

Puma Biotechnology

H.C. Wainwright BIOCONNECT Virtual Conference

January 2022



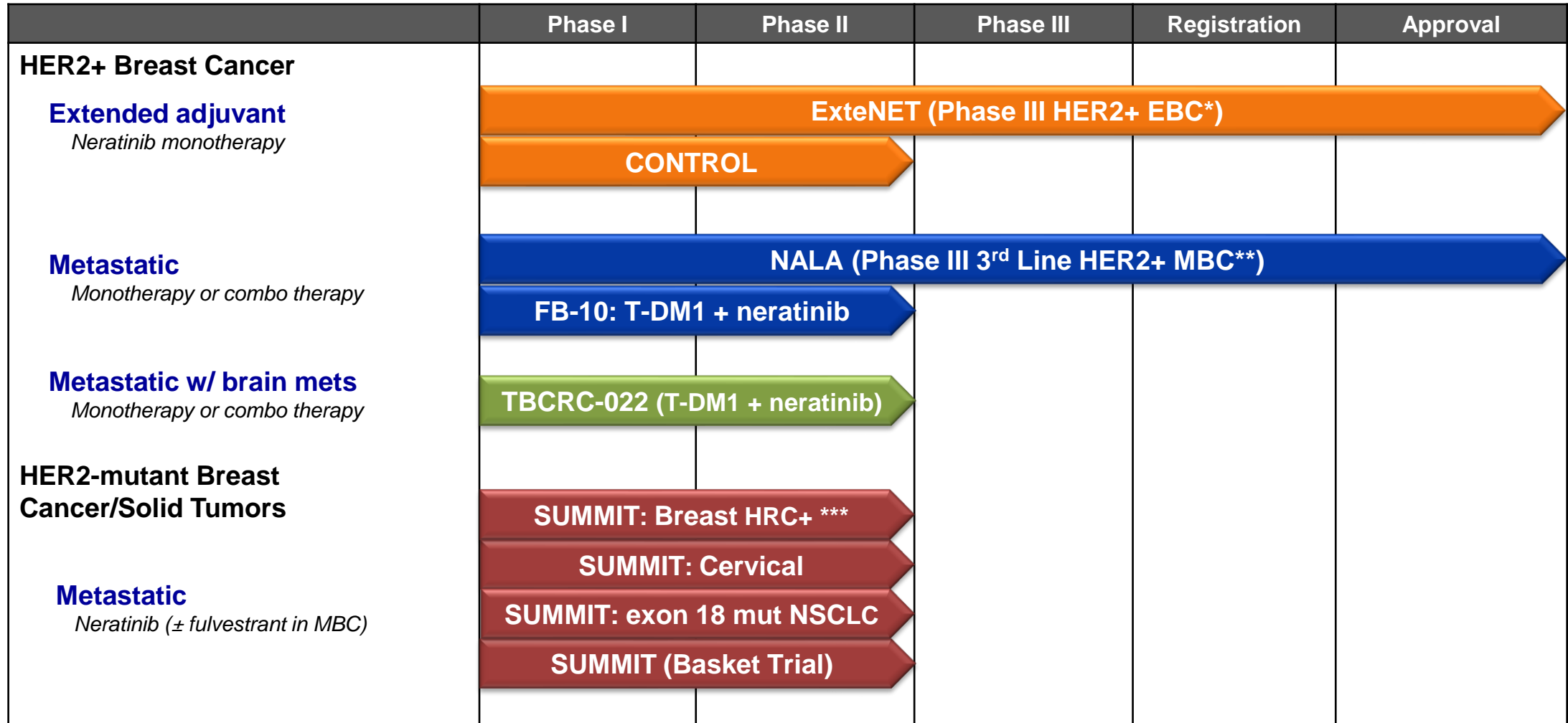
Forward-Looking Safe-Harbor Statement

This presentation contains forward-looking statements, including statements regarding commercialization of NERLYNX® and the potential indications and development of our drug candidates. All forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from the anticipated results and expectations expressed in these forward-looking statements. These statements are based on our current expectations, forecasts and assumptions, and actual outcomes and results could differ materially from these statements due to a number of factors, which include, but are not limited to, any adverse impact on our business or the global economy and financial markets, generally, from the global COVID-19 pandemic, and the risk factors disclosed in our periodic and current reports filed with the Securities and Exchange Commission from time to time, including our Annual Report on Form 10-K for the year ended December 31, 2020, and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2021. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We assume no obligation to update these forward-looking statements except as required by law.



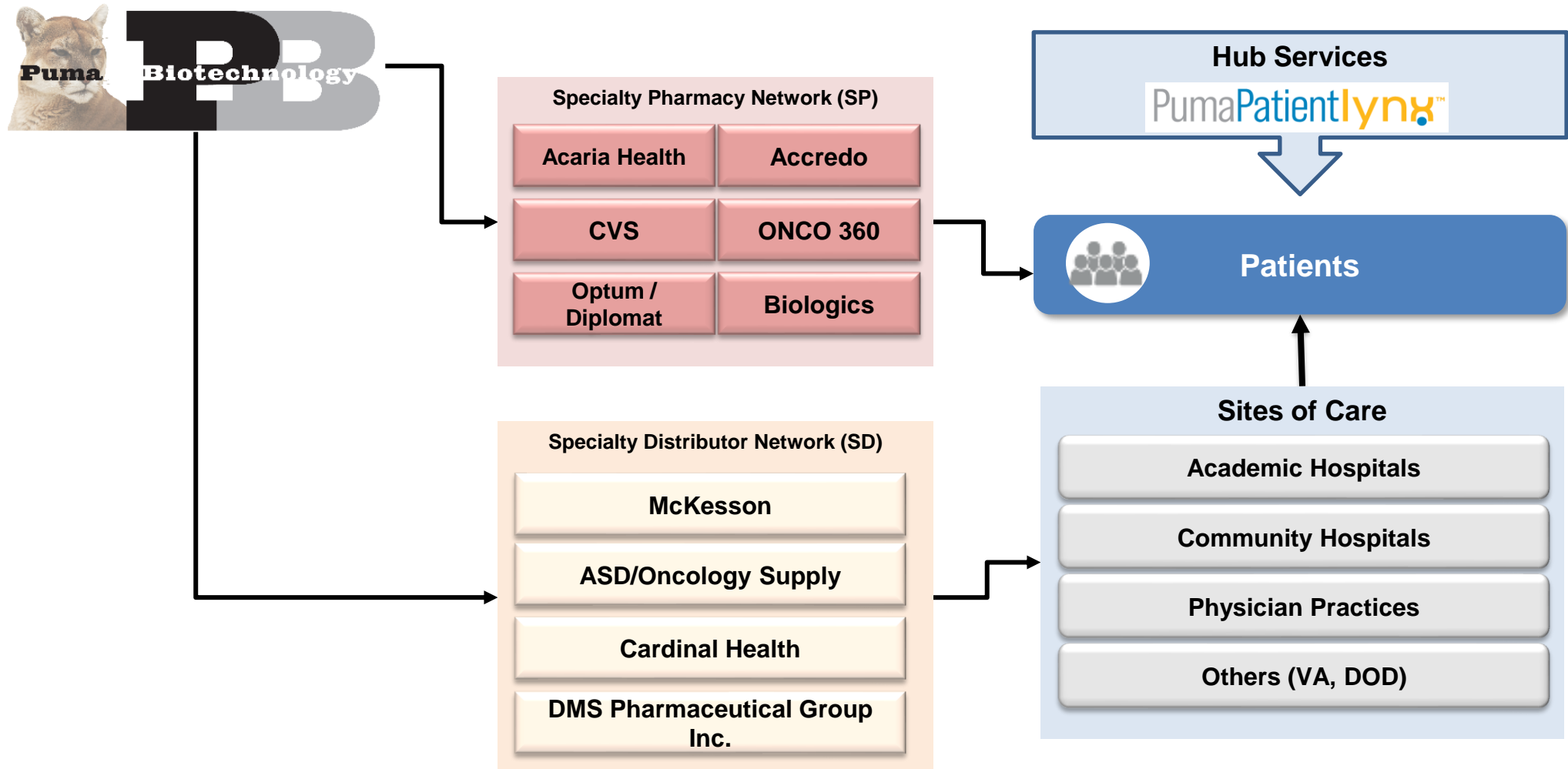
Product Pipeline

Neratinib across the breast cancer therapy spectrum

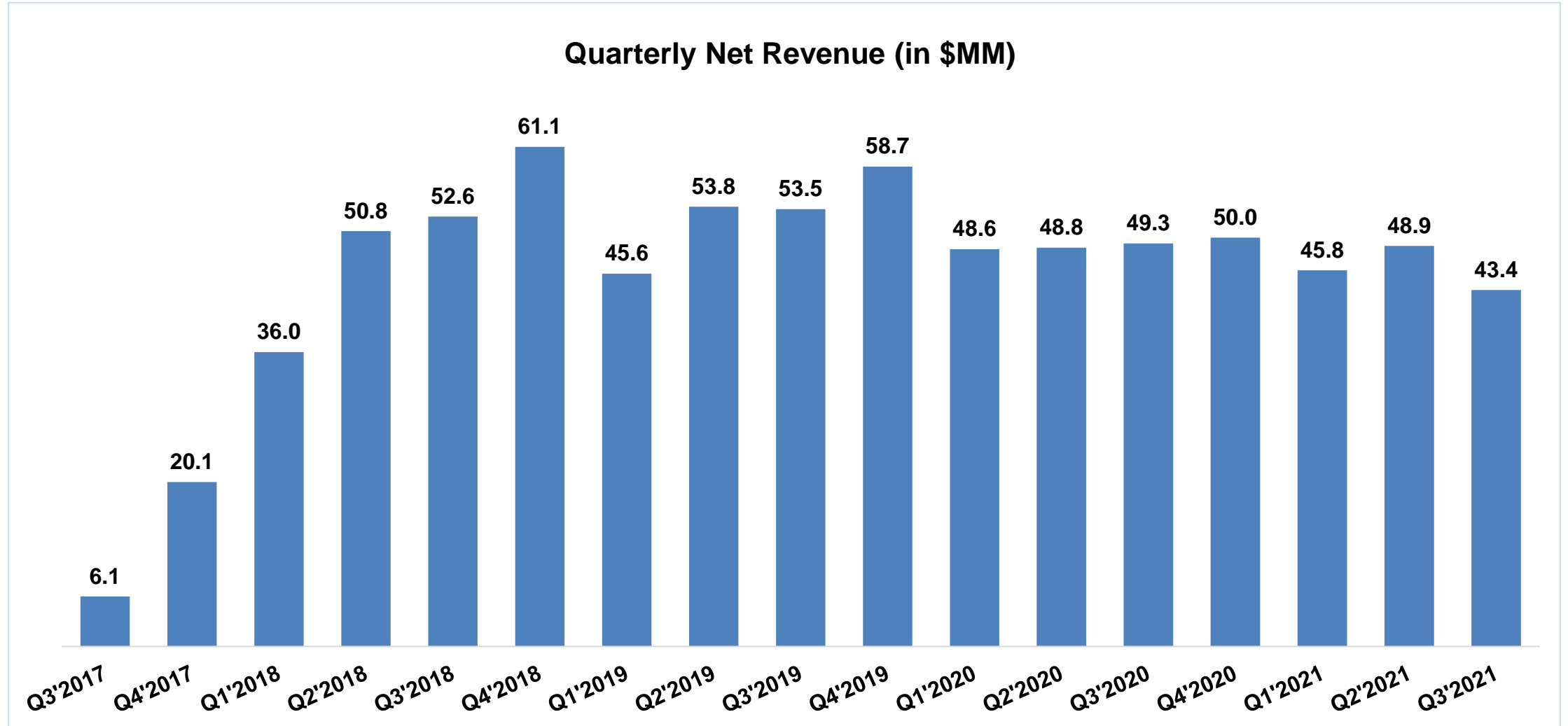


* EBC: Early breast cancer ** MBC: Metastatic breast cancer *** HRC+: Hormone receptor positive

PUMA's Pharmacy and Distributor Network

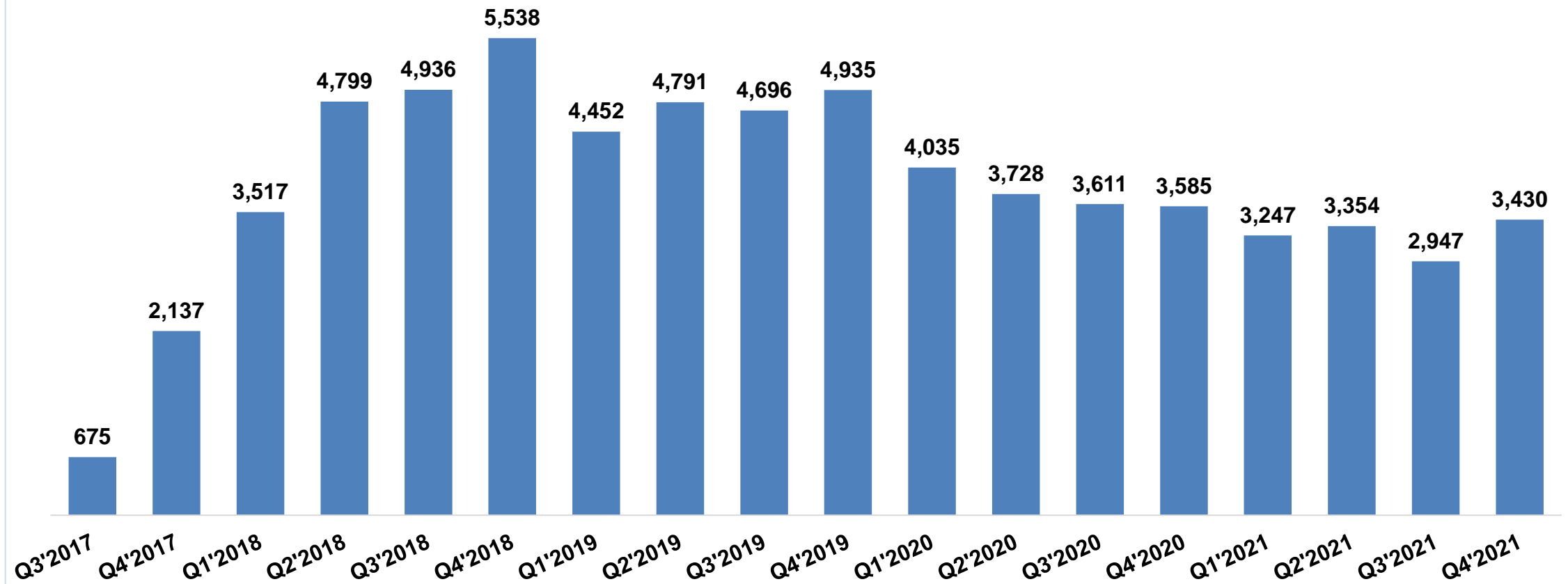


~\$43 Million net NERLYNX revenue in Q3'21



3,430 Ex-factory bottles were sold in Q4'21

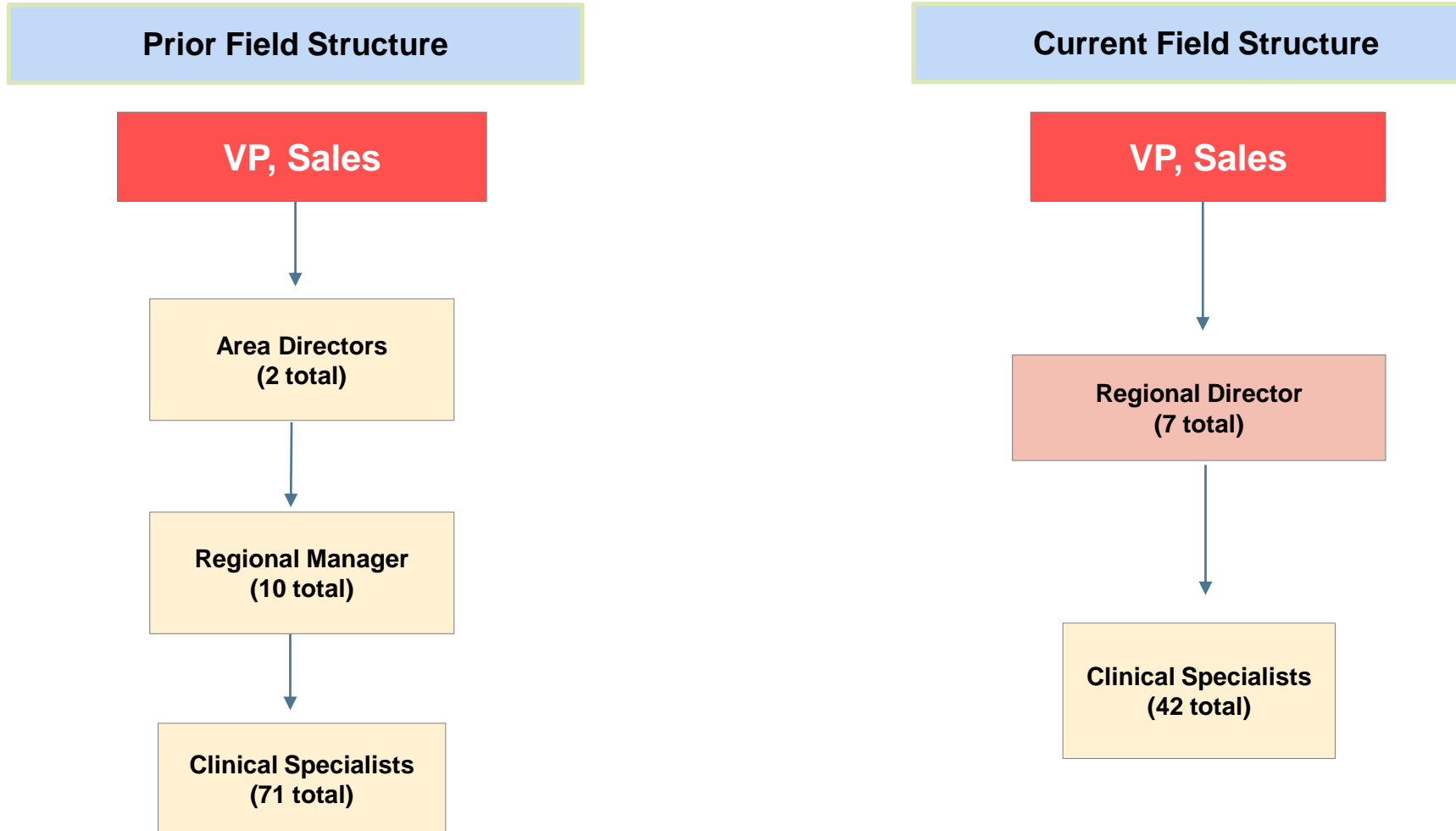
Bottles Sold (SP + SD) by Quarter



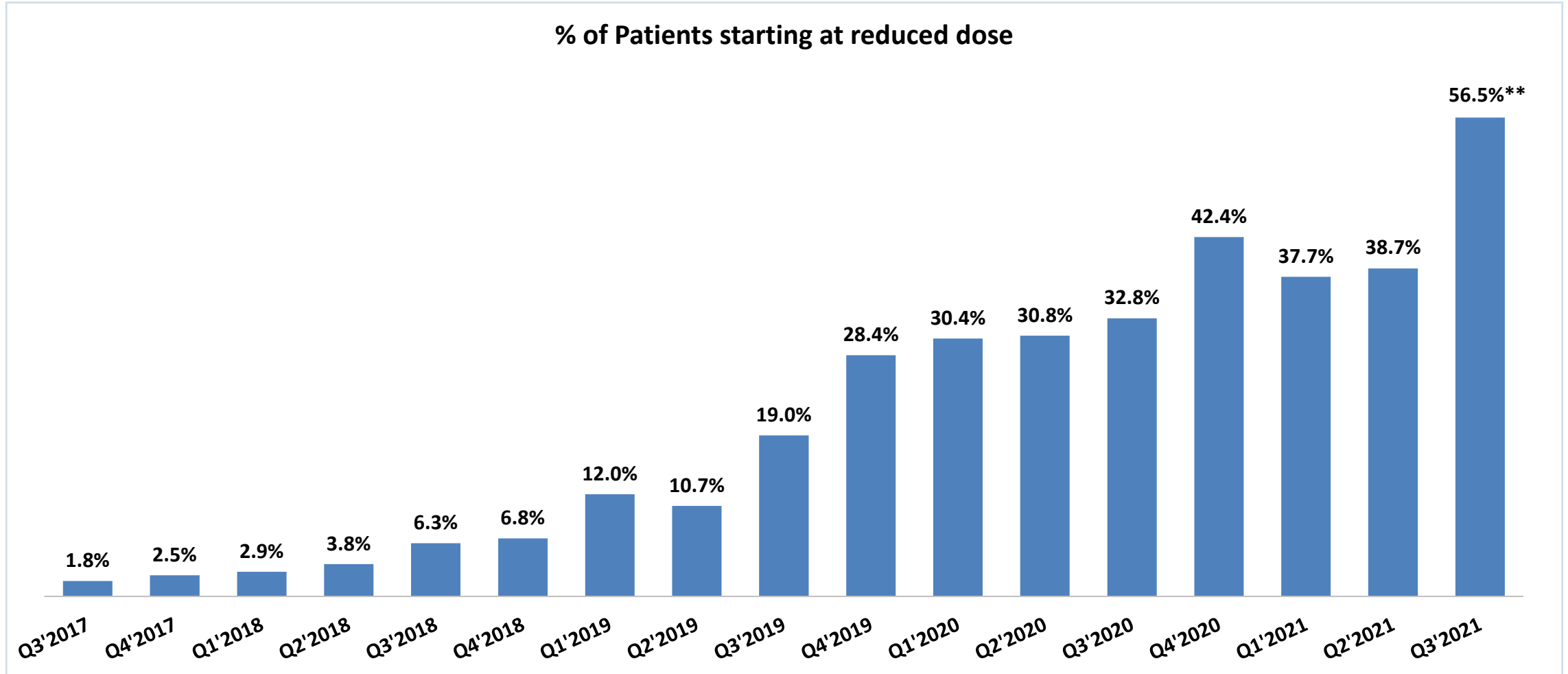
Q4'21 bottle count includes ~200 additional bottles due to increase in inventory

Includes Commercial SP and SD

Field Structure Reduced to Adapt to Virtual Environment









~57% of patients in Q3'21 started at a reduced dose* **



*Reduced dose defined as fewer than 6 pills per day

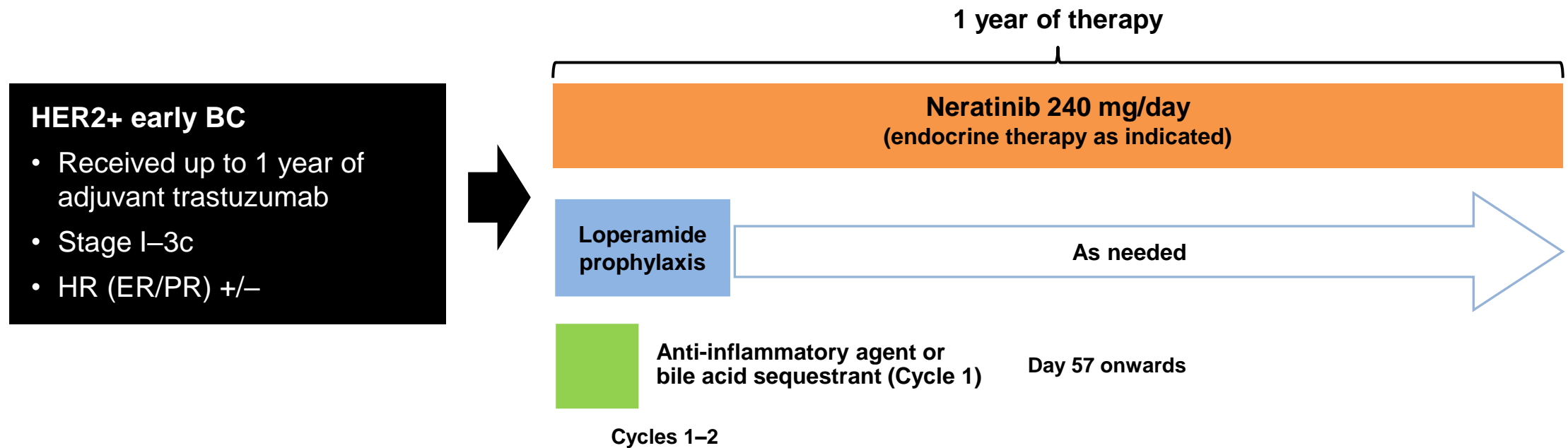
** FDA approved dose-escalation label supplement in June 2021

Rest of World Partnerships – Timelines

Region	Partner	Regulatory Approvals	Commercial Launches
Australia / SE Asia	 Specialised Therapeutics	<ul style="list-style-type: none"> • 2019 – Ext. Adj. in Australia, Singapore • 2020 – Ext. Adj. in Brunei, Malaysia, New Zealand 	<ul style="list-style-type: none"> • 2020 – Singapore • Q2 2021 – Malaysia • Q3 / Q4 2021 – Brunei, New Zealand
Israel	 MEDISON Driving Innovative Medicine	<ul style="list-style-type: none"> • 2020 – Approved in Ext. Adj. and mBC 	<ul style="list-style-type: none"> • 2020 – Launched
Canada	 Knight	<ul style="list-style-type: none"> • 2019 – Ext.. Adj. approved • Q2 2021 – mBC approved 	<ul style="list-style-type: none"> • 2020 – Launched
Latin America	 PINT PHARMA	<ul style="list-style-type: none"> • 2019 – Ext Adj in Argentina • 2020 – Ext. Adj in Chile, Ecuador • 2020 – mBC in Argentina • 2021 – Ext Adj and mBC in Peru • 2021 – Expected approvals in Brazil and Mexico 	<ul style="list-style-type: none"> • 2020 – Argentina • Q2 2021 – Chile • Q4 2021 -- Peru
Europe Greater China Middle East North and West Africa South Africa Turkey	 Pierre Fabre	<ul style="list-style-type: none"> • 2019 – EMA approval • 2019 – Ext. Adj. in Hong Kong • 2020 – Ext. Adj. in China, Taiwan • Q4 2021 – mBC in Taiwan 	<ul style="list-style-type: none"> • 2019 – Germany, UK, Austria • 2020 – Sweden, Finland, Scotland, Switzerland Denmark • 2020 – Hong Kong • Q1 2021 – China, Taiwan • Q1 2021 – Greece, Czech Republic
South Korea	 BIXINK THERAPEUTICS	<ul style="list-style-type: none"> • Q4 2021 – Ext. Adj. in S. Korea 	

CONTROL Study Design

Phase 2 trial to characterize the incidence and severity of diarrhea in patients with HER2+ early breast cancer treated with neratinib and loperamide prophylaxis \pm an investigational agent



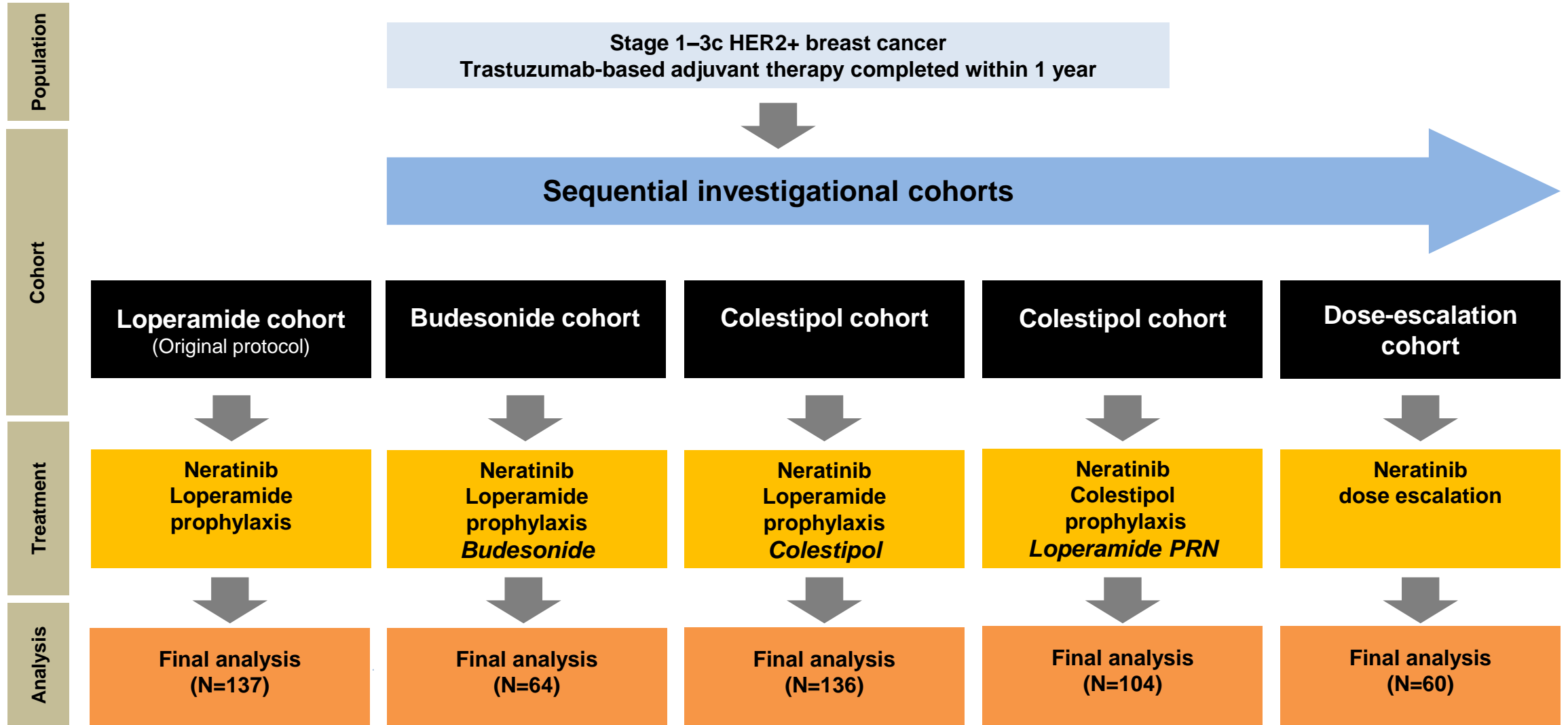
STUDY ENDPOINTS

Primary endpoint: incidence of grade ≥ 3 diarrhea

Secondary endpoints: frequency distribution of maximum-grade diarrhea; incidence and severity of diarrhea by loperamide exposure

CONTROL

Study Flowchart



CONTROL vs ExteNET: Neratinib Treatment-Emergent Diarrhea

Loperamide prophylaxis reduces incidence and severity of diarrhea

	CONTROL ¹					ExteNET ³
	Loperamide (n=137)	Budesonide + loperamide (n=64)	Colestipol + loperamide (n=136)	Colestipol + loperamide prn (n=104)	Neratinib dose escalation + loperamide prn (n=60) ²	Loperamide prn (n=1408)
Treatment-emergent diarrhea incidence, n (%)						
No diarrhea	28 (20)	9 (14)	23 (17)	5 (5)	1 (2)	65 (5)
Grade 1	33 (24)	16 (25)	38 (28)	34 (33)	24 (40)	323 (23)
Grade 2	34 (25)	21 (33)	47 (35)	32 (31)	27 (45)	458 (33)
Grade 3	42 (31)	18 (28)	28 (21)	33 (32)	8 (13)	561 (40)
Grade 4	0	0	0	0	0	1 (<1)
Diarrhea leading to discontinuation	28 (20)	5 (8)	5 (4)	8 (8)	2 (3)	237 (17)
Hospitalization (due to diarrhea)	2 (1)	0	0	0	0	20 (1)
Diarrhea leading to dose reduction	10 (7)	3 (5)	10 (7)	12 (12)	2 (3)	372 (26)

1. Barcenas et al. *Annals of Oncology*, 2020

2. Ruiz-Borrego et al. SABCS 2020 3. Chan et al. *Lancet Oncology* 2016

NERLYNX[®] Extended Adjuvant HER2+ Breast Cancer Market Size

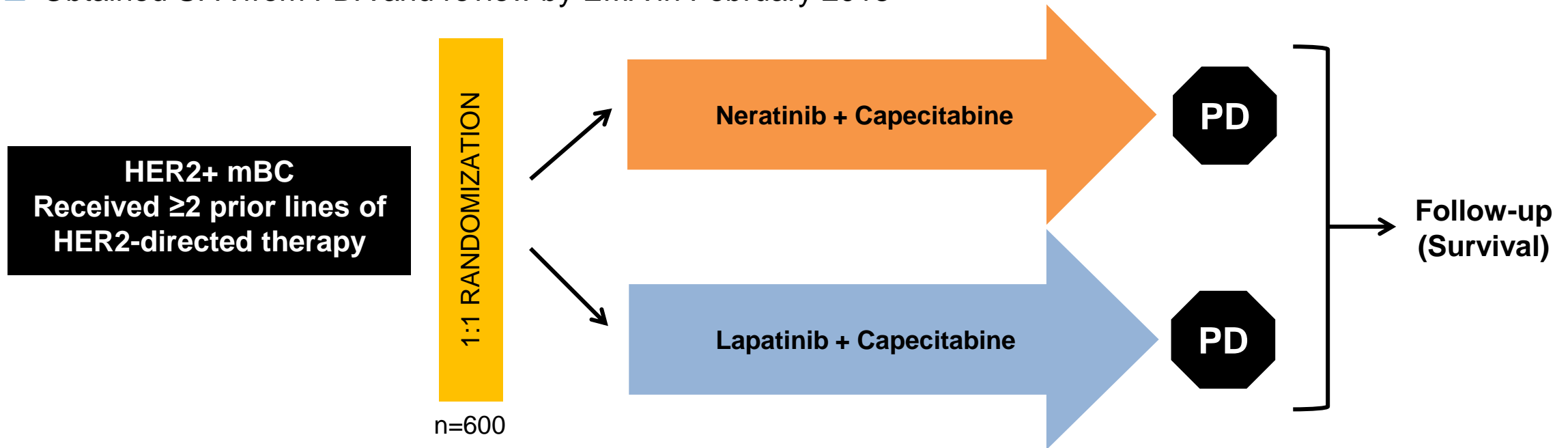
- Approximately 28,300 patients (US) with early stage HER2+ breast cancer treated with adjuvant treatment¹
 - Approximately 6,000 patients (US) with HR positive early stage HER2+ breast cancer and no pathological complete response to neoadjuvant treatment (high risk disease)
- Approximately 37,000 patients (EU) with early stage HER2+ breast cancer treated with adjuvant treatment¹
 - Approximately 65–70% of patients have HR positive disease

¹Roche epidemiology slides 09/18

Phase III Trial – Third-Line HER2+ MBC (NALA)

Study Design

- 3rd- or later-line therapy for patients with HER2+ mBC
- Patients with asymptomatic CNS metastatic disease are eligible
- Obtained SPA from FDA and review by EMA in February 2013



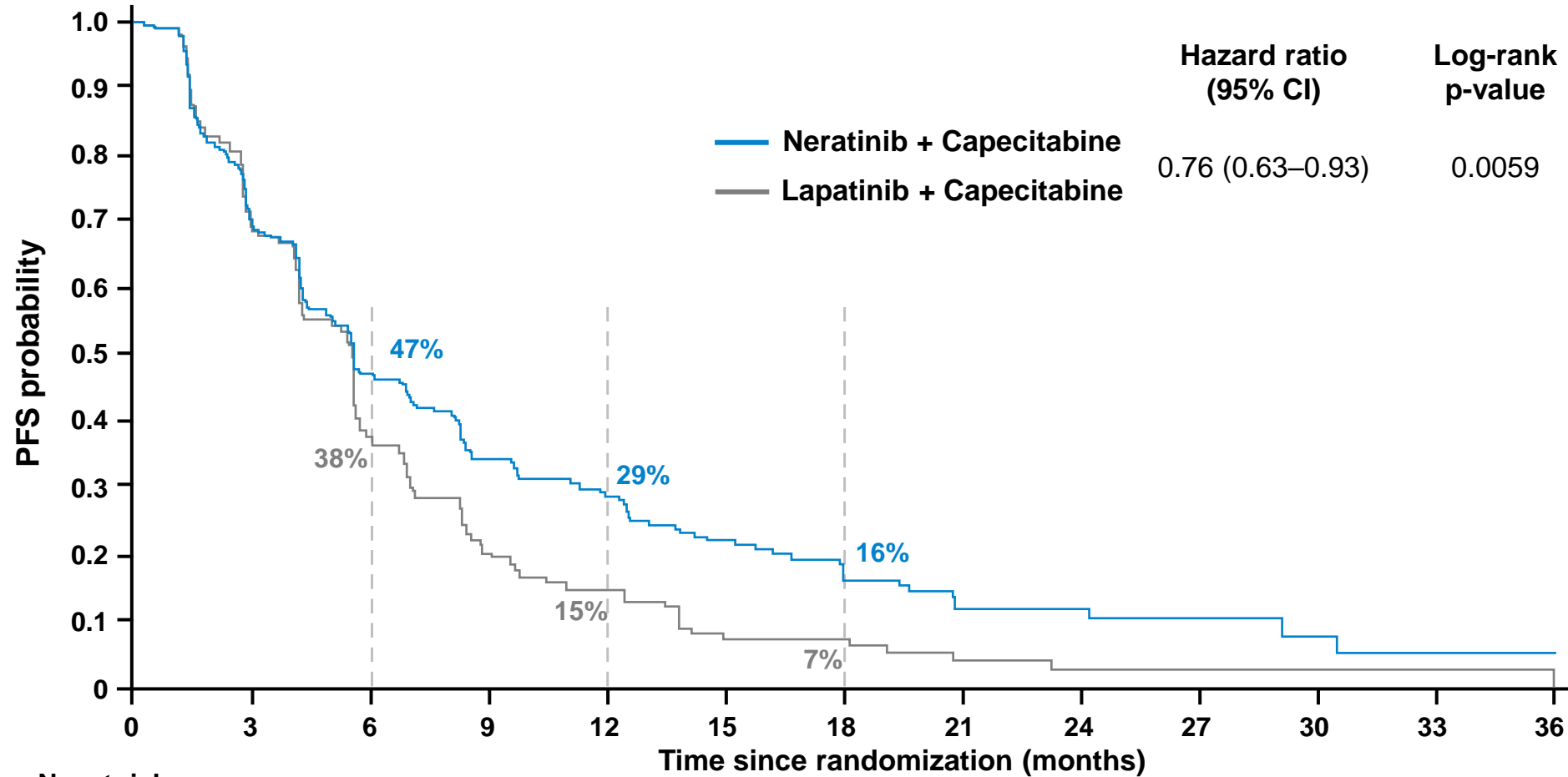
STUDY OBJECTIVES

Co-Primary: PFS (central) and OS

Secondary: PFS (local), ORR, DoR, CBR, time to intervention for CNS metastases, safety, health outcomes

Phase III Trial – Third-Line HER2+ MBC (NALA): Study Results

Centrally Confirmed PFS (co-primary endpoint)



No. at risk:

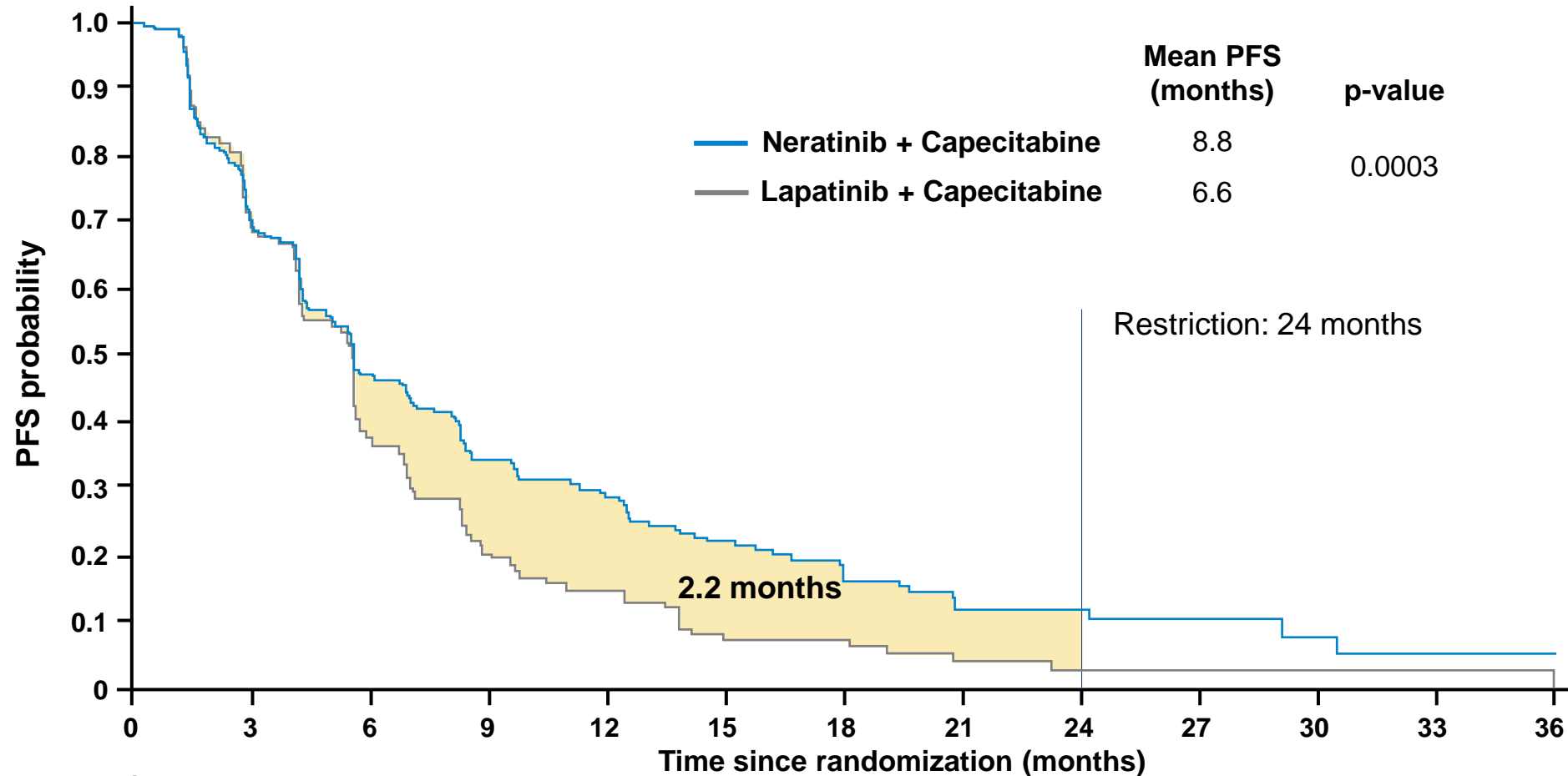
	0	3	6	9	12	15	18	21	24	27	30	33	36
N+C	307	183	113	69	54	35	20	13	9	7	3	2	2
L+C	314	183	82	39	24	9	8	3	2	2	2	2	1

Saura et al. ASCO 2019 Oral Session: Breast Cancer – Metastatic. Abstract 10002. Presented Tuesday, June 4, 2019



Phase III Trial – Third-Line HER2+ MBC (NALA): Study Results

Prespecified restricted means analysis – PFS



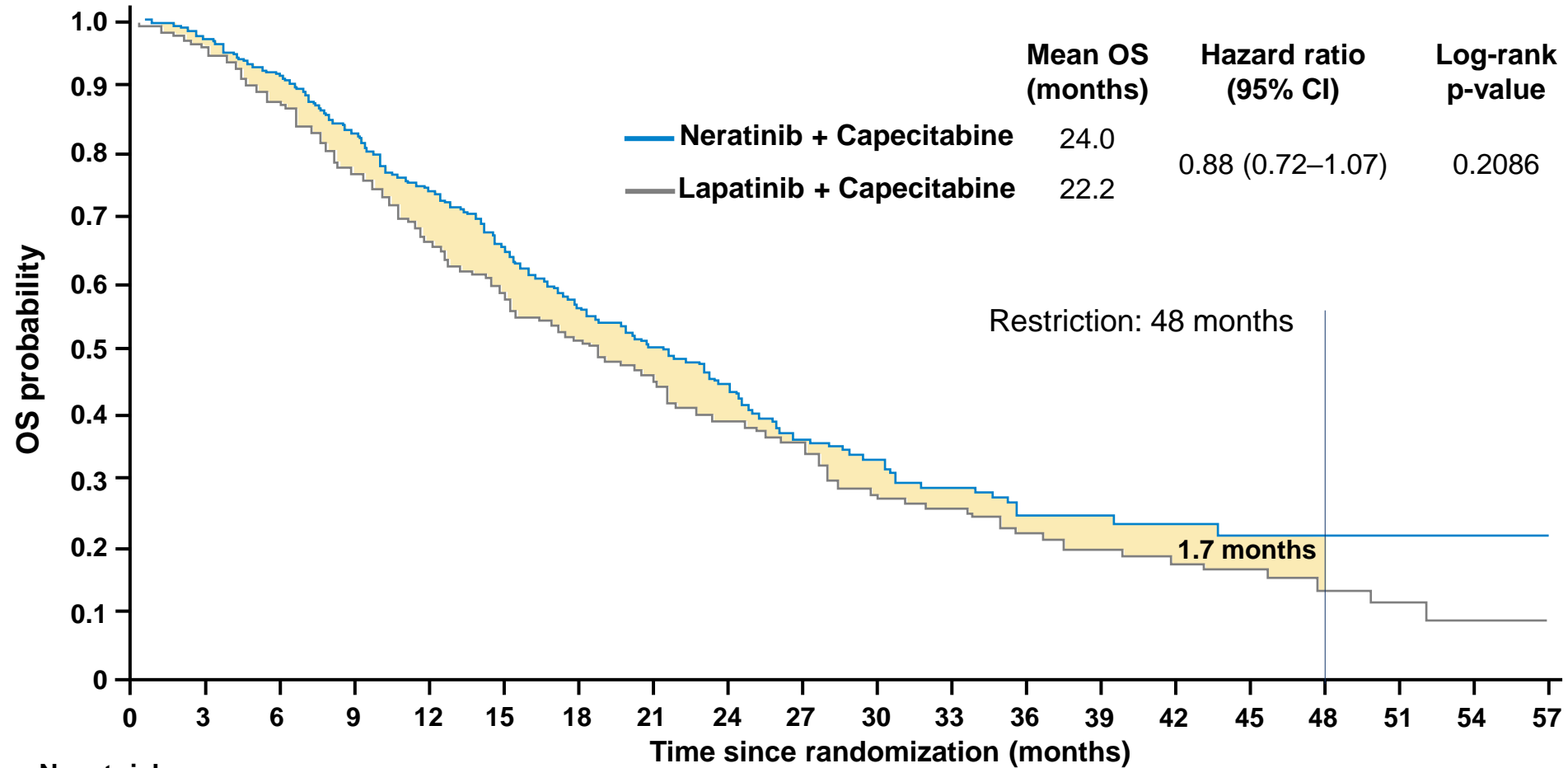
No. at risk:

N+C	307	183	113	69	54	35	20	13	9	7	3	2	2
L+C	314	183	82	39	24	9	8	3	2	2	2	2	1

Saura et al. ASCO 2019 Oral Session: Breast Cancer – Metastatic. Abstract 10002. Presented Tuesday, June 4, 2019

Phase III Trial – Third-Line HER2+ MBC (NALA): Study Results

OS (co-primary endpoint)



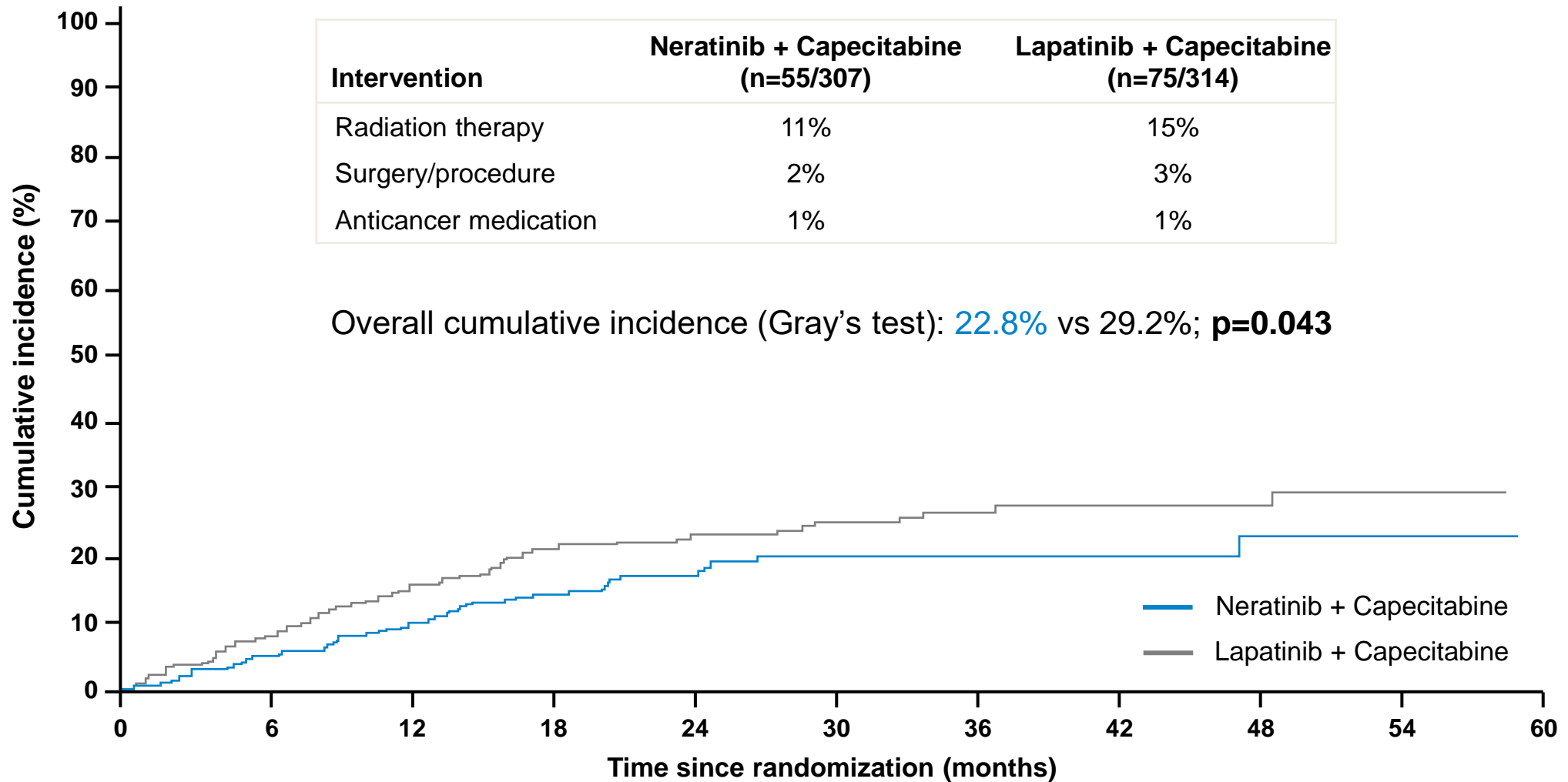
No. at risk:

N+C	307	294	275	244	220	182	142	112	82	64	47	34	28	18	15	13	6	4	2	1
L+C	314	303	273	240	208	170	132	107	84	67	47	36	27	22	17	12	8	4	3	1

Saura et al. ASCO 2019 Oral Session: Breast Cancer – Metastatic. Abstract 10002. Presented Tuesday, June 4, 2019

Phase III Trial – Third-Line HER2+ MBC (NALA): Study Results

Time to intervention for CNS metastases



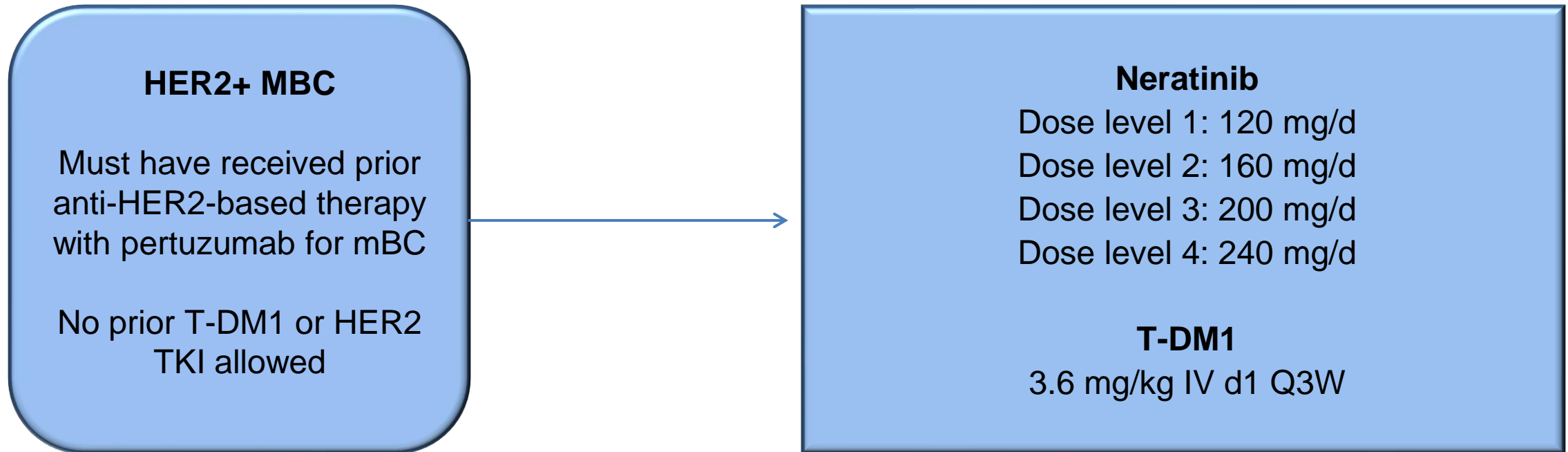
Saura et al. ASCO 2019 Oral Session: Breast Cancer – Metastatic. Abstract 10002. Presented Tuesday, June 4, 2019

Third-Line HER2+ MBC Market Size

- Approximately 6,400 patients (US) with third-line HER2+ metastatic breast cancer and 4,700 patients (US) with fourth-line HER2+ metastatic breast cancer¹

¹Roche epidemiology slides 09/18

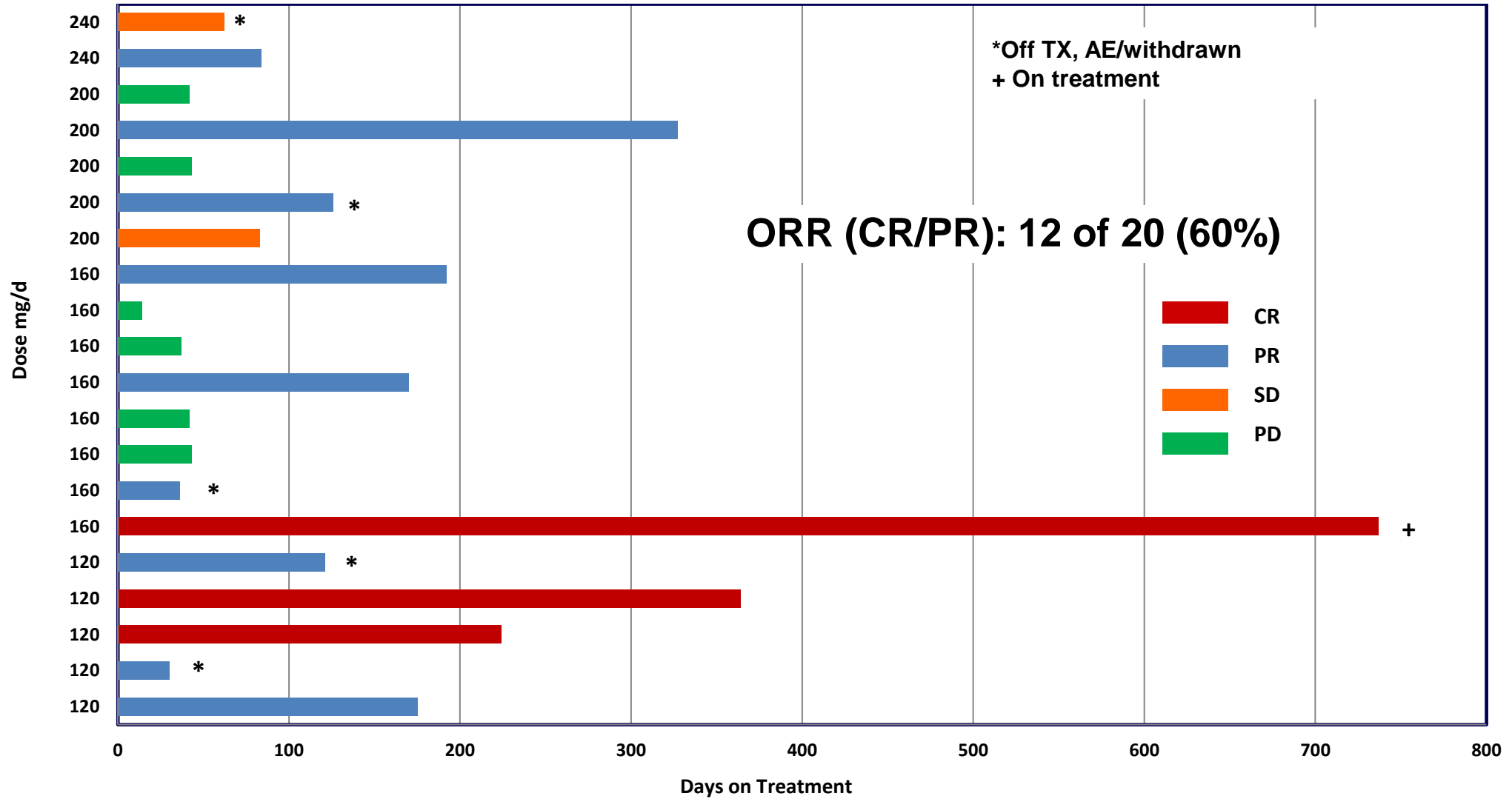
FB-10 – Phase I/II Trial of Kadcylya (T-DM1) + Neratinib



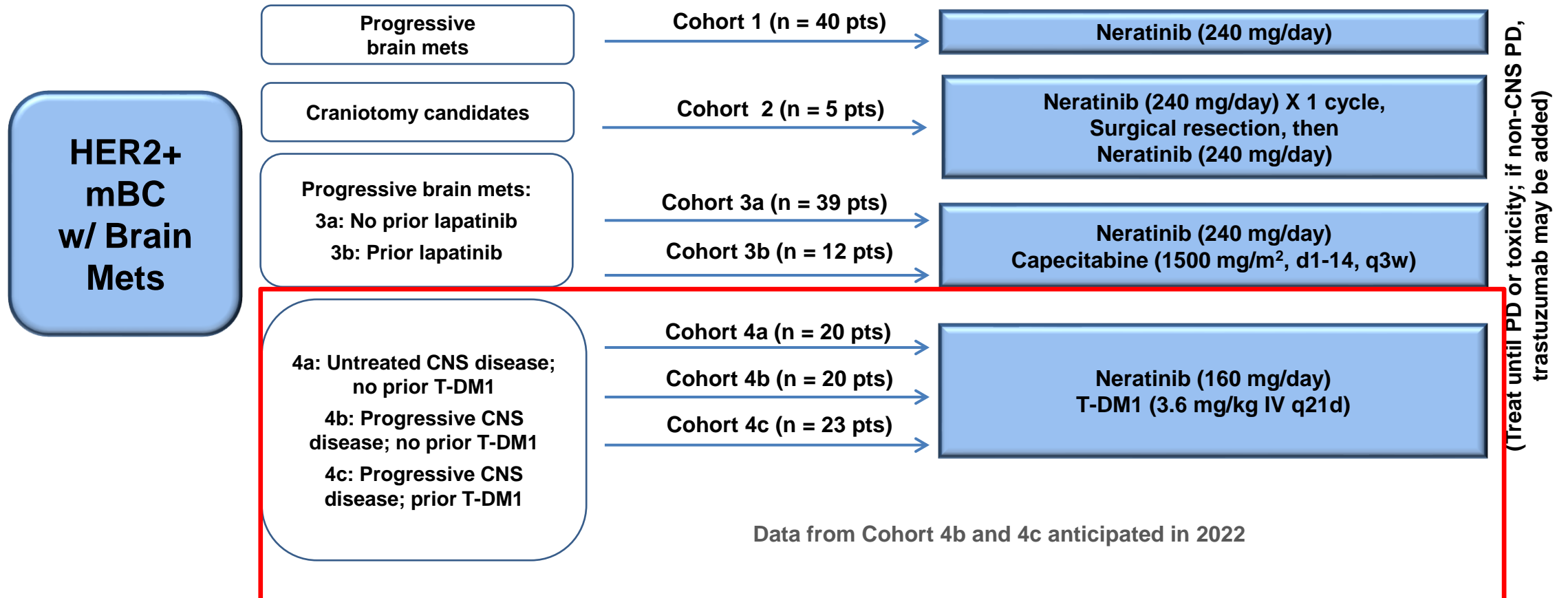
Primary endpoint: Phase I: Recommended dose of neratinib when given with T-DM1; Phase 2: Objective response rate (CR/PR)

Secondary endpoint: Clinical benefit rate (CR/PR/SD), PFS, PK, tumor biopsy for PDX model (optional)

FB-10 – Phase I/II Trial of Kadcylya (T-DM1) + Neratinib



TBCRC 022: Phase II Trial of HKI-272 (Neratinib) for Patients with HER2+ Breast Cancer and Brain Metastases



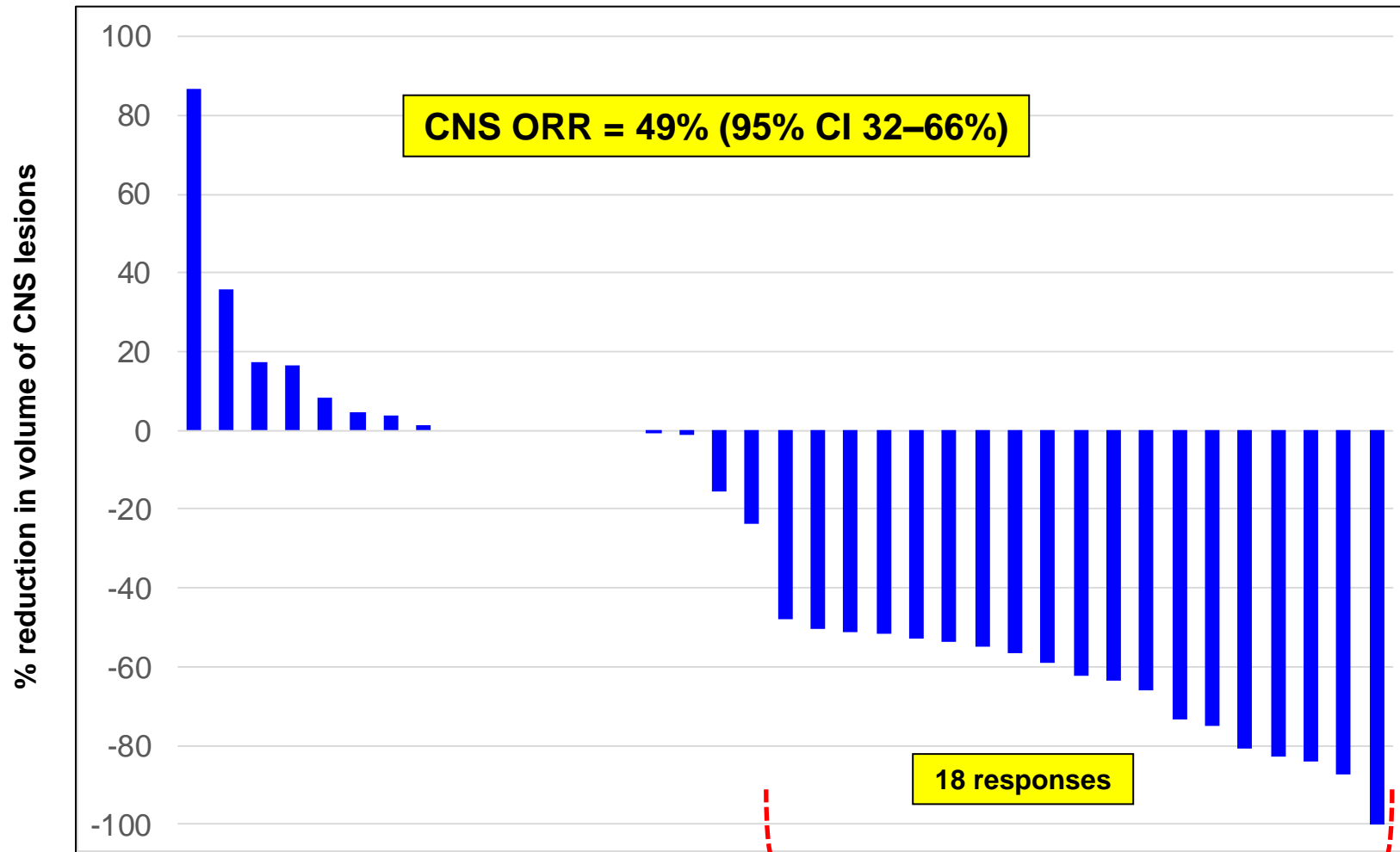
Primary endpoint: ORR in CNS: Cohort 1 ≥5 pts (12.5%); Cohort 3a ≥9 pts (25.7%); Cohort 3b ≥2 pts (8%); Cohort 2 PFS

Secondary endpoints: ORR in non-CNS, PFS, OS

TBCRC-022 Cohort 3a

CNS Response

Best Volumetric Response (n=31)*



Neratinib Recently Included as a Treatment Option for Recurrent Breast Cancer CNS Metastases By NCCN[®] Guidelines¹

Guidelines updated March 2020

Category 2A: Neratinib + Capecitabine

TBCRC 022²

A Phase II Trial of Neratinib and Capecitabine for Patients with HER2+ Breast Cancer Brain Metastases (NCT01494662)

Category 2B: Neratinib + Paclitaxel

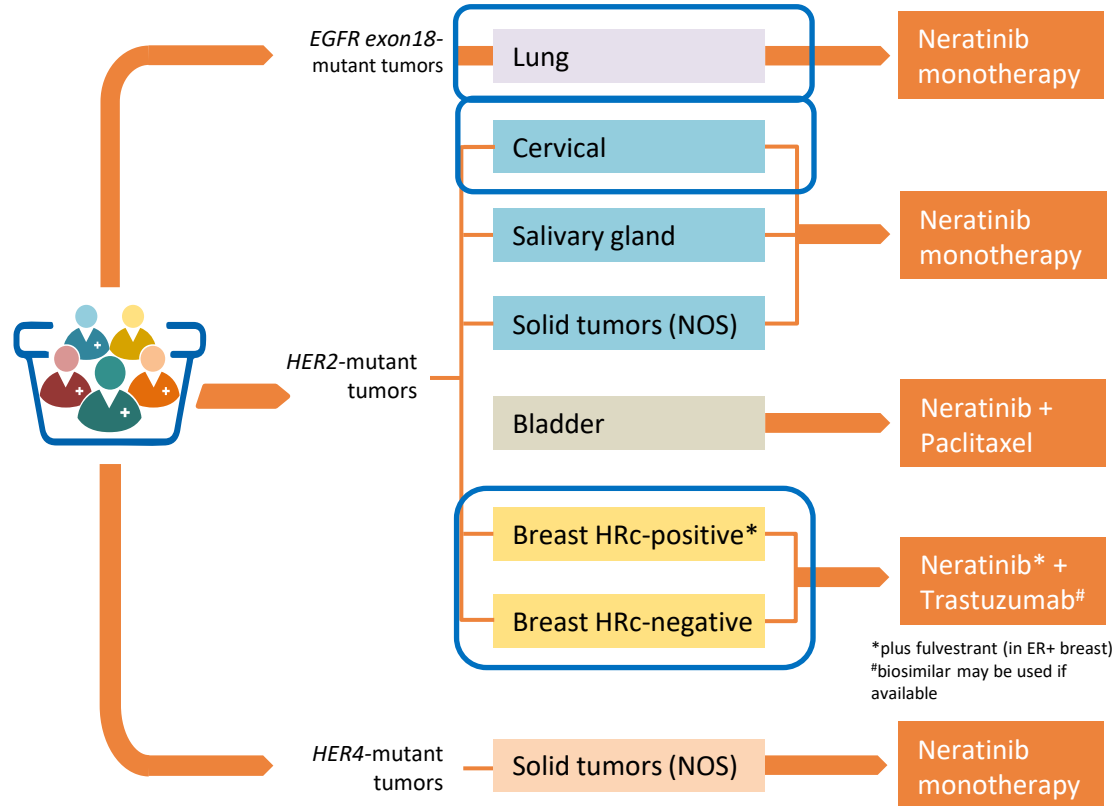
NEfERT-T^{3,4}

Randomized, Multi-Center, International Study of HER2-Directed Therapy in 1st-line mBC (NCT00915018)

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. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines[®]) for Central Nervous System Cancers V.1.2018. © National Comprehensive Cancer Network, Inc. 2018. All rights reserved. Accessed [March 20, 2018]. To view the most recent and complete version of the guideline, go online to NCCN.org

1. NCCN Guidelines v 1.2018. Central Nervous System Cancers.
2. Freedman RA, et al. Presented at ASCO Annual Meeting, 2017. Abstract 1005
3. Awada A, et al. *Poster Presentation at ASCO Annual Meeting, 2015. #610.*
4. Awada A, et al. *JAMA Oncol.* 2016;2:1557-1564.

Current SUMMIT 'Basket' Trial: Study Design



EGFR, HER2 or HER4 mutations
(documented by local testing)

Primary endpoint

- Objective response rate at first post-baseline tumor assessment (ORR_{first})

Secondary endpoints

- ORR (confirmed)
- Clinical benefit rate (CBR)
- Progression-free survival (PFS)
- Safety
- Biomarkers

Simon 2-stage design

- If ≥1 response in first evaluable 7 patients, expand cohort to Stage 2 (N=18)
- If ≥4 responses in Stage 2, expand or breakout

Tumor assessments

- RECIST v1.1 (primary criteria)
- PET response criteria (RECIST non-evaluable)

Statistical methods

- ORR_{first}, ORR, CBR: associated 95% CI
- Median PFS: Kaplan-Meier estimate with 95% CI

Key Inclusion Criteria

- Histologically confirmed cancers for which no curative therapy exists
- Documented EGFR exon 18, HER2 or HER4 mutation
- ECOG status of 0 to 2
- RECIST 1.1 evaluable disease (measurable or non-measurable disease): if RECIST non-measurable, evaluable by other accepted criteria

Key Exclusion Criteria

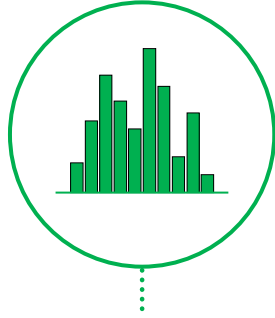
- Prior treatment with any pan-HER TKI (eg, lapatinib, afatinib, dacomitinib, neratinib)
- Patients who are receiving any other anticancer agents
- Symptomatic or unstable brain metastases
- Women who are pregnant or breast-feeding

SUMMIT

Breast Cancer Cohort

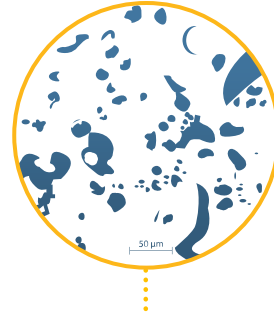


Characteristics of *HER2*-mutant breast cancer^{1–8}



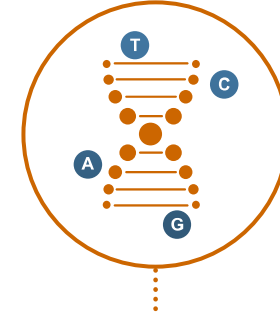
Incidence

- 2% Primary breast cancers
- 2–4% MBC
- 8% ER+ MBC
- Up to 15% in metastatic ILC



Histology

- Predominantly in hormone receptor-positive (luminal-A) and *HER2*-negative tumors
- Represented in all histology subtypes but enriched in lobular carcinoma



Genomics

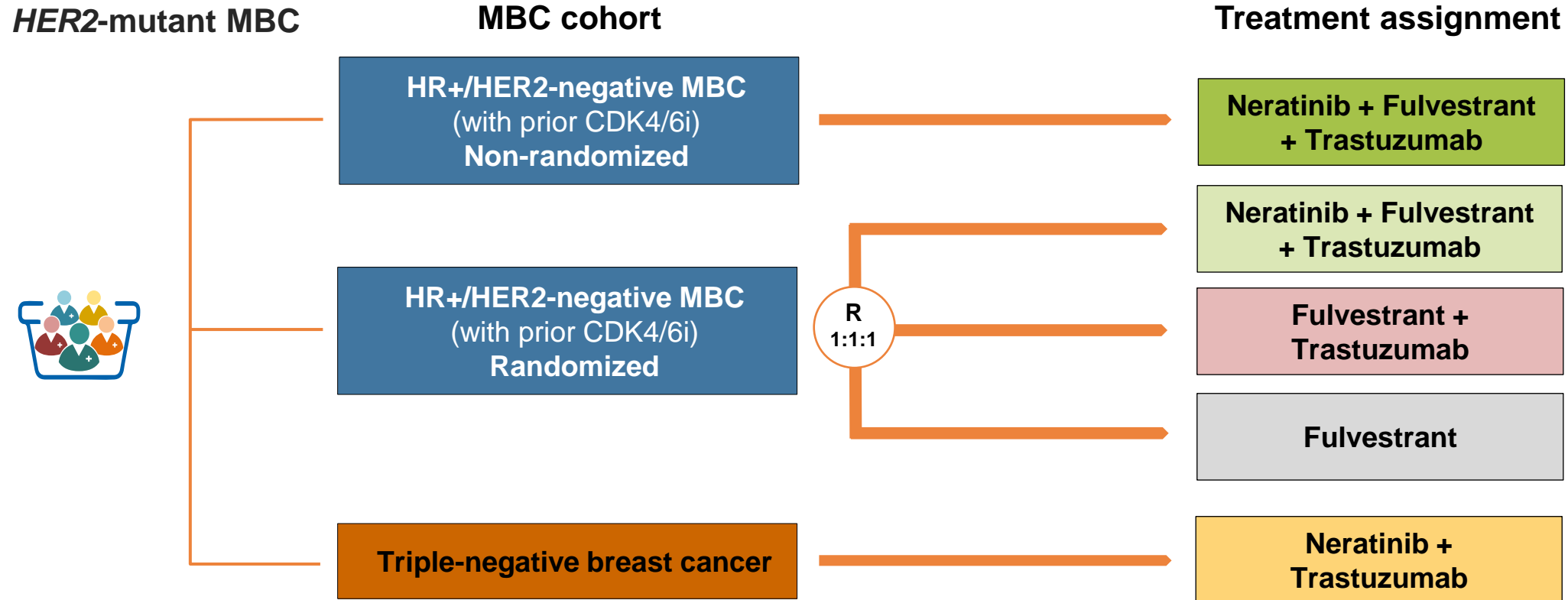
- Occur across multiple domains of the protein (KD, ECD, TMD)
- Most common variants:
 - SNVs in KD
 - *Exon 20* insertions
 - S310F/Y in ECD
- Common co-mutations include *TP53*, *PIK3CA*, *ERBB3* and *CDH1*

Abbreviations: ECD, extracellular domain; ILC, invasive lobular carcinoma; KD, kinase domain; MBC, metastatic breast cancer; SNV, single nucleotide variant; TMD, transmembrane domain

1. Bose et al. *Cancer Discovery* 2013; 2. Razavi et al. *Cancer Cell* 2018; 3. Nayar et al. *Nat Genet* 2019;51; 4. Croessmann et al. *Clin Cancer Res* 2019
5. Hyman et al. *Nature* 2018; 6. Smyth et al. *Cancer Discov* 2020; 7. Ma et al. *Clin Cancer Res* 2017; 8. Jhaveri et al. *SABCS* 2020

Current SUMMIT breast cancer cohorts

- Added inclusion criteria for HR+ cohort to reflect current standard of care: prior CDK4/6 inhibitor therapy



- **Design:** Simon 2-stage
 - If ≥ 1 response in first evaluable 7 patients, expand cohort to Stage 2 (N=18)
 - If ≥ 4 responses in Stage 2, expand up to 50 patients
- **Primary endpoint:** HR+: confirmed objective response rate (ORR, RECIST v1.1)^a; TNBC: ORR at first post-baseline tumor assessment (ORR_{first}), RECIST v1.1 or modified PERCIST
- **Key secondary endpoint:** Confirmed ORR^b

^aORR by independent review was a primary endpoint in the randomized HR+ cohorts
^bORR by investigator review was a secondary endpoint in the randomized HR+ cohorts

HR+ non-randomized N+F+T w prior CDK4/6i: Efficacy findings

Characteristics	Non-randomized (N+F+T, n=26)
Objective response (confirmed CR/PR)^a, n (%)	12 (46.2)
CR	0
PR	12 (46.2)
Best overall response (confirmed or unconfirmed PR or CR), n (%)	15 (57.7)
Median DOR^b, months (95% CI)	14.4 (6.4–NE)
Clinical benefit^c, n (%)	15 (57.7)
Median PFS, months (95% CI)	8.2 (4.0–15.1)
Median duration of treatment, months (range)	8.7 (1.0–22.1)

Data cut-off: 10 September 2021. Tumor response based on: investigator tumor assessments (RECIST v1.1) for HR+ cohorts

CR, confirmed response; PR, partial response; CI, confidence interval; DOR, duration of response; NE, not estimable; PFS, progression-free survival

^aObjective response defined as either a complete or partial response that is confirmed no less than 4-weeks after the criteria for response are initially met; ^bKaplan-Meier analysis

^cClinical benefit is defined as confirmed CR or PR or stable disease (SD) for ≥24 weeks (within +/- 7-day visit window)

HR+ randomized cohorts: Efficacy findings

Neratinib appears to be critical for inhibition of *HER2* mutations

Randomized cohort

Characteristics	(N+F+T, n=7)	(F+T, n=7)	(F, n=7)
Objective response (confirmed CR/PR)^a, n (%)	2 (28.6)	0	0
CR	1 (14.3)	0	0
PR	1 (14.3)	0	0
Best overall response (confirmed or unconfirmed PR or CR), n (%)	3 (42.9)	0	0
Median DOR^b, months (95% CI)	NE	NE	NE
Clinical benefit^c, n (%)	2 (28.6)	0	0
Median PFS, months (95% CI)	6.2 (2.1–NE)	3.9 (1.9–4.1)	4.1 (1.6–4.1)
Median duration of treatment, months (range)	5.0 (0.7–13.2)	3.5 (0.8–4.1)	2.1 (0.7–4.1)

Data cut-off: 10 September 2021. Tumor response based on: investigator tumor assessments (RECIST v1.1) for HR+ cohorts

CR, confirmed response; PR, partial response; CI, confidence interval; DOR, duration of response; NE, not estimable; PFS, progression-free survival

^aObjective response defined as either a complete or partial response that is confirmed no less than 4-weeks after the criteria for response are initially met; ^bKaplan-Meier analysis

^cClinical benefit is defined as confirmed CR or PR or stable disease (SD) for ≥24 weeks (within +/- 7-day visit window)

TNBC cohort: baseline characteristics and efficacy

Baseline characteristics	TNBC (N+T, n=18)
ECOG performance status, n (%)	
0	9 (50.0)
1	9 (50.0)
Histological type, n (%)	
Lobular	3 (16.7)
Ductal	7 (38.9)
Mixed Ductal and Lobular	0
Other	8 (44.4)
Median number of prior anti-cancer regimens (range)	3.5 (1–7)

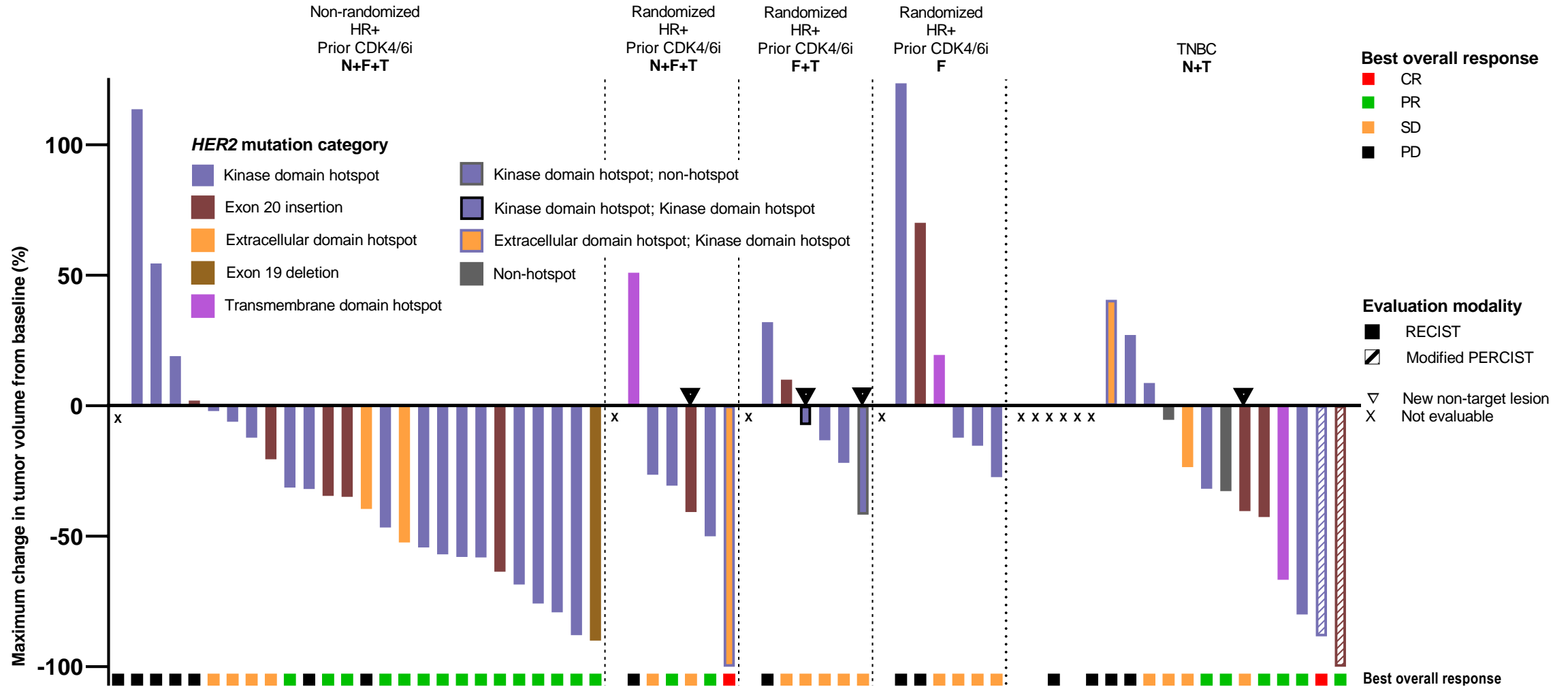
Efficacy	TNBC (N+T, n=18)
Objective response (confirmed CR/PR)^a, n (%)	6 (33.3)
CR	1 (5.6)
PR	5 (27.8)
Best overall response (confirmed or unconfirmed PR or CR), n (%)	7 (38.9)
Median DOR^b, months (95% CI)	NE
Clinical benefit^c, n (%)	7 (38.9)
Median PFS, months (95% CI)	6.2 (2.1–8.2)
Median duration of treatment, months (range)	4.4 (0.3–15.4)

Data cut-off: 10 September 2021. Tumor response based on: investigator tumor assessments (RECIST v1.1 or modified PERCIST for TNBC cohort; TNBC cohort analysis ongoing CR, confirmed response; PR, partial response; CI, confidence interval; DOR, duration of response; NE, not estimable; PFS, progression-free survival

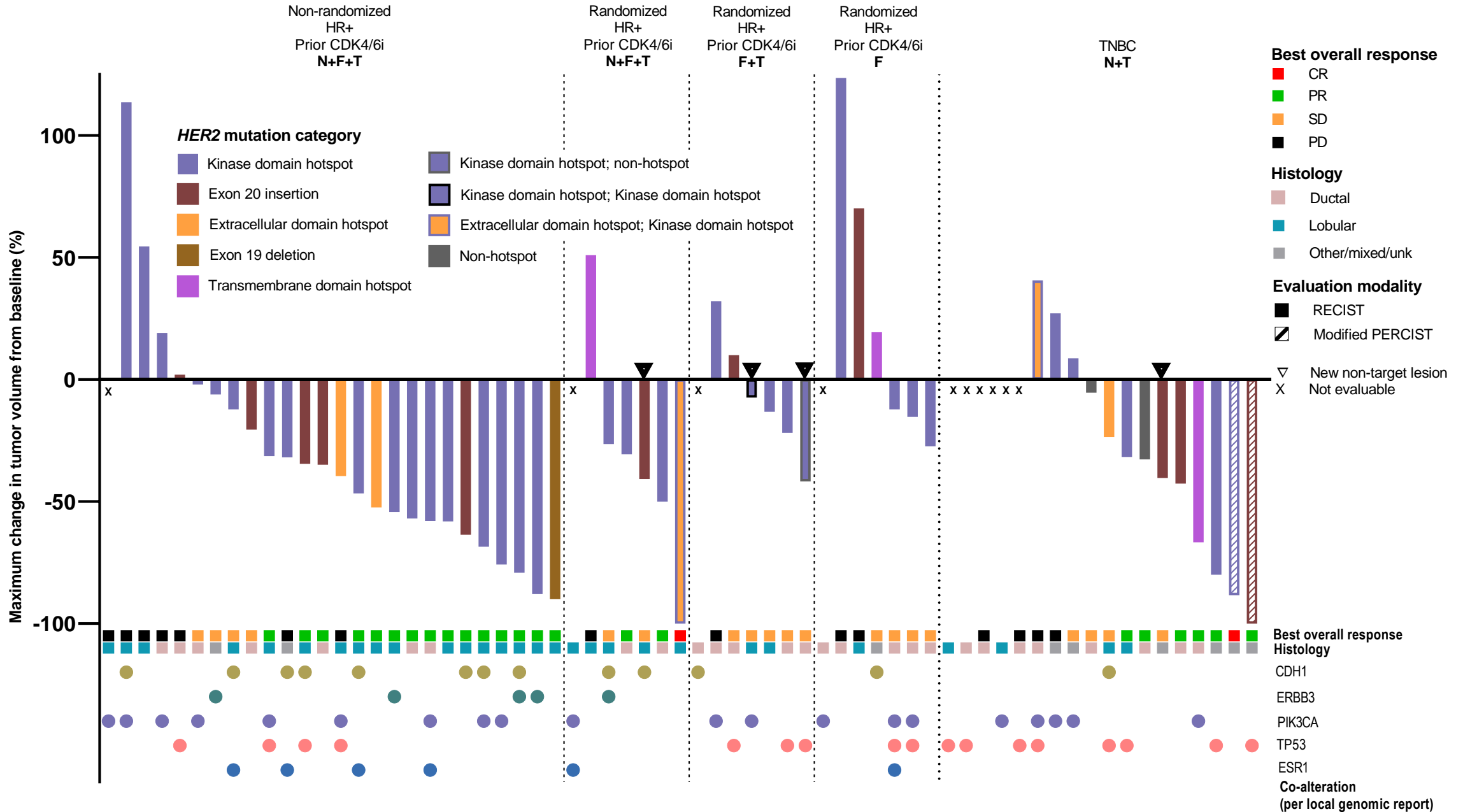
^aObjective response defined as either a complete or partial response that is confirmed no less than 4-weeks after the criteria for response are initially met; ^bKaplan-Meier analysis

^cClinical benefit is defined as confirmed CR or PR or stable disease (SD) for ≥24 weeks (within +/- 7-day visit window)

Change in tumor size (target lesion) and characteristics



Change in tumor size (target lesion) and characteristics



Conclusions/Next Steps

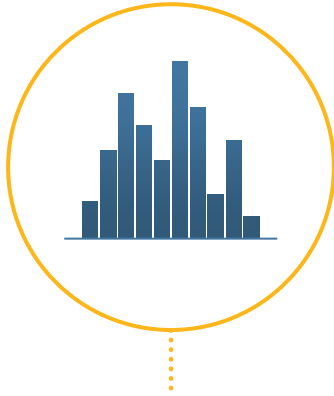
- The combination of N+F+T demonstrated encouraging clinical activity in patients with heavily pretreated HR+, HER2-negative, *HER2*-mutant MBC who had previously received CDK4/6:
 - Objective response rate 42.4% (1 CR and 13 PRs); median PFS 7.0 months, n=33
- Following guidance from the Independent Data Monitoring Committee, the F+T and F arms of SUMMIT were closed
- Following closure of the F+T and F arms of the randomized cohort, additional patients with HR+, HER2-negative, *HER2*-mutant MBC and prior CDK4/6i have been enrolled, totaling n=50 who have received N+F+T
 - Safety and efficacy outcomes of these 50 patients will be evaluated and discussed with the FDA in 2022
- The N+T combination showed promising clinical activity in heavily pretreated *HER2*-mutant TNBC:
 - Objective response rate 33.3% (1 CR and 5 PRs); median PFS 6.2 months

SUMMIT

Cervical Cancer Cohort

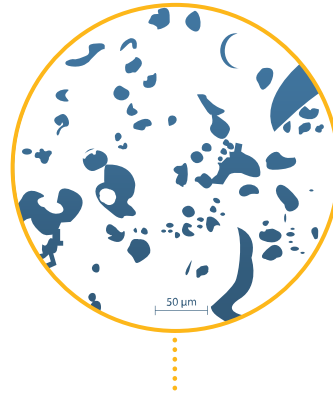


Characteristics of *HER2*-Mutant Cervical Cancer



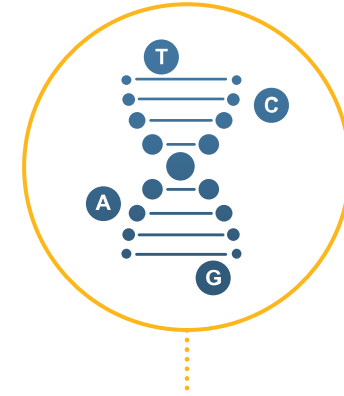
Incidence

- 5% metastatic cervical cancers
- May be negatively prognostic for survival



Histology

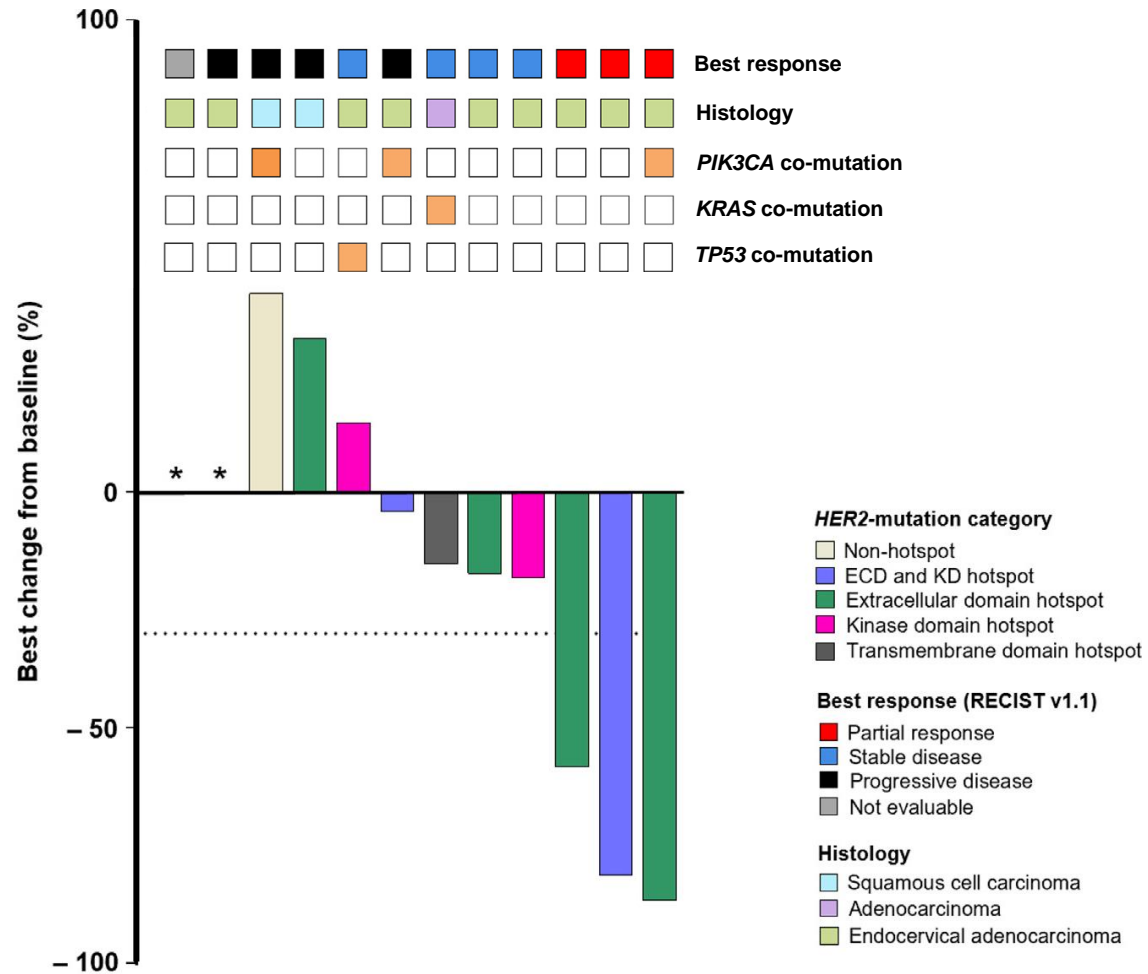
- Enriched in adenocarcinomas
- High occurrence in HPV+ tumors



Genomics

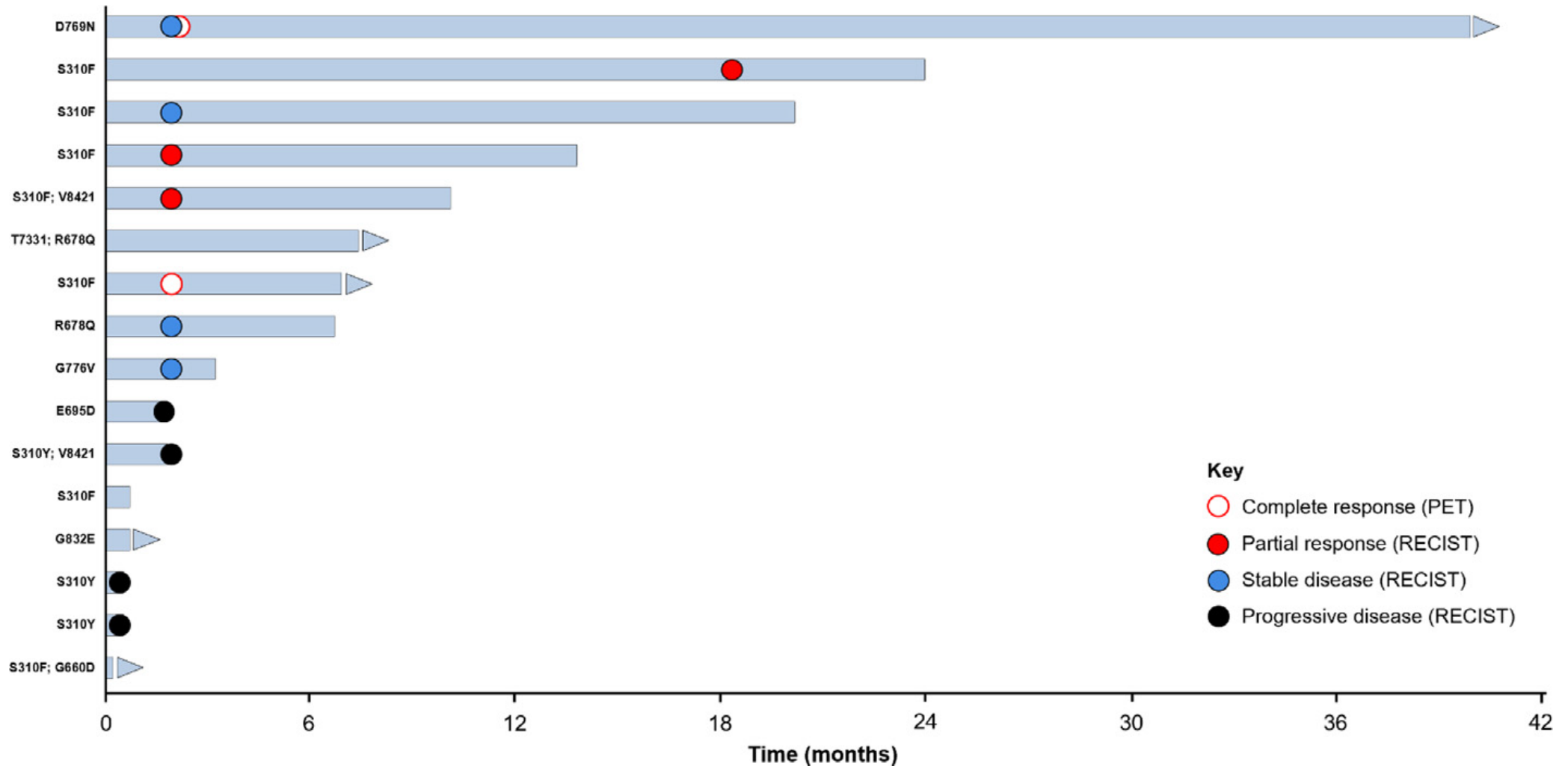
- Most common *HER2*^{mut} is S310 extracellular domain hotspot mutation
- Usually exclusive to *HER2* amplifications
- Most common co-mutations include *TP53*, *PIK3CA*

Neratinib Monotherapy Results Published in Gynecologic Oncology



Gynecologic Oncology, 2020

Neratinib Monotherapy Results Published in Gynecologic Oncology



Gynecologic Oncology, 2020

SUMMIT (PUMA-NER-5201) Basket Trial

EGFR exon 18 lung cancer cohort update



EGFR Exon 18-Mutant Lung Cancer Cohort Receiving Neratinib Monotherapy: Baseline Demographics and Patient Characteristics

Patient characteristics	Safety/Efficacy evaluable patients (n=11)
Median (range), years	67 (56-83)
<65 years, n (%)	4 (36)
≥65 years, n (%)	7 (64)
Gender, n (%)	
Female	5 (45)
Male	6 (55)
ECOG performance status, n (%)	
0	5 (45)
1	6 (55)
Race, n (%)	
Black or African American	1 (9)
White	10 (91)
Median number of prior therapies in metastatic/locally advanced setting (range)	2 (1 – 3)
Prior checkpoint inhibitor, n (%)	3 (27)
Prior chemotherapy, n (%)	6 (55)
Prior tyrosine kinase inhibitor, n (%)	10 (91)
gefitinib/erlotinib (reversible 1 st gen EGFR TKI)	7 (58)
osimertinib (irreversible EGFR T790M TKI)	3 (25)
afatinib (irreversible pan-HER TKI)	2 (17)

Data cut-off: 21-Aug-2020

EGFR Exon 18-Mutant Lung Cancer Cohort Receiving Neratinib Monotherapy: Efficacy Summary

Parameter	Efficacy evaluable patients (n=11)	TKI Pre-Treated (n=10)
Objective response (confirmed), ^a n	4	4
CR	0	0
PR	4	4
Objective response rate, % (95% CI)	36 (11–69)	40 (12–74)
Best overall response, n	6	6
CR	0	0
PR	6	6
Best overall response rate, % (95% CI)	54 (23–83)	60 (26–88)
Median DOR, ^b months (95% CI)	7.5 (4.0–NE) (1.9*, 4.0, 7.5, 9.2*)	7.5 (4.0–NE) (1.9*, 4.0, 7.5, 9.2*)
Clinical benefit, ^c n	8	8
CR or PR	4	4
SD ≥16 weeks	4	4
Clinical benefit rate, % (95% CI)	73 (39–94)	80 (44–97)
Median PFS time to event, months (95% CI)	6.9^b (2.1–NA)	9.1 (3.7–NA)

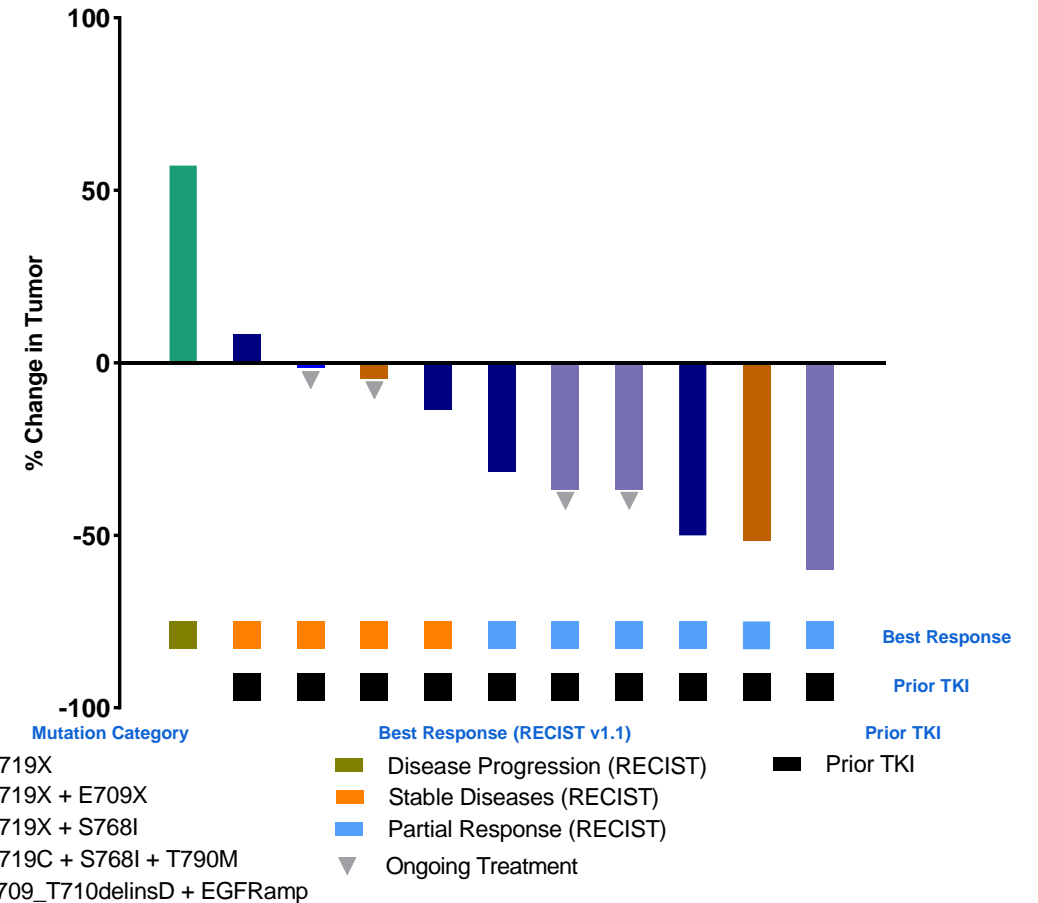
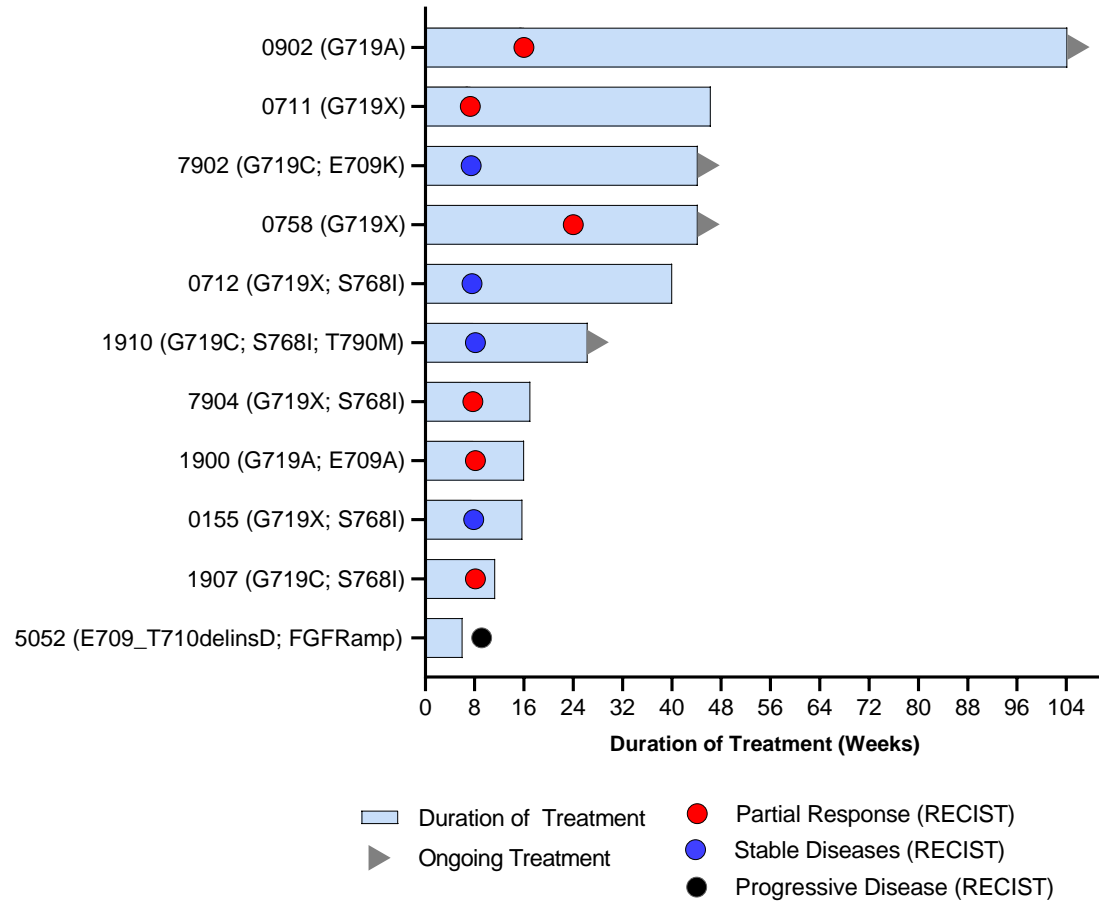
^a Objective response rate (ORR) is defined as either a complete or partial response that is confirmed no less than 4-weeks after the criteria for response are initially met

^b Kaplan-Meier analysis in safety population. ^c Clinical benefit rate (CBR) is defined as confirmed CR or PR or stable disease (SD) for ≥16 weeks (within +/- 7-day visit window)

DOR, duration of response; PFS, progression-free survival, * response ongoing

Data cut-off: 21-Aug-2020

EGFR Exon 18-Mutant Lung Cancer Cohort Receiving Neratinib Monotherapy: Treatment Duration, Best Response and Best Change in Tumor



Data cut-off: 21-Aug-2020

Historical Response Rates of Afatinib in NSCLC Patients With *EGFR* Exon 18 Mutations (G719X)

Table 3. Response Rates With Afatinib in Patients With NSCLC Harboring Uncommon Mutations

Mutation Type	CR, n (%)	PR, n (%)	SD, n (%)	PD, n (%)	DCR, n (%)	ORR, n (%)	DoR, Mo (95% CI)
EGFR TKI-naïve patients							
Major uncommon mutation (n = 110)	5 (4.5)	61 (55.5)	35 (31.8)	9 (8.2)	101 (91.8)	66 (60.0)	17.1 (11.0-20.8)
TKI-naïve patients → G719X (n = 55)	4 (7.3)	31 (56.4)	16 (29.1)	4 (7.3)	51 (92.7)	35 (63.4)	17.1 (10.3-22.0)
L861Q (n = 47)	0 (0.0)	28 (59.6)	14 (29.8)	5 (10.6)	42 (89.4)	28 (59.6)	13.8 (7.4-20.6)
S768I (n = 8)	1 (12.5)	4 (50.0)	3 (37.5)	0 (0.0)	8 (100.0)	5 (62.5)	NR (15.9-NR)
Compound (n = 35)	0 (0.0)	27 (77.1)	5 (14.3)	3 (8.6)	32 (91.4)	27 (77.1)	16.6 (13.8-18.7)
With major uncommon mutation (n = 23)	0 (0.0)	18 (78.3)	4 (17.4)	1 (4.3)	22 (95.7)	18 (78.3)	17.1 (14.7-NR)
Exon 20 insertion (n = 70)	2 (2.9)	15 (21.4)	41 (58.6)	12 (17.1)	58 (82.9)	17 (24.3)	11.9 (5.4-26.7)
T790M (n = 25)	0 (0.0)	6 (24.0)	13 (52.0)	6 (24.0)	19 (76.0)	6 (24.0)	4.7 (3.8-11.0)
Others (n = 23)	0 (0.0)	15 (65.2)	5 (21.7)	3 (13.0)	20 (87.0)	15 (65.2)	9.0 (3.5-11.9)
EGFR TKI-pretreated patients							
Major uncommon mutation (n = 32)	0 (0.0)	8 (25.0)	14 (43.8)	10 (31.3)	22 (68.8)	8 (25.0)	4.9 (2.0-18.0)
TKI-pre-treated patients → G719X (n = 19)	0 (0.0)	2 (10.5)	10 (52.6)	7 (36.8)	12 (63.2)	2 (10.5)	10.0 (2.0-18.0)
L861Q (n = 11)	0 (0.0)	5 (45.5)	3 (27.3)	3 (27.3)	8 (72.7)	5 (45.5)	4.4 (4.3-8.4)
S768I (n = 2)	0 (0.0)	1 (50.0)	1 (50.0)	0 (0.0)	2 (100.0)	1 (50.0)	NR
Compound (n = 21)	0 (0.0)	6 (28.6)	10 (47.6)	5 (23.9)	16 (76.2)	6 (28.6)	16.7 (9.9-21.8)
With major uncommon mutation (n = 8)	0 (0.0)	3 (37.5)	3 (37.5)	2 (25.0)	6 (75.0)	3 (37.5)	16.7 (9.9-16.7)
Exon 20 insertion (n = 21)	0 (0.0)	3 (14.3)	9 (42.9)	9 (42.9)	12 (57.1)	3 (14.3)	3.7 (2.7-10.1)
T790M (n = 64)	0 (0.0)	12 (18.8)	31 (48.4)	21 (32.8)	43 (67.2)	12 (18.8)	6.1 (2.6-7.9)
Others (n = 25)	0 (0.0)	9 (36.0)	8 (32.0)	8 (32.0)	17 (68.0)	9 (36.0)	6.3 (0.8-11.3)

CI, confidence interval; CR, complete response; DCR, disease control rate; DoR, duration of response; PD, progressive disease; ORR, overall response rate; PR, partial response; SD, stable disease; TKI, tyrosine kinase inhibitor; NR, not reported.

Milestones for Neratinib in *EGFR* Exon 18-Mutant Lung Cancer Cohort in SUMMIT Study

- The success criteria for the 1st stage and 2nd stage of the Simon's 2-stage design has been met
 - Enrollment in the 2nd stage is continuing up to a total of 30 patients
- Anticipate presentation of additional data from SUMMIT in patients with *EGFR* exon 18-mutant lung cancer in the first half of 2022
- Anticipate scheduling meeting with FDA to discuss potential accelerated approval strategy for patients with *EGFR* exon 18-mutant lung cancer who have been treated with a prior *EGFR* TKIs in 2022

Puma – Expected Milestones

- Conduct pre-NDA meeting with the FDA to discuss accelerated approval of neratinib in *HER2*-mutated HR+ breast cancer (H1 2022)
- Report Phase II data from cohort of patients in SUMMIT basket trial of neratinib in non-small cell lung cancer patients with *EGFR* exon 18 mutations (H1 2022)
- Conduct meeting with the FDA to discuss the potential for an accelerated approval pathway for neratinib in non-small cell lung cancer patients with *EGFR* exon 18 mutations who have been previously treated with an EGFR tyrosine kinase inhibitor (2022)
- Report Phase II TBCRC-022 trial from Cohort 4B and 4C of the combination of Kadcylla + neratinib in patients with HER2+ breast cancer with brain metastases who have previously been treated with Kadcylla (H2 2022)
- Report Phase II data from SUMMIT trial in cervical cancer patients with HER2 mutations (H2 2022)

Intellectual Property

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

Intellectual Property on *EGFR* T790M Mutations

- Issued claims in Europe, Asia, Australia (expires 2026)
 - Possibility to extend up to 5 years
- Issued claims in United States (expires 2026)
- Patent claims upheld after European Opposition Hearing (February 2014)
 - Patent claims upheld after Appeal to European Opposition (December 2020)
- Claims for the pharmaceutical composition comprising an irreversible EGFR inhibitor for use in treating cancer having a T790M mutation
- Claims for the pharmaceutical composition for use in the treatment of cancer including lung cancer and non-small cell lung cancer

Experienced Management Team

Alan H. Auerbach

Chairman, Chief Executive Officer, President, Founder

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

Jeff Ludwig

Chief Commercial Officer

– *Astellas, Amgen*

Maximo F. Nougues

Chief Financial Officer

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

Alvin Wong, Pharma.D.

Chief Scientific Officer

– *Proteolix, Novacea, Genentech*

Douglas Hunt

Senior Vice President, Regulatory Affairs

– *ArmaGen, Baxter Healthcare, Amgen*

Board of Directors

Alan H. Auerbach

Chairman, Chief Executive Officer, President, Founder, Puma Biotechnology, Inc.

Allison Dorval

CFO, Verve Therapeutics; Former CFO Voyager Therapeutics, Inc.; VP and Controller, Juniper Pharmaceuticals, Inc.

Michael Miller

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

Jay Moyes

Former CFO, Myriad Genetics

Adrian Senderowicz, M.D.

SVP & Chief Medical Officer, Constellation Pharmaceuticals; Ignyta; Sanofi; Astrazeneca; FDA (Division of Oncology Drug Products)

Brian Stuglich, R.Ph.

CEO, Verastem; Founder, Proventus Health Solutions; Former VP and Chief Marketing Officer, Eli Lilly Oncology

Troy Wilson, PhD, JD

CEO, Kura Oncology; CEO, Wellspring Biosciences; CEO Avidity Nanomedicines; Former CEO, President, Intellikine

Puma Biotechnology – Financial

- Currently trading on NASDAQ: PBYY
- Cash, cash equivalents and marketable securities at September 30, 2021: ~\$87.5 million
- Cash burn in Q3 2021: ~\$21.4million
- Note purchase agreement (July 2021)
 - Fund managed by Athyrium Capital Management
 - New agreement for \$125 million replaces loan of \$100 million
 - \$100 million drawn down to repay loan from Oxford Finance
 - Provides increased cash flexibility, improved short-term cash flow, ongoing clinical funding
- Shares issued and outstanding: 40.9 million

Company Highlights

- NERLYNX[®] – first HER2-directed drug approved by FDA for extended adjuvant treatment of early-stage HER2+ breast cancer in patients who have received prior trastuzumab
- NERLYNX[®] – first HER2-directed tyrosine kinase inhibitor approved in both early stage and metastatic HER2+ breast cancer
- Additional potential indications:
 - HER2+ metastatic breast cancer with brain metastases
 - HER2-mutated breast cancer
 - HER2-mutated cervical cancer
 - EGFR exon 18-mutated non-small cell lung cancer
 - HER2-mutated solid tumors
- Retain full U.S. commercial rights to NERLYNX[®]
- Large initial market opportunity with additional label expansion potential

Puma Biotechnology

H.C. Wainwright BIOCONNECT Virtual Conference

January 2022

