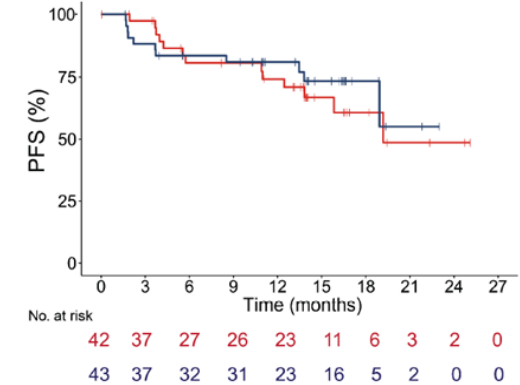
- Encouraging early clinical efficacy in 2L post-CDK4/6i setting (alone & with other SOC target therapies)
- Monotherapy was well tolerated and safely combines with SOC
- Pivotal registrational studies ongoing



SERD = selective estrogen receptor degrader; SOC, standard of care.

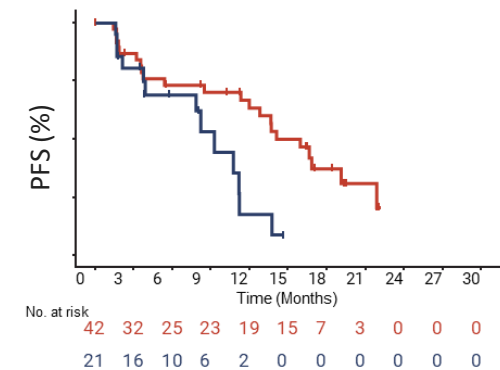
### % Progression Free Survival<sup>1</sup>

Group	n	Events	Median (95% CI)
Imlunestrant + abemaciclib	42	13	19.2 (13.8, NA)
Imlunestrant + abemaciclib + AI	43	11	NA (18.9, NA)



### % Progression Free Survival<sup>2</sup>

Group	N	Events	Median (95% CI)
Imlunestrant + everolimus	42	22	19.2 (13.8, NA)
Imlunestrant + alpelisib	21	13	9.2 (3.7, 11.1)

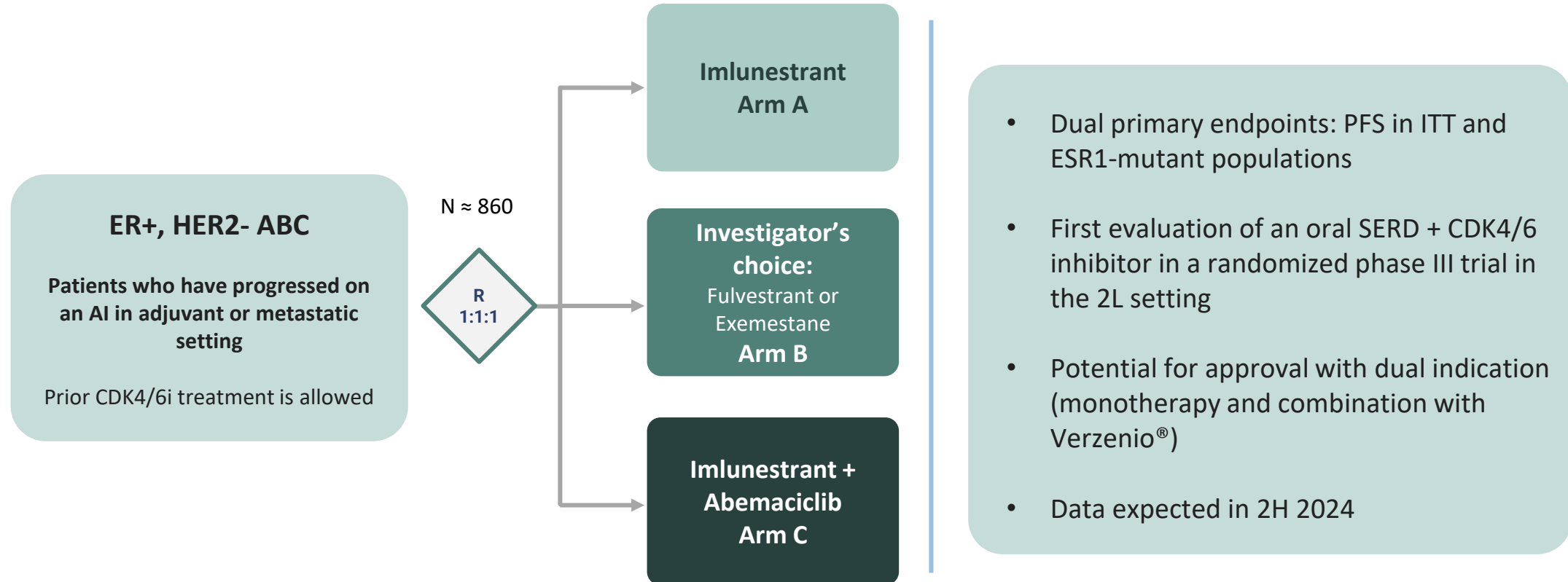


Most common any grade TRAEs: diarrhea, nausea, fatigue, and neutropenia

1. Jhaveri KL, et al. Presented at SABCS 2023. Abstract PS15-09. 2. Jhaveri KL, et al. Presented at ESMO 2023. Abstract 383 MO.

# Imlunestrant

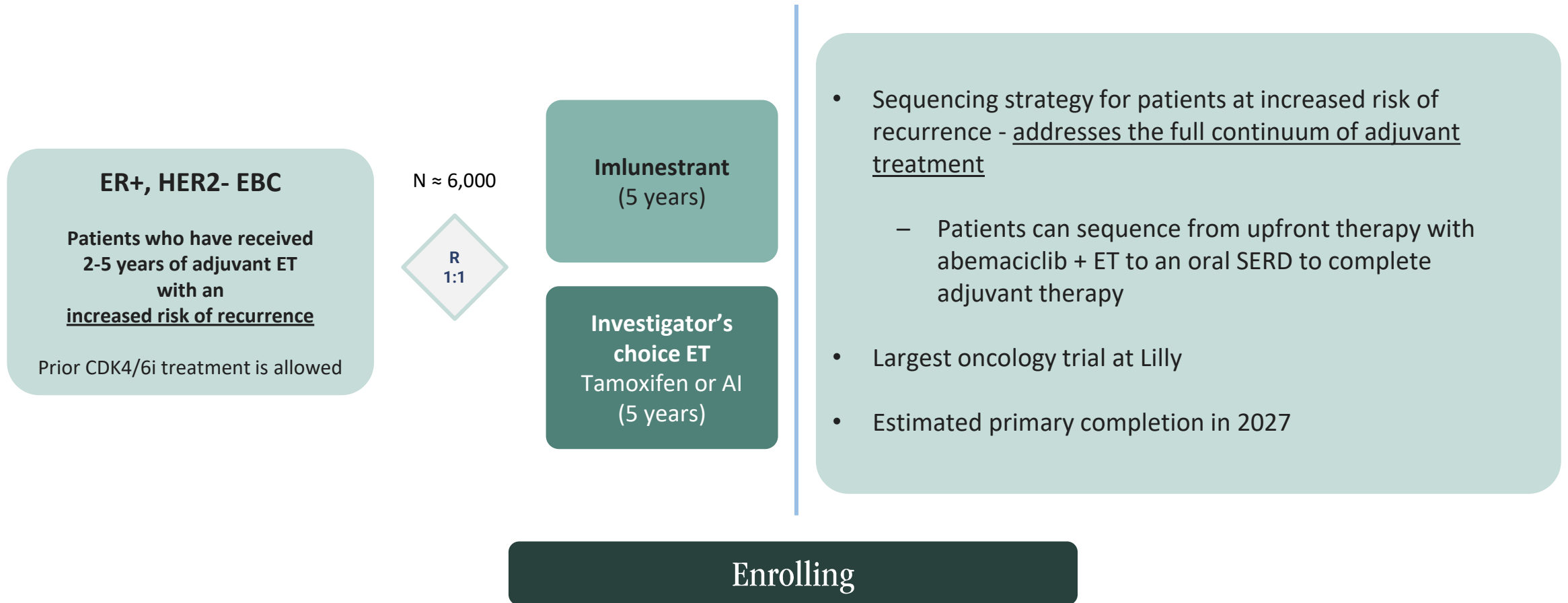
## ONGOING PHASE III REGISTRATIONAL TRIAL: EMBER-3



ClinicalTrials.gov. NCT05514054. ITT = intent-to-treat; PFS = progression-free survival; R = randomization.

# Imlunestrant

## ONGOING PHASE III REGISTRATIONAL TRIAL: EMBER-4



ClinicalTrials.gov. NCT05514054. EBC = early breast cancer; ET = endocrine therapy.

# LOXO-783

A highly mutant-selective PI3K $\alpha$  H1047R allosteric inhibitor

## Current Treatment Landscape

- PI3K $\alpha$  H1047R mutations occur in ~15% of breast cancer
- Approved PI3K $\alpha$  and AKT inhibitors are not mutant-selective, leading to wildtype-mediated toxicity, including hyperglycemia, skin, and GI toxicity

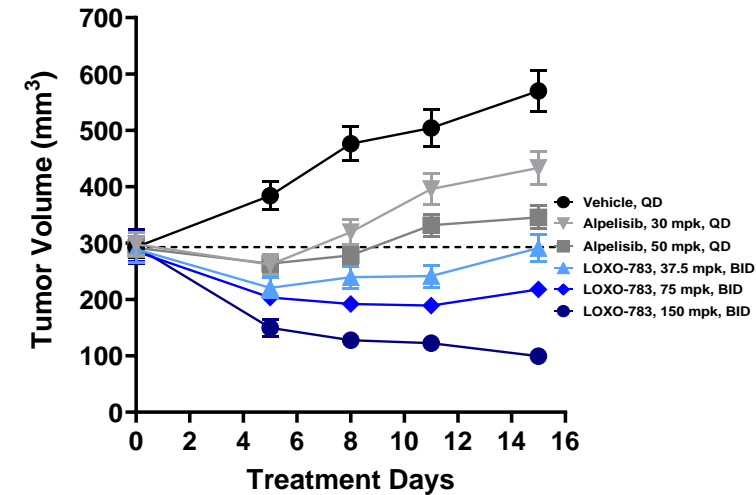
## Program Thesis

- Develop a mutant-selective PI3K $\alpha$  H1047R inhibitor with selectivity over wildtype PI3K $\alpha$  leading to superior efficacy and tolerability

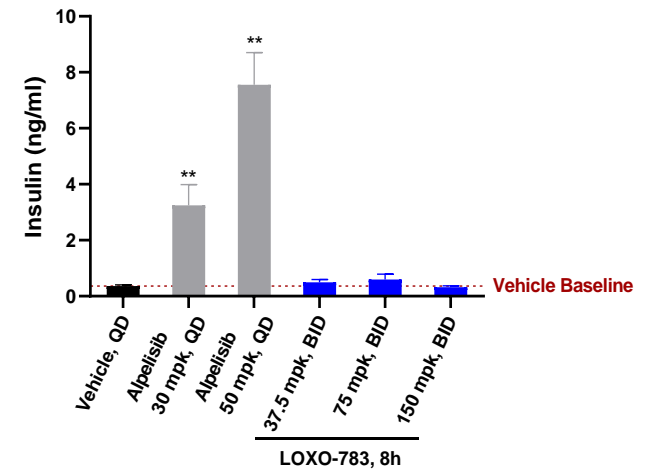
## Program Background

- Achieves significant tumor regression without increase in insulin or C-peptide and shows additive efficacy when combined with SOC treatments in vivo<sup>1,2</sup>
- Phase I trial (PIKASSO) FHD in '22, ongoing trial
- Part of a broad discovery campaign against this target profile

T47D  
(PI3K $\alpha$  H1047R)



Plasma insulin (ng/mL), NSG mice  
(24 days repeat dosing)



1. Klippel A, et al. Presented at AACR-NCI-EORTC Virtual Meeting; October 11-15, 2021; 2. Puca L, et al. Presented at SABCS; December 6-10, 2022. NSG = NOD scid gamma; SOC = standard of care.

# Jaypirca<sup>®</sup>

## FR $\alpha$ ADC

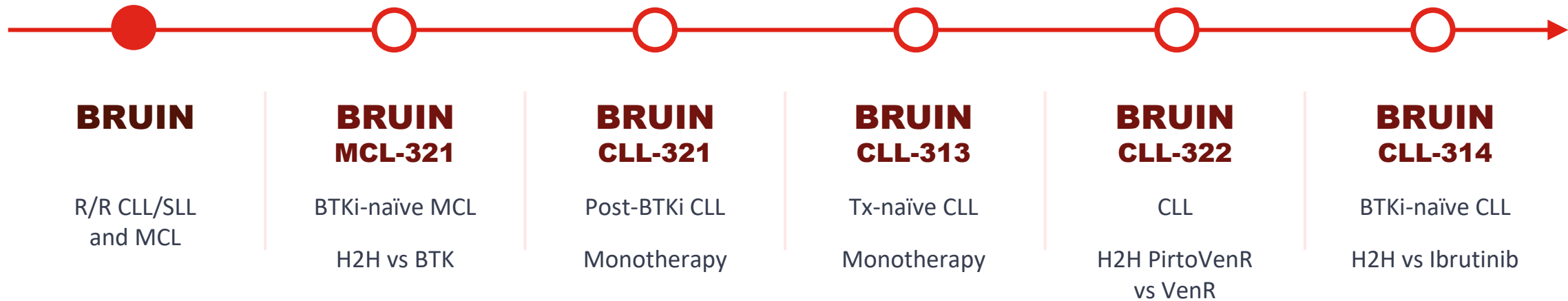
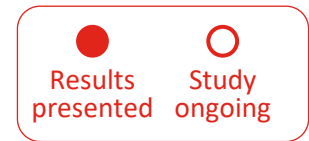
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John Pagel, M.D., Ph.D.  
Global Head, Hematology



# Jaypirca<sup>®</sup> Pivotal Studies

Jaypirca<sup>®</sup> is the only FDA-approved non-covalent BTK inhibitor



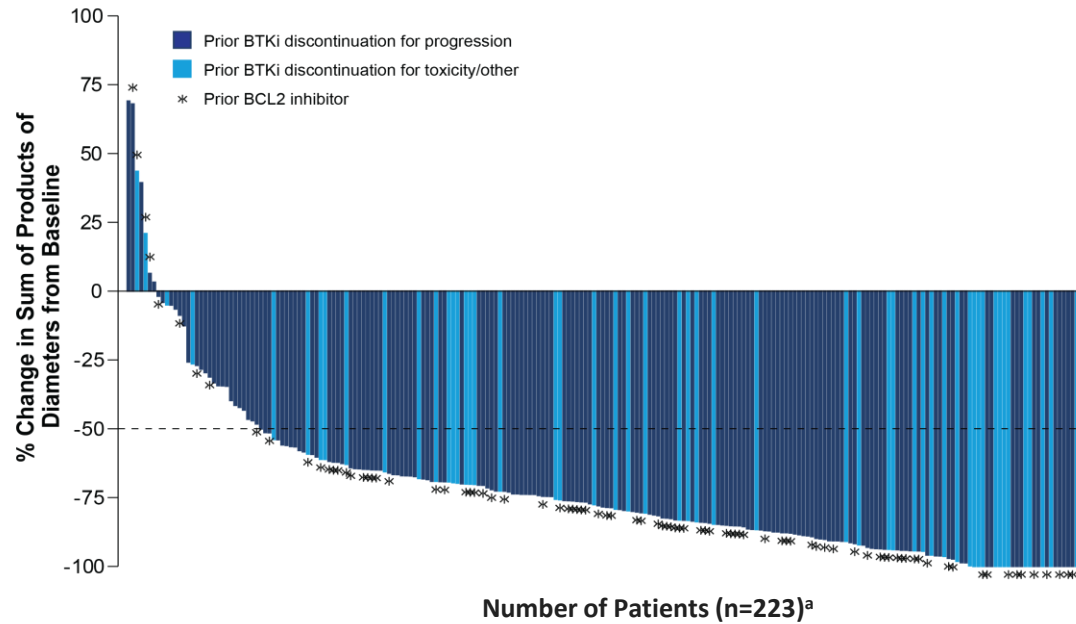
Jaypirca<sup>®</sup> is approved<sup>1</sup> for the treatment of relapsed or refractory:

- MCL after two lines of therapy, including a prior BTKi
- CLL after two lines of therapy, including a prior BTKi and BCL2i

1. Jaypirca<sup>®</sup> received accelerated approval approved based on how many people responded to treatment. Studies are ongoing to confirm the benefit of Jaypirca<sup>®</sup> for this use. BCL2i = B-cell lymphoma inhibitor; BTK = Bruton tyrosine kinase; CLL = chronic lymphocytic leukemia; H2H = head to head; MCL = mantle cell lymphoma; PirtovenR = pirtobrutinib + venetoclax + rituximab; SLL = small lymphocytic lymphoma; Tx = treatment; VenR = venetoclax + rituximab.

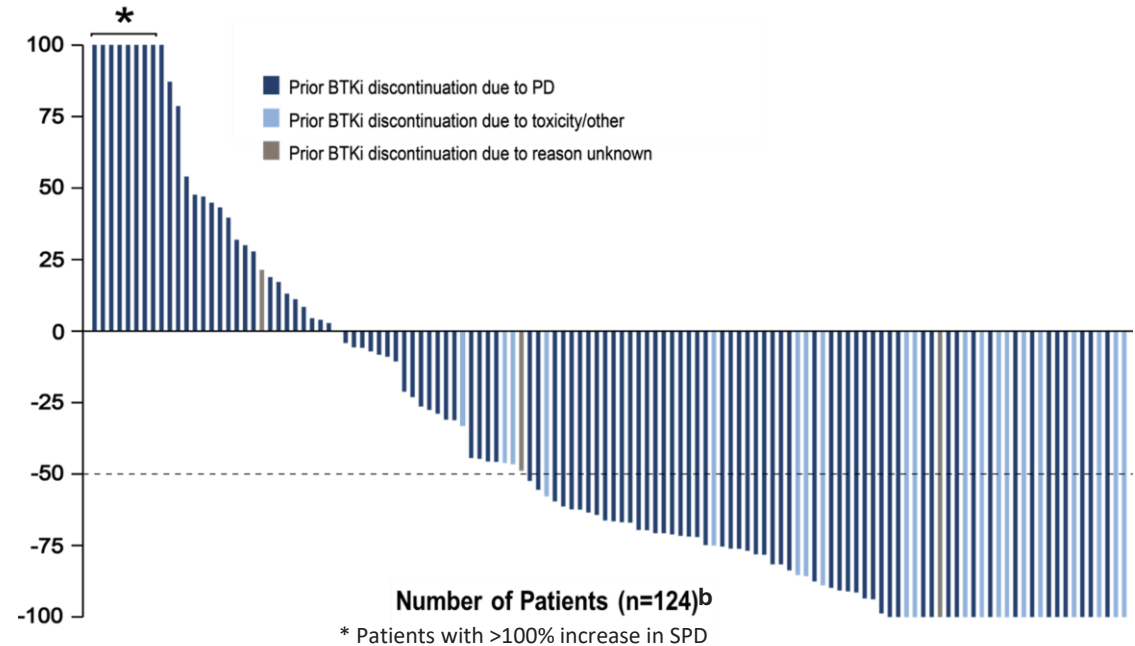


## CLL/SLL: Pirtobrutinib efficacy with prior cBTKi



a. Data for 24/247 patients who received prior cBTKi are not shown in the waterfall plot due to no measurable target lesions identified by CT at baseline, discontinuation prior to first response assessment, or lack of adequate imaging in follow-up.

## MCL: Pirtobrutinib efficacy with prior cBTKi



b. Data for 28/152 patients who received prior cBTKi are not shown in the waterfall plot due to no measurable target lesions identified by CT at baseline, discontinuation prior to first response assessment, or lack of adequate imaging in follow-up.

**Jaypirca<sup>®</sup> is the first and only approved non-covalent BTK inhibitor in both CLL & MCL**

Common adverse events for Jaypirca<sup>®</sup> include: tiredness, muscle pain, joint pain, bone pain, diarrhea, COVID-19, bruising, and cough

Mato, et al. Presented at ASH; December 10-13, 2022; Cohen, et al. Presented at ASH; December 6-15, 2023. cBTK = covalent Bruton tyrosine kinase; BCL2 = B-cell lymphoma; CT = computed tomography; PD = product of diameters; SD = stable disease; SPD = sum of the product of diameters.

# Pivotal Studies

	<b>BRUIN MCL-321</b>	<b>BRUIN CLL-321</b>	<b>BRUIN CLL-313</b>	<b>Enrolling</b>		<b>Est. start Q4 2024</b>
<b>DISEASE SETTING</b>	R/R MCL	R/R CLL	1L CLL	R/R CLL	1L and R/R CLL	1L CLL
<b>REGIMEN</b>	Continuous dosing	Continuous dosing	Continuous dosing	Fixed duration with VenR	Continuous dosing	Fixed duration with Ven 2 active arms, one MRD-guided
<b>COMPARATOR</b>	Covalent BTK	IdelaR / BendaR	BendaR	VenR	Ibrutinib	VenO

Comprehensive Phase III clinical development plan

BendaR = bendamustine plus rituximab; IdelaR = idelalisib plus rituximab; MRD = minimal residual disease; R/R = relapsed/refractory; VenO = venetoclax plus obinutuzumab; VenR = venetoclax plus rituximab; 1L = first line.

# FR $\alpha$ ADC

A next-generation ADC targeting folate receptor  $\alpha$  at all expression levels with improved therapeutic index

## Current Treatment Landscape

- Elahere™ is limited to high FR $\alpha$  tumor expression levels and is associated with ocular toxicity

## Program Thesis

- Establish a new standard of care FR $\alpha$  ADC that is effective, regardless of FR $\alpha$  expression levels, with low toxicity

## Program Background

- Composed of an Fcy silent monoclonal antibody linked to a topoisomerase-1 payload, exatecan, via a novel PSAR linker with a DAR of 8
- Achieves preclinical tumor regression in low and moderate FR $\alpha$ -expressing models w/o evidence of ocular toxicity, ILD, or neuropathy
- Phase I trial has begun dosing patients

DAR = drug-to-antibody ratio; ILD = interstitial lung disease; PSAR = polysarcosine.

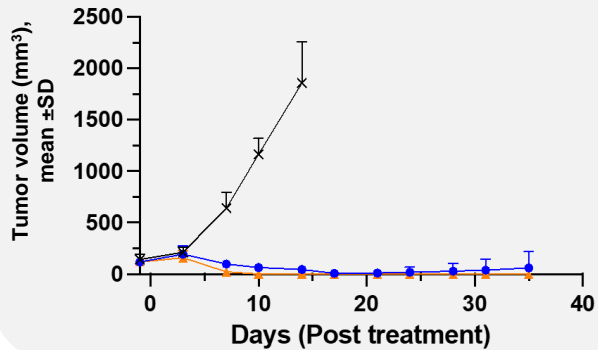
# FR $\alpha$ ADC

## FR $\alpha$ expression level



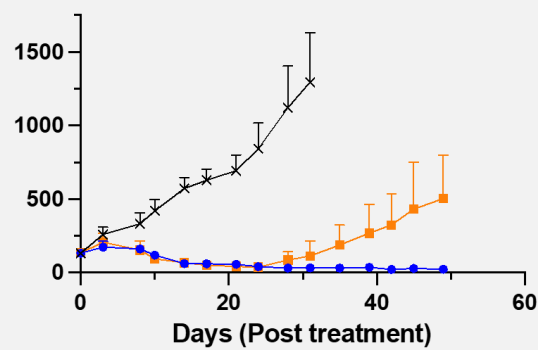
Cervical Cancer

FR $\alpha$  ++++ model (KB)



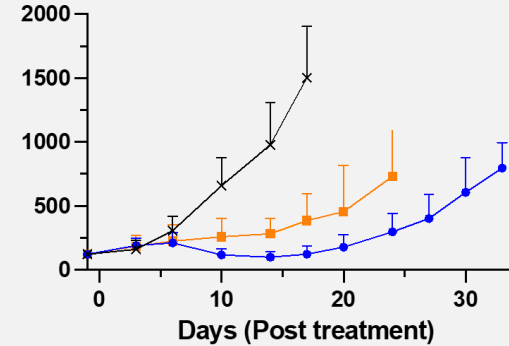
Ovarian Cancer

FR $\alpha$  +++ model (IGROV1)



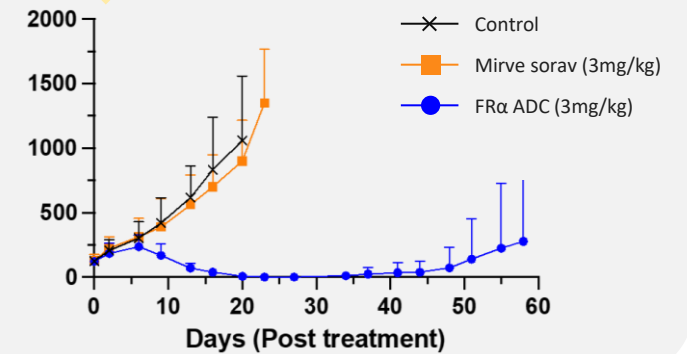
Ovarian Cancer

FR $\alpha$  ++ model (OV90)



Colorectal Cancer

FR $\alpha$  + model (SW-620)



In vivo activity in low FolR1-expressing ovarian tumors and other tumor types that are not sensitive to Elahere<sup>TM1</sup>

1. Viricel W, et al. Presented at AACR; April 14-19, 2023. Mirve sorav = mirvetuximab soravtansine.

**Retevmo®**  
**Olomorasib**  
**KRAS G12D Inhibitor**  
**PAN-KRAS Inhibitor**

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Geoff Oxnard, M.D.  
Global Head, Thoracic Cancer

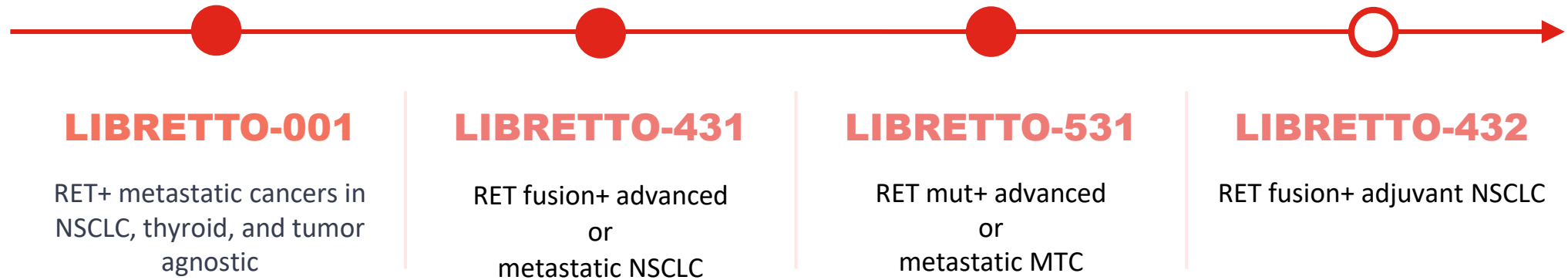


# Retevmo® Pivotal Studies

Used to treat certain cancers caused by abnormal RET genes



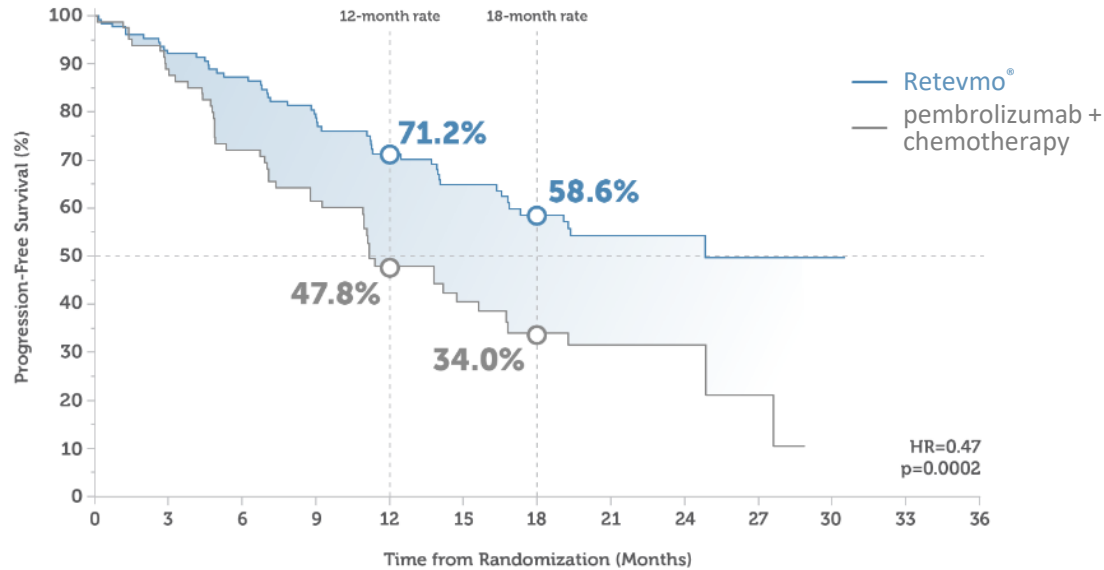
● Results presented  
○ Study ongoing



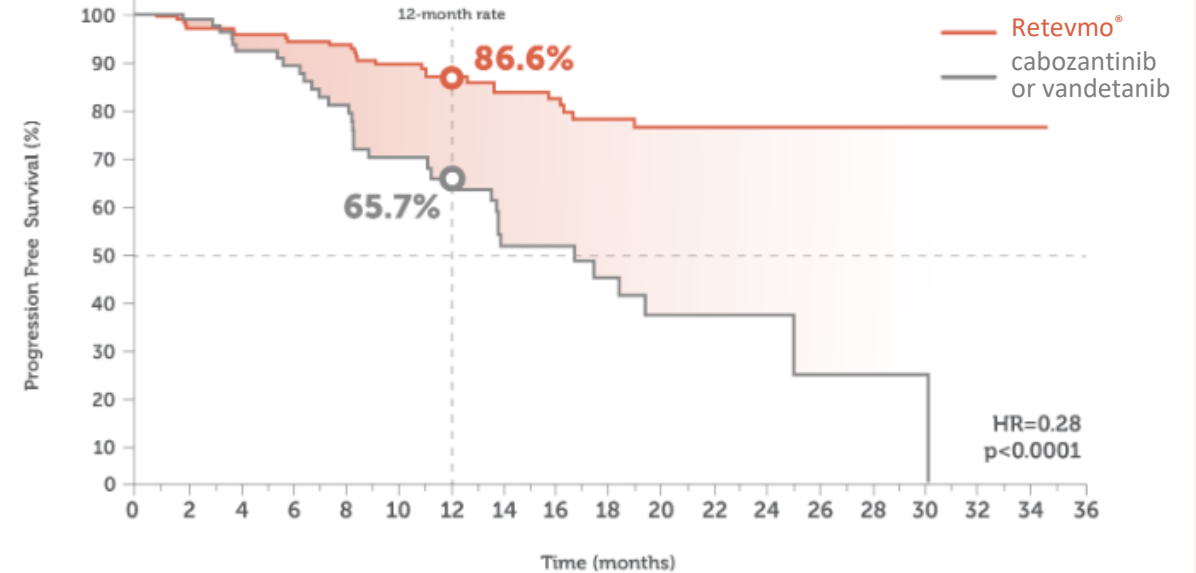
First FDA-approved treatment for people with RET-positive advanced NSCLC, thyroid cancers, and certain other cancers

FDA = Food and Drug Administration; MTC = medullary thyroid carcinoma; NSCLC = non-small cell lung cancer.

## Retevmo® vs KEYNOTE-189 in 1L NSCLC<sup>1</sup>



## Retevmo® vs MKI in MTC<sup>2</sup>



Common adverse events for Retevmo® include: edema, diarrhea, tiredness, dry mouth, hypertension, abdominal pain, constipation, rash, nausea, and headache

1. Loong, et al. Presented at ESMO; October 20-24, 2023; 2. Hadoux, et al. Presented at ESMO; October 20-24, 2023.  
HR = hazard ratio; MKI = multi-targeted kinase inhibitor.

# Lilly KRAS Portfolio

**Olomorasib  
(KRAS G12C)**

**2024 Phase III Start**

2<sup>nd</sup> generation G12C inhibitor

Combinable with IO

**KRAS G12D**

**2024 IND Submission**

Highly potent non-covalent inhibitor of KRAS G12D

Achieved oral bioavailability in preclinical species

**Pan-KRAS**

**2024 IND Submission**

Highly potent non-covalent isoform-selective pan-KRAS inhibitor

Achieved oral bioavailability in preclinical species

KRAS G12D & pan-KRAS developed from pharmacologic insights generated by olomorasib



# Olomorasib

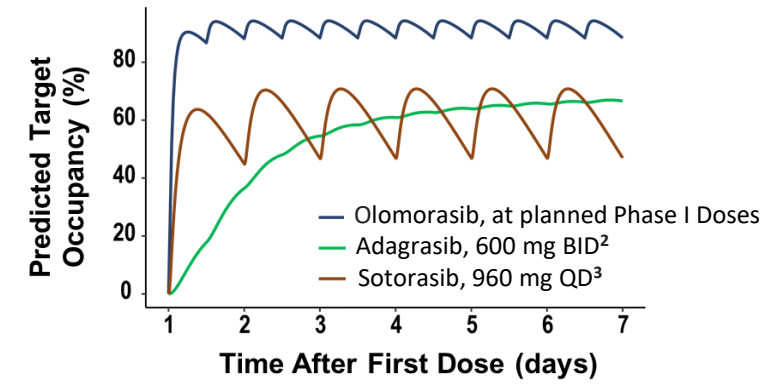
A potent and selective 2<sup>nd</sup>-generation KRAS G12C inhibitor to combine with PD-1 inhibitor

## Current Treatment Landscape

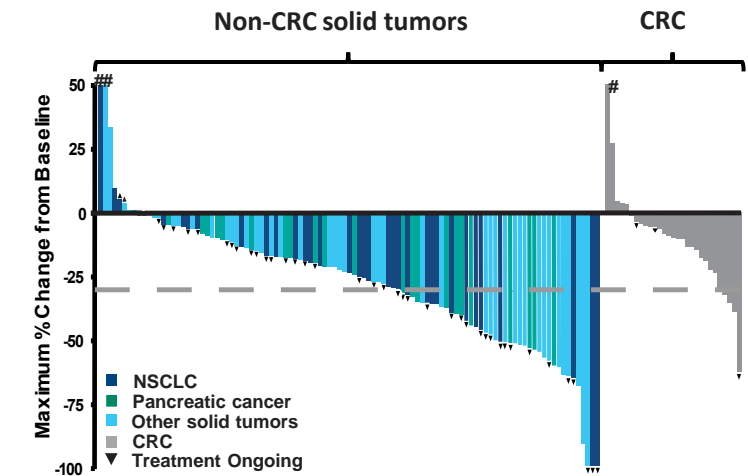
- KRAS G12C mutations occur in up to 15% of NSCLC<sup>1</sup>
- Currently approved 1<sup>st</sup>-generation KRAS G12C inhibitors have limitations due to tolerability, including ability to combine with PD-1 inhibitor

## Program Thesis

- A potent and selective KRAS G12C inhibitor will be safely combinable with IO to improve outcomes in 1L NSCLC



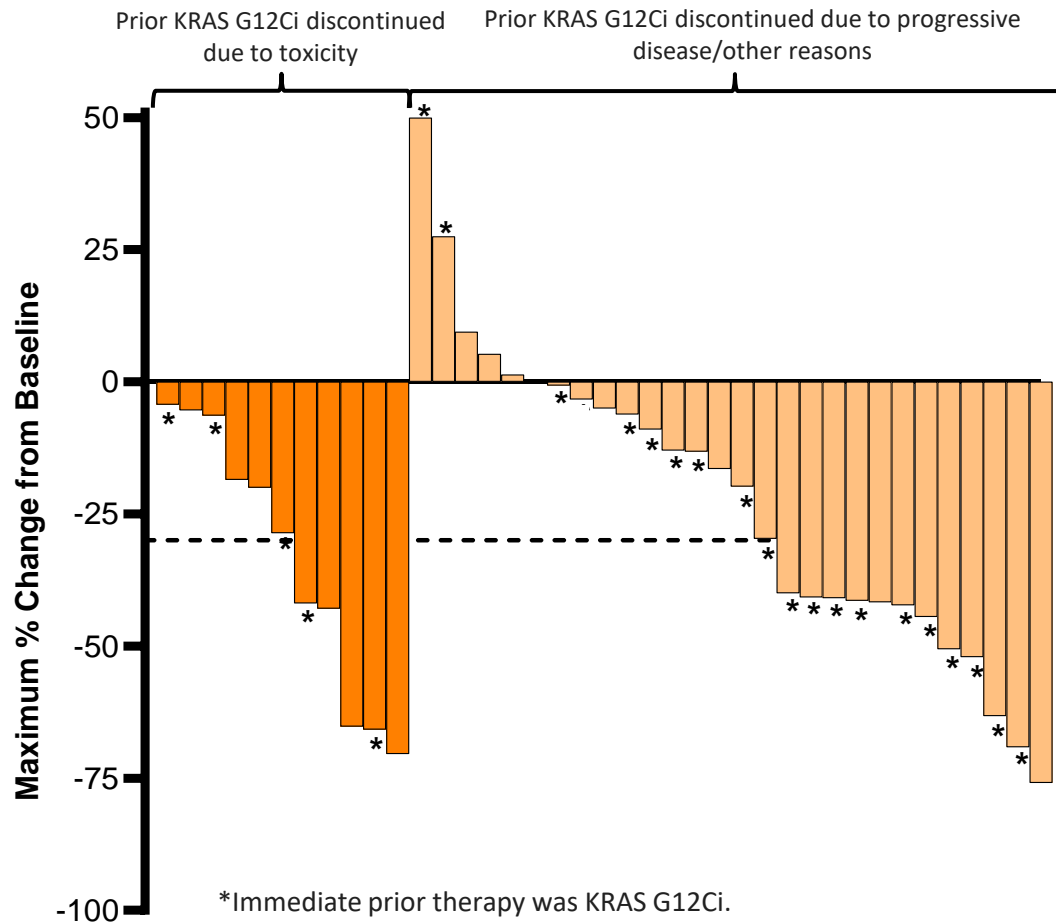
Highly potent covalent inhibitor, with potential for >90% clinical target occupancy<sup>4</sup>



Efficacy in KRAS G12Ci-naïve Solid Tumors<sup>5</sup>

1. Lee A. Target Oncol. 2022;17:727-33. 2. Janne PA, et al. 2020; 3. Hong DS, et al. N Engl J Med. 2020;383:1207-17; 4. Sheng-Bin P, et al. 2021; 5. Heist RS, et al. Presented at ASCO; May 31 – June 4, 2024. Abstract #3007.

# Olomorasib Monotherapy



	Prior KRAS G12Ci discontinued due to	
	Toxicity (n = 11)	Progressive disease/ other reasons (n = 28)
Efficacy Evaluable Patients		
Objective response rate, %	46	39
Disease control rate, %	100	75

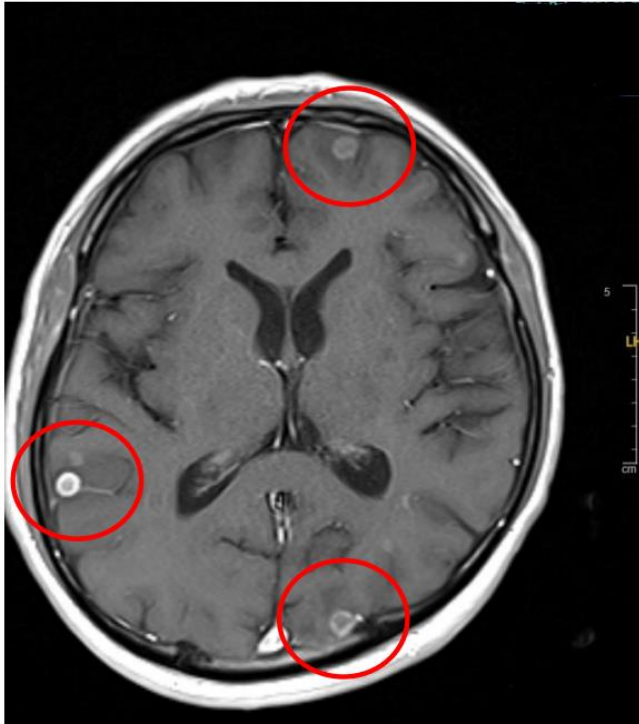
- KRAS G12Ci-pretreated NSCLC, median PFS was 8.1 months
- Favorable safety profile, including in patients with prior intolerance to other G12C inhibitors
  - Grade 1 diarrhea was most common TRAE
  - 1 patient discontinued due to a TRAE

## Monotherapy efficacy and safety in KRAS G12Ci-pretreated NSCLC

Heist RS, et al. Presented at ASCO; May 31 – June 4, 2024. Abstract #3007. PFS = progression-free survival; TRAE = treatment-related adverse events.

# Olomorasib Monotherapy

Baseline MRI



6W MRI

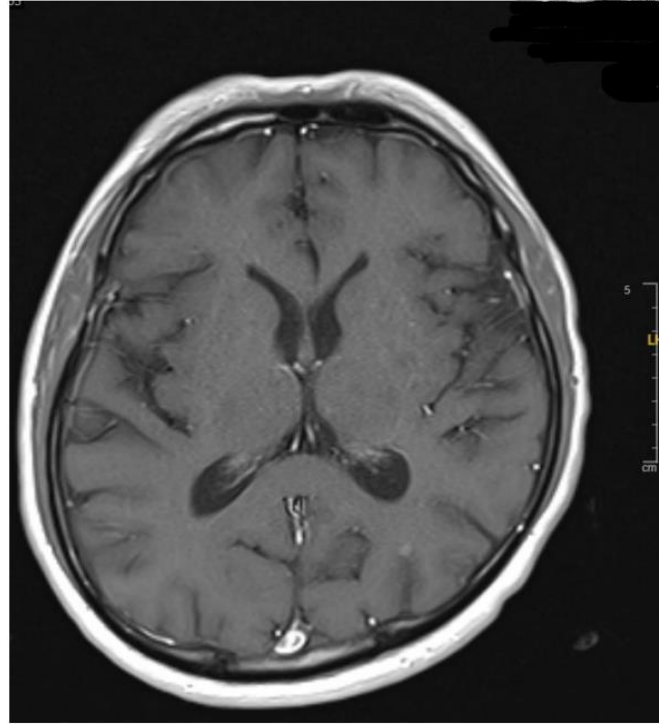


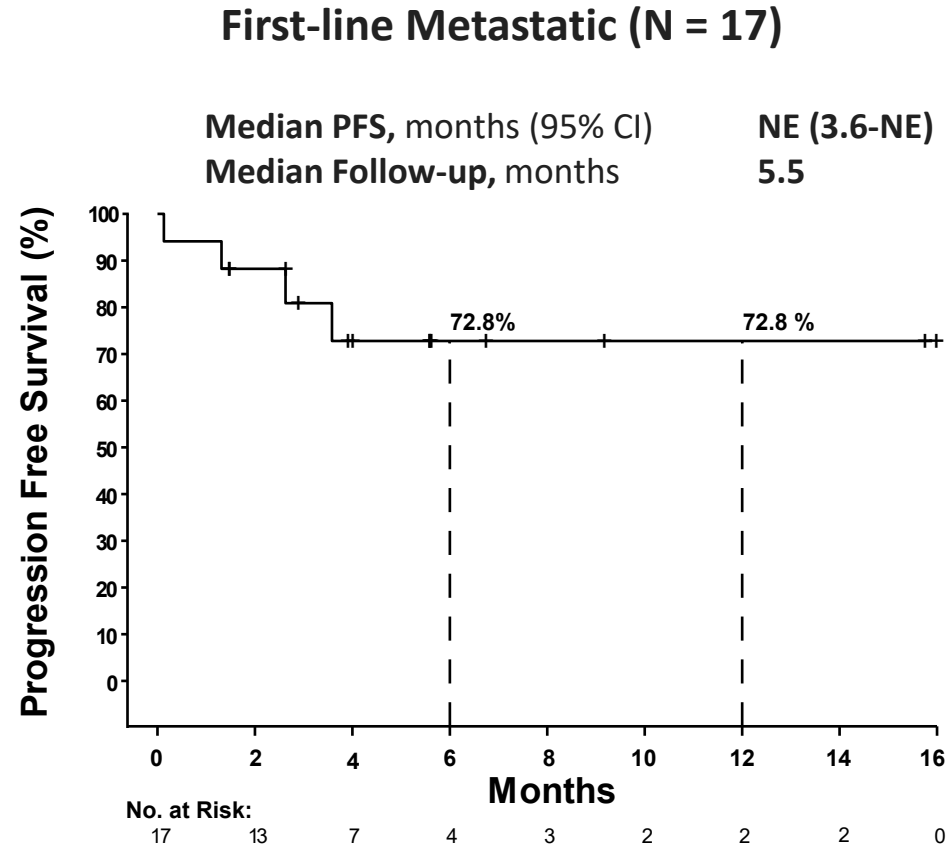
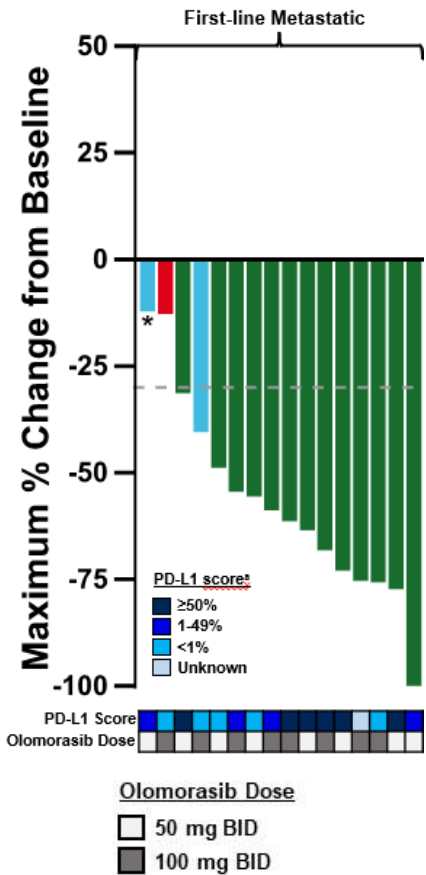
Image courtesy of Toshio Shimizu, M.D., Ph.D., Wakayama Medical University Hospital

- CNS activity is a key feature for targeted therapies in advanced NSCLC
- CNS activity seen in NSCLC patients with measurable brain metastases treated with olomorasib

CNS activity supports the potential for durable effect in NSCLC

Heist RS, et al. Presented at ASCO; May 31 – June 4, 2024. Abstract #3007. CNS = central nervous system; MRI = magnetic resonance imaging; 6W = 6 weeks.

# Olomorasib + Pembrolizumab



Efficacy Evaluable Patients	First-line Metastatic (N=17)
Overall response rate, % (n/N)	77% (13/17)
Best overall response	
CR, n (%)	-
PR, n (%)	13 (76)
SD, n (%)	2 (12)
PD, n (%)	1 (6)
NE, n (%)	1 (6)
DCR, n (%)	88% (15/17)

Responses observed across all PD-L1 expression levels

Burns T, et al. Presented at ASCO; May 31 – June 4, 2024. Abstract #8510. CR = complete response; NE = not evaluable; PD = progressive disease; PD-L1 = programmed death ligand 1; PR = partial response; SD = stable disease.

# Olomorasib + Pembrolizumab

All Doses and Patients (50 + 100 mg BID, N = 64)

Adverse Event	Treatment-Related AEs <sup>a</sup> , %, ≥10%				
	Any grade	Grade 1	Grade 2	Grade 3	Grade 4
Patients with ≥1 TRAE	70	20	23	25	2
Diarrhea	23	8	3	13	-
Fatigue	16	8	8	-	-
ALT increased	20	11	3	6	-
Pruritus	19	11	5	3	-
Nausea	14	6	8	-	-
AST increased	16	6	2	8	-

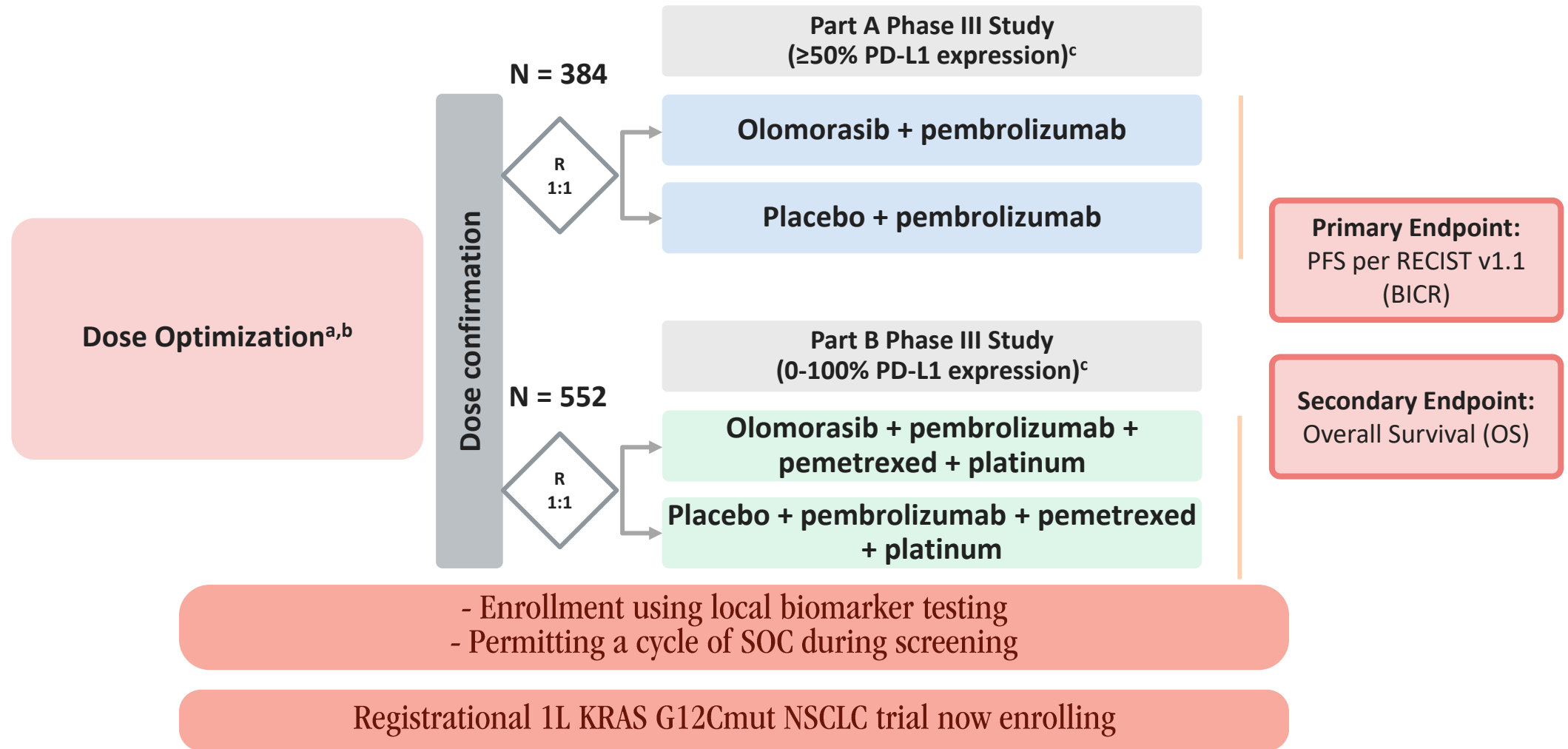
1 patient had a grade 4 TRAE (pneumonitis). <sup>a</sup>TRAEs are olomorasib and/or pembrolizumab related.

TRAEs led to permanent discontinuation of olomorasib only in 3% of patients (2/64) and pembrolizumab only in 11% of patients (7/64); 5% of patients (3/64) discontinued both drugs due to TRAEs

**Olomorasib + pembrolizumab AE profile well suited for 1L NSCLC development**

Burns T, et al. Presented at ASCO; May 31 – June 4, 2024. Abstract #8510. ALT = alanine aminotransferase; AST = aspartate aminotransferase.

# SUNRAY-01: 1L Metastatic KRAS G12C NSCLC



a. Participants should be suitable for pembrolizumab monotherapy. b. PD-L1 expression 0-100%, N~40 for each study part (randomized Dose Optimization and Safety Lead-In Part B). c. Participants with PD-L1 ≥50% are eligible to be enrolled to Part A or Part B at the discretion of the investigator. Heist RS, et al. Presented at ASCO; May 31 – June 4, 2024. Abstract #3007. BICR = blinded independent central review; PD-L1 = programmed death ligand 1; R = randomization; SOC = standard of care.

# KRAS G12D Inhibitor

An orally bioavailable, highly potent, and selective KRAS G12D inhibitor

## Current Treatment Landscape

- KRAS G12D mutations occur in upwards of 40% and 15% of PDAC and CRC, respectively, and occur less frequently in other solid tumors<sup>1</sup>
- High unmet need - No approved KRAS G12D inhibitors

## Program Thesis

- Develop an oral, highly selective KRAS G12D inhibitor that is selective over wild-type KRAS and other targets

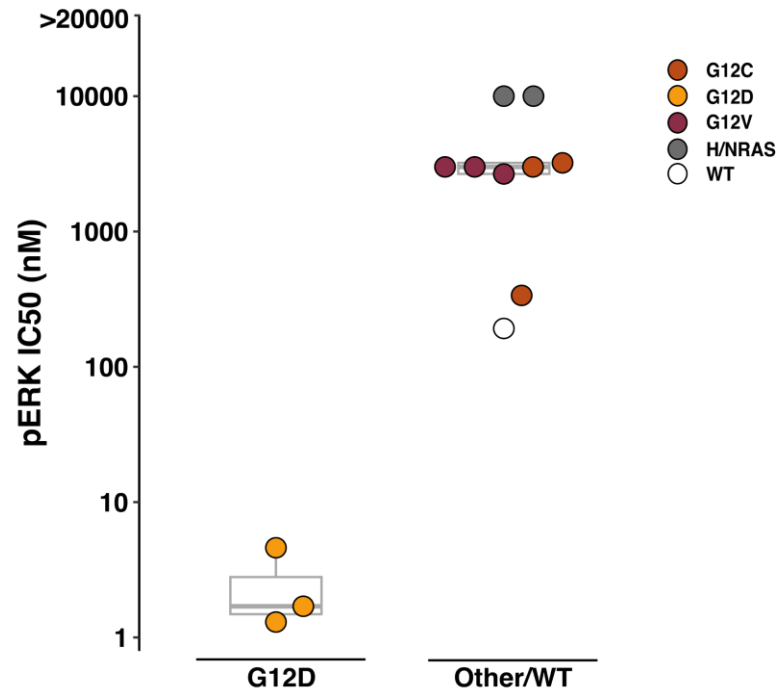
1. Lin TA, et al. J Clin Oncol. 2023;41:3074-5. CRC = colorectal cancer; PDAC = pancreatic ductal adenocarcinoma.

## Program Background

- Achieved oral bioavailability in preclinical species providing tonic target coverage
- Potently inhibits KRAS G12D and is selective over wild-type KRAS, HRAS, and NRAS
- IND submission planned 2024

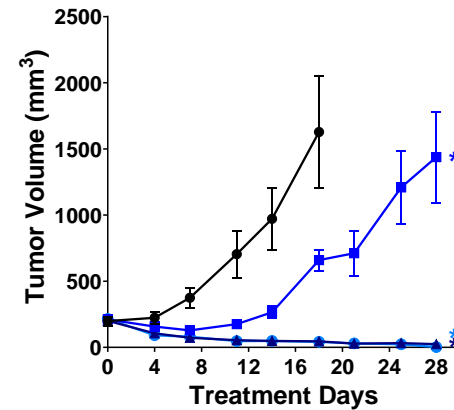
# KRAS G12D Inhibitor

## Pathway Inhibition

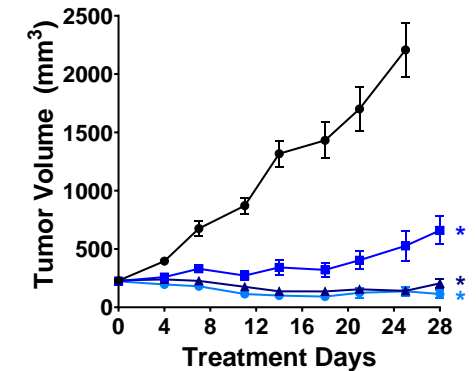


## Cancer Cell Models

### HCC-461 Lung model



### GP2D CRC model



- ◆ Vehicle Control, BIDx28, PO
- KRAS G12D; 10 mpk, BIDx28, PO
- ▲ KRAS G12D; 30 mpk, BIDx28, PO
- ◆ KRAS G12D; 60 mpk, BIDx28, PO

Highly potent and selective in preclinical models

1. Iyer C, et al. Presented at AACR-NCI-EORTC; October 11-15, 2023.  
pERK = protein kinase R-like endoplasmic reticulum kinase.



# Pan-KRAS Inhibitor

An orally bioavailable, highly potent pan-KRAS inhibitor

## Current Treatment Landscape

- KRAS mutations occur in approximately 1 of every 7 cancers<sup>1</sup>
- Multi-KRAS inhibitors have demonstrated challenging toxicity

## Program Thesis

- Develop an oral multi-mutant KRAS inhibitor that spares HRAS, NRAS, and other off-targets

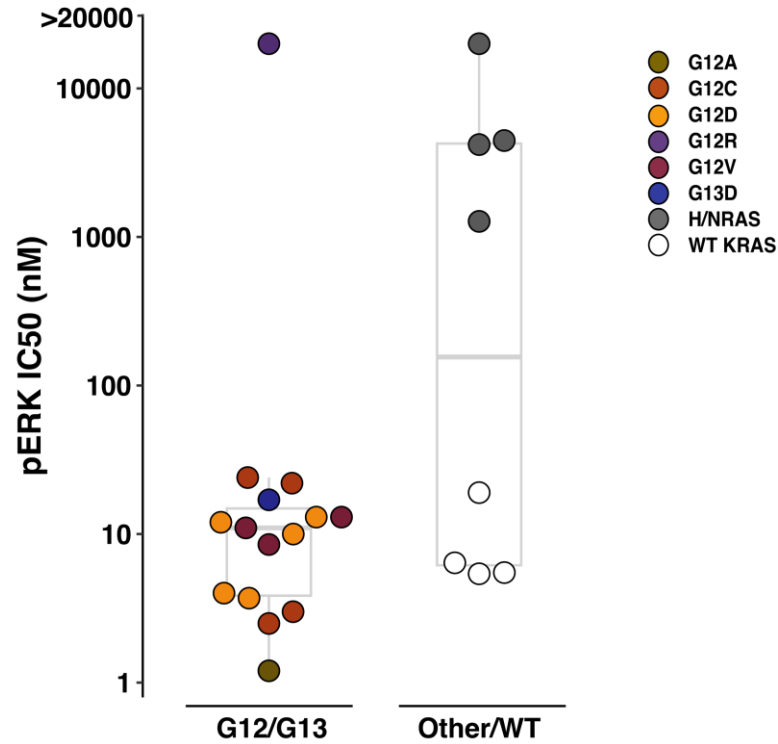
## Program Background

- Achieved oral bioavailability in preclinical species providing tonic target coverage
- Potently inhibits KRAS G12D, G12C, G12V and various additional known oncogenic KRAS mutations and wild-type KRAS, and is selective over HRAS, NRAS, and other off-targets
- IND submission planned 2024

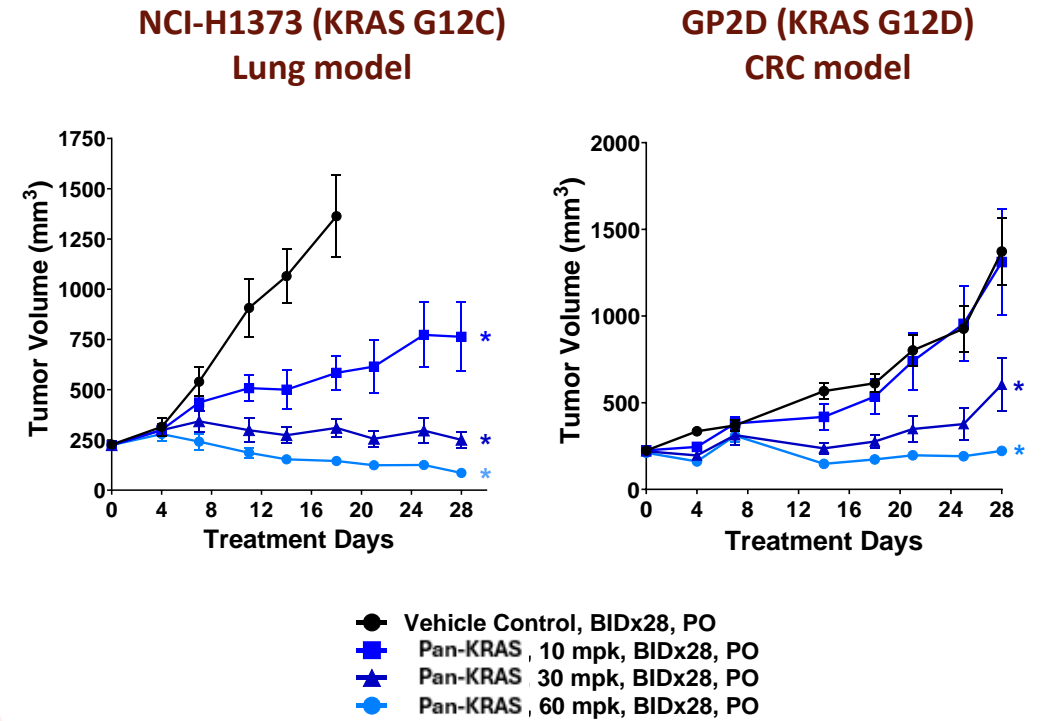
1. Hofmann MH, et al. Cancer Discovery. 2022;12:924-37.

# Pan-KRAS Inhibitor

## Pathway Inhibition



## Cancer Cell Models



Highly potent and isoform selective in preclinical models

1. Prieto, et al. Presented at AACR-NCI-EORTC; October 11-15, 2023. pERK = protein kinase R-like endoplasmic reticulum kinase.

# LOXO-435 (FGFR3 Inhibitor) Nectin-4 Targeted ADCs

Arjun Balar, M.D.  
Global Clinical Development



# LOXO-435 (FGFR3 Inhibitor)

A highly potent isoform-selective FGFR3 inhibitor

## Current Treatment Landscape

- Activating FGFR3 alterations are found in 15-20% of metastatic urothelial cancer
- Approved pan-FGFR inhibitors exhibit limited efficacy, dose-limiting off-target toxicities, and susceptibility to resistance mutations

## Program Thesis

- Develop a highly potent and isoform-selective FGFR3 inhibitor with preserved potency against gatekeeper resistance mutations

## Program Background

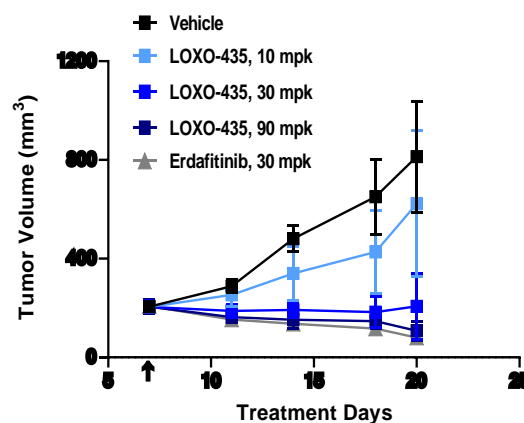
- Isoform-selective FGFR3 inhibitor that has shown antitumor activity in vivo, with preserved potency against FGFR3 gatekeeper resistance mutants<sup>1</sup>
- Spares FGFR1 and FGFR2 in preclinical in vivo models, potentially avoiding dose-limiting hyperphosphatemia and other clinical adverse events<sup>2</sup>
- Phase I FHD achieved in 2023, trial is ongoing

1. Ballard JA, et al. Mol Cancer Ther. 2021; 2. Repetto M, et al. Expert Rev Clin Pharmacol. 2021;14:1233-52. FGFR = fibroblast growth factor receptor, FHD = first human dose.

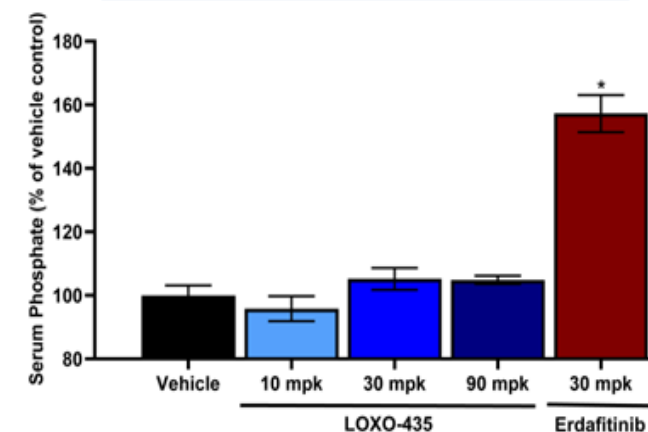
# LOXO-435 (FGFR3 Inhibitor)

	Enzyme Inhibition IC <sub>50</sub> (nM)				Fold Selectivity	
	FGFR1	FGFR2	FGFR3	FGFR3 V555M	FGFR3 over FGFR1	FGFR3 over FGFR2
Erdafitinib	0.3	0.6	0.2	1218.0	1.5x	2.0x
Pemigatinib	0.5	0.3	1.0	752.0	0.5x	0.3x
Infigratinib	0.4	0.7	0.3	579.8	1.3x	0.6x
Futibatinib	0.7	0.4	0.4	14.4	1.8x	1.8x
<b>LOXO-435</b>	<b>108.2</b>	<b>19.7</b>	<b>0.3</b>	<b>1.1</b>	<b>361x</b>	<b>66x</b>

UMUC-14 (FGFR3 S249C)



Serum phosphate in athymic mice (3.5d BID treatment)



Highly isoform-selective for FGFR3, with gatekeeper activity, and observed tumor regressions without hyperphosphatemia in preclinical experiments

# Nectin-4 Targeted ADCs

Two opportunities to improve outcomes for patients

## Current Treatment Landscape

- Treatment resistance to Padcev® is a key unmet need in metastatic urothelial cancer
- Nectin-4 remains overexpressed post-Padcev®<sup>1</sup>
- Efficacy of Padcev® is not well established in non-urothelial solid tumors

## Program Thesis

- Overcome Padcev® treatment resistance and toxicities; achieve efficacy in other Nectin-4 expressing tumor types

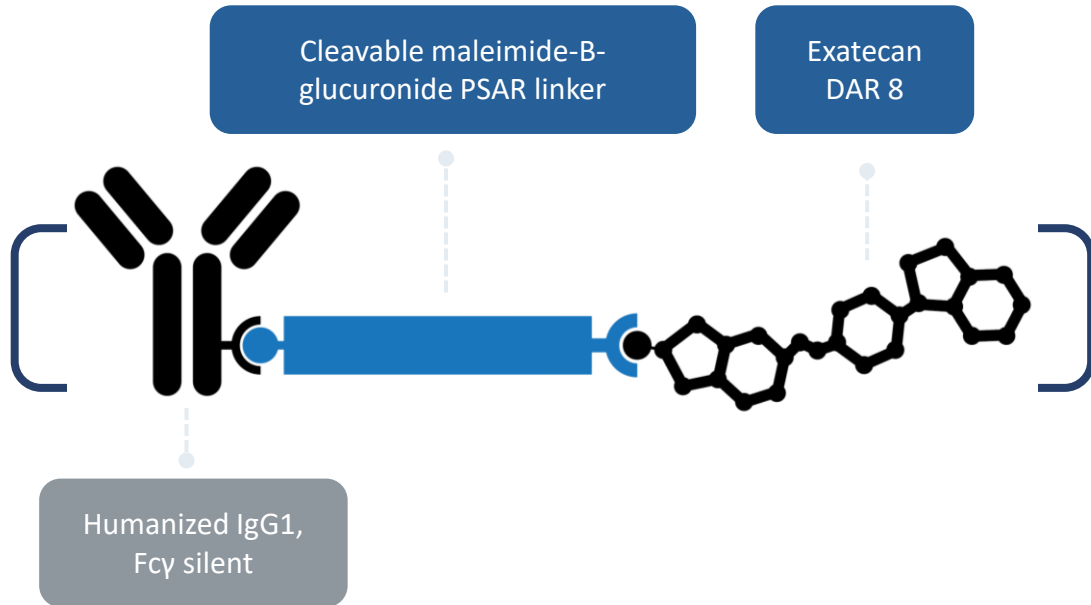
1. Data on file; 2. Fares J, et al. Presented at AACR-NCI-EORTC; October 11-15, 2023. ADC = antibody-drug conjugate; DAR = drug-to-antibody ratio; MMAE = monomethyl auristatin E.

## Program Background

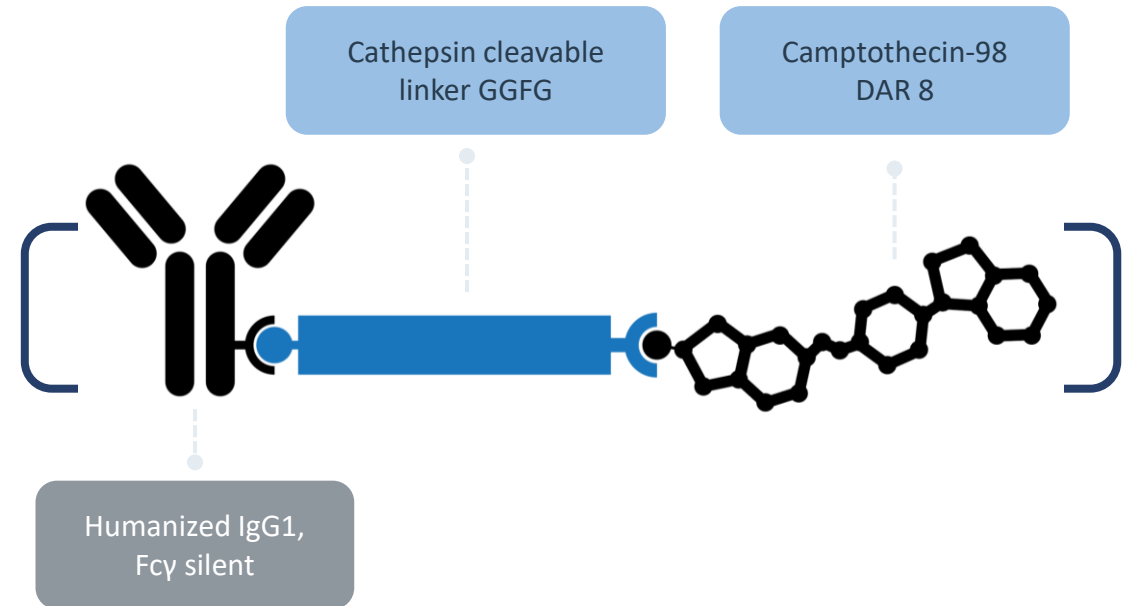
- Improved linker-payload stability with homogeneous DAR 8<sup>1,2</sup>
- In preclinical studies, achieved significant tumor regression in MMAE-resistant models and across Nectin-4 expression levels<sup>1,2</sup>
- **LY4101174**: Phase I trial (EXCEED) ongoing
- **LY4052031**: Phase I trial (NEXUS-01) planned for Q2 2024

# Nectin-4 Targeted ADCs

## LY4101174



## LY4052031



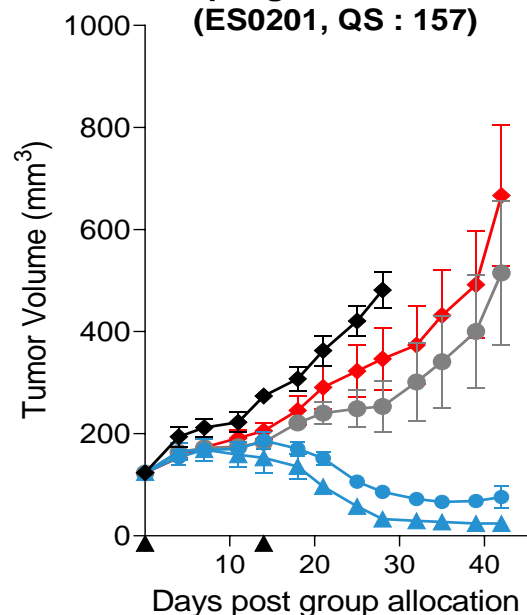
LY4101174 and LY4052031 each show preclinical activity in MMAE-resistant models

Fares J, et al. Presented at AACR-NCI-EORTC; October 11-15, 2023. IgG1 = immunoglobulin G 1; PSAR = polysarcosine.

# Nectin-4 ADCs: LY4101174

## Low Nectin-4

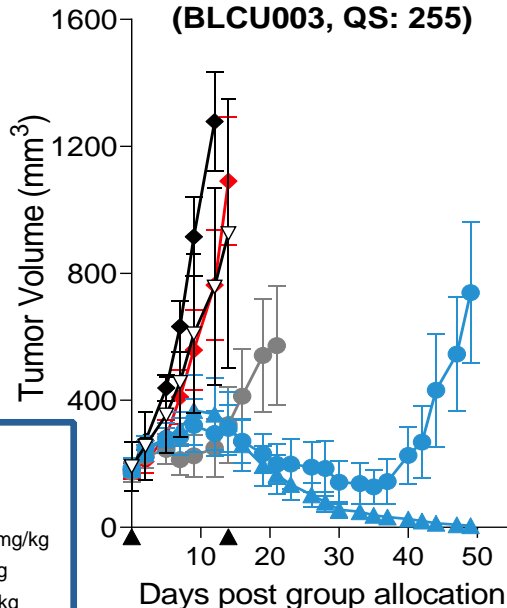
**Esophageal Cancer PDX (ES0201, QS : 157)**



- ◆ Vehicle
- LY4101174 4mg/kg
- ▲ LY4101174 10mg/kg
- Enfortumab vedotin 4 mg/kg
- ICT\_bGlu-Exa, 4 mg/kg
- ICT\_bGlu-Exa, 10 mg/kg
- ◆ Chemotherapy
- ▲ Injection (IV)

## Moderate Nectin-4

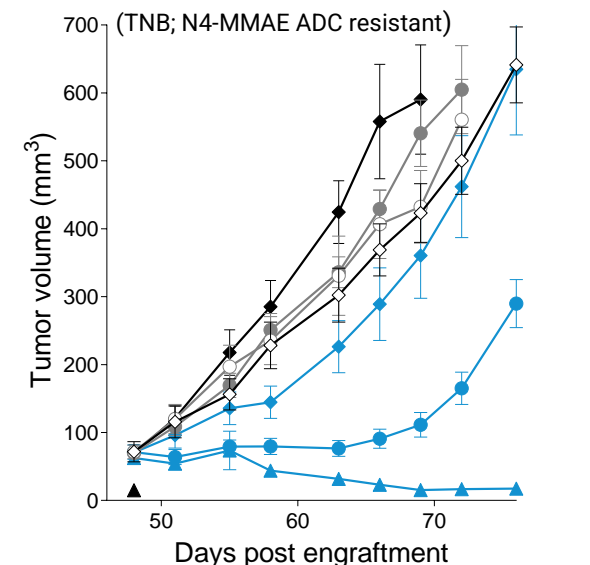
**Bladder Cancer PDX (BLCU003, QS: 255)**



## Xenograft model with Nectin-4 MMAE ADC resistance

**SUM190**

(TNB; N4-MMAE ADC resistant)



- ◆ Vehicle
- LY4101174, 2mg/kg
- ▲ LY4101174, 4mg/kg
- ▲ LY4101174, 8mg/kg
- Enfortumab vedotin, 4 mg/kg
- Enfortumab vedotin, 8 mg/kg
- ICT, 8 mg/kg
- ▲ Injection (IV)

Drives tumor regression in multiple PDX models across Nectin-4 expression levels and is effective in Nectin-4 MMAE ADC-resistant preclinical models

Presented at AACR-NCI-EORTC; October 11-15, 2023. PDX = patient-derived xenograft.



# SMARCA2 (BRM) Inhibitor

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Barry Taylor, Ph.D.  
Chief Scientific Officer



# SMARCA2 (BRM) Inhibitor

An orally bioavailable, potent and selective SMARCA2 (BRM) inhibitor

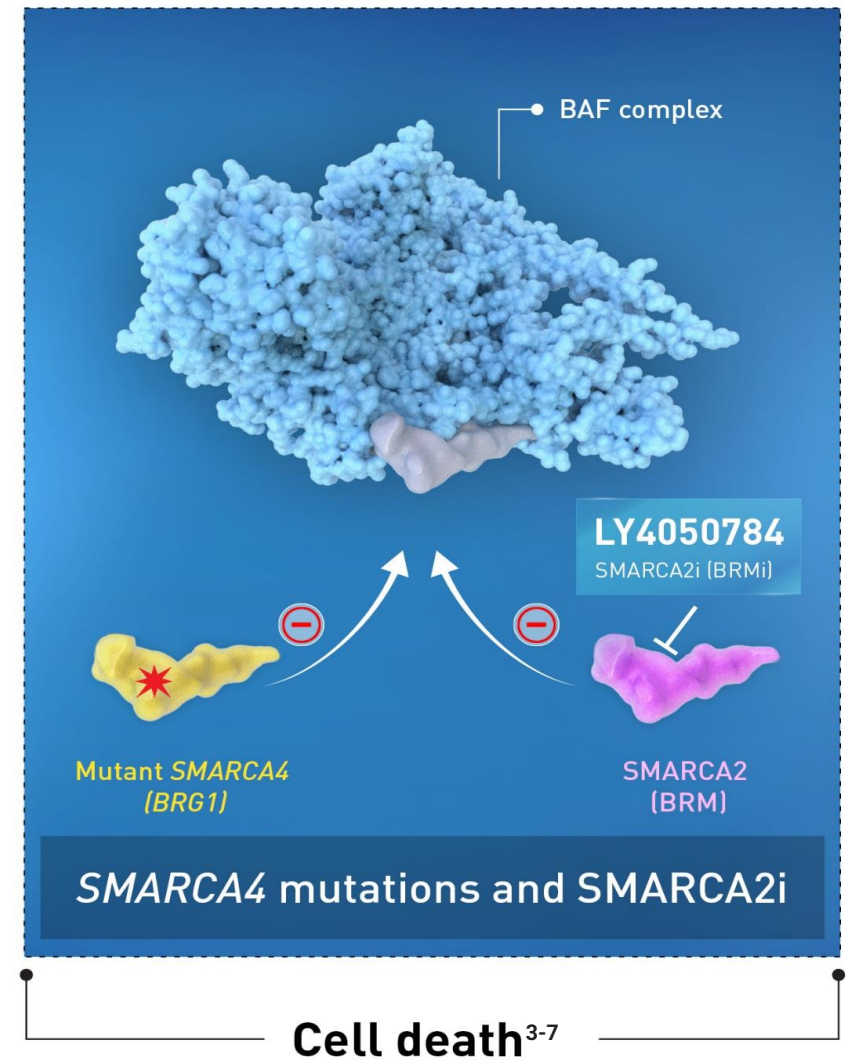
## Current Treatment Landscape

- SMARCA4 mutations are associated with worse outcomes and present in 9%-11% of NSCLC<sup>1,2</sup>
- SMARCA4 and SMARCA2 are mutually exclusive ATPase subunits required for chromatin remodeling<sup>3</sup>

## Program Thesis

- Develop a potential first-in-class potent and selective oral SMARCA2 inhibitor to achieve synthetic lethality in SMARCA4-deficient cancers

1. Dagogo-Jack I, et al. J Thorac Oncol. 2020;15:766-76; 2. Alessi JV, et al. J Thorac Oncol. 2021;16:1176-87; 3. Jancewicz I, et al. Epigenetics Chromatin. 2019;13:68; 4. Zhang B, et al. 2021; 5. Papillon JPN, et al. J Med Chem. 2018;61:10155-72; 6. Helming KC, et al. Cancer Cell. 2014;26:309-17; 7. Wilson BG, et al. Mol Cell Biol. 2014;34:1136-44; 8. Hoffman GR, et al. Proc Natl Acad Sci U S A. 2014;111:3128-33. NSCLC = non-small cell lung cancer.



SMARCA4-mutant cancer cells are dependent on SMARCA2 ATPase for survival<sup>5-8</sup>

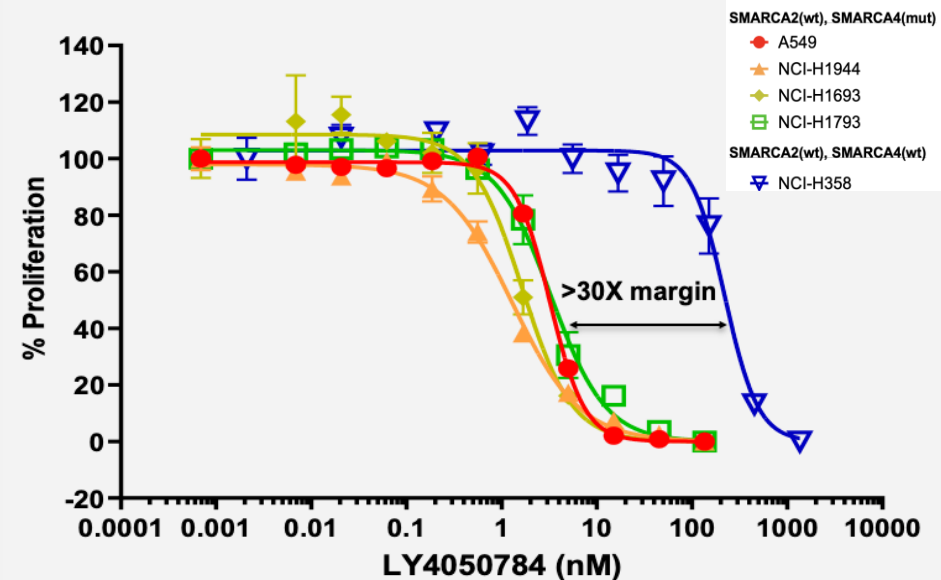
# SMARCA2 (BRM) Inhibitor

An orally bioavailable, potent and selective SMARCA2 (BRM) inhibitor

## Program Background

- Strategic collaboration with Foghorn Therapeutics to create novel oncology medicines, including Foghorn's selective SMARCA2 (BRM) program
- Selective oral SMARCA2 inhibitor with >30x margin for SMARCA2 vs SMARCA4
- Tumor regression and tumor growth arrest in preclinical models, including SMARCA-mutant cell lines containing KRAS, TP53, STK11, and KEAP1 mutations
- IND filing in Q2 2024

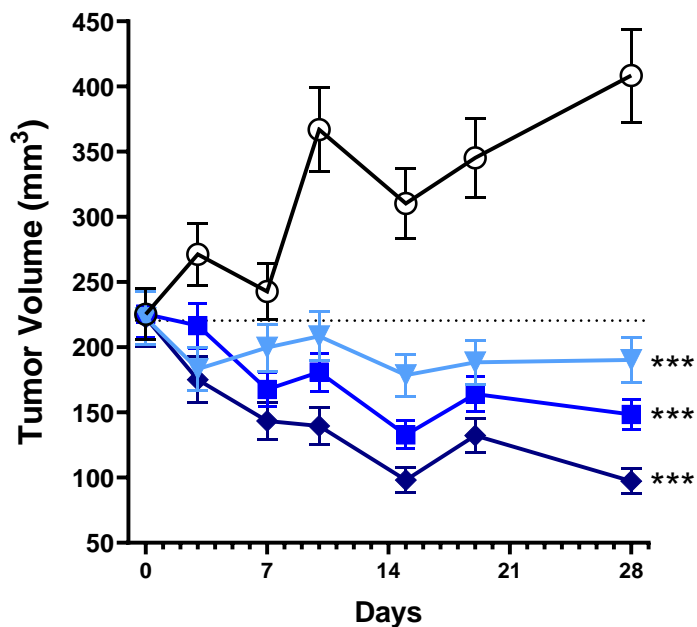
### NSCLC in vitro proliferation assay



LY4050784 exhibits >30-fold increased potency against SMARCA2 (BRM) vs SMARCA4 (BRG1)

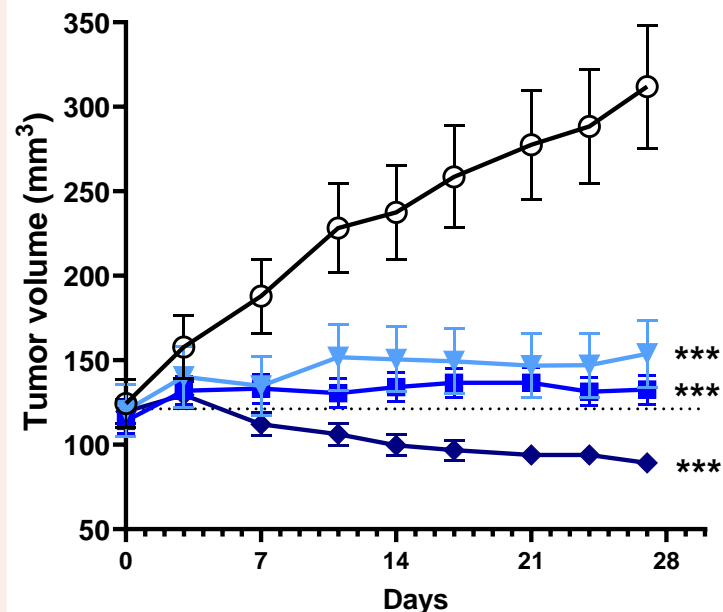
# SMARCA2 (BRM) Inhibitor

**NCI-H1793  
(SMARCA4-mutant)**



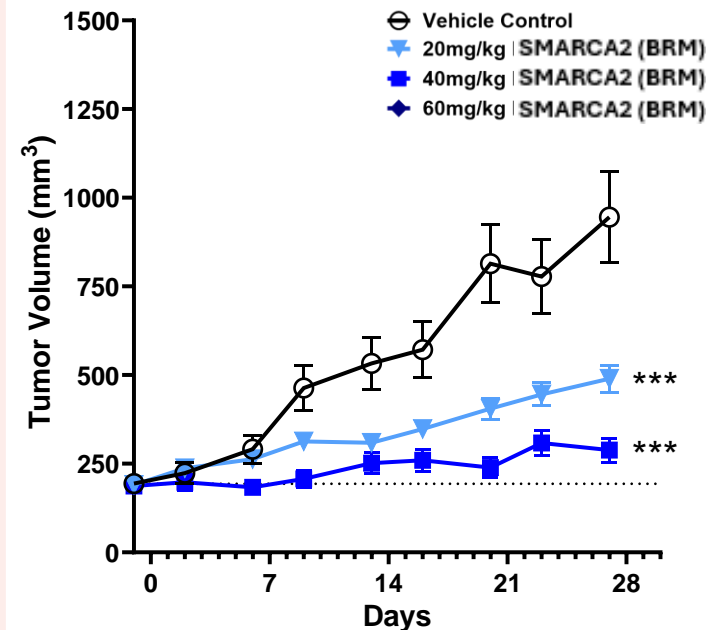
Mutational profile:  
SMARCA4 E514\*, TP53 R209\* R273H, ARID1A  
C884\*...

**NCI-H2126  
(SMARCA4-mutant)**



Mutational Profile:  
SMARCA4 W764R, TP53 E62\*, STK11-/-, CDKN2A-/-,  
KEAP1 R272C...

**A549  
(SMARCA4 and KRAS G12S double mutant)**



Mutational profile:  
SMARCA4 Q729fs / H736Y, KRAS G12S, STK11-/-, CDKN2A-/-  
KEAP1 G333C...

Complete tumor growth inhibition or regression in all models tested

# Radioligand Therapy

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# Theranostics Enable Us to Treat What We See with RLTs

Next-generation radionuclides for paired imaging and treatment

PSMA overexpressed on prostate cancer cells

+

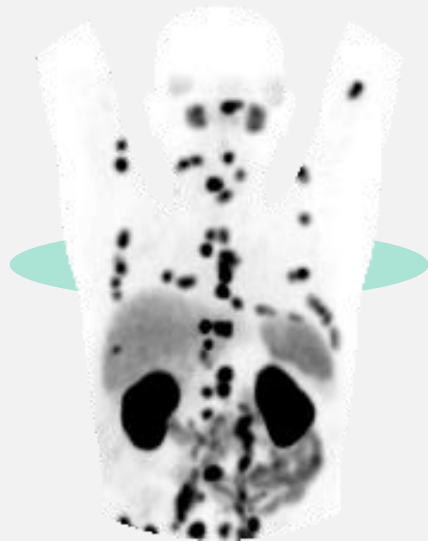
PSMA-specific ligand seeks out cancer cells

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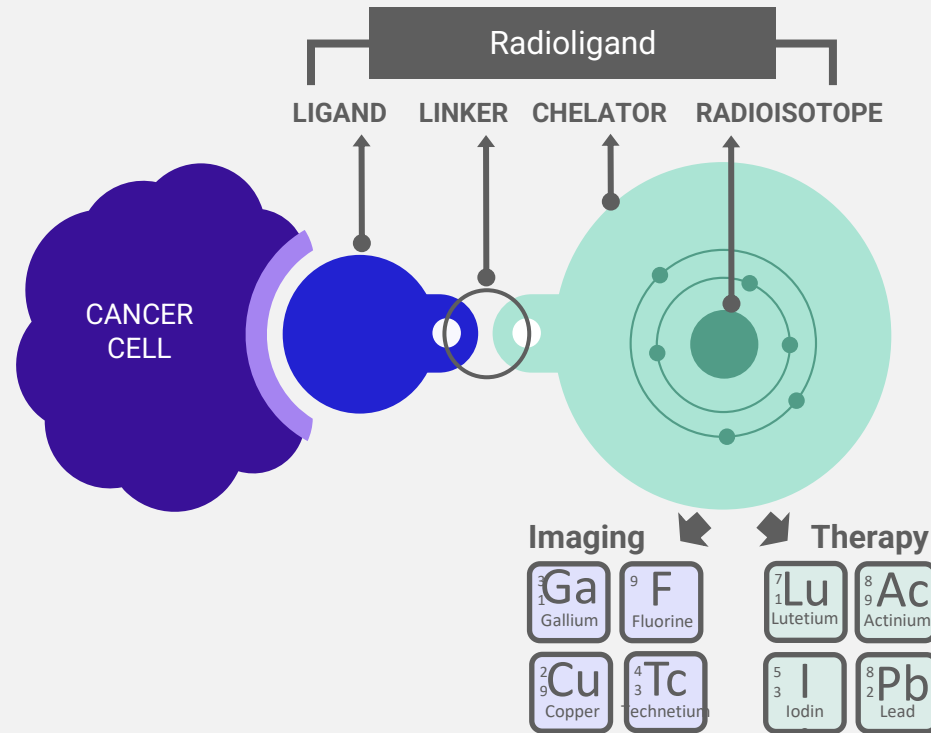
The radioisotope emits ionizing radiation

=

Ionizing radiation kills tumor cell, while minimizing damage to healthy tissue



PSMA-PET before treatment<sup>1</sup>



PSMA-PET after three <sup>177</sup>Lu-PSMA treatments<sup>1</sup>

1. Data on File. PET = positron emission tomography; PSMA = prostate-specific membrane antigen; RLT = radioligand therapy.

# <sup>225</sup>Ac-PSMA-62

A Next-Generation PSMA Radioligand  
Optimized for Delivery of Ac-225

## Current Treatment Landscape

- Despite advances in radioligand therapies, mCRPC remains a fatal condition
- Current-generation <sup>225</sup>Ac-PSMA causes significant off-tumor salivary toxicity

## Program Thesis

- Improved ligand characteristics enable use of short-range, high LET alpha-emitter, Ac-225 in PSMA RLT

## Program Background

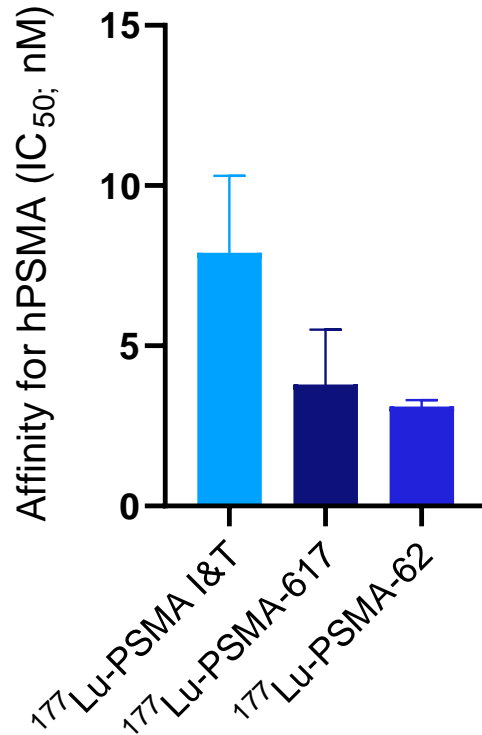
- PSMA-62 improves preclinical affinity, internalization, and tumor uptake<sup>1</sup>
- High-energy alpha emissions from Ac-225 causes deadly double-strand DNA breaks
- Shorter tissue penetration of Ac-225 may optimize killing of micro-metastases while sparing normal tissues
- Phase I trial (ACCEL) ongoing

1. Vito A, et al. Presented at TAT Symposium; February 27 – March 2, 2023.  
LET = linear energy transfer; mCRPC = metastatic castration-resistant prostate cancer.

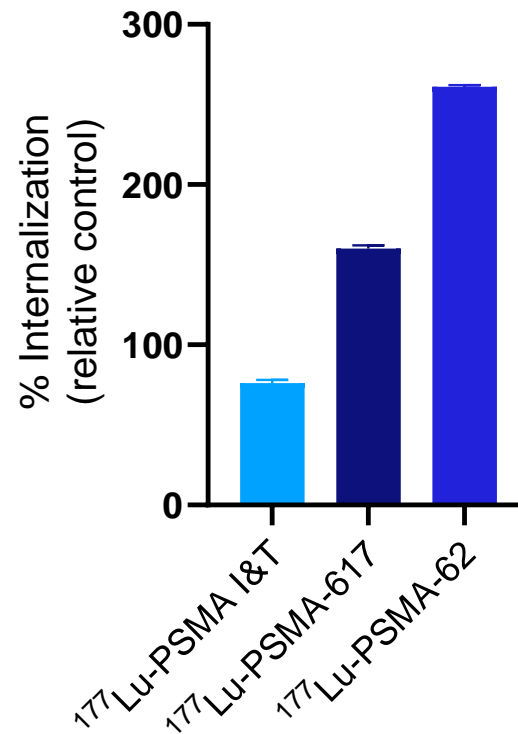
# <sup>225</sup>Ac-PSMA-62

A next-generation PSMA radioligand optimized for delivery of Ac-225

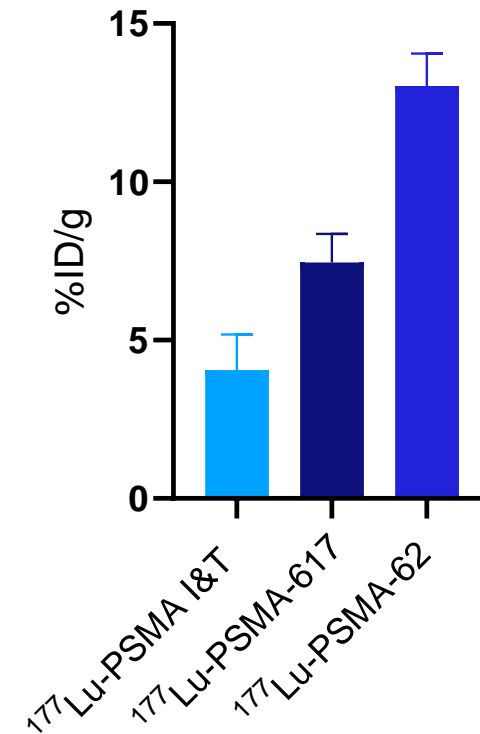
## Improved Affinity



## Improved Internalization



## Improved Tumor Uptake

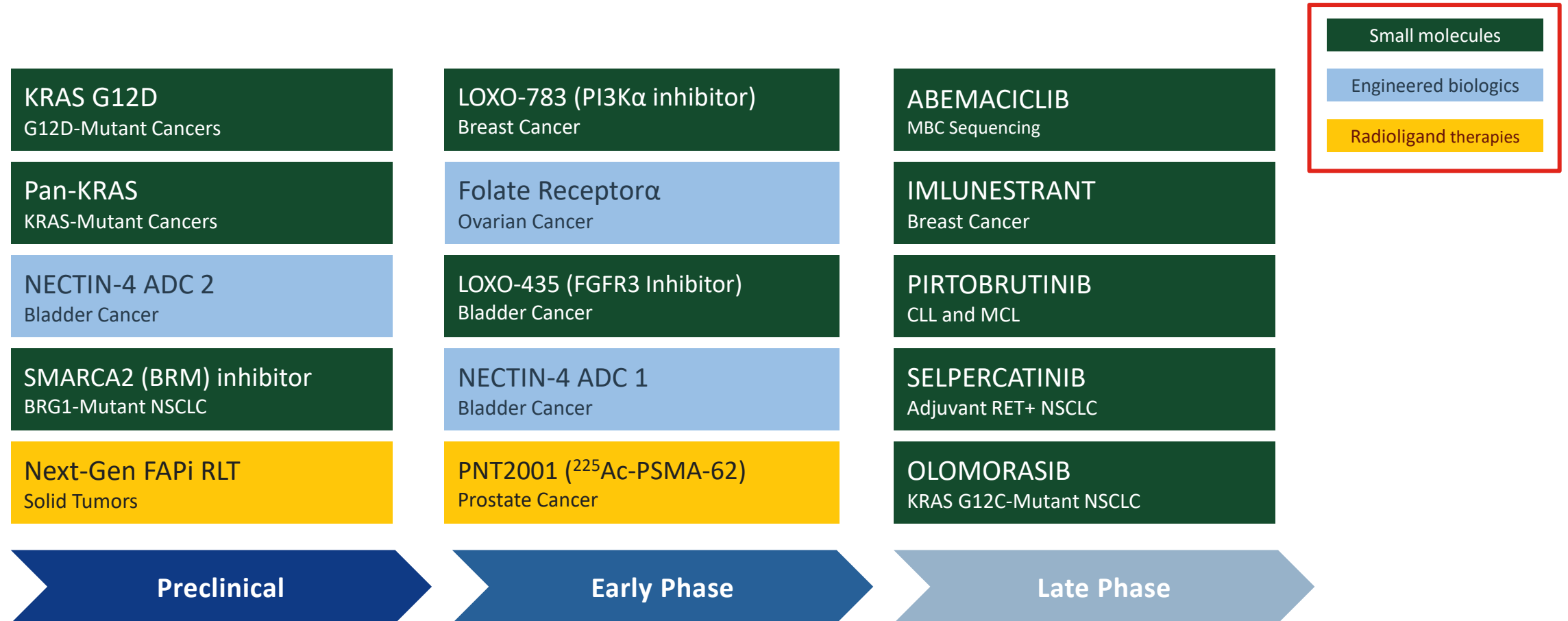


Linker technology allows for increased internalization into cells, resulting in increased tumor uptake

1. Vito A, et al. Presented at TAT Symposium; February 27 – March 2, 2023.



# Select Publicly Disclosed Oncology Pipeline



- Small molecules
- Engineered biologics
- Radioligand therapies

ADC = antibody-drug conjugate; CLL = chronic lymphocytic leukemia; FAPi = fibroblast activation protein inhibitor; MBC = metastatic breast cancer; MCL = mantle cell lymphoma; NSCLC = non-small cell lung cancer; PSMA = prostate-specific membrane antigen; RLT = radioligand therapy.

# Q&A Session

# Q&A With The Lilly Oncology Leadership Team



**Jake Van Naarden**  
President



**Barry Taylor, Ph.D.**  
Chief Scientific Officer



**Kara Clinton**  
Global Medical Affairs



**Winselow Tucker**  
Chief Commercial Officer



**Arjun Balar, M.D.**  
Global Clinical Development



**Lillian Smyth, M.D.**  
Global Head, Breast Cancer



**John Pagel, M.D., Ph.D.**  
Global Head, Hematology



**Geoff Oxnard, M.D.**  
Global Head, Thoracic Cancer

# Conclusions

Oncology at Lilly has a strong foundation but has undergone a transformation since 2019, with 2024 poised to be a productive year of new clinical starts

We are prosecuting programs across an increasingly diverse oncology pipeline in areas of high conviction biology and new innovation

With a robust clinical and preclinical pipeline, we are working to speed medicines to patients and increase our impact in oncology

*Lilly*

**A MEDICINE COMPANY**