



RELAY[®]
T H E R A P E U T I C S

Corporate Presentation
December 2024

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, implied and express statements regarding the progress and timing of the clinical development of the programs across our portfolio, including the expected therapeutic benefits of our programs, and potential efficacy and tolerability; the timing of clinical data updates across our pipeline, including the progress of doublet and triplet combinations for RLY-2608, the timing of clinical updates for RLY-2608, and the timing of a clinical data and regulatory update for lirafugratinib; the timing of clinical initiation of our various programs, including a potential pivotal trial for RLY-2608, clinical development in vascular malformations, clinical development of our non-inhibitory chaperone for Fabry disease, and clinical development of our NRAS-selective inhibitor; the potential of our product candidates to address a major unmet medical need; expectations regarding our pipeline, operating plan, use of capital, expenses and other financial results; our cash runway projection; the competitive landscape and potential market opportunities for our product candidates; the expected strategic benefits under our collaborations; our ability to successfully establish or maintain collaborations or strategic relationships for our product candidates; expectations regarding current and future interactions with the U.S. Food and Drug Administration (FDA); our ability to manufacture our product candidates in conformity with the FDA's requirements; the capabilities and development of our Dynamo[®] platform, including its role in identifying product candidates; our plans to develop, manufacture and commercialize our current product candidates and any future product candidates; and the implementation of our business model and strategic plans for our business, current product candidates and any future product candidates. The words "may," "might," "will," "could," "would," "should," "plan," "anticipate," "intend," "believe," "expect," "estimate," "seek," "predict," "future," "project," "potential," "continue," "target" and similar words or expressions, or the negative thereof, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

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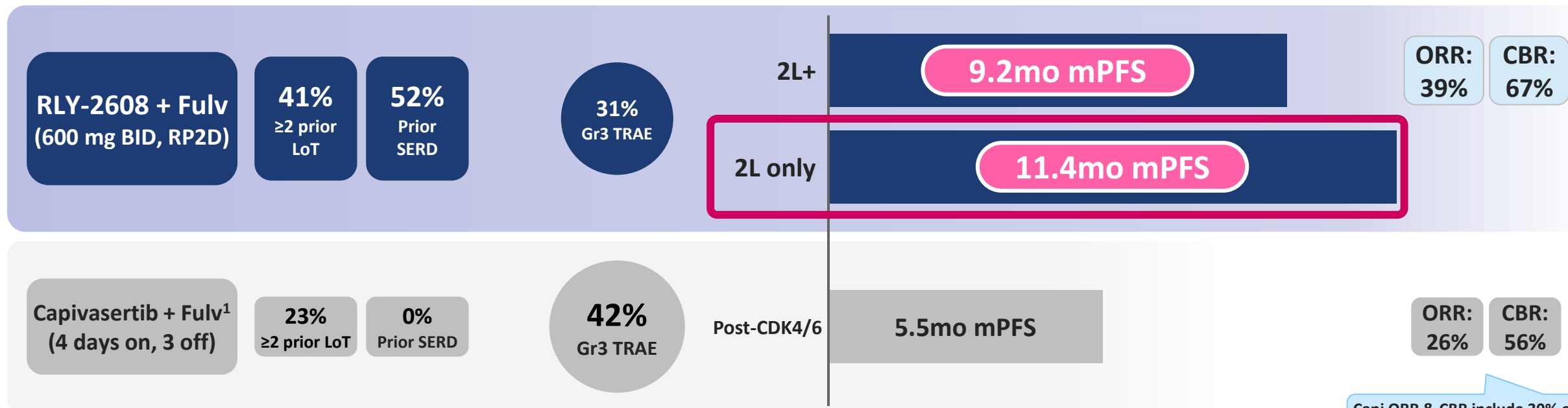
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RLY-2608 – Interim Clinical Data Continue to Show Clinically Meaningful PFS

More Heavily Pre-Treated Pt **Favorable Tolerability** **Favorable Efficacy**
*PIK3CA*mut, HR+/HER2- Advanced / Metastatic Breast Cancer (post CDK4/6)



Capi ORR & CBR include 30% of pts who are CDK4/6 naïve

Interim RLY-2608 safety and efficacy data supportive of pivotal trial in 2L Breast Cancer against capivasertib

Data presented at SABCS 2024; 1. CAPitello-291: Turner N Engl J Med 2023; 388:2058-2070; 2. In CAPitello-291, CBR and ORR not reported for CDK4/6-experienced patient population; ORR = objective response rate, mPFS = median progression free survival, LoT = line of therapy (metastatic setting), SoC = Standard of Care, TRAE = treatment related adverse effects, RP2D = recommended Phase 2 dose, CBR = clinical benefit rate, SERD = selective estrogen receptor degrader; Note: data shown are not from head-to-head studies, and no head-to-head studies have been conducted.

	BREAST CANCER	GENETIC DISEASE		SOLID TUMORS
	1 PI3K α -Driven Breast Cancer 	2 PI3K α -Driven Vascular Malformations 	3 Fabry Disease 	4 NRAS-Driven Solid tumors
Program Updates	1st PI3Kαi + ET + CDK4i combination in clinic	1st mutant-selective PI3Kα inhibitor	1st non-inhibitory αGal chaperone	1st NRAS-selective inhibitor
Large US opportunity	~140,000 pts ¹	~170,000 pts ² <i>(chronic treatment)</i>	~8,000 pts ³ <i>(chronic treatment)</i>	~28,000 pts ⁴
Milestones	CDK4i clinical start by YE 2024	Clinical start in 1Q 2025	Clinical start in 2H 2025	Clinical start in 2H 2025

\$2B current market⁵

1. Prevalent US patient population with a PIK3CA mutation (excluding PTEN co-mutations) in adjuvant, first line metastatic and second line metastatic settings (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. Prevalence of vascular malformations with a PIK3CA mutation (Gallagher et al 2022 and several other sources); 3. Prevalence of Fabry patients (National Fabry Disease Foundation, Jan 2024); 4. Newly diagnosed (incident) solid tumors with an NRAS mutation, excluding melanoma stages 0-II (SEER, 3rd party source for alteration rate, Jan 2024); 5. Fabry disease forecasted 2024 market size per EvaluatePharma, includes Galafold[®] and ERTs (May 2024)

2016

2024

FUTURE EXPECTATIONS

PRODUCTIVE PLATFORM

8

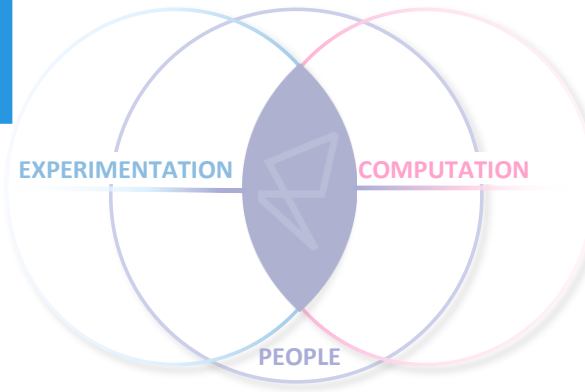
DCs

4

INDs

2

Clinical POC



CONTINUED PLATFORM PRODUCTIVITY

+3

New DCs

+3

New INDs

+3

New clinical starts

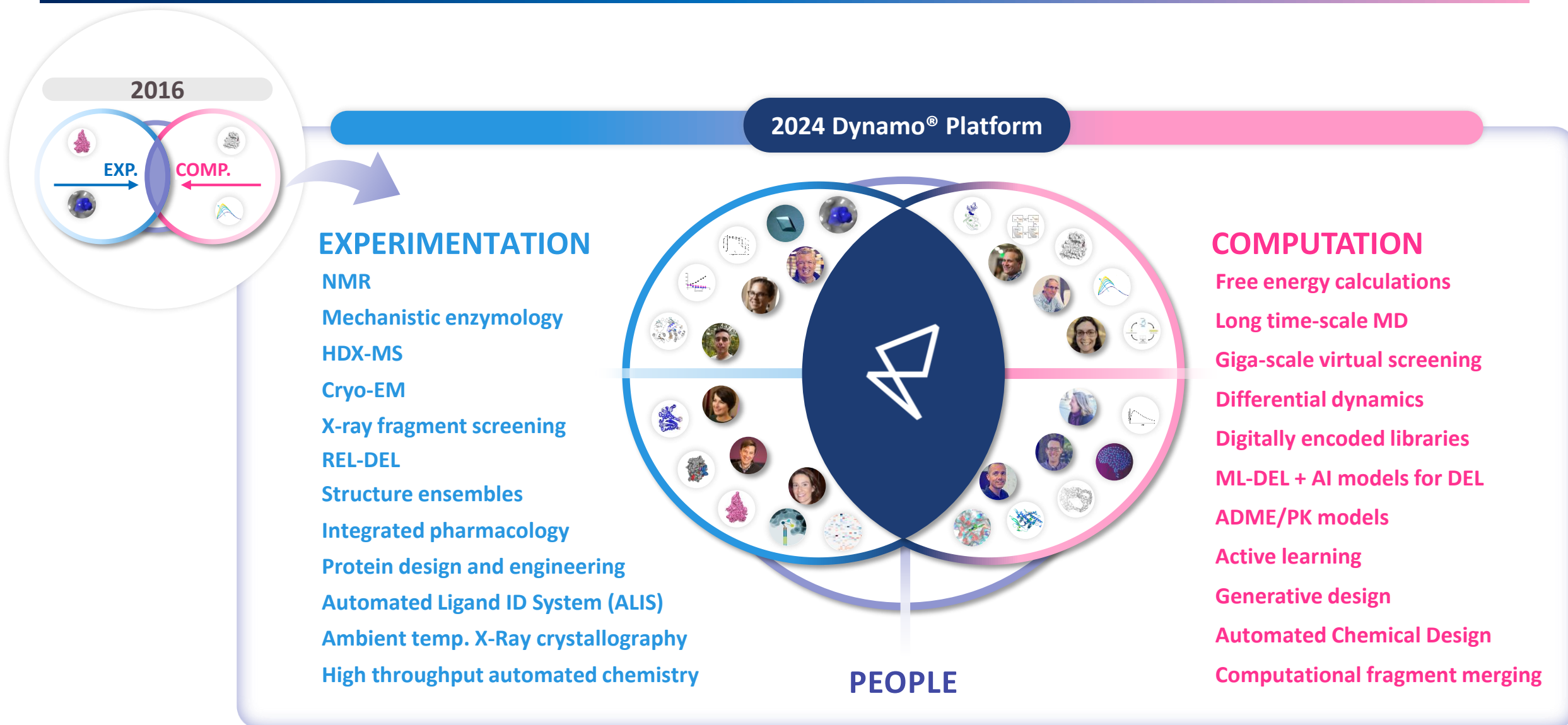
Expected platform production by YE 2025

- ✓ Built computationally enabled platform
- ✓ Solid Tumors
- ✓ Small Molecule Inhibitors & Degraders

- + Internalize, integrate & expand platform
- + Genetic Disease
- + New Modalities: Chaperones

~\$840M Cash as of end 3Q 2024
Expected to fund current operating plan into 2H 2027

Relay Tx's Dynamo[®] – Productive Computationally Enabled Platform



Relay Tx – Consistent Focus on Validated, Low Translational Risk Programs



Target Selection Focus

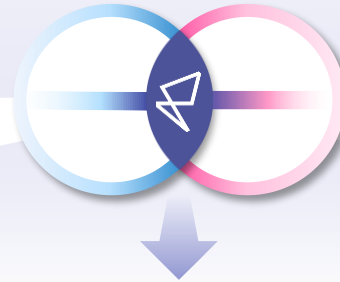
Genetically Defined

Clinically Validated

Unmet
Medical Need

Commercially
Attractive

Amenable to
Dynamo™ Platform



BREAST CANCER

PI3K α

CDK2

ER α

GENETIC DISEASE

α Gal
(Fabry Disease)

PI3K α
(Vascular Malformations)

SOLID TUMORS

NRAS

PI3K α

FGFR2

PRODUCTIVE DYNAMO™ RESEARCH ENGINE

Multiple unnamed
research stage programs

Relay Tx – Broad Precision Medicine Pipeline



	Target	Program	Preclinical	Early Clinical	Late Clinical	
BREAST CANCER	PI3K α	Endocrine Tx (ET) doublet	[Progress bar]			
		RLY-2608 (PI3K α ^{PAN})	Ribociclib + ET triplet	[Progress bar]		
		CDK4i + ET triplet	[Progress bar]			
		Other Novel Combinations	[Progress bar]			
	CDK2	RLY-2139	Paused; IND ready			
ER α	RLY-1013 (Degradar)	Advance to IND-ready				
GENETIC DISEASE	Fabry Disease	α Gal Chaperone	[Progress bar]			
	Vascular Malformations	RLY-2608 (PI3K α ^{PAN})	[Progress bar]			
		Other PI3K α ^{PAN}	[Progress bar]			
SOLID TUMORS	NRAS	NRAS-selective Inhibitor	[Progress bar]			
	PI3K α	RLY-2608 Monotherapy	[Progress bar]			
	FGFR2	Lirafugratinib (RLY-4008)	Global Outlicense to Elevar Therapeutics			


DYNAMO® PLATFORM | 5 unnamed research programs

Anticipated 2025 Corporate Objectives

Breast Cancer
RLY-2608

- 2L pivotal trial start – 2025
- Full Ph1-2 data – 2025

Vascular Malformations
RLY-2608

- Clinical start – 1Q 2025

Fabry Disease
Pre-clinical

- Clinical start – 2H 2025

NRAS
Pre-clinical

- Clinical start – 2H 2025

Significant Capital to Achieve Goals

~\$840M

Cash as of the end of 3Q 2024

Expected to fund
current operating plan
into 2H 2027



DYNAMO® PLATFORM

5 unnamed research programs

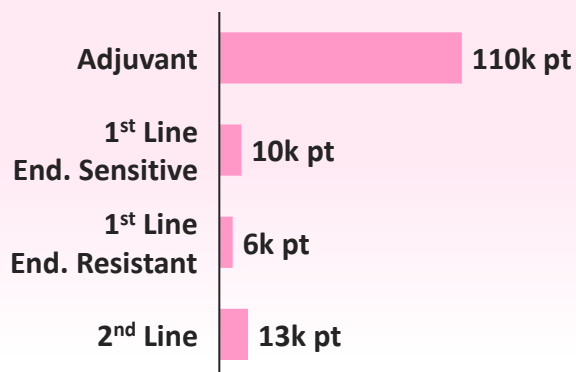
Relay Tx's PI3K α Franchise – Large Opportunities Across 3 Pillars



PIK3CA mutant HR+/HER2- Breast Cancer

~140k Patients
(US prevalence)¹

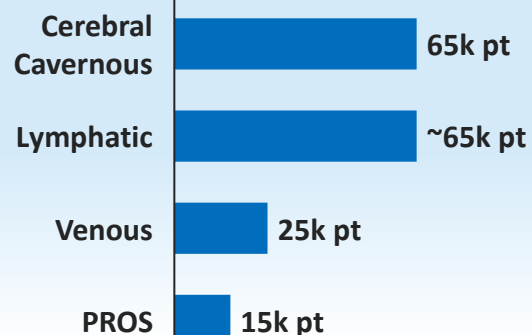
RLY-2608



PIK3CA mutant Vascular Malformations

~170k Patients
(US prevalence)²

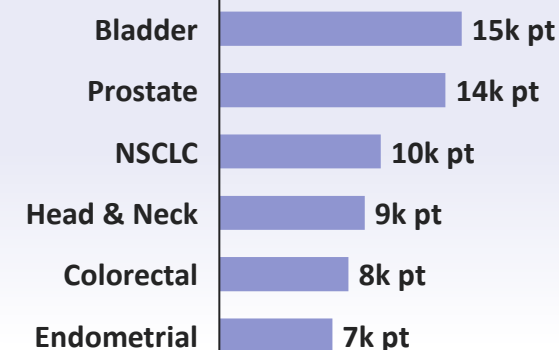
Potential for initial POC with RLY-2608,
then distinct molecule for pivotal



PIK3CA mutant Other Solid Tumors

~90k Patients
(US incidence)³

RLY-2608




Relay Tx's PI3K α Franchise has the potential to address wide range of large disease indications

1. Prevalent US patient population with a PIK3CA mutation in each line of therapy, excluding PTEN co-mutations (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. Prevalent US patient population of vascular malformation patients with a PIK3CA mutation (multiple sources); 3. Incident US patient population solid tumors annually with a PIK3CA mutation, excluding PTEN and KRAS co-mutations (SEER; 3rd party source for alteration rate, May 2024); POC = proof of concept; PROS = PIK3CA Related Overgrowth Spectrum, NSCLC = non-small cell lung cancer

Relay Tx – Broad Precision Medicine Pipeline



	Target	Program	Preclinical	Early Clinical	Late Clinical
BREAST CANCER	PI3K α	Endocrine Tx (ET) doublet		[Progress bar]	
		RLY-2608 (PI3K α ^{PAN})	Ribociclib + ET triplet	[Progress bar]	
			CDK4i + ET triplet	[Progress bar]	
			<i>Other Novel Combinations</i>	[Progress bar]	
	CDK2	RLY-2139		Paused; IND ready	
	ER α	RLY-1013 (Degradar)		Advance to IND-ready	
GENETIC DISEASE	Fabry Disease	α Gal Chaperone	[Progress bar]		
	Vascular Malformations	RLY-2608 (PI3K α ^{PAN})	[Progress bar]		
		Other PI3K α ^{PAN}	[Progress bar]		
SOLID TUMORS	NRAS	NRAS-selective Inhibitor	[Progress bar]		
	PI3K α	RLY-2608 Monotherapy	[Progress bar]		
	FGFR2	Lirafugratinib (RLY-4008) 	Global Outlicense to Elevat Therapeutics		

5 additional unnamed research programs

Relay Tx – Extensive Breast Cancer Portfolio in Validated Market Expected to Grow to ~\$27B by 2030¹



HR+/HER2- Breast Cancer is a very large patient population...

35% of Breast Cancer Pt with PI3Kα mutation (14% of all solid tumors)

~140k
US prevalence
HR+/HER2- Breast Cancer Patients with PI3Kα mutation²

~110k
Adjuvant

~10k
1L End. Sensitive

~6k
1L End. Resistant

~13k
2L

...for which Relay Tx's broad next generation ER+/HER2- BC Portfolio is designed to address

Current SoC Tx → Evolving SoC

PI3Kα Pathway Non-Selective Inhibitors → PI3Kα Mutant-specific

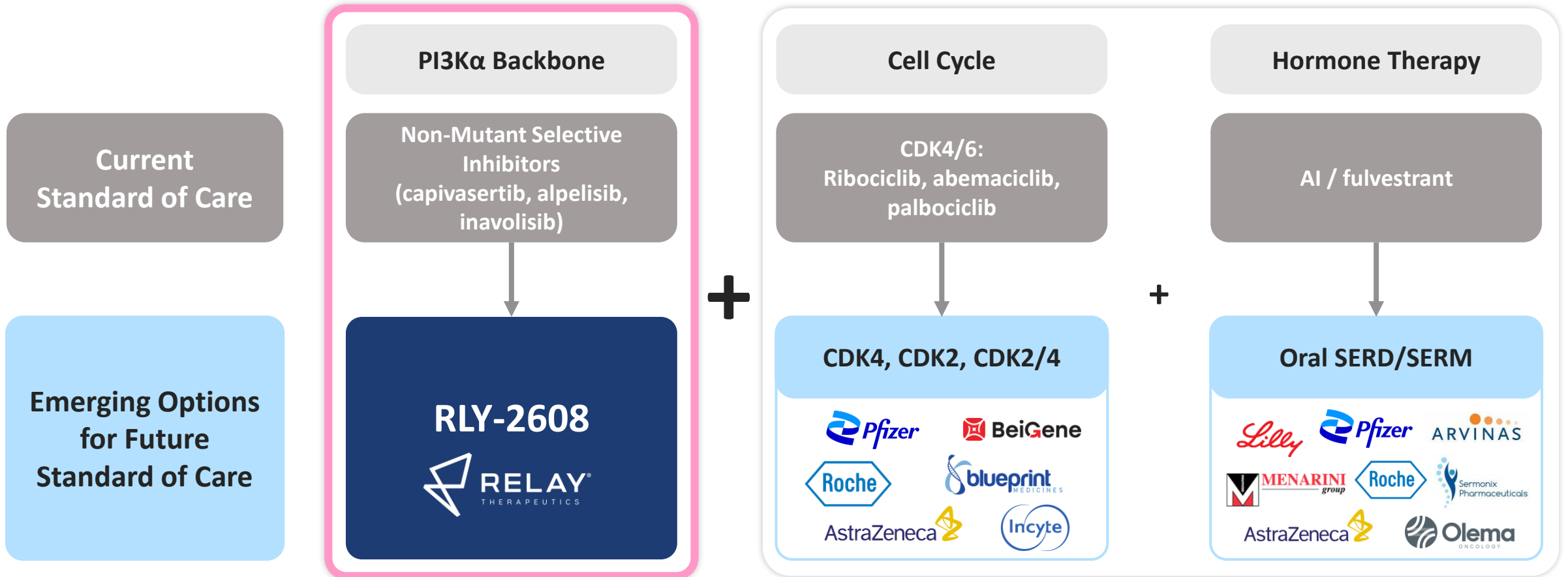
ET Backbone: AI / fulvestrant → ER Degraders & other SERDs

CDK4/6 inhibitors → CDK4 or CDK2 selective

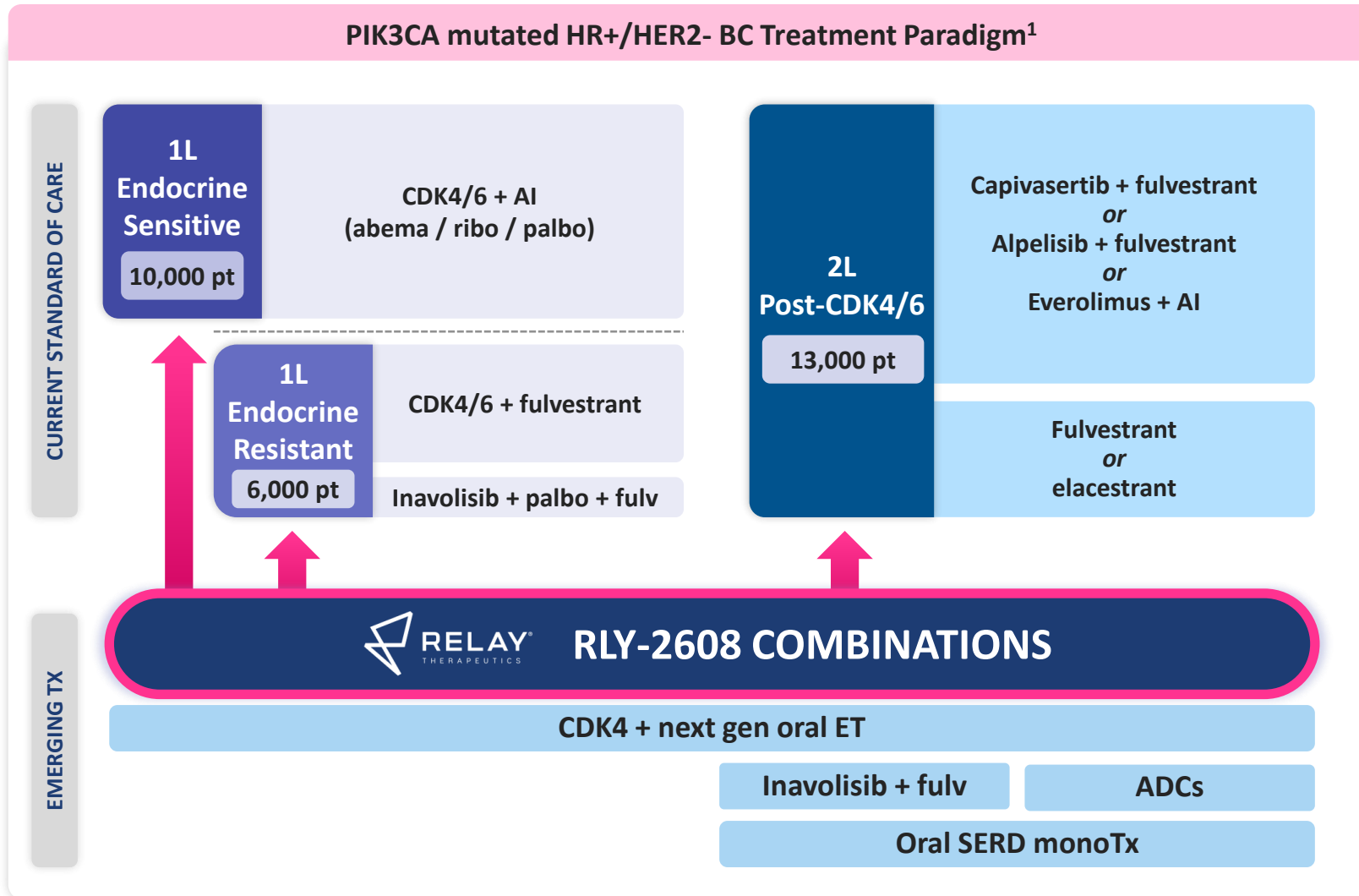
- ✓ RLY-2608 (pan)
- ✓ RLY-1013 (ERα)
- ✓ RLY-2139 (CDK2)³
Atirmo (CDK4)

1. Decision Resources Group – Breast Cancer Disease Landscape & Forecast (Nov 2023); 2. Prevalent US patient population with a PIK3CA mutation, excluding PTEN co-mutation, in each line of therapy (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 3. RLY-2139 is paused and IND-ready
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PIK3CAmut HR+/HER2- Breast Cancer Treatment Paradigm



Breast Cancer – Large Market for Mutant-Selective PI3K α Targeted Therapies



\$6B+
**Current PI3K α Pathway
 Total Addressable Market²**
*(Metastatic HR+/HER2-
 Breast Cancer)*

1. Prevalent US patient population with a PIK3CA mutation in each line of therapy, excluding PTEN co-mutations (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. Relay Tx PIK3CA internal market forecast (patient-based – US, EU5, Japan). Forecast includes estimates for genetic testing, class share, market access, compliance, duration of therapy and assumes current PIK3CA therapy net price (primary sources: SEER; GloboCan; Global Data; Evaluate Pharma; DRG Market Forecast; PIK3CAi PIs)
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Large Unmet Need in Metastatic Breast Cancer



PIK3CAmut, HR+/HER2- mBC¹

**1L
Endocrine
Sensitive** **10,000
patients**

**1L
Endocrine
Resistant** **6,000
patients**

**2L
Post-CDK4/6** **13,000
patients**

Median PFS of Current Standard of Care

Ribociclib + AI²

25 months

Also abemaciclib
or palbociclib

19mo in PIK3CAmut
subset analysis

Ribociclib + fulv³

16-20 months

Inavolisib + palbo
+ fulv: 15mo

Capivasertib + fulv⁴

5.5mo

Alpelisib + fulv⁵

5.6-8mo

CDK4/6 + fulv⁶

~5-6mo

SERD monox⁷

~2-4mo

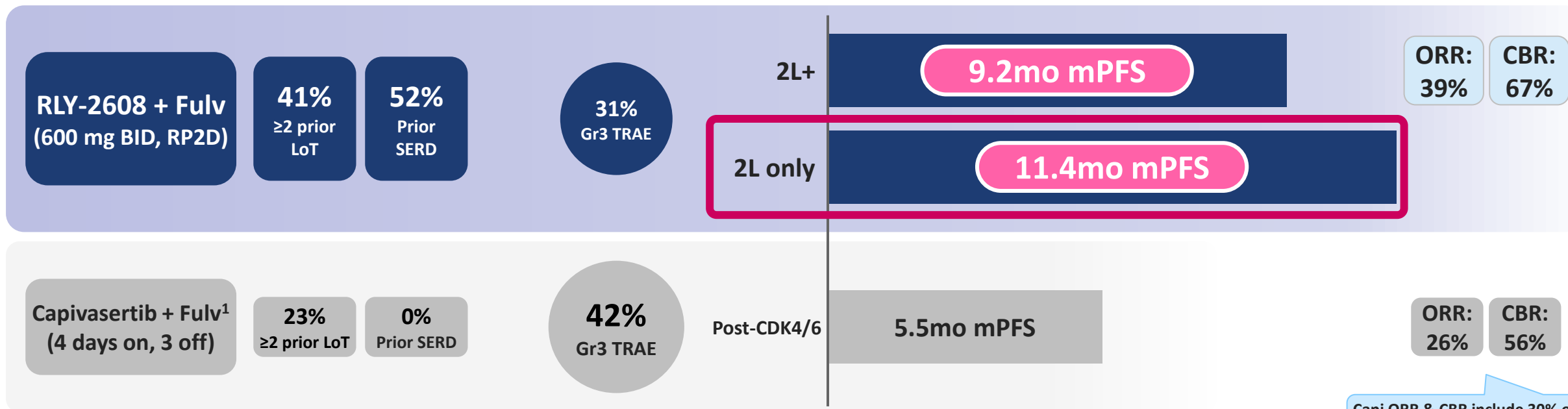
Large unmet need in 2L presents opportunity for well-differentiated targeted agent

Notes: 1. Prevalent US patient population with a PIK3CA mutation in each line of therapy, excluding PTEN co-mutations (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. All-comers and PIK3CAmut sub-group, MONALEESA-2; 3. All-comers and PIK3CAmut sub-group, MONALEESA-3; 4. Turner N Engl J Med 2023; 388:2058-2070 (n=355); 5. Rugo 2021 Lancet Oncol 22:489, SABCs 2021 #P1-18-03; 6. MAINTAIN: Kalinsky 2023 J Clin Oncol 41:4004, postMONARCH: Kalinsky 2024 ASCO; 7. Elacestrant Prescribing Information
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RLY-2608 – Interim Clinical Data Continue to Show Clinically Meaningful PFS

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*PIK3CA*mut, HR+/HER2- Advanced / Metastatic Breast Cancer (post CDK4/6)



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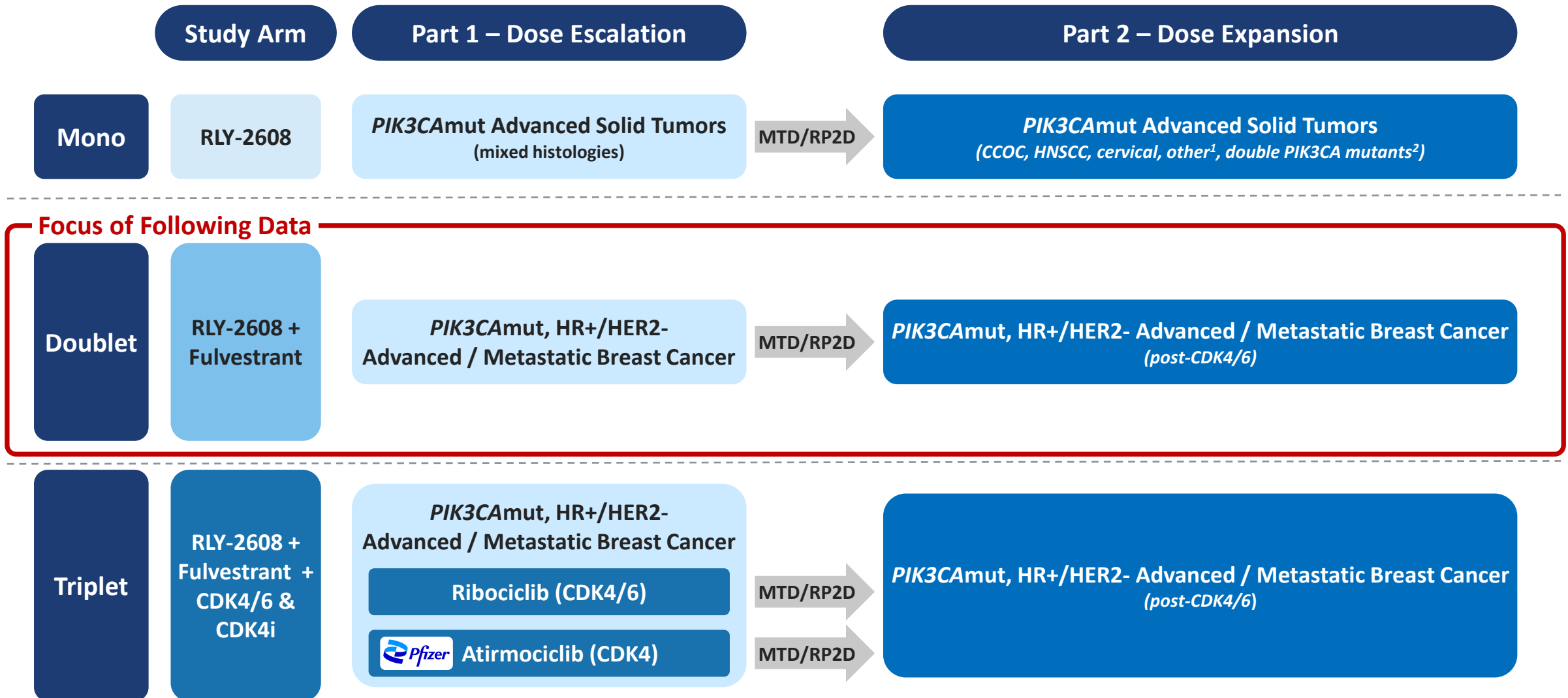
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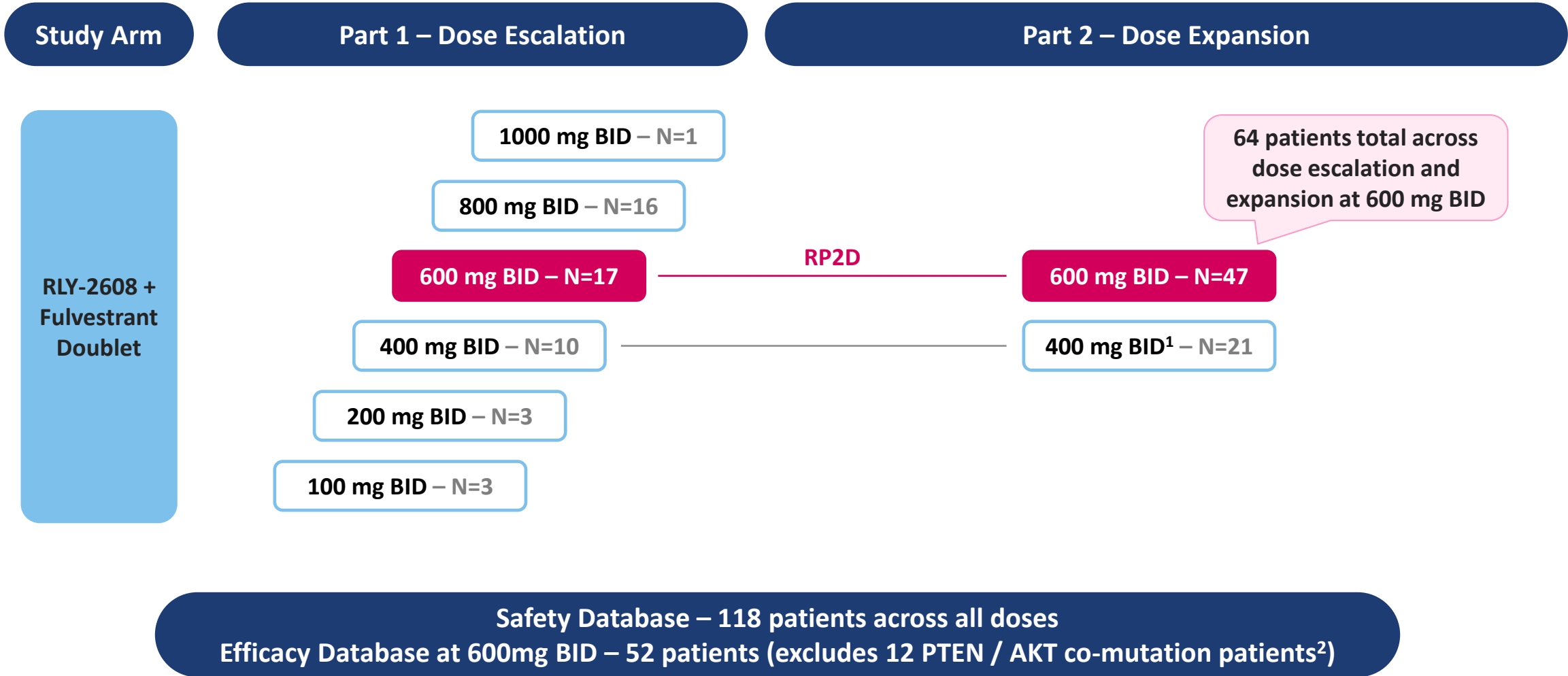
5 additional unnamed research programs

RLY-2608 – ReDiscover Trial Overview



1. Excludes PIK3CAmut clear cell OvCA, HNSCC, Cervical cancer, and colorectal patients; 2. Double mutation defined as one major PIK3CA mutation (E542X, E545X, H1047X) + ≥1 additional PIK3CA mutation per local assessment; CCOC = clear cell ovarian cancer
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RLY-2608 – ReDiscover Trial Enrollment



1. 400mg cohort is not yet mature for efficacy analysis. Full Phase I results, including 400mg cohort, will be disclosed at a later date; 2. As defined by central ctDNA

RLY-2608 – ReDiscover Trial Baseline Demographics



	RLY-2608 + Fulvestrant	
	All Patients (N=118)	600 mg BID (RP2D, N=64)
Age, Median (Range), Years	59.0 (34, 85)	59.0 (34, 80)
ECOG, 0 / 1, n (%)	69 (58.5) / 49 (41.5)	38 (59.4) / 26 (40.6)
Local PIK3CA Baseline Results		
Kinase Mutation, n (%)	57 (48.3)	31 (48.4)
Non-Kinase Mutations, n (%)	61 (51.7)	33 (51.6)
BMI \geq 30 or HbA1c \geq 5.7%, n (%)	44 (37.3)	22 (34.4)
Measurable Disease, n (%)	83 (70.3)	42 (65.6)
Patients with Visceral Metastases, n (%) ¹	75 (63.6)	38 (59.4)
Prior Lines of Therapy in Advanced Setting		
1, n (%)	62 (52.5)	38 (59.4)
2+, n (%)	56 (47.5)	26 (40.6)
Prior Therapies in Advanced Setting		
CDK4/6, n (%) ²	118 (100.0)	64 (100.0)
Fulvestrant or Novel SERD, n (%)	66 (55.9)	33 (51.6)
Chemo / ADC, n (%)	30 (25.4)	16 (25.0)
ESR1 Mutation (Central Read) ³ , n (%)	40 (35.4)	18 (28.6)

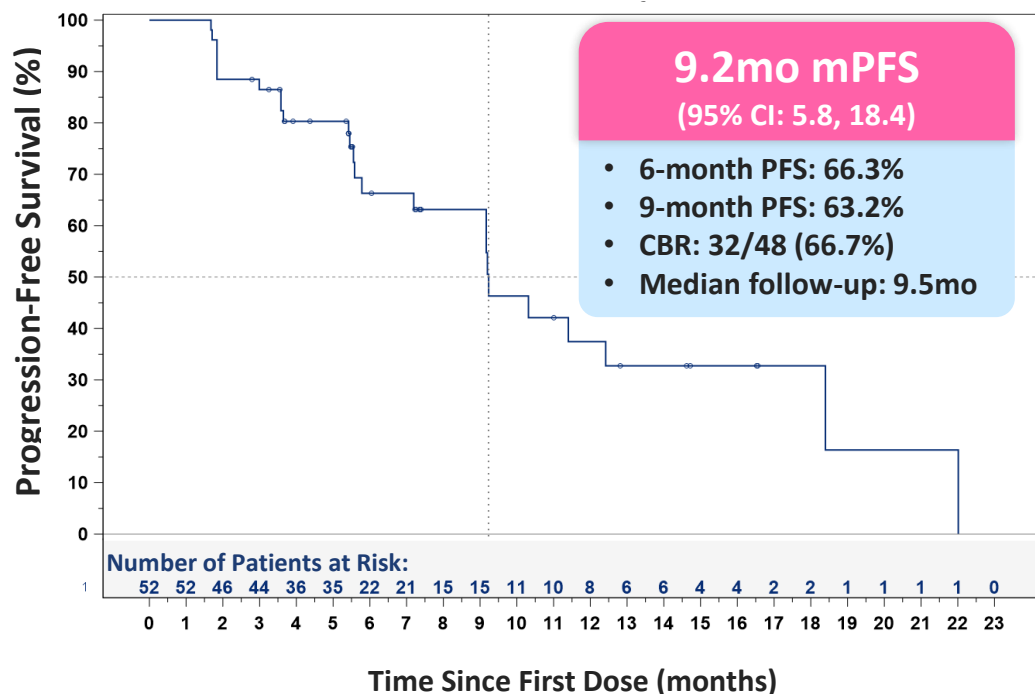
1. Visceral metastatic sites include brain, lung, liver, pleural, peritoneal involvement; 2. Three patients received prior CDK4/6 in the adjuvant setting which is allowed per protocol; 3. Percentage was based on pts with evaluable ctDNA data at baseline;

ECOG = Eastern Cooperative Oncology Group performance status

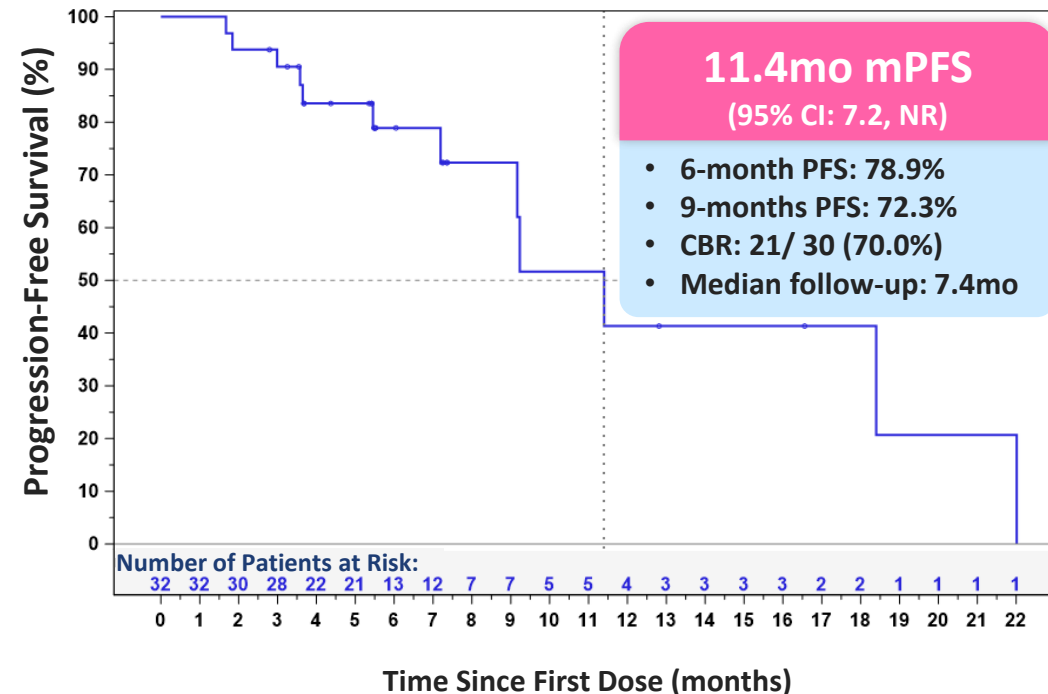
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RLY-2608 600 mg BID (RP2D) + Fulvestrant Excluding PTEN / AKT Co-Mutations

All Patients (N=52)



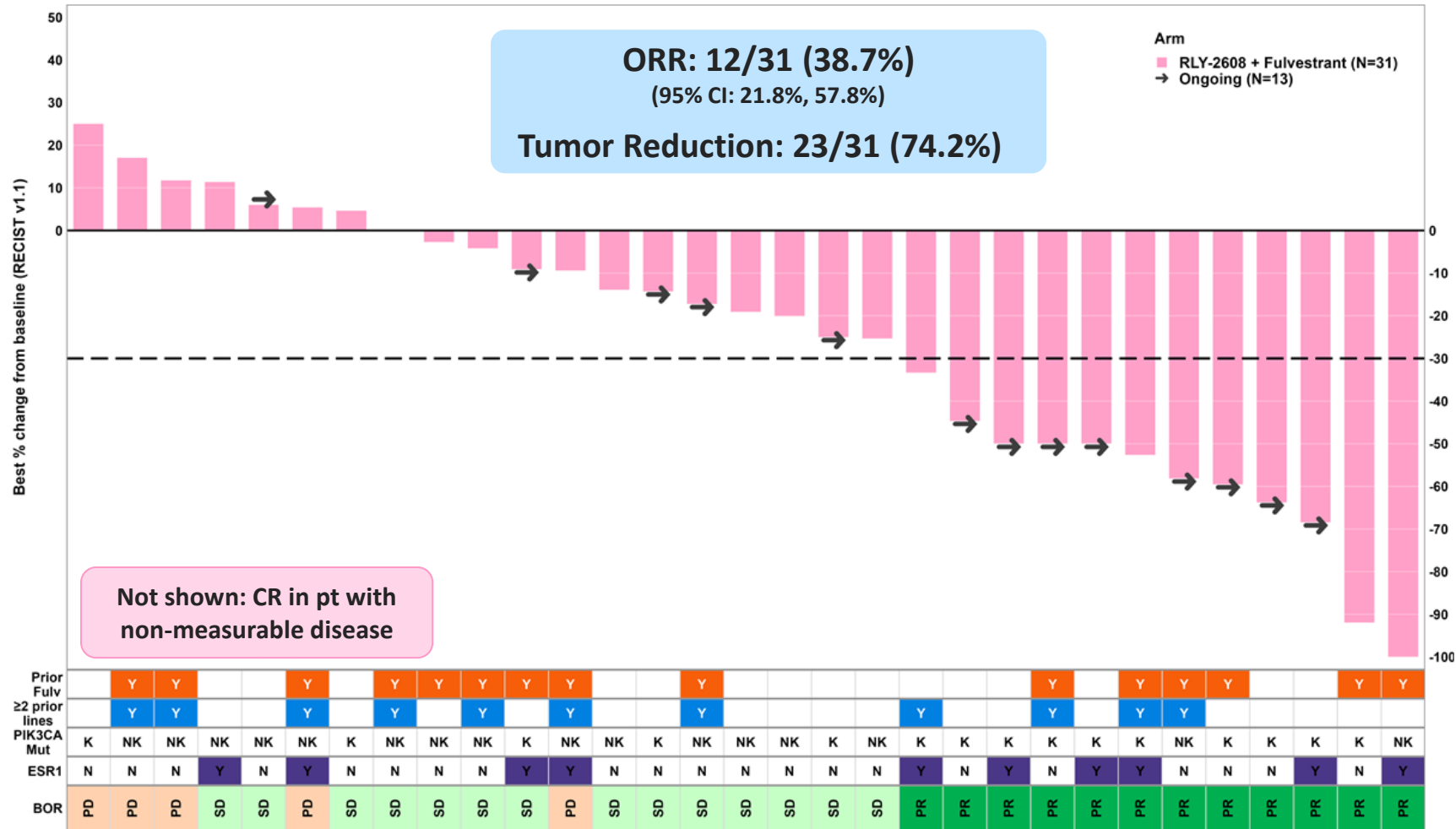
2L Patients (N=32)



RLY-2608 – Efficacy: Confirmed ORR 39%

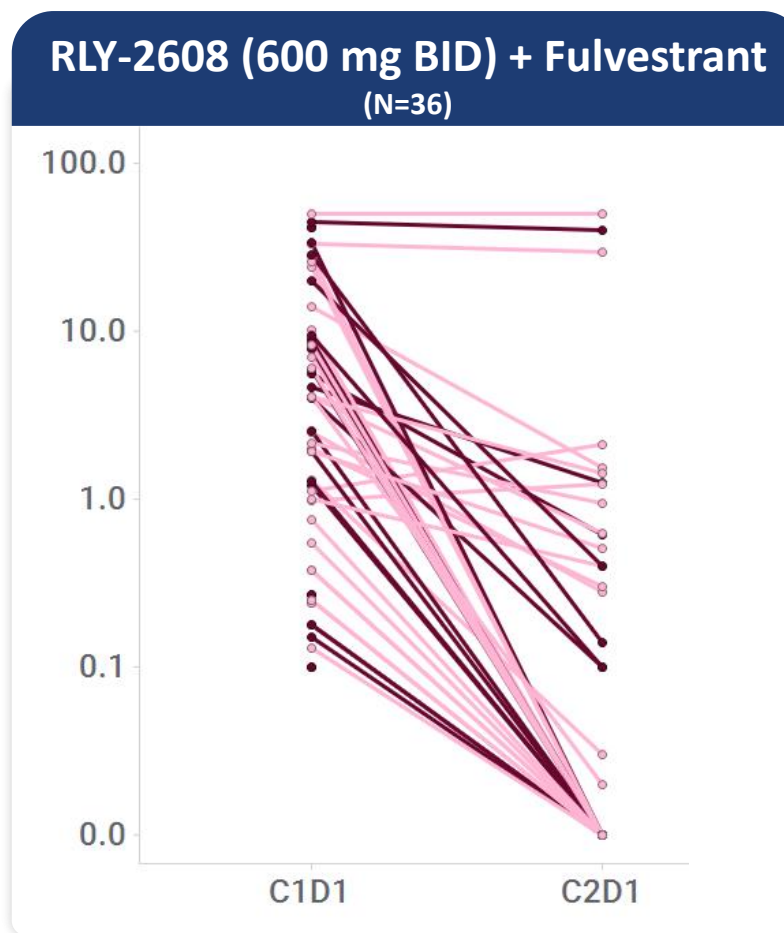
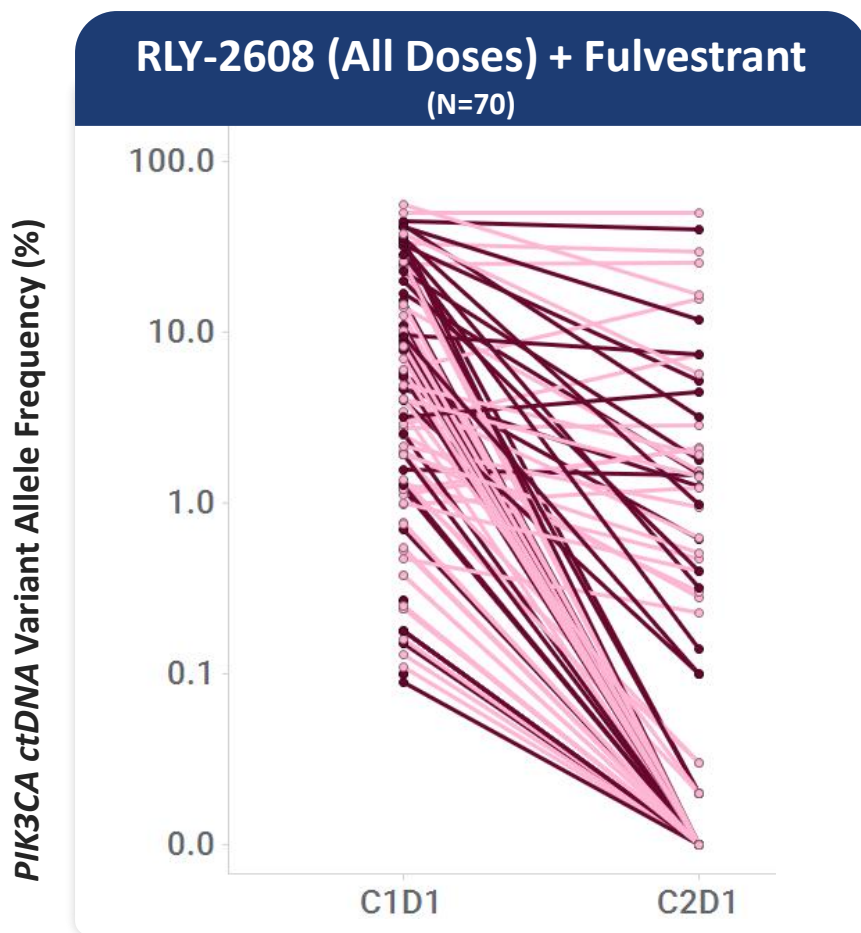


RLY-2608 600 mg BID (RP2D) + Fulvestrant Excluding PTEN / AKT Co-Mutations – Measurable Disease (N=31)



PIK3CA mutation: “K” = Kinase domain mutation, “NK” = Non-Kinase domain mutation; CR = Complete Response
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RLY-2608 – Efficacy: ctDNA Clearance



At 600 mg BID¹ (RP2D):

- 35 (97.2%) patients had decline in PIK3CA ctDNA
- 19 (52.8%) patients completely cleared PIK3CA ctDNA by C2D1

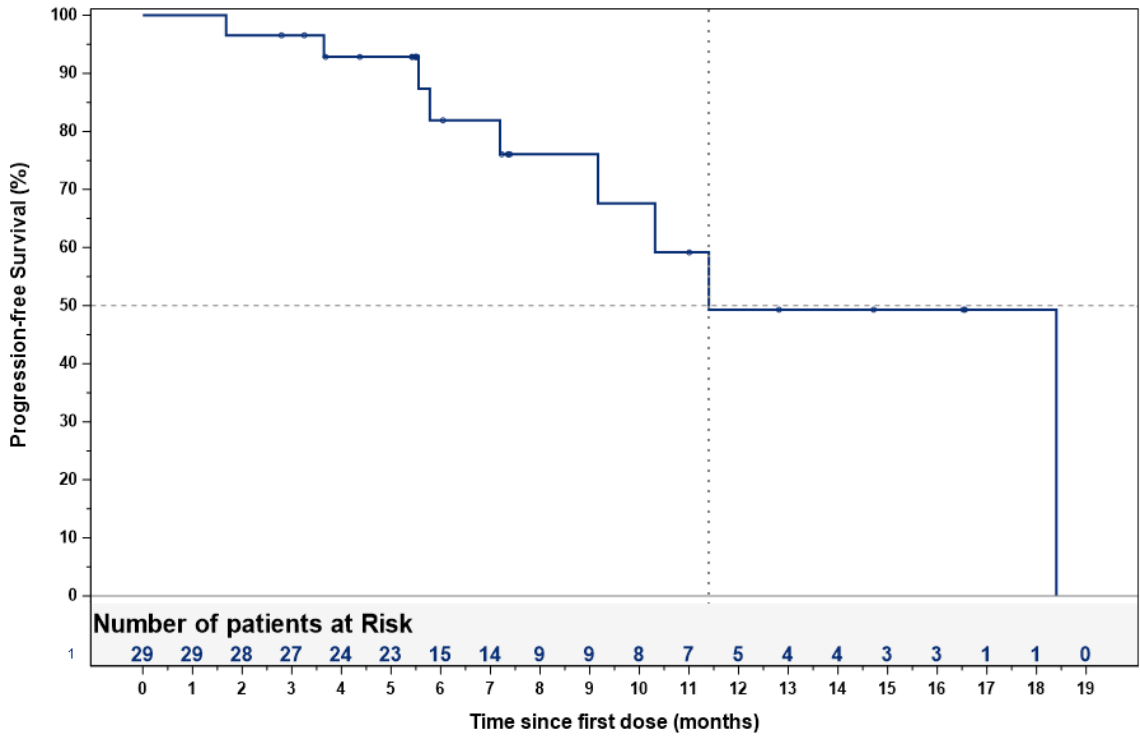
● Kinase
● Non-Kinase

1. N=36 patients without PTEN/AKT co-alterations who have detectable PIK3CA at baseline and a paired C1D1-C2D1 ctDNA result are presented
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RLY-2608 – Efficacy: Kinase Mutations mPFS 11.4 Months & Confirmed ORR 67%

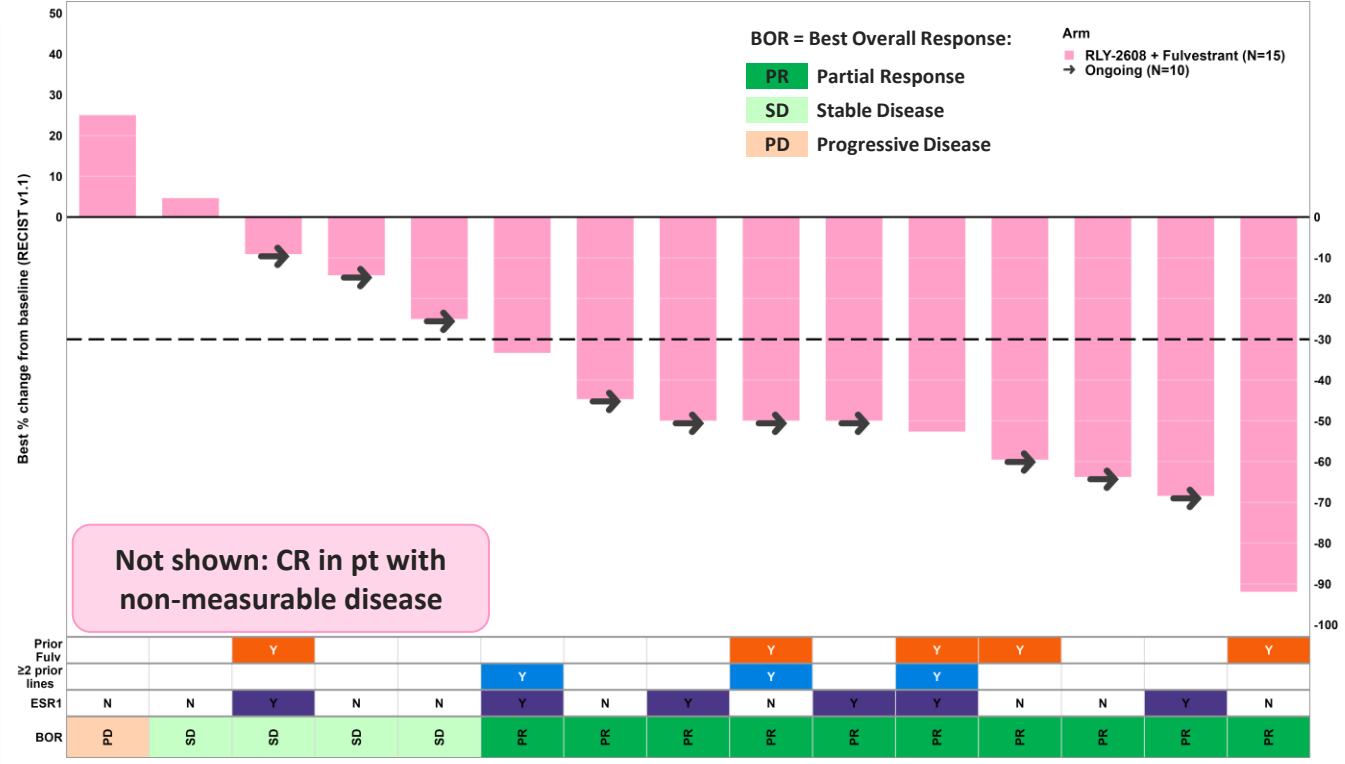


RLY-2608 600 mg BID (RP2D) + Fulvestrant Excluding PTEN / AKT co-mutations (N=29)



11.4 mo mPFS
(95% CI: 9.2, NR)

RLY-2608 600 mg BID (RP2D) + Fulvestrant Excluding PTEN / AKT – Measurable Disease (N=15)

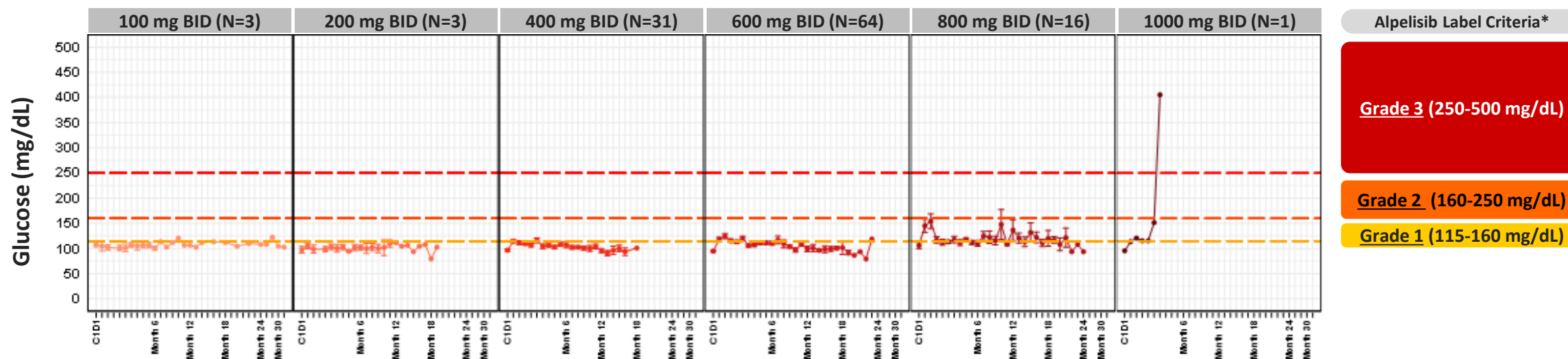


66.7% ORR
(10/15 pt, 95% CI: 38.4%, 88.2%)

RLY-2608 – Tolerability: Limited Observed Impact on Glucose Homeostasis



RLY-2608 + Fulvestrant



Note: *Based on CTCAE version 4 criteria

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ReDiscover preliminary data as of 11/04/2024

		All Patients (N=118)		600mg BID (RP2D, N=64)	
		All Gr	Gr3	All Gr	Gr3
Any TRAE		92.4%	25.4%	93.8%	31.3%
TRAEs ≥15% of 600 mg BID	Hyperglycemia¹	42.4%	2.5%	46.9%	3.1%
	Nausea	41.5%	0.8%	50.0%	1.6%
	Fatigue¹	40.7%	8.5%	35.9%	9.4%
	Creatinine Increased	34.7%	0.8%	34.4%	1.6%
	Diarrhea	30.5%	1.7%	35.9%	3.1%
	Decreased Appetite	16.9%	0%	20.3%	0%
	Headache	15.3%	0.8%	20.3%	0%
	Hypokalaemia¹	15.3%	1.7%	17.2%	1.6%
	Vomiting	12.7%	0%	15.6%	0%
Other select TRAEs	Rash¹	11.9%	0.8%	10.9%	1.6%
	Stomatitis	3.4%	0.8%	4.7%	0%

27% Gr1 hyperglycemia
(no intervention required)

No Gr4-5 TRAEs

1: Hyperglycemia includes the MedDRA v26.0 Preferred Terms (PT): Hyperglycemia, Blood Glucose Increased, Glucose Tolerance Impaired; Fatigue includes the PTs: Fatigue, Asthenia; Hypokalemia includes the PTs: Hypokalemia and blood potassium decreased; Rash includes the PTs: Rash, Rash Macular, Rash Maculo-Papular

RLY-2608 – Tolerability: Dose Intensity and Modifications



		All Patients (N=118)	600mg BID (RP2D, N=64)
Dose Intensity	Relative Dose Intensity (%), Median	97%	94%
Dose Modifications Due to TRAE	Dose Reduction, n (%)	38 (32.2)	25 (39.1)
	Dose Interruption, n (%)	56 (47.5)	33 (51.6)
	Dose Discontinuation, n (%)	7 (5.9)	2 (3.1)
TRAEs Leading to Dose Reduction	Fatigue¹	12 (10.2)	6 (9.4)
	Blood Creatinine Increased	8 (6.8)	3 (4.7)
	Diarrhea	6 (5.1)	3 (4.7)

Grade 1 pruritis; Grade 1 nausea and loss of appetite

Maintained 94% dose intensity with very low TRAE discontinuations at 600mg BID

Note: 1. Fatigue includes the PTs: Fatigue and Asthenia; TRAEs leading to Dose Reduction in more than 2 patients within 600 mg BID are presented.

PI3K α Inhibitors – Efficacy Profiles



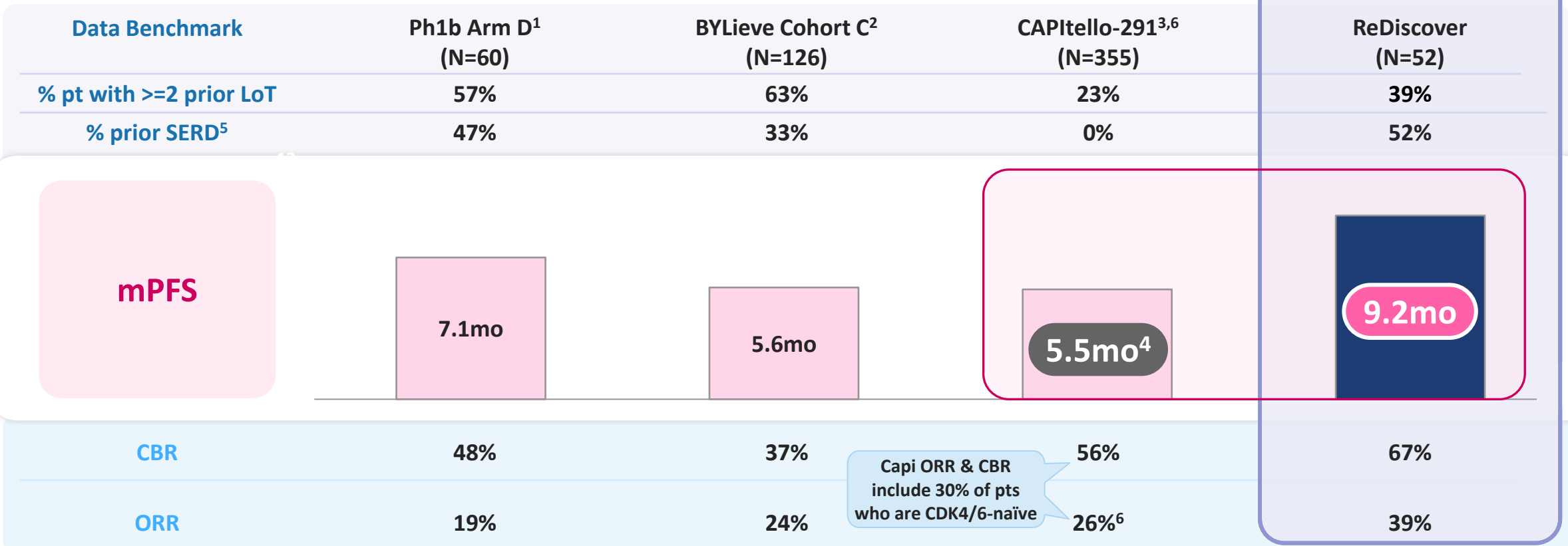
Doublet Combination Regimens

Inavolisib + fulvestrant
not approved

Alpelisib + fulvestrant
approved 2019

Capivasertib + fulvestrant
approved 2023

RLY-2608 + fulvestrant
(600mg BID, RP2D)



1. SABCS 2021 #P5-17-05 (n=60); 2. SABCS 2021 #PD-13-05; 3. Turner N Engl J Med 2023; 388:2058-2070 (n=355); 4. 5.5mo mPFS reported in CDK4/6-experienced patient sub-population of CAPItello-291; 5. Prior SERD includes fulvestrant and next-generation SERDs; 6. FDA Prescribing Information.
Note: These data are derived from different clinical trials at different points in time, with differences in molecule composition, trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

PI3K α Inhibitors – Tolerability Profiles



Doublet Combination Regimens

Inavolisib + fulvestrant
not approved

Alpelisib + fulvestrant
approved 2019

Capivasertib + fulvestrant
approved 2023

RLY-2608 + fulvestrant
(600mg BID, RP2D)

Data Benchmark

	Ph1b Arm D ¹ (n=60)	BYLieve ² (n=127)	FDA Label ³ (n=355)	ReDiscover (n=64)
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All Grade 3+ TRAEs



Grade 3+ Hyperglycemia



Dose Discontinuation due TRAEs



Discontinuous dosing:
4 days on, 3 days off

34% of pt BMI \geq 30
and/or HbA1c \geq 5.7%

1. SABCS 2021 #P5-17-05; 2. Rugo 2021 Lancet Oncol 22:489; 3. FDA Prescribing Information; 4. CAPItello-291: Turner N Engl J Med 2023; 388:2058-2070.

Note: These data are derived from different clinical trials at different points in time, with differences in molecule composition, trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

PI3K α Inhibitors – Tolerability Profiles



Doublet Combination Regimens

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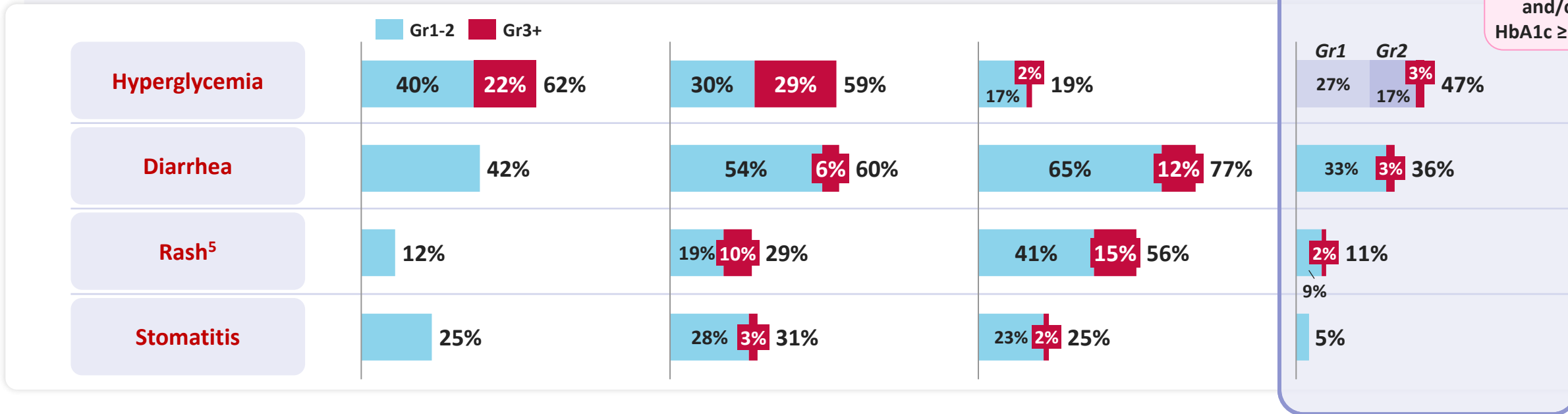
Alpelisib + fulvestrant
approved 2019

Capivasertib + fulvestrant
approved 2023

RLY-2608 + fulvestrant
(600mg BID, RP2D)

Data Benchmark	Ph1b Arm D ¹ (n=60)	BYLieve ² (n=127)	FDA Label ³ (n=355)	ReDiscover (n=64)
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HbA1c Enrollment Criteria	<7%	≤6.4%	<8% ⁴	<7% <i>34% of pt BMI ≥30 and/or HbA1c ≥5.7%</i>
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1. SABCS 2021 #P5-17-05; 2. Rugo 2021 Lancet Oncol 22:489; 3. FDA Prescribing Information; 4. per CAPItello-291 enrollment criteria; 5. Rash for capivasertib references Cutaneous Adverse Reactions grouped term includes a number of preferred terms listed in FDA Prescribing Information. Note: These data are derived from different clinical trials at different points in time, with differences in molecule composition, trial design and patient populations. As a result, cross-trial comparisons cannot be made, and no head-to-head clinical trials have been conducted.

Large Unmet Need in Metastatic Breast Cancer



PIK3CAmut, HR+/HER2- mBC¹

Median PFS of Current Standard of Care

Potential Market Opportunity⁸

1L Endocrine Sensitive
10,000 patients

Ribociclib + AI²
25 months

Current Market Oppty

~\$4B

Future Market Oppty

~\$6-7B

Also abemaciclib or palbociclib

1L Endocrine Resistant
6,000 patients

Ribociclib + fulv³
16-20 months

~\$2B

RLY-2608 Potential to Drive Meaningful Improvement

~\$3-4B

2L Post-CDK4/6
13,000 patients

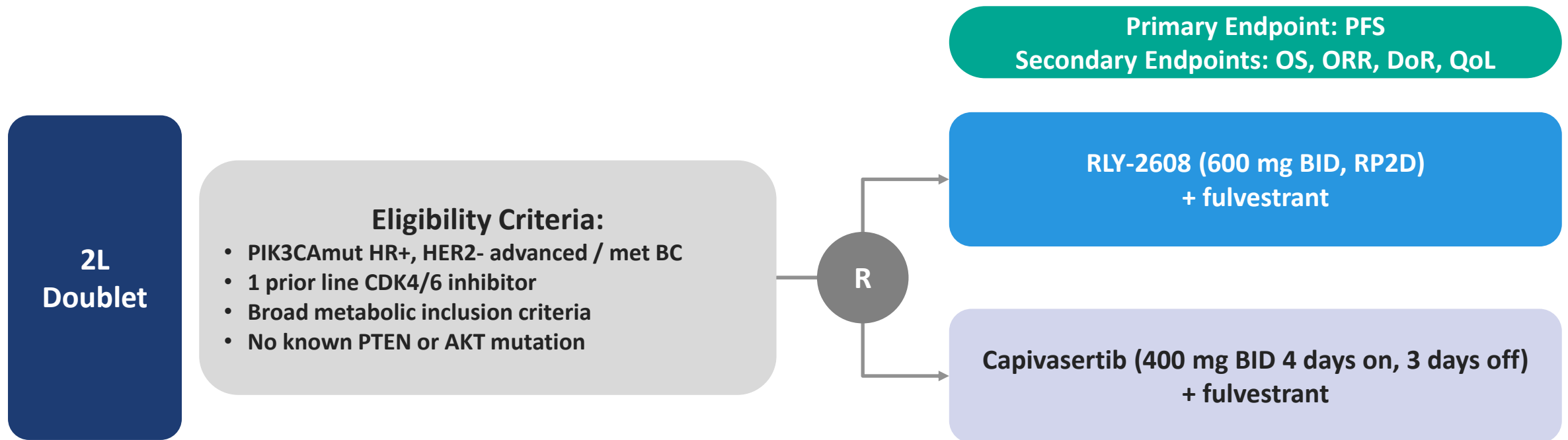
Capivasertib + fulv⁴ 5.5mo
Alpelisib + fulv⁵ 5.6-8mo
CDK4/6 + fulv⁶ ~5-6mo
SERD monox⁷ ~2-4mo

~\$2B

~\$3-4B

Notes: 1. Prevalent US patient population with a PIK3CA mutation in each line of therapy, excluding PTEN co-mutations (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. All-comers and PIK3CAmut sub-group, MONALEESA-2; 3. All-comers and PIK3CAmut sub-group, MONALEESA-3; 4. Turner N Engl J Med 2023; 388:2058-2070 (n=355); 5. Rugo 2021 Lancet Oncol 22:489, SABCS 2021 #P1-18-03; 6. MAINTAIN: Kalinsky 2023 J Clin Oncol 41:4004, postMONARCH: Kalinsky 2024 ASCO; 7. Elacestrant Prescribing Information; 8. Informed by qualitative and quantitative primary market research performed in Q2 2024
 © 2024 Relay Therapeutics

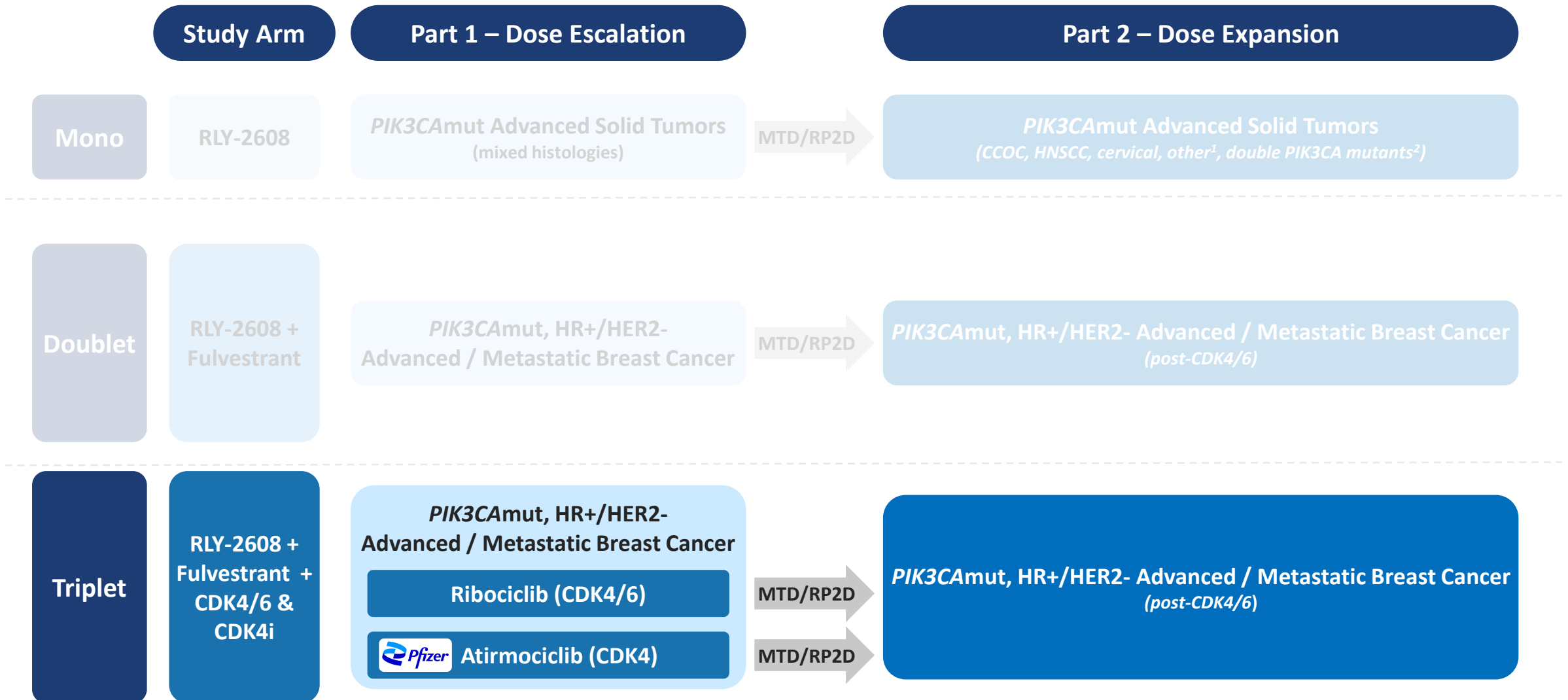
RLY-2608 – Initial Pivotal Trial Planned for 2L Doublet in 2025*



2L doublet pivotal start expected in 2025

*Subject to discussions with regulators; eligibility criteria, endpoints, RP2D, and other aspects of trial design have not yet been finalized; OS = overall survival, DoR = duration of response, QoL = quality of life, met BC = metastatic Breast Cancer; 2L = 2nd line

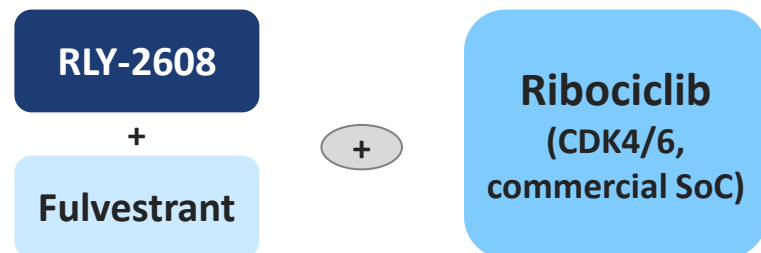
RLY-2608 – ReDiscover Trial Overview



1. Excludes PIK3CAmut clear cell OvCA, HNSCC, Cervical cancer, and colorectal patients; 2. Double mutation defined as one major PIK3CA mutation (E542X, E545X, H1047X) + ≥1 additional PIK3CA mutation per local assessment.

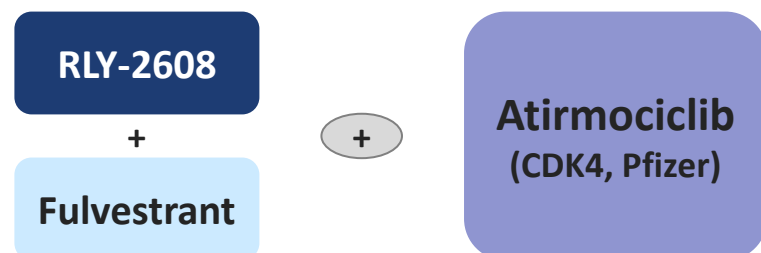
RLY-2608 – On Track to Realize 1L Potential with Triplet Combinations

Triplets



Dose Escalation

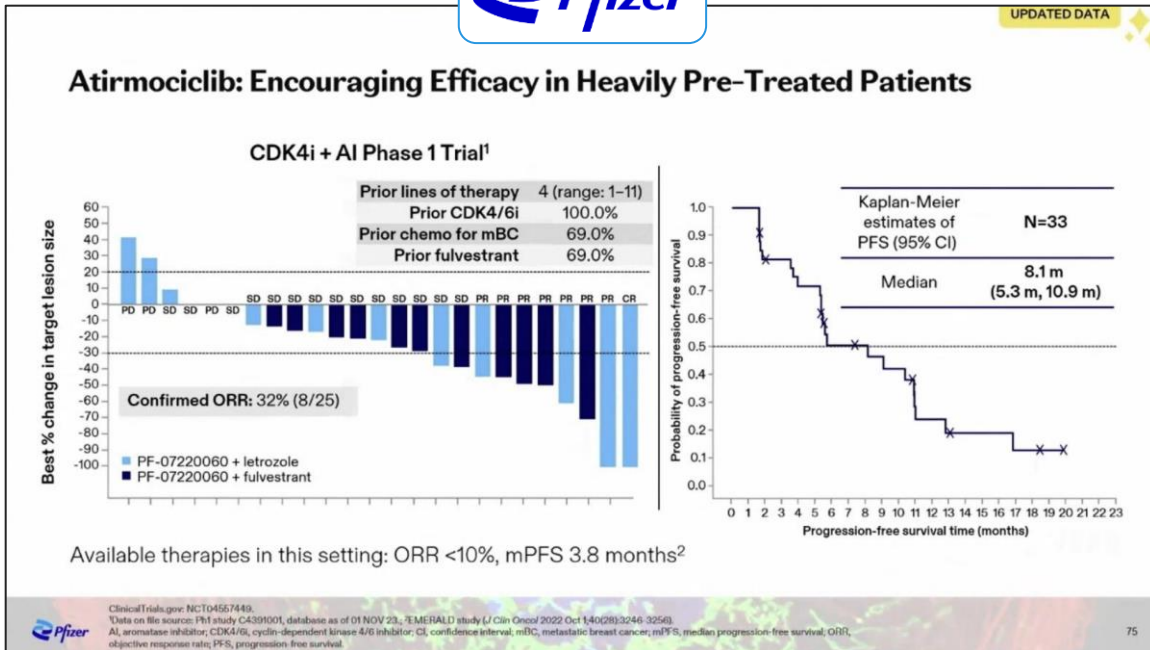
Currently dosing at biologically active doses of RLY-2608



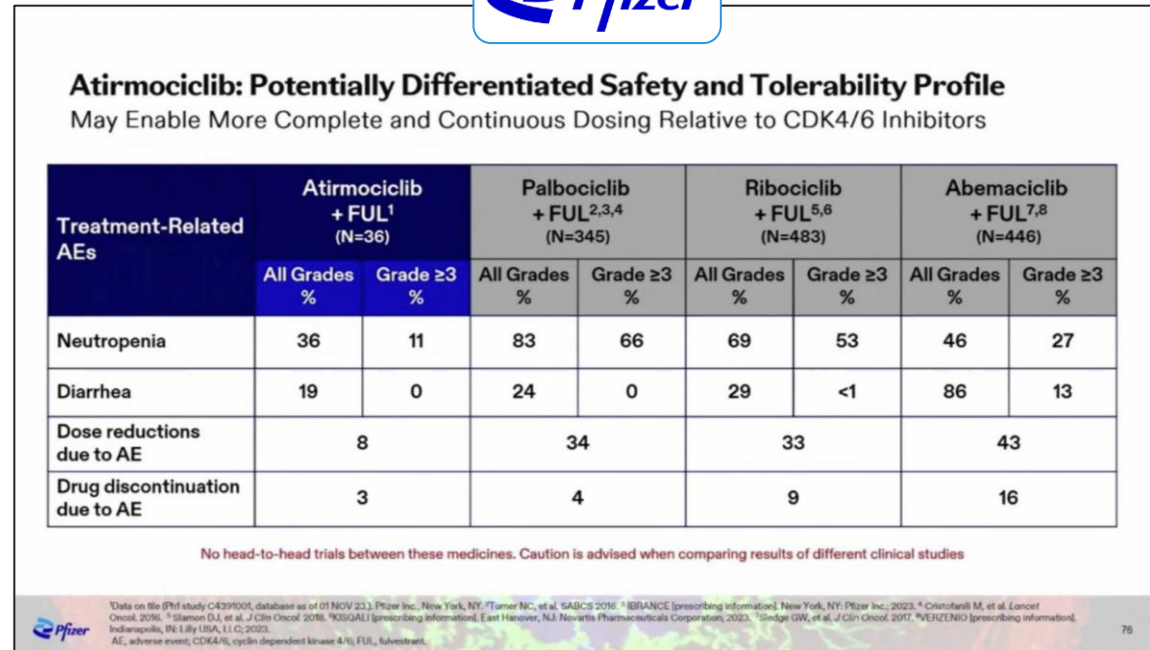
Atirmociclib triplet has initiated

Phase 1 Aim for Triplets: Demonstrate safety, tolerability and preliminary efficacy with both current generation CDK4/6 and next-gen CDK4 to enable pivotal development potential in both

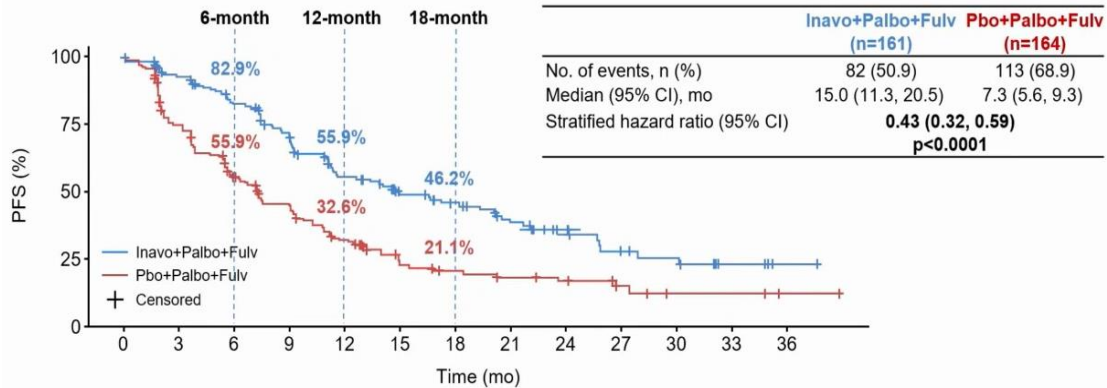
Encouraging Efficacy Data in Heavily Pre-Treated Patients



Potentially Differentiated Safety and Tolerability Profile



Inavolisib + Palbociclib + Fulvestrant doubled PFS vs. Fulvestrant + Palbociclib Alone

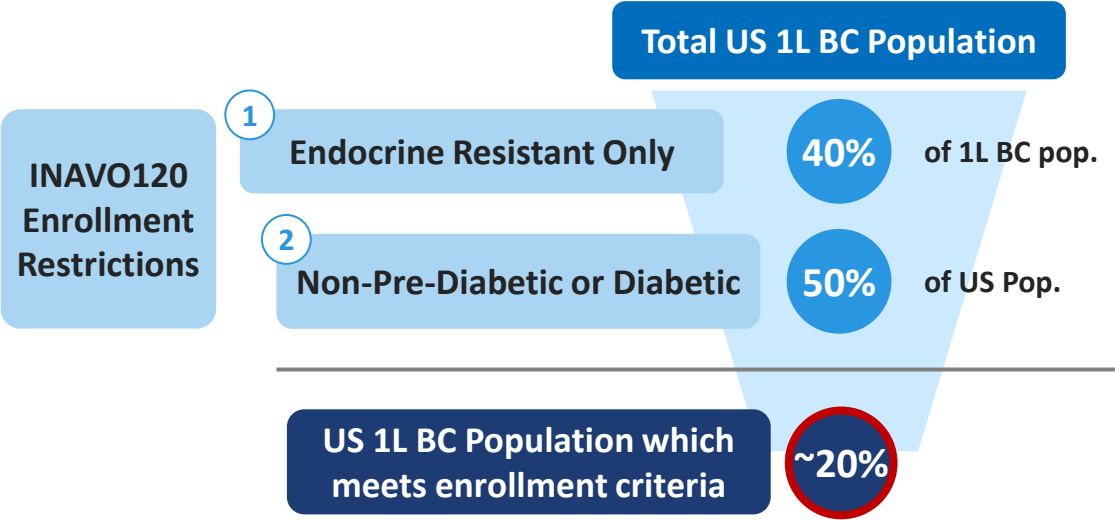


15.0mo mPFS
Vs. 7.3mo pbo

HR: 0.43

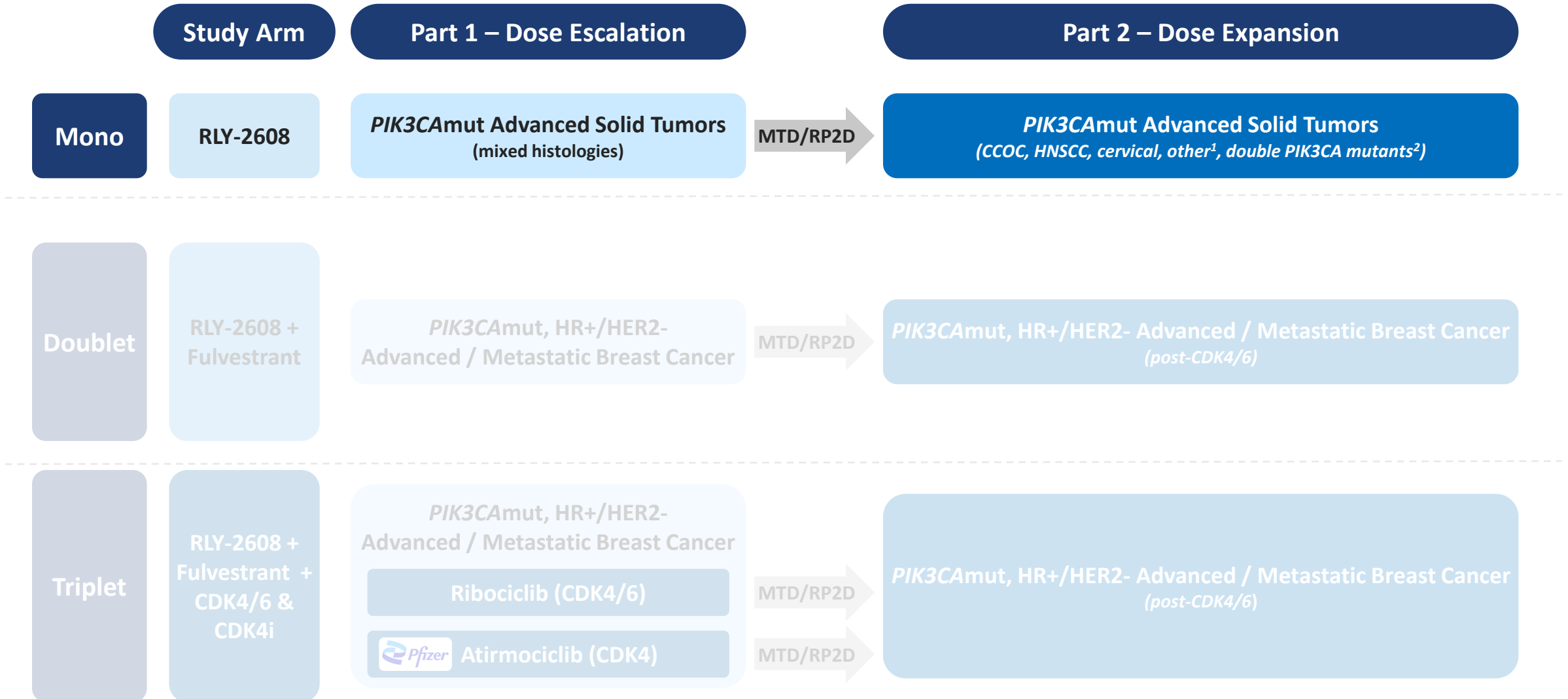
Demonstrated manageable safety in heavily selected, metabolically stable patient population

However, INAVO120 Ph 3 Trial Included Only a Subset of 1L HR+/HER2- Breast Cancer



Metabolically selected patients limit market size

RLY-2608 – ReDiscover Trial Overview



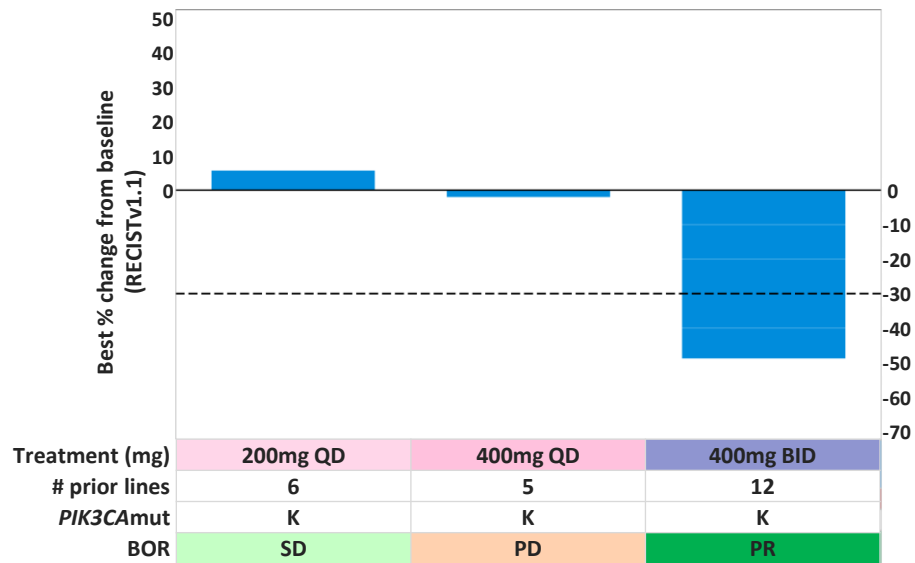
1. Excludes PIK3CAmut clear cell OvCA, HNSCC, Cervical cancer, and colorectal patients; 2. Double mutation defined as one major PIK3CA mutation (E542X, E545X, H1047X) + ≥1 additional PIK3CA mutation per local assessment.

RLY-2608 – Monotherapy Activity in Breast Cancer



RLY-2608 Active as Monotherapy

All HR+/HER2- Breast Cancer Patients Across All Doses (N=3)*



**ORR: 1/3
(33%)**

**DCR: 2/3
(67%)**

No endometrial patients dosed*

Relay Tx Focus on Significant Commercial Opportunities

**2L
Breast Cancer**

13,000 pt

**1L
Breast Cancer**

Endocrine Sensitive

10,000 pt

Endocrine Resistant

6,000 pt

Vascular Malformations

170,000 pt

BC combinations & VMs are near-term development focus; other solid tumor development currently deprioritized

* Within efficacy evaluable population, which excludes PTEN co-mutated patients

Anticipated 2025 Corporate Objectives

Breast Cancer
RLY-2608

- 2L pivotal trial start – 2025
- Full Ph1-2 data – 2025

Vascular Malformations
RLY-2608

- Clinical start – 1Q 2025

Fabry Disease
Pre-clinical

- Clinical start – 2H 2025

NRAS
Pre-clinical

- Clinical start – 2H 2025

Significant Capital to Achieve Goals

~\$840M

Cash as of the end of 3Q 2024

Expected to fund
current operating plan
into 2H 2027



DYNAMO® PLATFORM

5 unnamed research programs

	BREAST CANCER	GENETIC DISEASE	SOLID TUMORS	
	<p>1 PI3Kα-Driven Breast Cancer</p>	<p>2 PI3Kα-Driven Vascular Malformations</p>	<p>3 Fabry Disease</p>	<p>4 NRAS-Driven Solid tumors</p>
Program Updates	<p>1st PI3Kαi + ET + CDK4i combination in clinic</p>	<p>1st mutant-selective PI3Kα inhibitor</p>	<p>1st non-inhibitory αGal chaperone</p>	<p>1st NRAS-selective inhibitor</p>
Large US opportunity	<p>~140,000 pts¹</p>	<p>~170,000 pts² (chronic treatment)</p>	<p>~8,000 pts³ (chronic treatment)</p>	<p>~28,000 pts⁴</p>
Milestones	<p> CDK4i clinical start by YE 2024</p>	<p>Clinical start in 1Q 2025</p>	<p>Clinical start in 2H 2025</p>	<p>Clinical start in 2H 2025</p>

1. Prevalent US patient population with a PIK3CA mutation (excluding PTEN co-mutations) in adjuvant, first line metastatic and second line metastatic settings (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. Prevalence of vascular malformations with a PIK3CA mutation (Gallagher et al 2022 and several other sources); 3. Prevalence of Fabry patients (National Fabry Disease Foundation, Jan 2024); 4. Newly diagnosed (incident) solid tumors with an NRAS mutation, excluding melanoma stages 0-II (SEER, 3rd party source for alteration rate, Jan 2024); 5. Fabry disease forecasted 2024 market size per EvaluatePharma, includes Galafold® and ERTs (May 2024)

PI3K α -Driven Vascular Malformations – Significant Unmet Need

GENETIC DISEASE

PI3K α -Driven
Vascular Malformations

Novel Approach

1st mutant-selective PI3K α inhibitor

Genetically Defined

PIK3CAmut

Clinically Validated

Vijoice[®] (alpelisib) approved

Unmet Medical Need

- Limited efficacy
- Lack of selectivity
- Approved Tx for PROS only

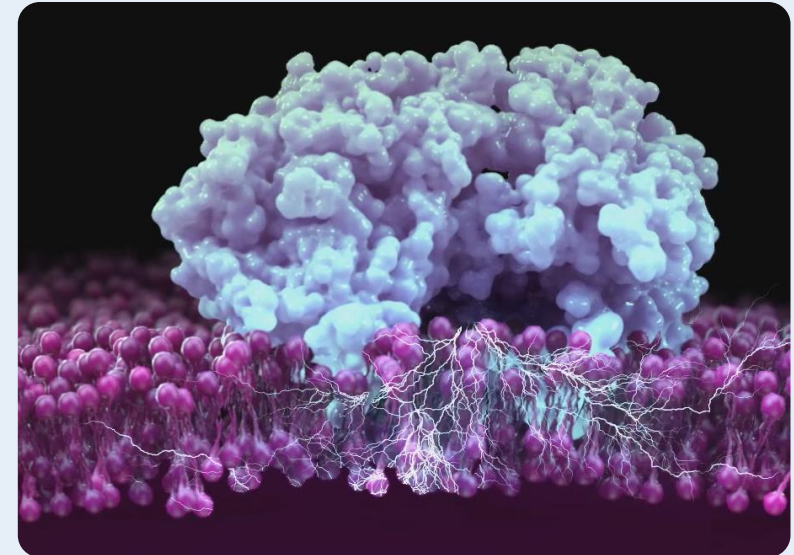
Commercially Attractive

~170,000 patients¹
(chronic treatment)



DYNAMO™ PLATFORM

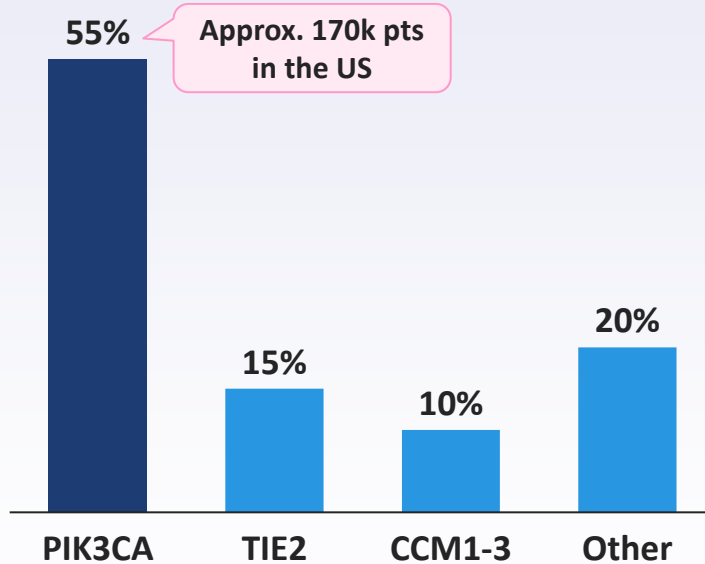
First Mutant Selective Inhibitor



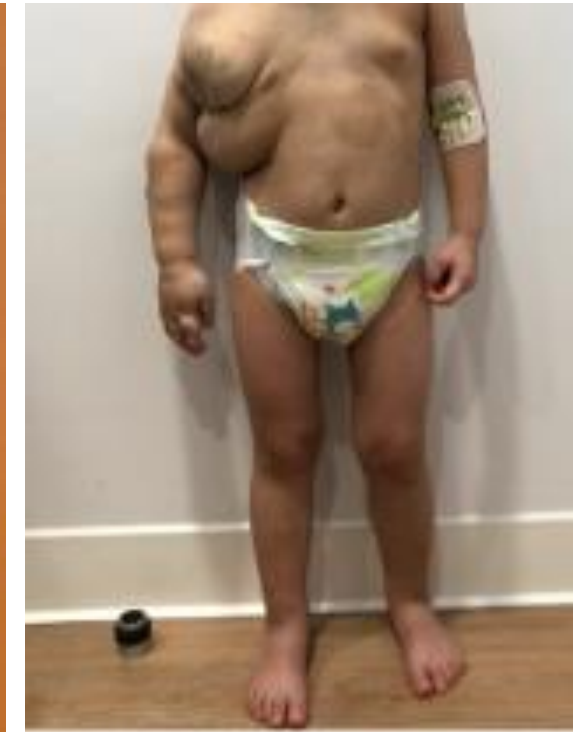
1. Prevalence of Vascular Malformations with a PIK3CA mutation (sources: Keppler-Noreuil. Am J Med Genet A. 2015; Engel-Nitz. JVA. 2022; Rodriguez-Laguna; OJRD. 2022; Vogel. Ped Derm. 2013; Shah. J Maxillofac Oral Surg. 2010; Poget. Ped Surg Int. 2023; Behravesh; CDT. 2016; Peyre. NEJM. 2021; Fereydooni et al 2019; Penington et al 2023; Gallagher et al 2022; Luks et al 2015; Limaye et al 2015; Stor et al 2023; Broek et al 2019; Choquet et al 2015; Venot et al. 2018; Pagliuzzi et al 2021)

~300k US patients affected by Vascular Malformations, driven by prenatal somatic mutations

Mutation Frequency by Gene



Abnormal development of lymphatic and/or blood vessels leads to a wide range of symptoms



Malformations may involve one or more types of vasculature

Sources: Fereydooni et al 2019, Penington et al 2023, Gallagher et al 2022, Luks et al 2015, Limaye et al 2015, Stor et al 2023, Broek et al 2019, Choquet et al 2015, Venot et al. 2018, Pagliuzzi et al 2021;

Photo sources: Delestre et al 2021, Pagliuzzi et al, 2021

Note: TIE2 gene also refers to TEK gene

Referral Pathway

Symptom presentation

PCP, Dermatologist, Surgeon, ENT, etc.



Diagnosis

Geneticist, "Vascular Anomalist"



Treatment

Surgeon, Int. Radiologist, Dermatologist, Heme-Onc

Treatment & Ongoing Management

Frequency of use

Watch and wait; Compression Therapy

– Temporary; 50-75% of diagnosed pts receive local or systemic Tx

Local treatment: sclerotherapy, surgery

– Invasive, recurrence is common (~25-40% recurrence rate)

Systemic therapy: Alpelisib, sirolimus

– Incomplete responses, side effects & toxicities limit widespread use

Current unmet need for selective, systemic therapy for Vascular Malformations

PI3K α -Driven Vascular Malformations – Over 170,000 US Patients

Vascular Malformation Types

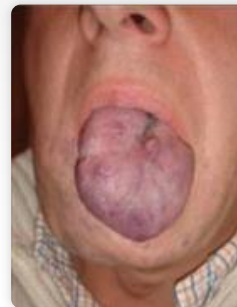
PIK3CA-Related Overgrowth Spectrum (PROS)



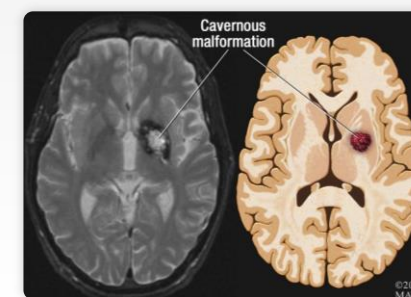
Lymphatic Malformation (LM)



Venous Malformation (VM)



Cerebral Cavernous Malformation (CCM)



US Patients

~5-15k

~80k

~100k

~120k

% PIK3CAmut

100%
~5-15k pt

80%
~65k pt

~20-25%
~20-25k pt

40-55%
~50-65k pt

Approved Therapies

Vioice® (alpelisib)

No approved systemic therapy

Total US pt across types

>300k pt

~170k pt
PIK3CAmut

PI3K α -Related Overgrowth Spectrum (PROS)

Lymphatic Malformations (LM)

Venous Malformations (VM)

Cerebral Cavernous Malformations (CCM)

Alpelisib



Limited Efficacy - 27% ORR¹



Non-Selective



Limited scope, approved in PROS only

Sirolimus



Immunosuppressive



Non-Selective

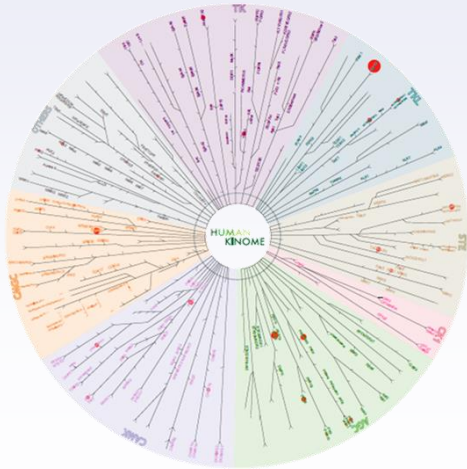


Not approved in any Vascular Malformation types

1. ORR defined as radiologic response \geq 20% lesion reduction; Source: FDA label for VIJOICE[®]

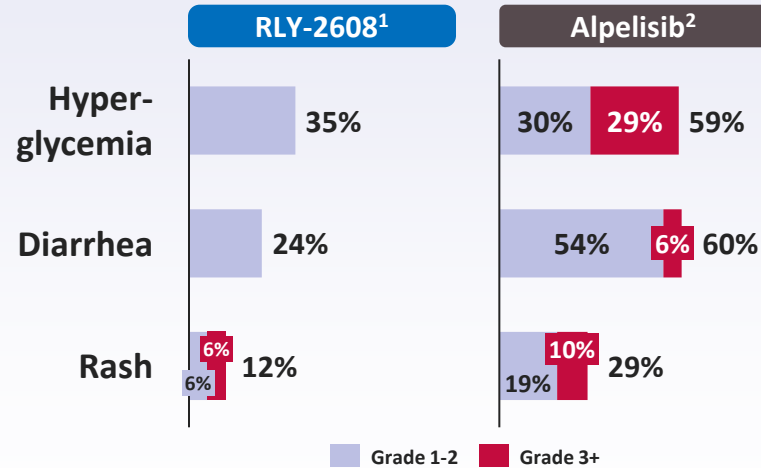
Favorable Selectivity

Selective for mutant PI3K α



Favorable Tolerability

Fewer key common PI3K class AEs*



Favorable Efficacy

Reduction of mutant *PIK3CA* ctDNA*



*interim data from oncology trials¹⁻²

Potential for rapid POC with RLY-2608, then use a distinct molecule for pivotal studies

PIK3CA-Related Overgrowth Spectrum (PROS)

Lymphatic Malformations (LM)

Venous Malformations (VM)

Cerebral Cavernous Malformations (CCM)

Discovery of 1st mutant-selective PI3K α inhibitor

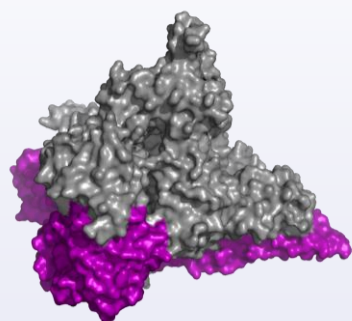
Target Modulation Hypothesis

Hit Identification

Lead Optimization

1

Solved 1st full-length structures & novel pocket of PI3K α



CryoEM & X-ray Crystallography

Long Time-scale MD

2

Identified early chemical matter for mutant selectivity

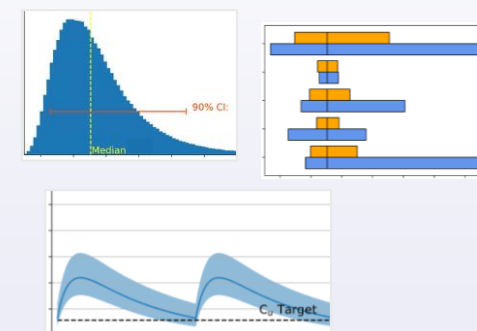


DNA-Encoded Libraries (DEL)

Differential Dynamics

3

Rapidly designed the 1st mutant-selective inhibitor of PI3K α



Integrated Pharmacology

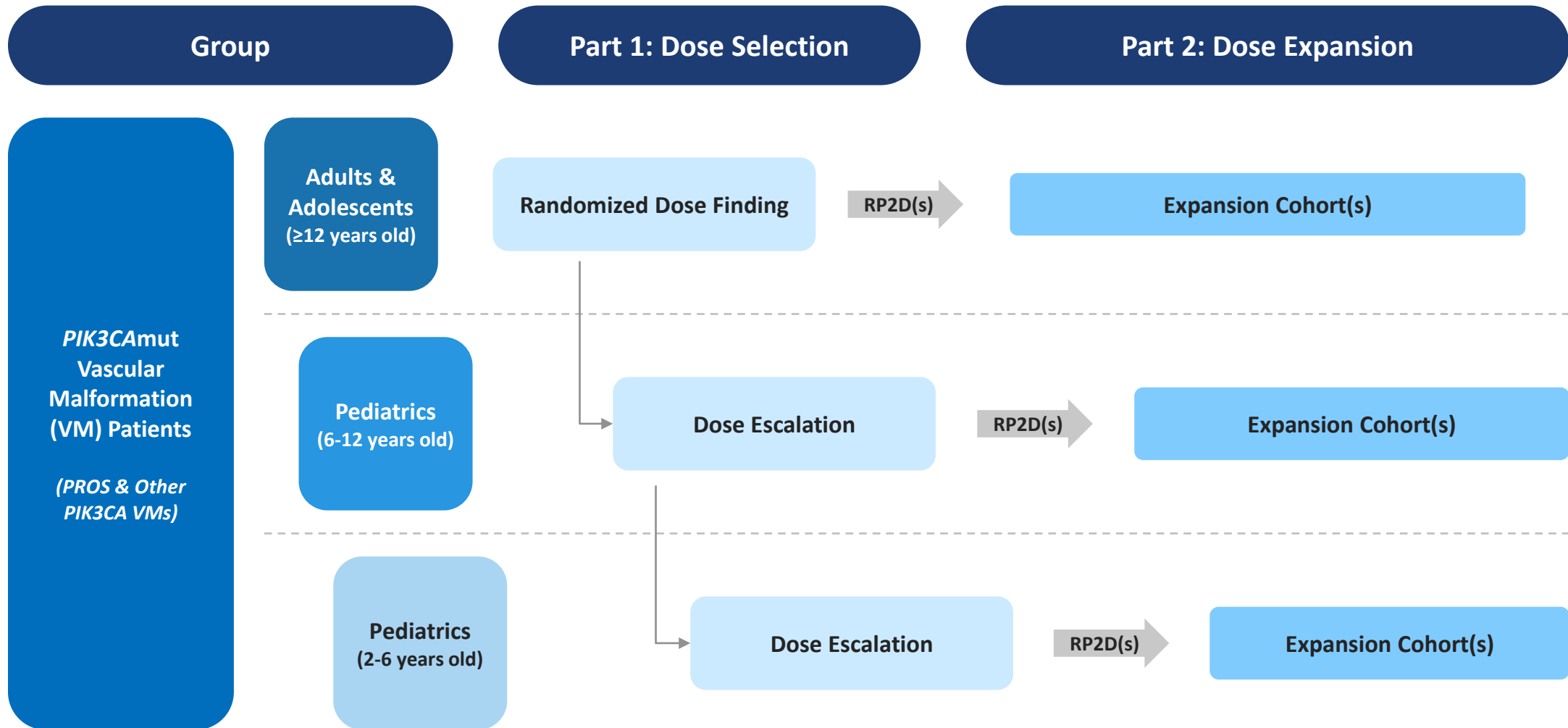
PK / PD Dose Modeling

Experimental tool


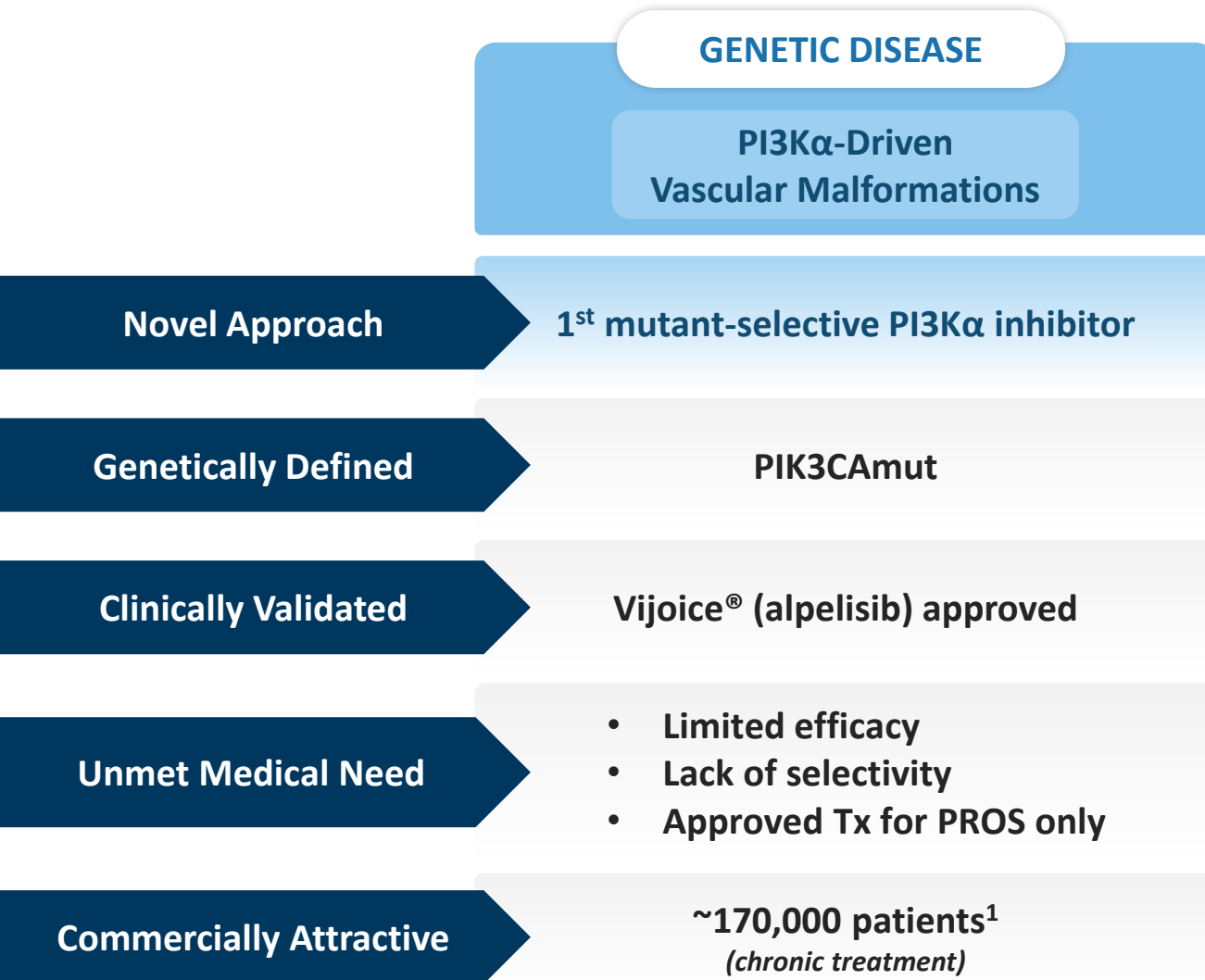
Computational tool

Platform Tool Examples

Vascular Malformations – Proposed Study Design



PI3K α -Driven Vascular Malformations – Significant Unmet Need



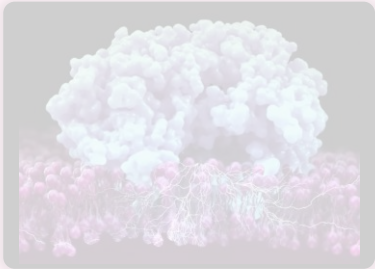
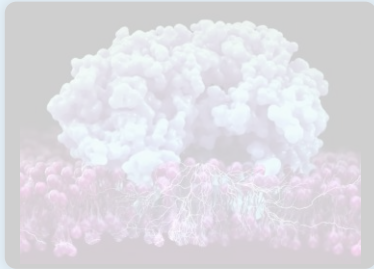
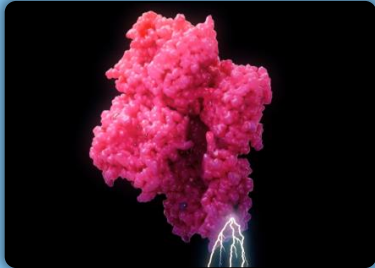



GENETIC DISEASE PORTFOLIO MILESTONES

Clinical Start in Q1 2025



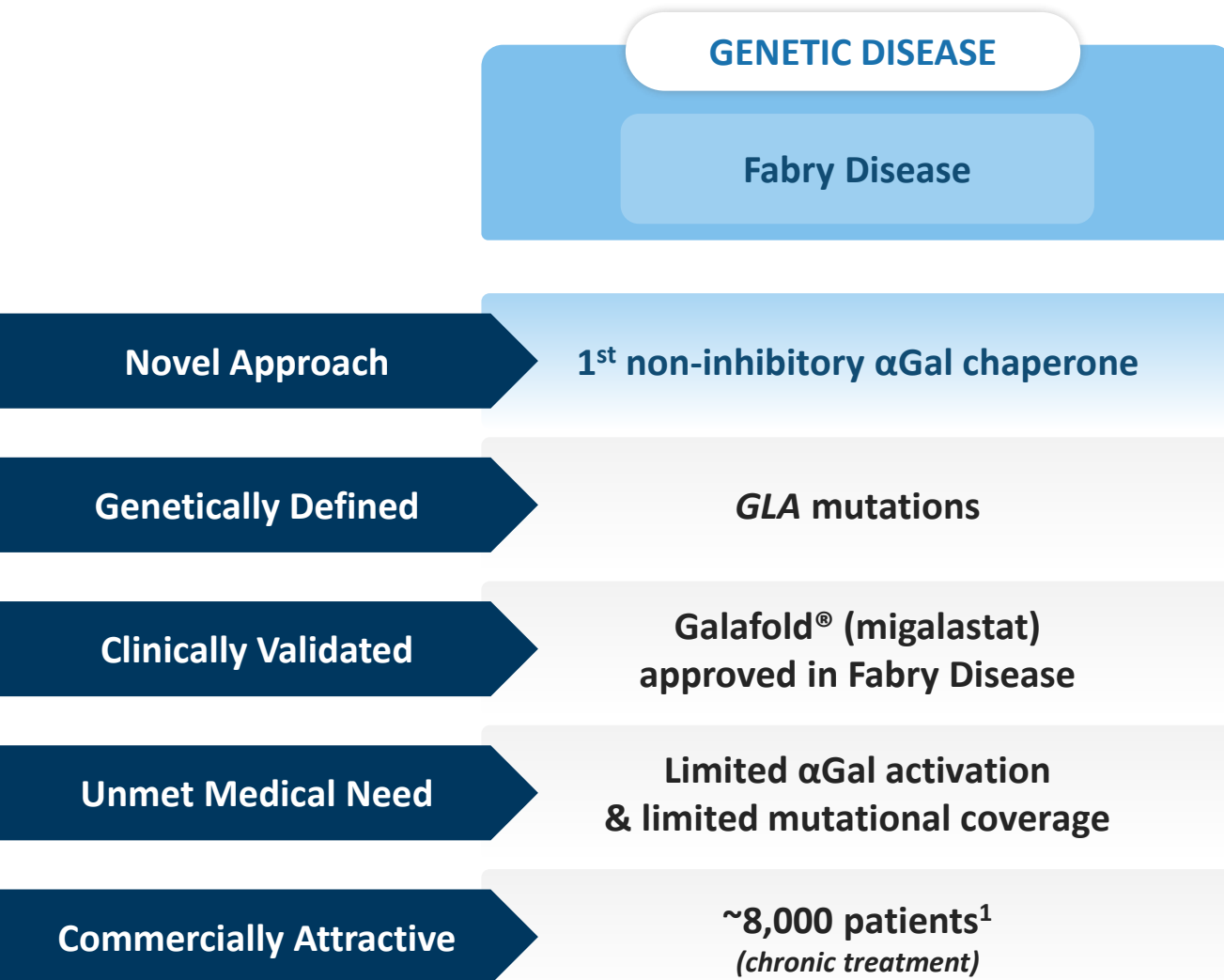
Relay Tx – Updates Announced June 2024



	BREAST CANCER	GENETIC DISEASE		SOLID TUMORS
	<p>1 PI3Kα-Driven Breast Cancer</p> 	<p>2 PI3Kα-Driven Vascular Malformations</p> 	<p>3 Fabry Disease</p> 	<p>4 NRAS-Driven Solid tumors</p> 
Program Updates	<p>1st PI3Kαi + ET + CDK4i combination in clinic</p> 	<p>1st mutant-selective PI3Kα inhibitor</p>	<p>1st non-inhibitory αGal chaperone</p>	<p>1st NRAS-selective inhibitor</p>
Large US opportunity	<p>~140,000 pts¹</p>	<p>~170,000 pts² <i>(chronic treatment)</i></p>	<p>~8,000 pts³ <i>(chronic treatment)</i></p>	<p>~28,000 pts⁴</p>
Milestones	<p>CDK4i clinical start by YE 2024</p> 	<p>Clinical start in 1Q 2025</p>	<p>Clinical start in 2H 2025</p>	<p>Clinical start in 2H 2025</p>

1. Prevalent US patient population with a PIK3CA mutation (excluding PTEN co-mutations) in adjuvant, first line metastatic and second line metastatic settings (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. Prevalence of vascular malformations with a PIK3CA mutation (Gallagher et al 2022 and several other sources); 3. Prevalence of Fabry patients (National Fabry Disease Foundation, Jan 2024); 4. Newly diagnosed (incident) solid tumors with an NRAS mutation, excluding melanoma stages 0-II (SEER, 3rd party source for alteration rate, Jan 2024); 5. Fabry disease forecasted 2024 market size per EvaluatePharma, includes Galafold® and ERTs (May 2024)

Fabry Disease – Large Validated Market With Significant Unmet Need



DYNAMO™ PLATFORM

First Non-Inhibitory α Gal Chaperone



Fabry Disease – Large Validated Market With Significant Unmet Need

Fabry disease is a lysosomal storage disorder affecting ~8,000 patients in US

Over 1,000 different *GLA* gene mutations

Reduces α Gal protein levels

Leads to accumulation of toxic Gb3 substrate

Broad clinical manifestations;
Life threatening cardiac & renal dysfunction



Current therapies have established a market but have key limitations

Current Therapies

Enzyme Replacement Therapy (ERT, intravenous)

~\$1.6B peak sales¹

Inhibitory Chaperone Therapy (migalastat)

40% of pts ~\$780M peak sales²

Limitations of Inhibitory Chaperone

- 1 Limited α Gal activation
- 2 Limited mutational coverage
- 3 Not combined with ERT

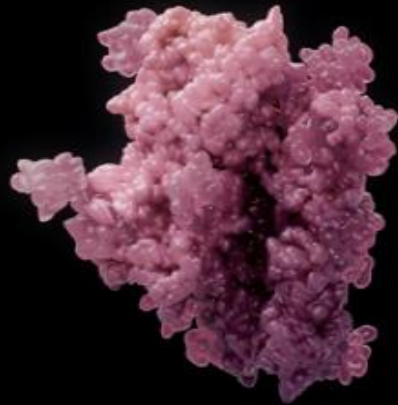
Need for a non-inhibitory α Gal chaperone

α Gal

Normal

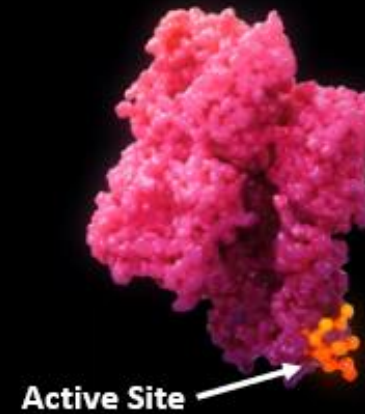


Mutant

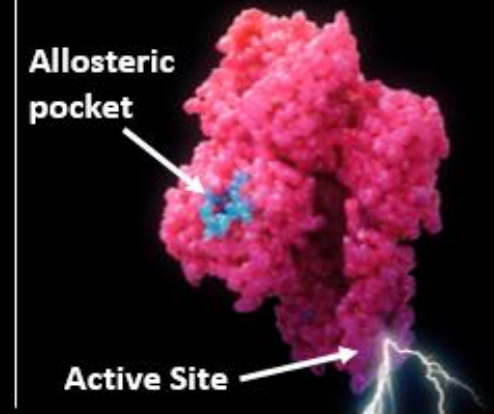


Inhibitory vs Non-Inhibitory Chaperone

Inhibitory



Non-Inhibitory



Discovery of 1st non-inhibitory α Gal chaperone

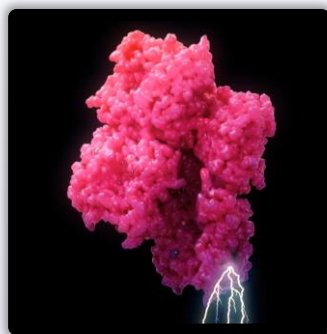
Target Modulation Hypothesis

Hit Identification

Lead Optimization

1

Discovered & validated novel allosteric pocket

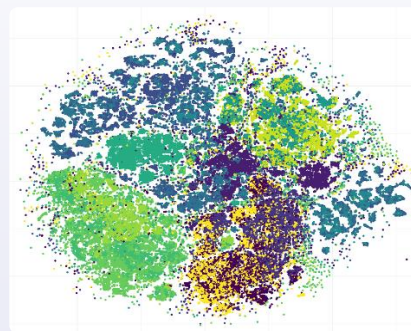


Structure Ensembles

Long Time-Scale MD

2

Identified & validated initial hits that stabilized

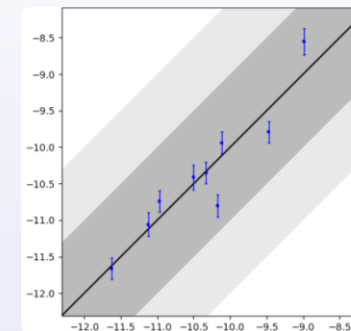


NMR

Virtual Screening

3

Achieved potent α Gal non-inhibitory chaperones



HTP Automated Chem.

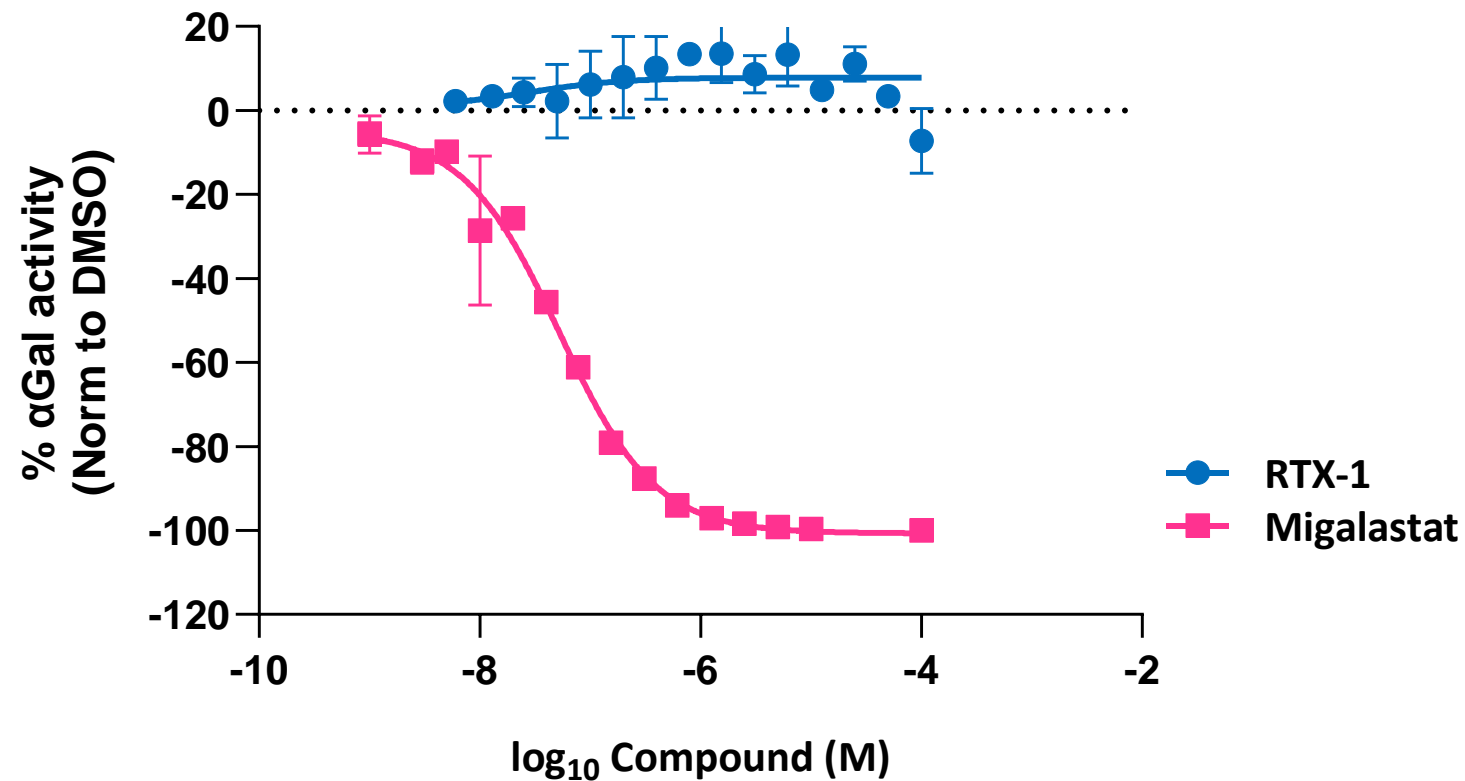
ADME/PK Models

Experimental tool

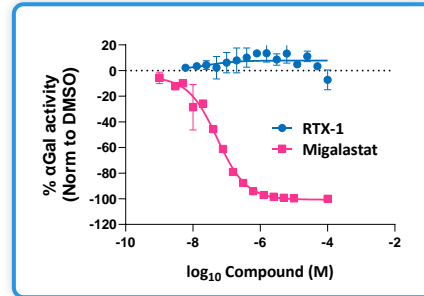
Computational tool

Platform Tool Examples

Migalastat inhibited α Gal function while Relay Tx compounds did not

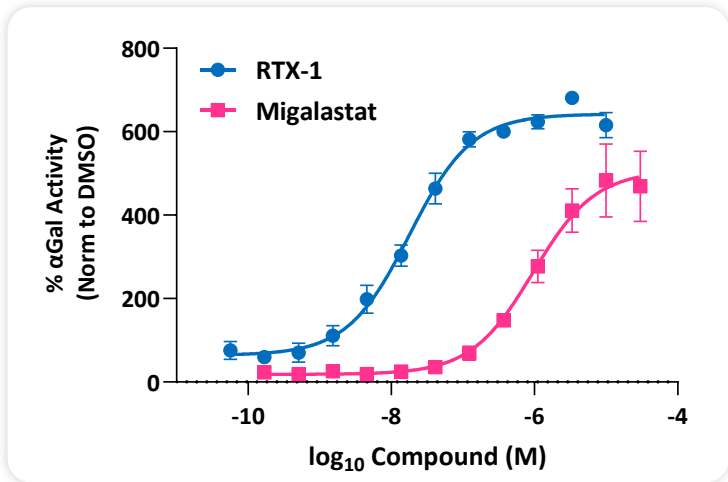


Fabry Disease – Potential Benefits of Non-Inhibitory Chaperone Approach

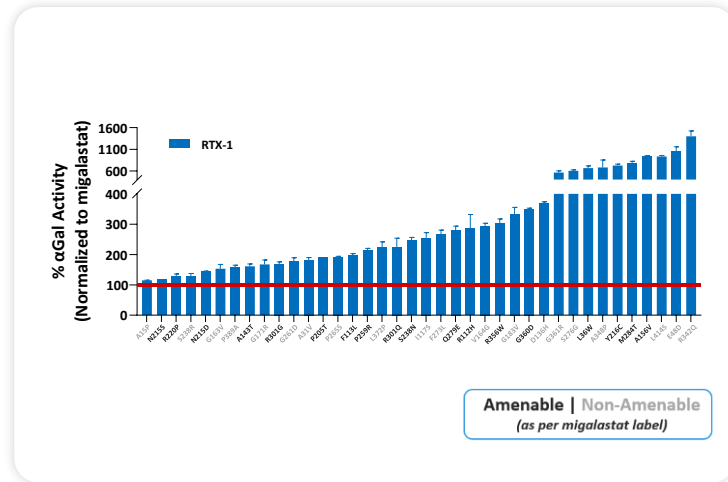


Relay Tx Solution:
Non-Inhibitory Chaperone to Stabilize Protein and Increase Activity

1 Superior αGal activation

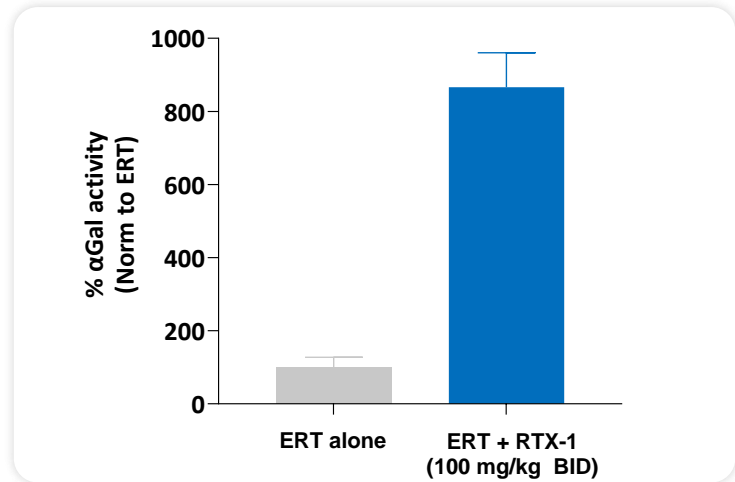


2 Broad mutational coverage



Amenable | Non-Amenable
(as per migalastat label)

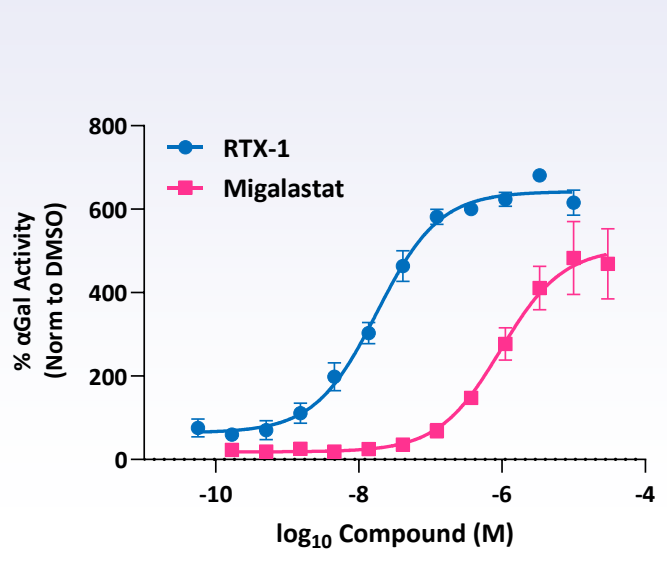
3 Combinable with ERT



Relay Tx Non-Inhibitory Chaperones Can Lead to Higher Levels of *In Vivo* Activity

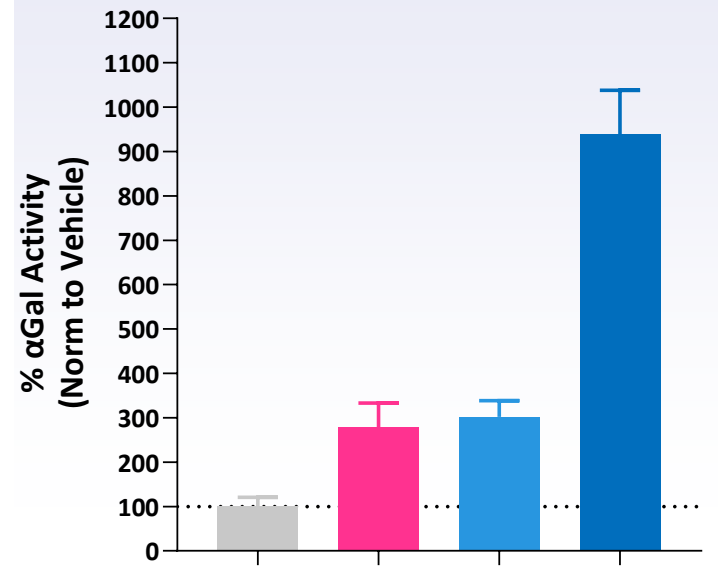
RTX-1 maintains higher levels of α Gal activity *in vitro*

R301Q mut α Gal
(2hr post compound washout, expressed in *GLA* KO HEK293 cells)



...which translates to greater *in vivo* kidney α Gal activity

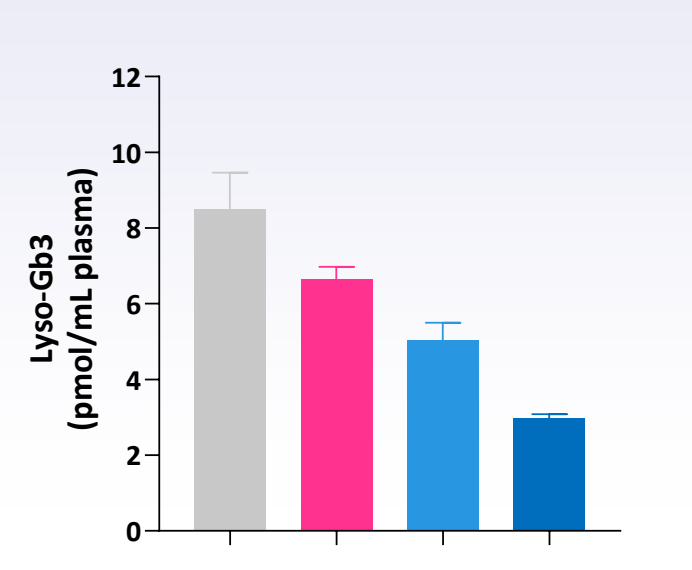
Activity levels measured at 28 days in humanized *GLA* R301Q mutant mouse model



■ Vehicle ■ Migalastat (30 mg/kg QOD)
■ RTX-1 (30 mg/kg BID) ■ RTX-1 (100 mg/kg BID)

... and greater substrate reduction

Lyso-Gb3 levels measured at 28 days in humanized *GLA* R301Q mutant mouse model

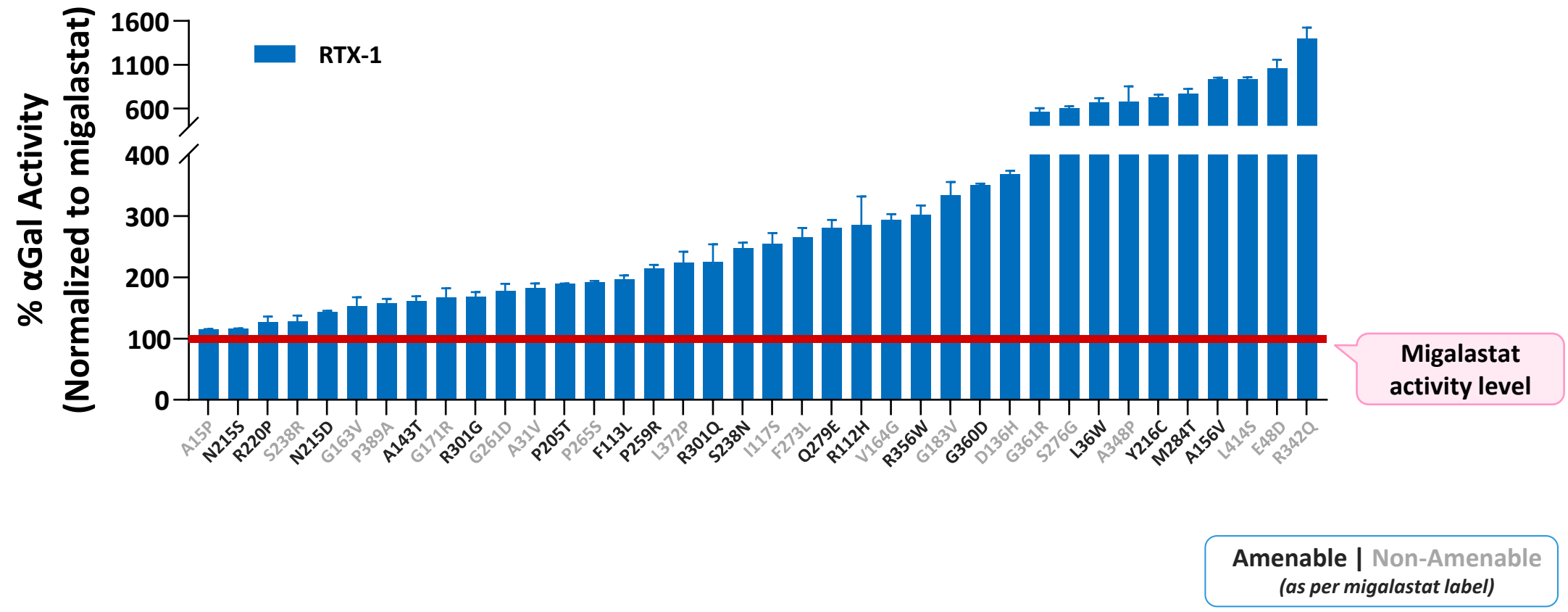


Estimated clinically relevant dose

There were no adverse findings in an exploratory rat toxicology study of RTX-1 at exposures equivalent to 100 mg/kg BID

Relay Tx Non-Inhibitory Chaperones Have Broad Mutational Coverage

In vitro αGal activity assay (4MU) across multiple *GLA* mutations expressed in HEK293 *GLA* KO cells

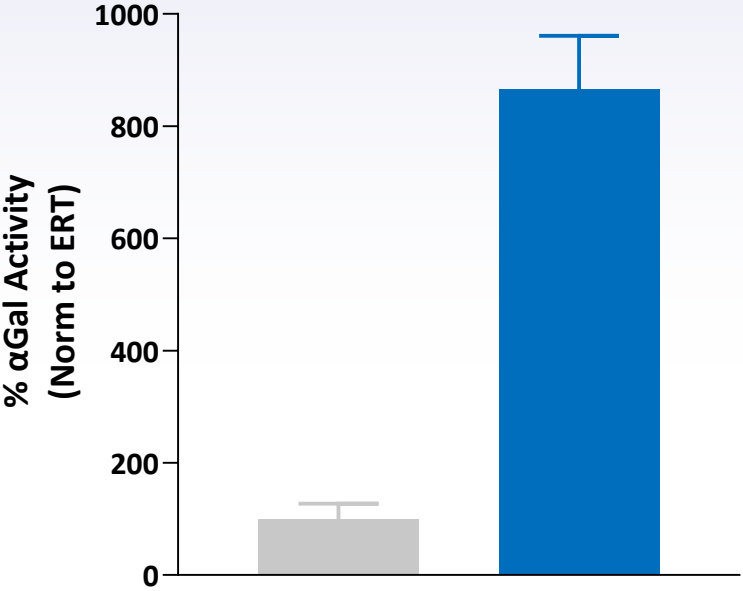


Note: αGal activity evaluated at 1uM of migalastat and RTX-1
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Relay Tx Non-Inhibitory Chaperones Combinable with ERT

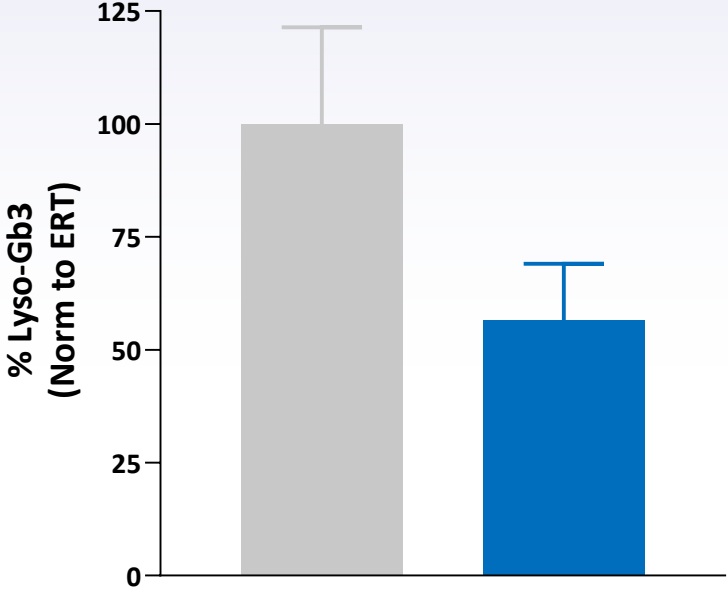
In vivo α Gal activity

Activity in kidney following single dose of ERT and 14-day treatment with RTX-1 (GLA KO mouse model)



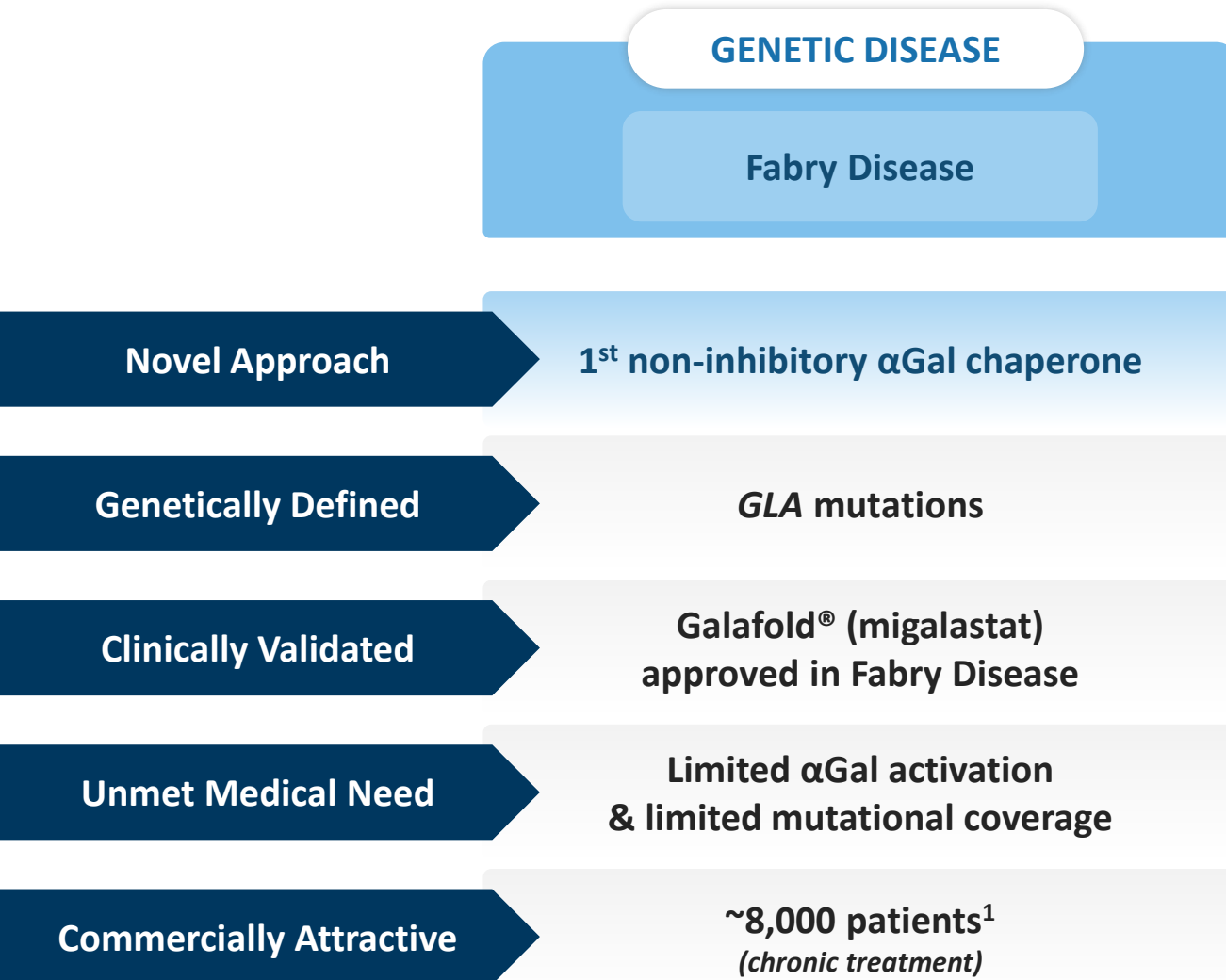
In vivo lyso-Gb3 reduction

Plasma lyso-Gb3 levels following single dose of ERT and 14-day treatment with RTX-1 (GLA KO mouse model)



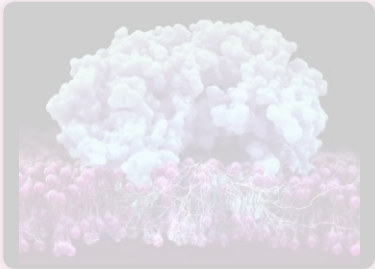
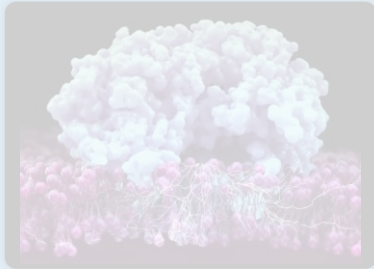




ERT alone ERT + RTX-1 (100 mg/kg BID)

Fabry Disease – Large Validated Market With Significant Unmet Need



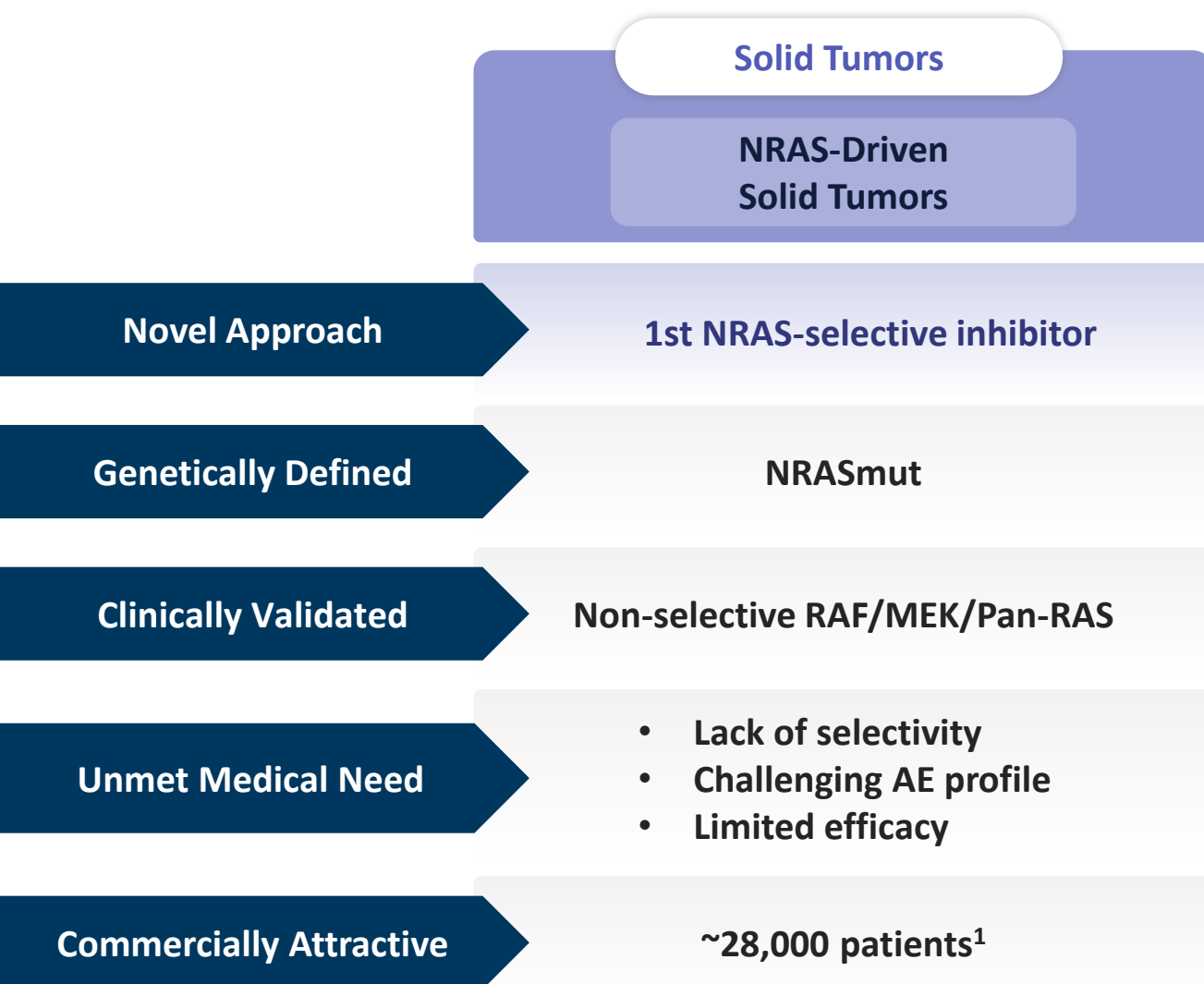
Relay Tx – Updates Announced June 2024



	BREAST CANCER	GENETIC DISEASE		SOLID TUMORS
	1 PI3K α -Driven Breast Cancer 	2 PI3K α -Driven Vascular Malformations 	3 Fabry Disease 	4 NRAS-Driven Solid tumors 
Program Updates	 1st PI3Kαi + ET + CDK4i combination in clinic	1st mutant-selective PI3Kα inhibitor	1st non-inhibitory αGal chaperone	1st NRAS-selective inhibitor
Large US opportunity	~140,000 pts ¹	~170,000 pts ² <i>(chronic treatment)</i>	~8,000 pts ³ <i>(chronic treatment)</i>	~28,000 pts ⁴
Milestones	 CDK4i clinical start by YE 2024	Clinical start in 1Q 2025	Clinical start in 2H 2025	Clinical start in 2H 2025

1. Prevalent US patient population with a PIK3CA mutation (excluding PTEN co-mutations) in adjuvant, first line metastatic and second line metastatic settings (Global Data HR+/HER2- Breast Cancer Global Forecast, November 2023; 3rd party source for alteration rate); 2. Prevalence of vascular malformations with a PIK3CA mutation (Gallagher et al 2022 and several other sources); 3. Prevalence of Fabry patients (National Fabry Disease Foundation, Jan 2024); 4. Newly diagnosed (incident) solid tumors with an NRAS mutation, excluding melanoma stages 0-II (SEER, 3rd party source for alteration rate, Jan 2024); 5. Fabry disease forecasted 2024 market size per EvaluatePharma, includes Galafold® and ERTs (May 2024)

NRAS – Large Validated Market With Significant Unmet Need



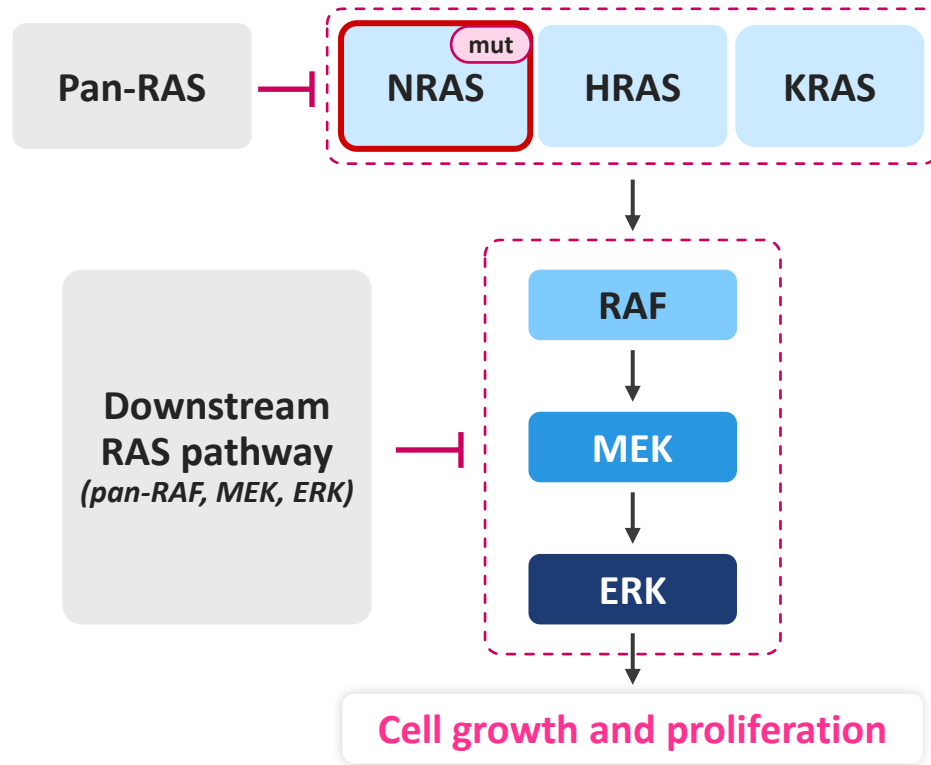
DYNAMO™ PLATFORM

First NRAS Selective Inhibitor

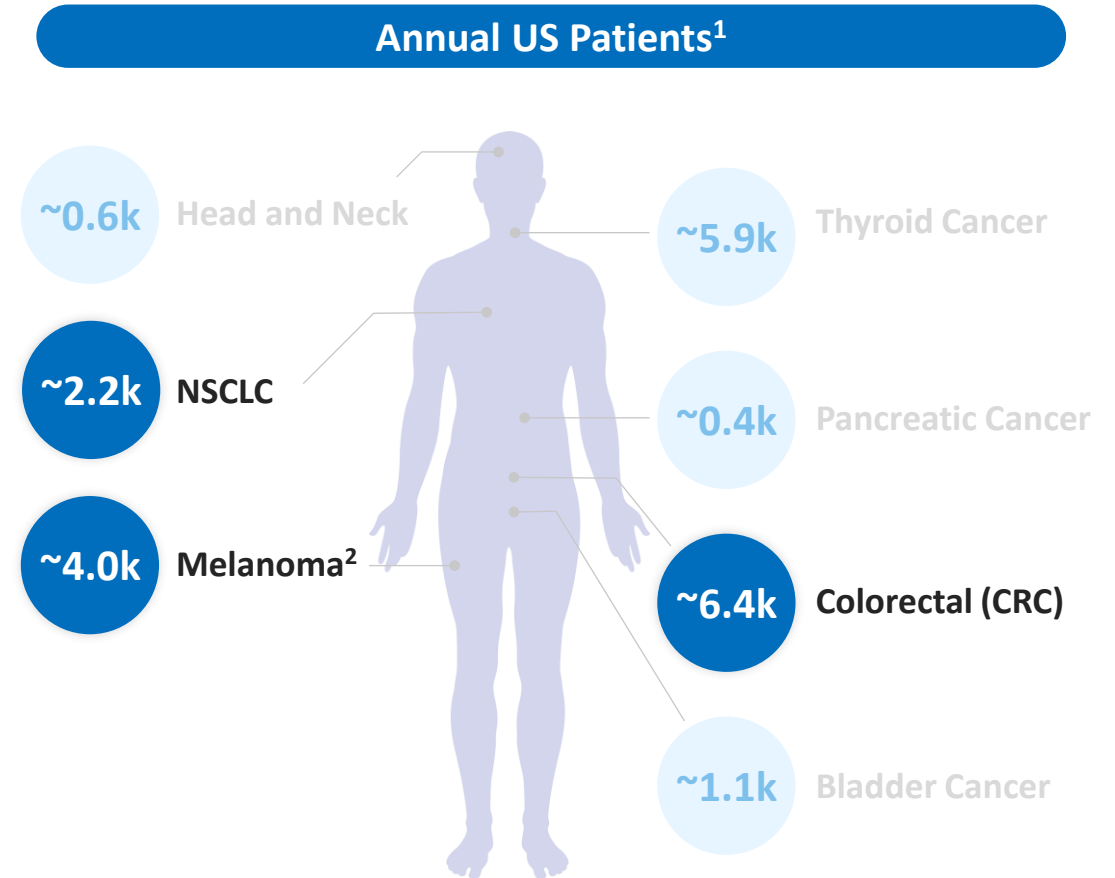


NRAS – Large Validated Market With Significant Unmet Need

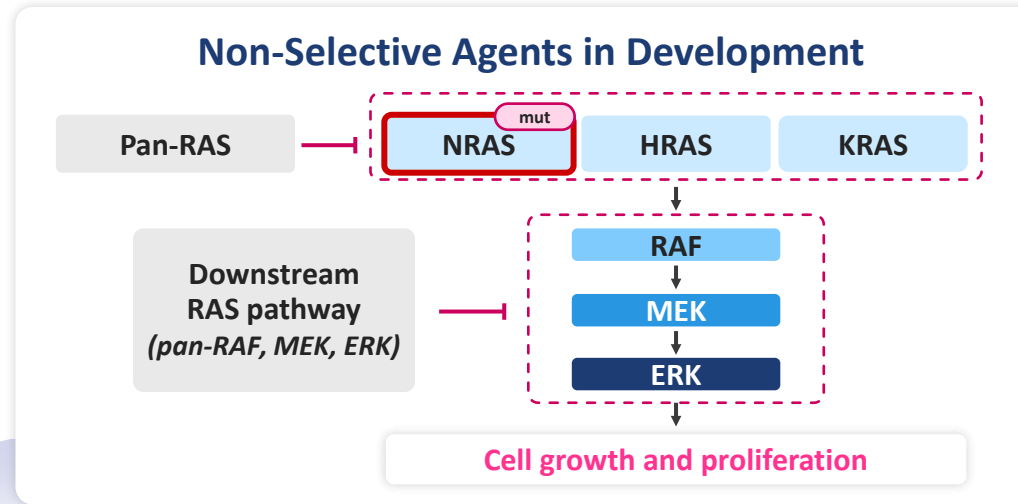
NRAS mutations are a key driver of solid tumors, though no NRAS-selective agent exists



NRAS mutations observed in broad range of tumor types



Limited Therapeutic Window of Current Agents – Pan-RAF/RAS & MEK Inhibitors



Limited Tolerability

	Rash	Liver Tox
MEK + RAFi	25-80%	<10-60%
Pan-RAS	81%	7-8%

High rates of skin toxicity driven by off-target pan-RAS pathway inhibition

Limited Target Inhibition

	Dose Red.	Dose Discont.
MEK + RAFi	16-70%	7-28%
Pan-RAS	8%	1%

Limited Efficacy

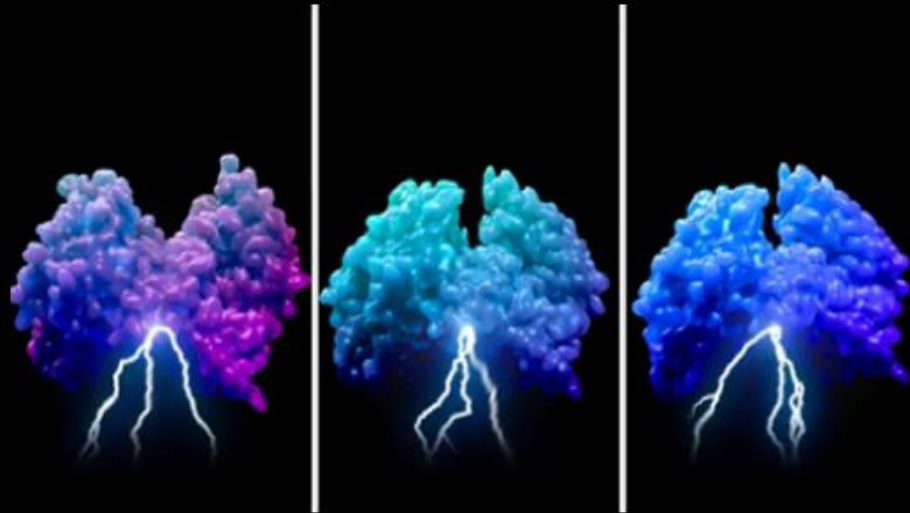
Regimen (2L NRASmut melanoma)	ORR	PFS (mo)
Naporafenib (RAFi) + trametinib (MEKi)	13-47%	4.2-5.5
Belvarafenib (RAFi) + cobimetinib (MEKi)	39%	7.3

No guidance for Ph3 development

Sources: ASCO 2021 #3007 (Belvarafenib + cobimetinib, n=32 all, 13 for efficacy), de Braud 2023 J Clin Oncol 41:2651 (naporafenib + trametinib, n=30 expansion arm), ASCO 2023 #9510 (tunlmetinib, n=95), ESMO 2023 652O (RMC-6236, n=111 pts at ≥80mg; liver tox = elevated ALT/AST)
 © 2024 Relay Therapeutics

NRAS – Dynamo™ Platform Discovered a Novel Allosteric Pocket

Exploited differences in protein motion...

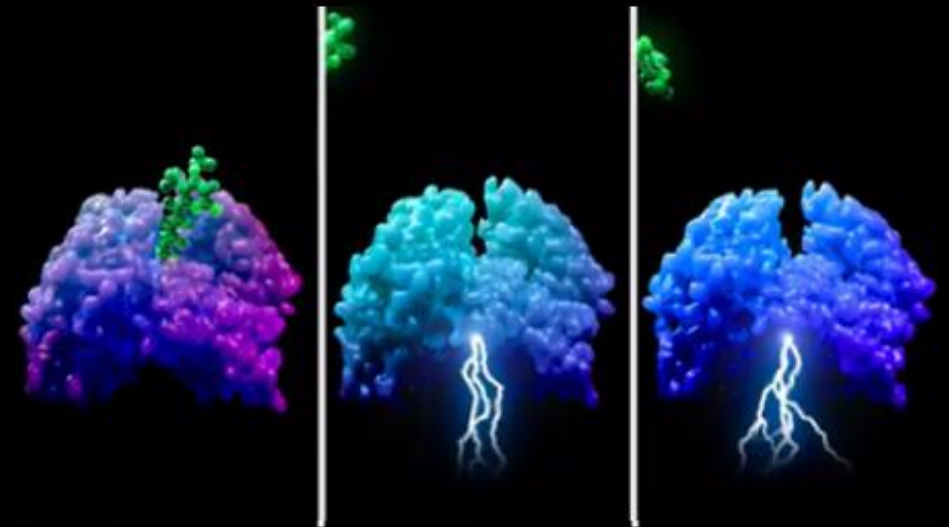


NRAS

HRAS

KRAS

...to design first NRAS-selective inhibitor



NRAS

HRAS

KRAS

Discovery of 1st NRAS-selective inhibitor

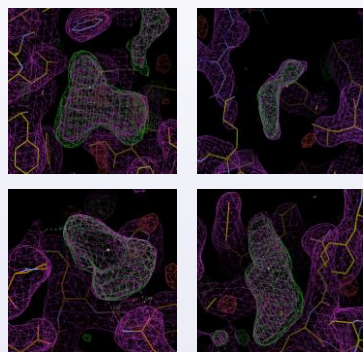
Target Modulation Hypothesis

Hit Identification

Lead Optimization

1

Discovered a novel cryptic pocket

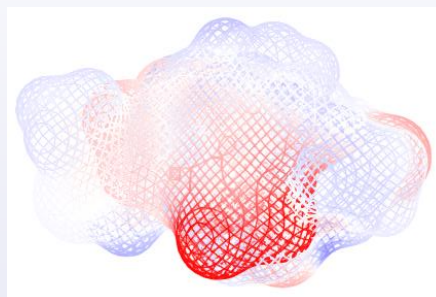


X-ray Fragment Screen

Virtual Screening

2

Identified & validated hits selective for NRAS (over H/KRAS)



2D NMR

Computational Fragment Merging

3

Rapidly designed & prioritized NRAS inhibitors



High Throughput Automated Chem.

Free Energy Calculations

Experimental tool

Computational tool

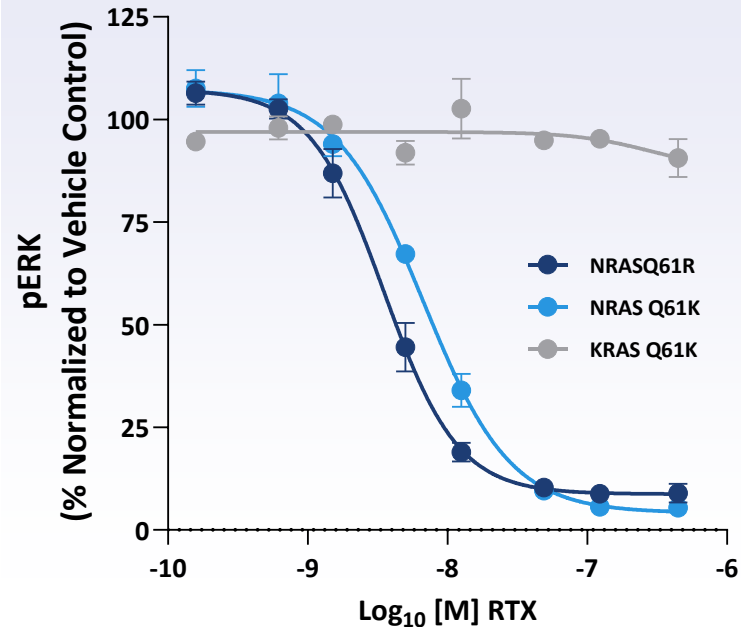
Platform Tool Examples

NRAS Inhibitors Are Potent, Selective & Active Across NRAS Mutations

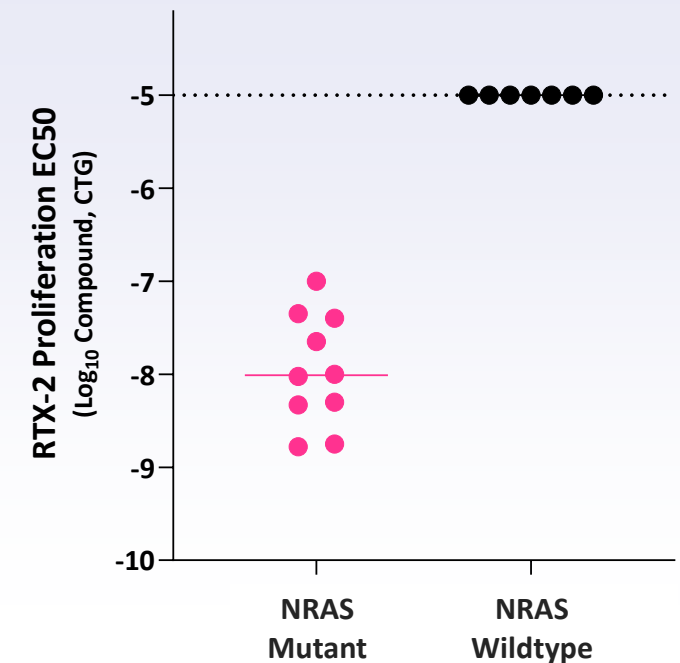
Relay Tx compounds bind to the ON-state with selectivity for NRAS¹

Binding Affinity (nM)	RTX-2
NRAS Q61R (ON)	7
NRAS Q61K (ON)	9
NRAS Q61L (ON)	10
NRAS WT (ON)	33
NRAS WT (OFF)	100
HRAS Q61K (ON)	No binding observed
KRAS Q61K (ON)	
KRAS WT (ON)	
KRAS WT (OFF)	

...inhibit pathway signaling only in NRAS mutant cells²



...inhibiting proliferation of only NRAS mutant cells³



NRAS^{G12C, G13R, Q61R, Q61K, Q61L}

- KRAS^{WT, Q61K, G12S}
- HRAS^{WT, G13D, Q61L}
- BRAF^{V600E}

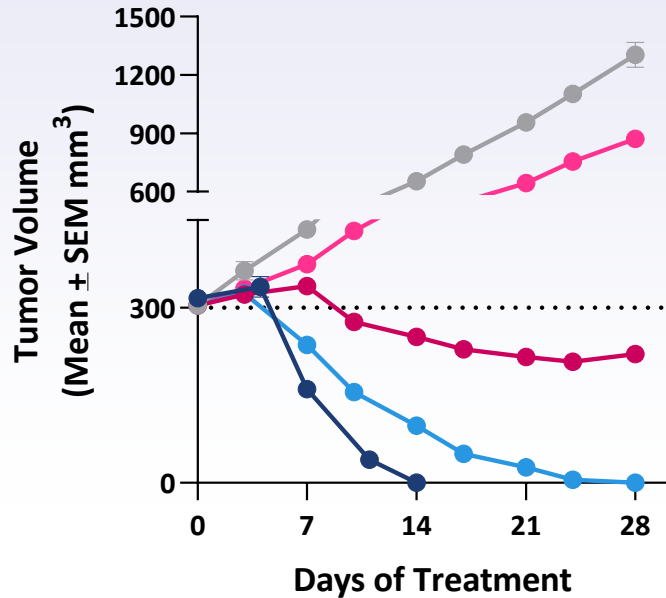
1. Based on SPR analysis of purified protein; 2. Based on pERK assay of SK-MEL-2, SK-MEL-30, and CALU-6 cell lines evaluated at 24hr timepoint; 3. Based on cell proliferation panel (17 cell lines) evaluated at 3-5d timepoint depending on cell line

NRAS Inhibitors Achieve Complete Regression at Well Tolerated Doses



Relay Tx's NRAS inhibitors drove rapid, complete regressions...

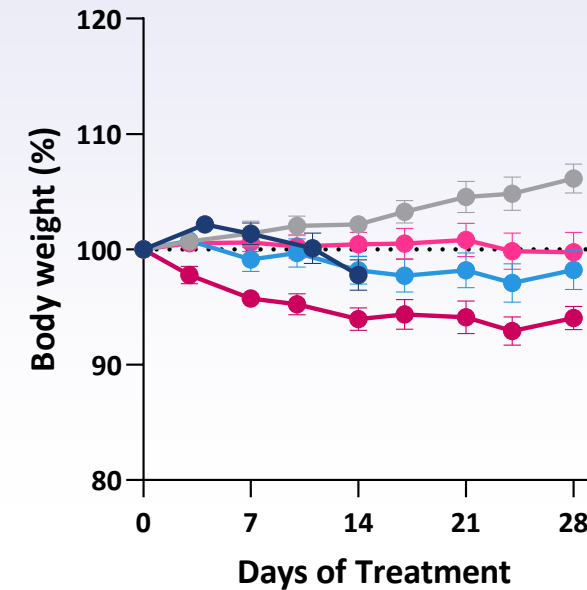
SK-MEL-2 (NRAS^{Q61R}) CDX*



● Vehicle
 ● RTX-2 100mg/kg QD
 ● RTX-4 10mg/kg QD
 ● Binimetinib 3mg/kg BID
 ● Exarafenib 10mg/kg + Binimetinib 3mg/kg BID

...and were generally well tolerated

SK-MEL-2 (NRAS^{Q61R}) CDX

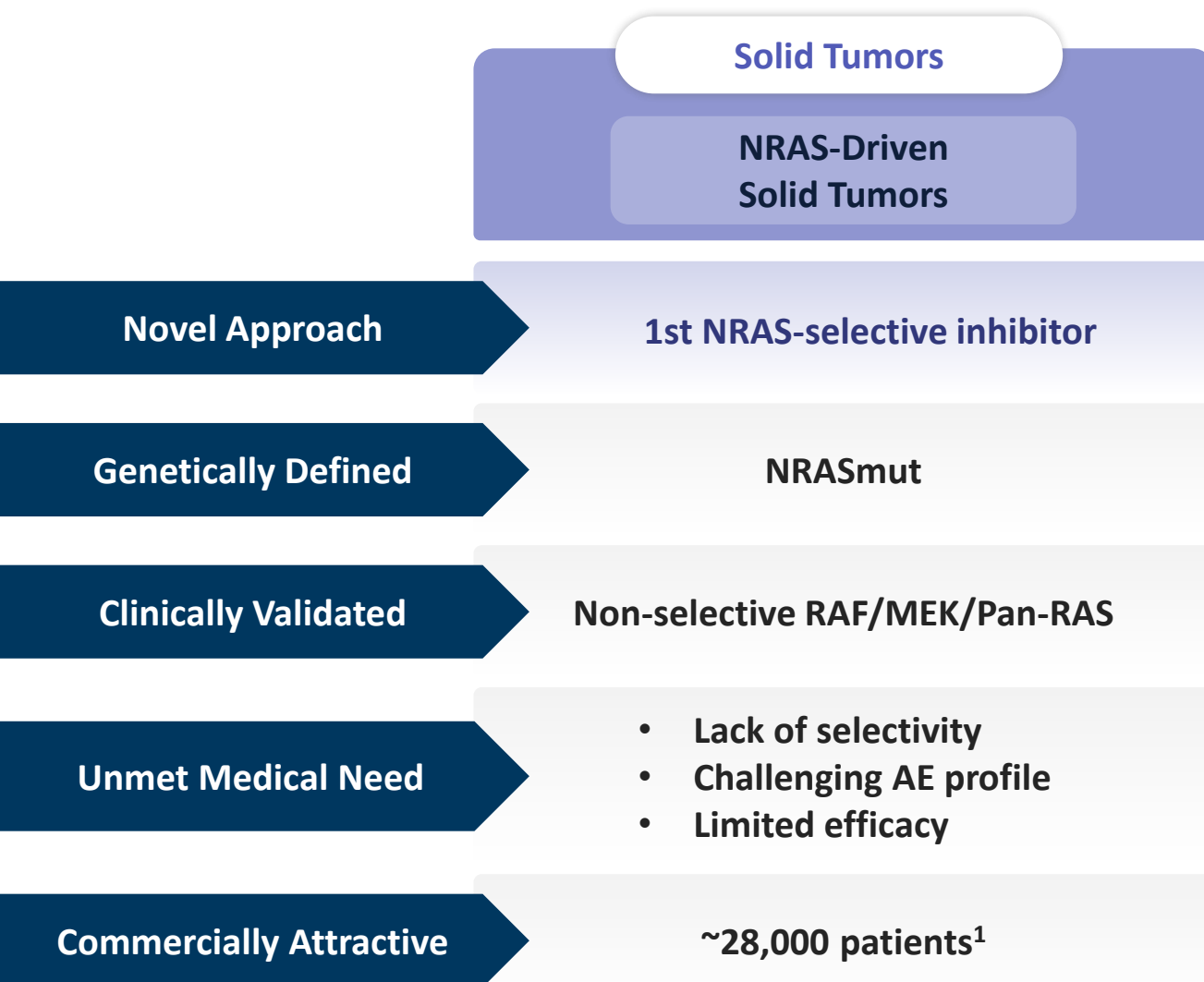


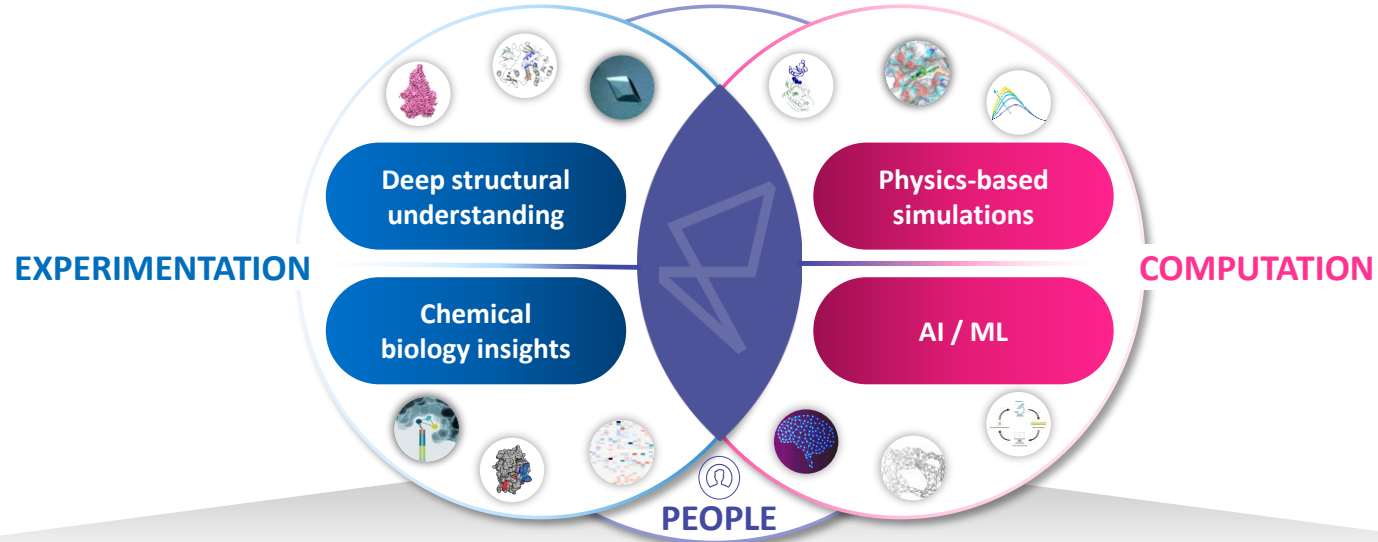
Estimated clinically relevant doses

There were no adverse findings in an exploratory rat toxicology study of RTX-2 at exposures equivalent to 100mg/kg QD

*Regressions also achieved with additional NRAS mutant models (NRAS Q61K and NRAS Q61R)

NRAS – Large Validated Market With Significant Unmet Need





Already Productive Platform...

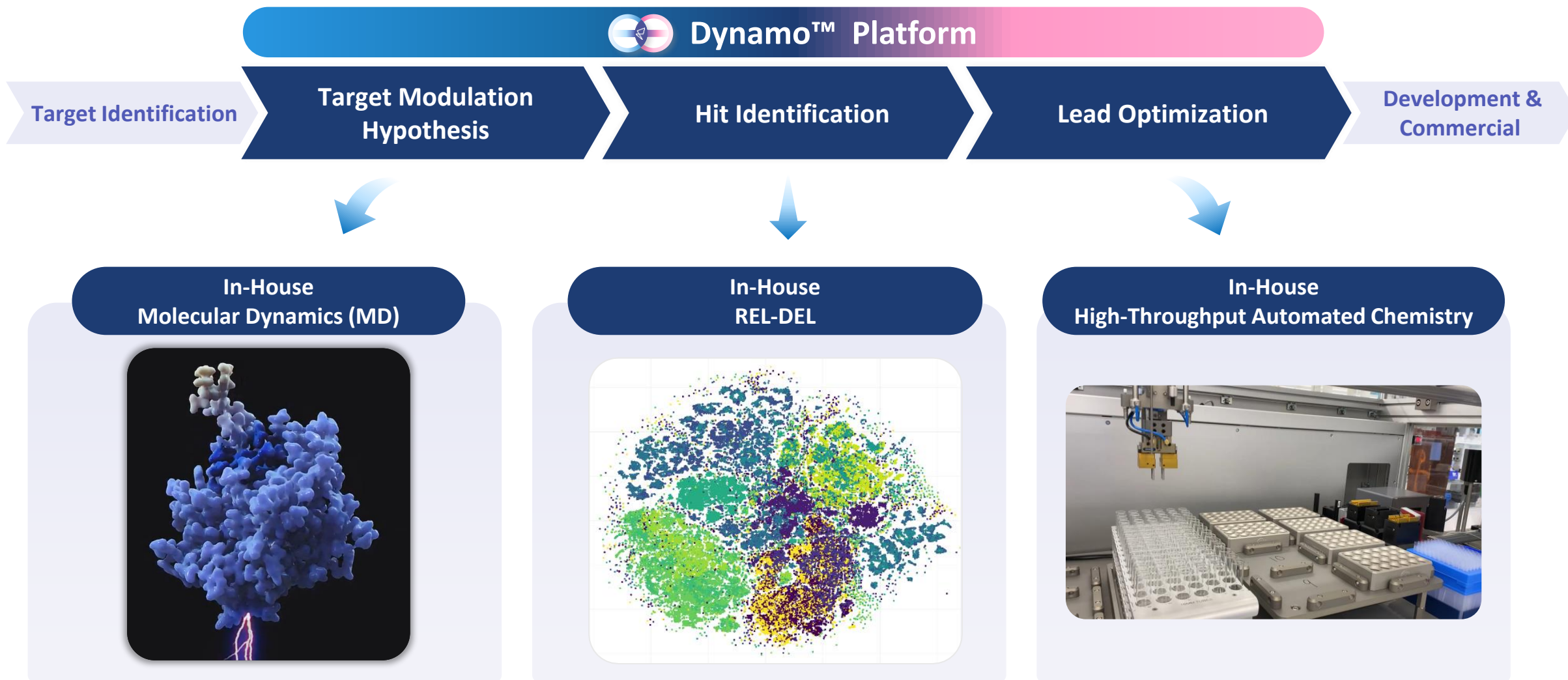
IND	Compound	Achievement
2019	Migoprotafib ¹ (SHP2)	Partnered with GNE
2020	Lirafugratinib ² (FGFR2)	Enrolled ~450+ pt
2021	RLY-2608 (PI3K α)	Clinical POC
2022	RLY-5836 (PI3K α)	Clinical Start
2023	RLY-2139 (CDK2)	IND Ready



...Potential To Generate More Assets In Future

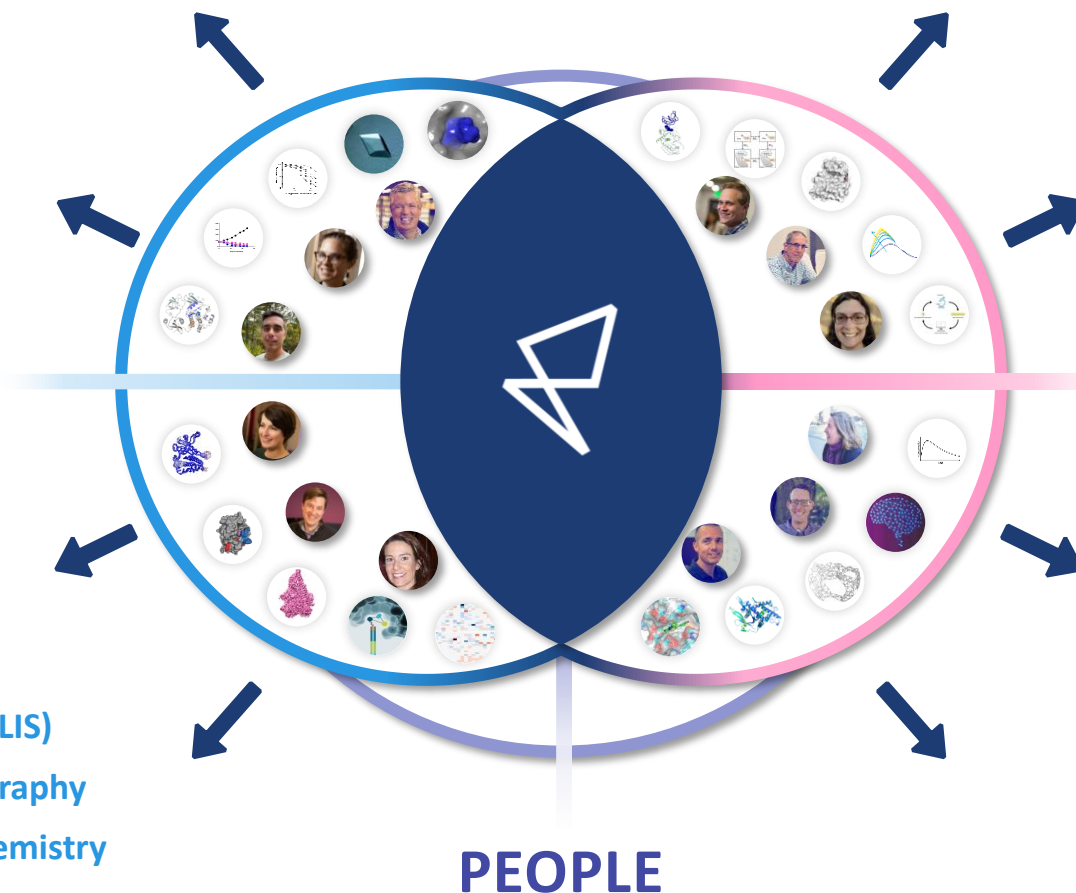
Pipeline	3 newly named programs <i>(and 5 unnamed programs)</i>
TAs	Oncology and Genetic Disease
Modalities	Inhibitors, chaperones and degraders
Platform	Expansion of integrated tools & capabilities

Relay Tx Dynamo™ – Internalizing Bespoke Tools



EXPERIMENTATION

- NMR
- Mechanistic enzymology
- HDX-MS
- Cryo-EM
- X-ray fragment screening
- REL-DEL
- Structure ensembles
- Integrated pharmacology
- Protein design and engineering
- Automated Ligand ID System (ALIS)
- Ambient temp. X-Ray crystallography
- High throughput automated chemistry



COMPUTATION

- Free energy calculations
- Long time-scale MD
- Giga-scale virtual screening
- Differential dynamics
- Digitally encoded libraries
- ML-DEL + AI models for DEL
- ADME/PK models
- Active learning
- Generative design
- Automated Chemical Design
- Computational fragment merging

Dynamo™ Platform integrates industry-leading tools and will continue to quickly grow and evolve

Relay Tx – Broad Precision Medicine Pipeline

	Target	Program	Preclinical	Early Clinical	Late Clinical
BREAST CANCER	PI3K α	Endocrine Tx (ET) doublet	[Progress bar]		
		RLY-2608 (PI3K α ^{PAN}) Ribociclib + ET triplet	[Progress bar]		
		CDK4i + ET triplet	[Progress bar]		
		<i>Other Novel Combinations</i>	[Progress bar]		
	CDK2	RLY-2139	Paused; IND ready		
ER α	RLY-1013 (Degradar)	Advance to IND-ready			
GENETIC DISEASE	Fabry Disease	α Gal Chaperone	[Progress bar]		
	Vascular Malformations	RLY-2608 (PI3K α ^{PAN})	[Progress bar]		
		Other PI3K α ^{PAN}	[Progress bar]		
SOLID TUMORS	NRAS	NRAS-selective Inhibitor	[Progress bar]		
	PI3K α	RLY-2608 Monotherapy	[Progress bar]		
	FGFR2	Lirafugratinib (RLY-4008)	Global Outlicense to Elevar Therapeutics		



DYNAMO® PLATFORM | 5 unnamed research programs

Anticipated 2025 Corporate Objectives

Breast Cancer
RLY-2608

- 2L pivotal trial start – 2025
- Full Ph1-2 data – 2025

Vascular Malformations
RLY-2608

- Clinical start – 1Q 2025

Fabry Disease
Pre-clinical

- Clinical start – 2H 2025

NRAS
Pre-clinical

- Clinical start – 2H 2025

Significant Capital to Achieve Goals

~\$840M

Cash as of the end of 3Q 2024

**Expected to fund
current operating plan
into 2H 2027**



DYNAMO® PLATFORM

5 unnamed research programs

Relay Tx's 3rd Annual Report

Patients

- 2 clinical programs
plus 7+ earlier-stage programs
- Committed to clinical trial patient safety and product quality and safety
- Well-established patient advocacy function

Note: Relay Tx is a development stage company

Community

- Our patients / future patients
- Our community in Cambridge and the broader Boston area
- The next generation of scientists

People

- 87% of employee respondents "would recommend Relay Tx as a great place to work"
- Turnover below industry average rates
- Diversity & inclusion advisory group
- Training and dev't opportunities
- Equitable compensation

Environment

- Two state-of-the-art research and operations facilities in Cambridge, MA
- Responsible energy & resource consumption*
- Careful waste management

*New in 2023: Evaluation of climate-related risks and opportunities in line with TCFD framework

Governance

- 8 Directors Total*
- The Nom/Gov and Audit Committees oversee ESG efforts, with the full BOD getting ~quarterly updates
- 38% Racial/Ethnic Diversity
- 38% Women
- 6yr Average Tenure
- 88% Independence (Separate CEO and Chair Role)

*As of December 2023



RELAY[®]
THERAPEUTICS