Puma Biotechnology

First Quarter 2026 Earnings Call

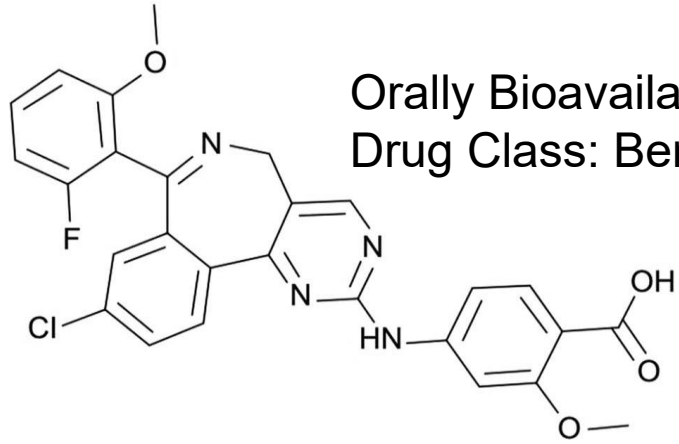
May 7, 2026

ALISCA™-Breast1 (PUMA-ALI-1201) Interim Analysis

May 7, 2026

Alisertib (MLN 8237)

Aurora Kinase A (AURKA) inhibitor

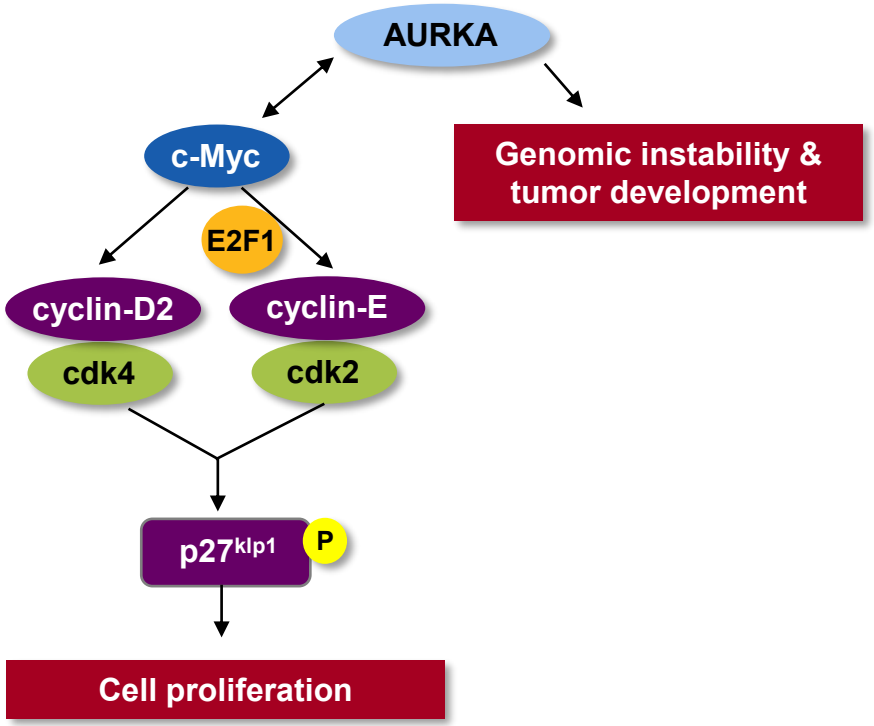


Orally Bioavailable
Drug Class: Benzazepine

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

AURKA and c-Myc Co-regulate Each Other

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



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

Naso FD Oncogene 2021, Tang A Oncotarget 2017

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

Key inclusion criteria:

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

Stratification factors

Investigator selected subclass of endocrine partner:

- **AI** (anastrozole, exemestane, letrozole)
- **SERD** (fulvestrant) OR
- **SERM** (tamoxifen)

1:1:1 RANDOMIZATION

N = up to 150

Arm 1
Alisertib 50 mg BID on Days 1-3, 8-10, 15-17 of a 28-day cycle + Endocrine

Arm 2
Alisertib 40 mg BID on Days 1-3, 8-10, 15-17 of a 28-day cycle + Endocrine

Arm 3
Alisertib 30 mg BID on Days 1-3, 8-10, 15-17 of a 28-day cycle + Endocrine

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

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

ALISCA™-Breast1 Summary of Prior Metastatic Anti-cancer Therapy

	50 mg BID (N=54)	40 mg BID (N=55)	30 mg BID (N=55)	Total (N=164)
Subjects with metastatic anti-cancer medication – n (%)	50 (92.6)	51 (92.7)	51 (92.7)	152 (92.7)
Prior metastatic endocrine – n (%)	50 (92.6)	51 (92.7)	51 (92.7)	152 (92.7)
Prior metastatic CDK4/6i – n (%)	47 (87.0)	50 (90.9)	51 (92.7)	148 (90.2)
Prior lines of treatment				
1	0	1 (1.8)	1 (1.8)	2 (1.2)
2	29 (53.7)	27 (49.1)	35 (63.6)	91 (55.5)
3	20 (37.0)	16 (29.1)	11 (20.0)	47 (28.7)
4	2 (3.7)	5 (9.1)	2 (3.6)	9 (5.5)
5	0	1 (1.8)	1 (1.8)	2 (1.2)
Missing	3 (5.6)	5 (9.1)	5 (9.1)	13 (7.9)

Safety

Alisertib Grades 3-4 TEAEs in Subjects with MBC

	TBCRC041		ALISCA™-Breast1 Alisertib + endocrine		
	Alisertib 50 mg BID (n=46)[1]	Alisertib + Fulvestrant 50 mg BID (n=45)[1]	50 mg BID (n=52)[2]	40 mg BID (n=49)[2]	30 mg BID (n=50)[2]
Neutropenia	19 (41.3)	19 (42.2)	14 (26.9)	5 (10.2)	4 (8.0)
Anemia	8 (17.4)	4 (8.9)	2 (3.8)	0	1 (2.0)
Thrombocytopenia	3 (6.5)	2 (4.4)	1 (1.9)	1 (2.0)	1 (2.0)
Febrile neutropenia	1 (2.2)	2 (4.4)	2 (3.8)	0	0
Diarrhea	NR	NR	0	1 (2.0)	0
Somnolence	NR	NR	1 (1.9)	0	0
Stomatitis	1 (2.2)	1 (2.2)	1 (1.9)	0	0

NR=Not reported
[1]Haddad, et. al. JAMA Oncology, 2023. [2]Source: Data Extract

Efficacy

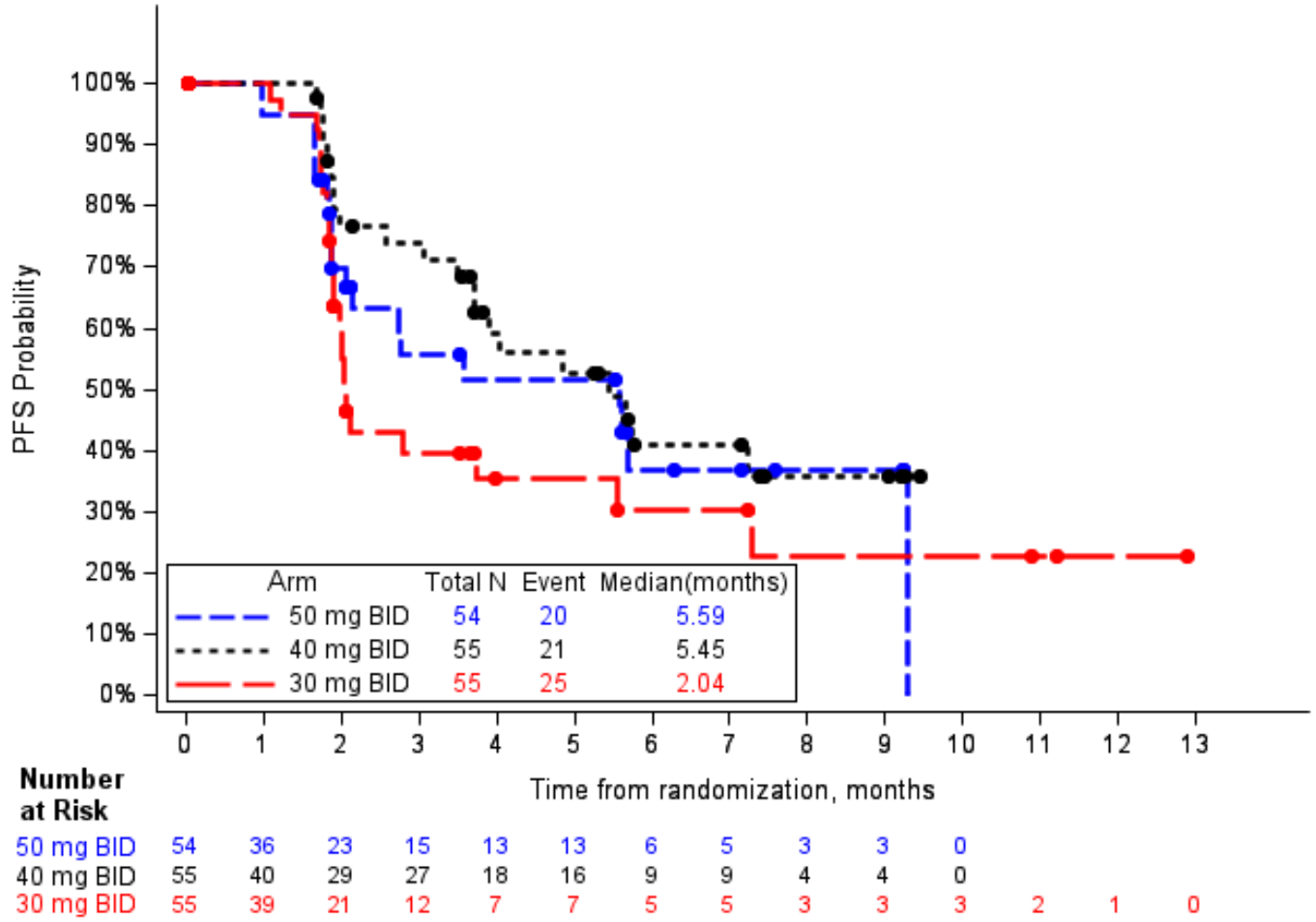
ALISCA™-Breast1 Summary of Clinical Benefit[1]

	50 mg BID (N=38)	40 mg BID (N=40)	30 mg BID (N=40)
Best overall response[a] - n (%)			
Complete response (CR)	0	0	0
Partial response (PR)	7 (18.4)	8 (20.0)	2 (5.0)
Stable disease (SD)	16 (42.1)	22 (55.0)	15 (37.5)
Non-CR/Non-PD	0	1 (2.5)	0
Disease progression (PD)	14 (36.8)	8 (20.0)	21 (52.5)
Not evaluable (NE)	0	0	0
Unavailable	1 (2.6)	1 (2.5)	2 (5.0)
Clinical benefit - n (%)			
Confirmed complete response (CR)	0	0	0
Confirmed partial response (PR)	4 (10.5)	5 (12.5)	1 (2.5)
Stable Disease (SD) ≥ 24 weeks	9 (23.7)	8 (20.0)	6 (15.0)

[a] Best overall response (BOR) is not confirmed.
[1]Subjects that have at least one post-baseline scan population: include all subjects in ITT with at least one post-baseline scan, or ended treatment or died before they got a scan.

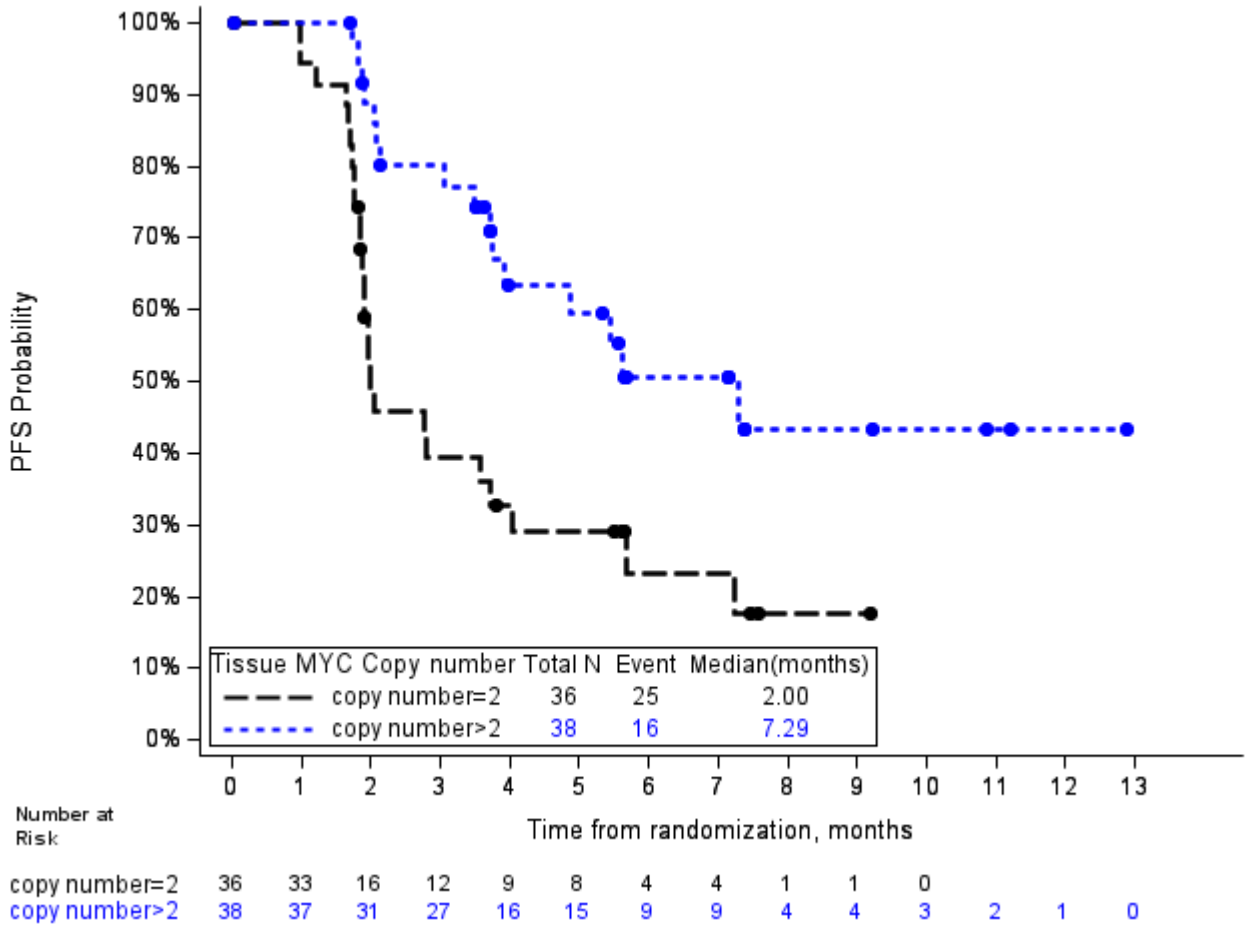
ALISCA™-Breast1 PFS – ITT population

Progression Free Survival

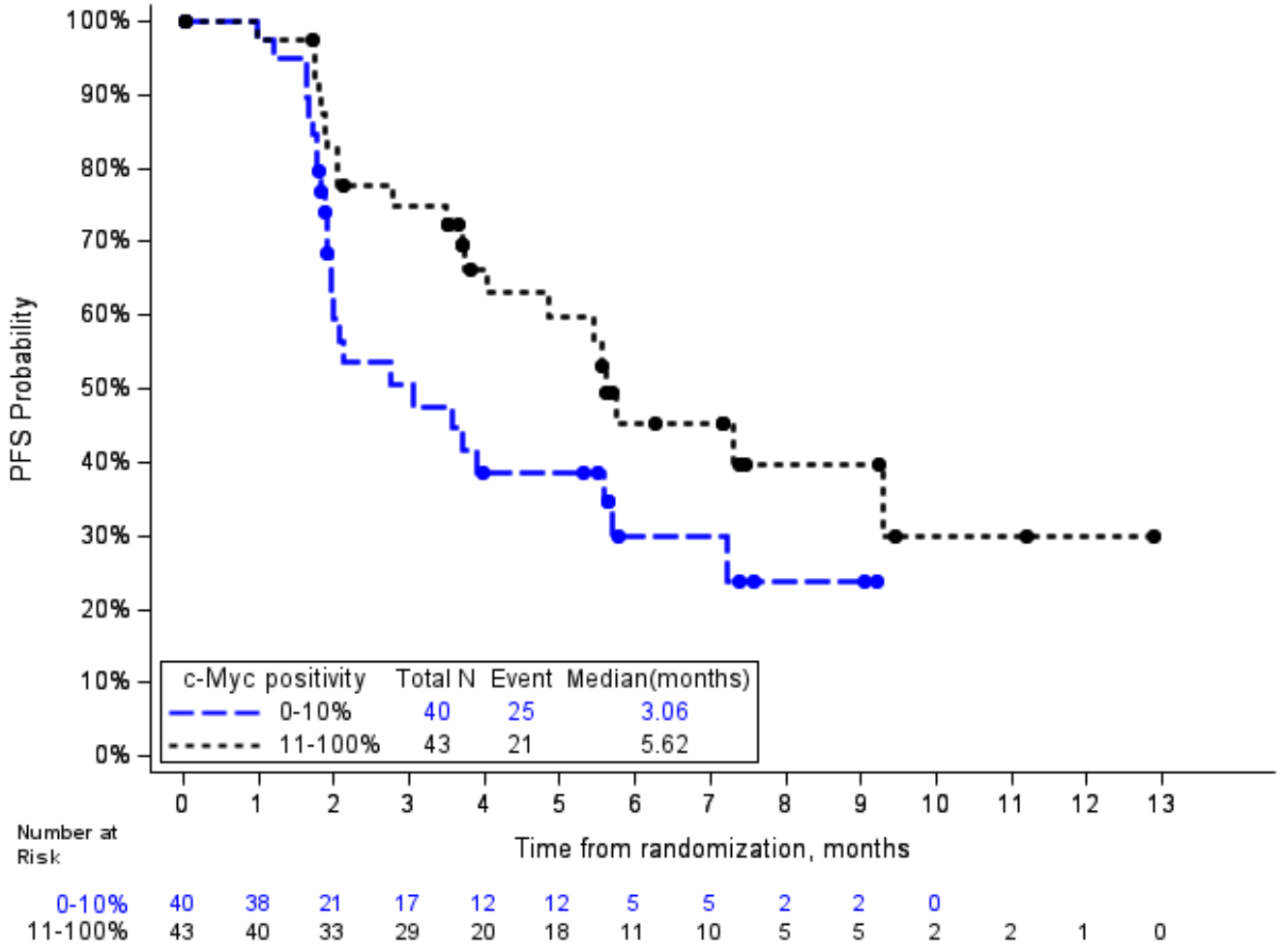


Biomarker

ALISCA™-Breast1 PFS *MYC* Copy Number

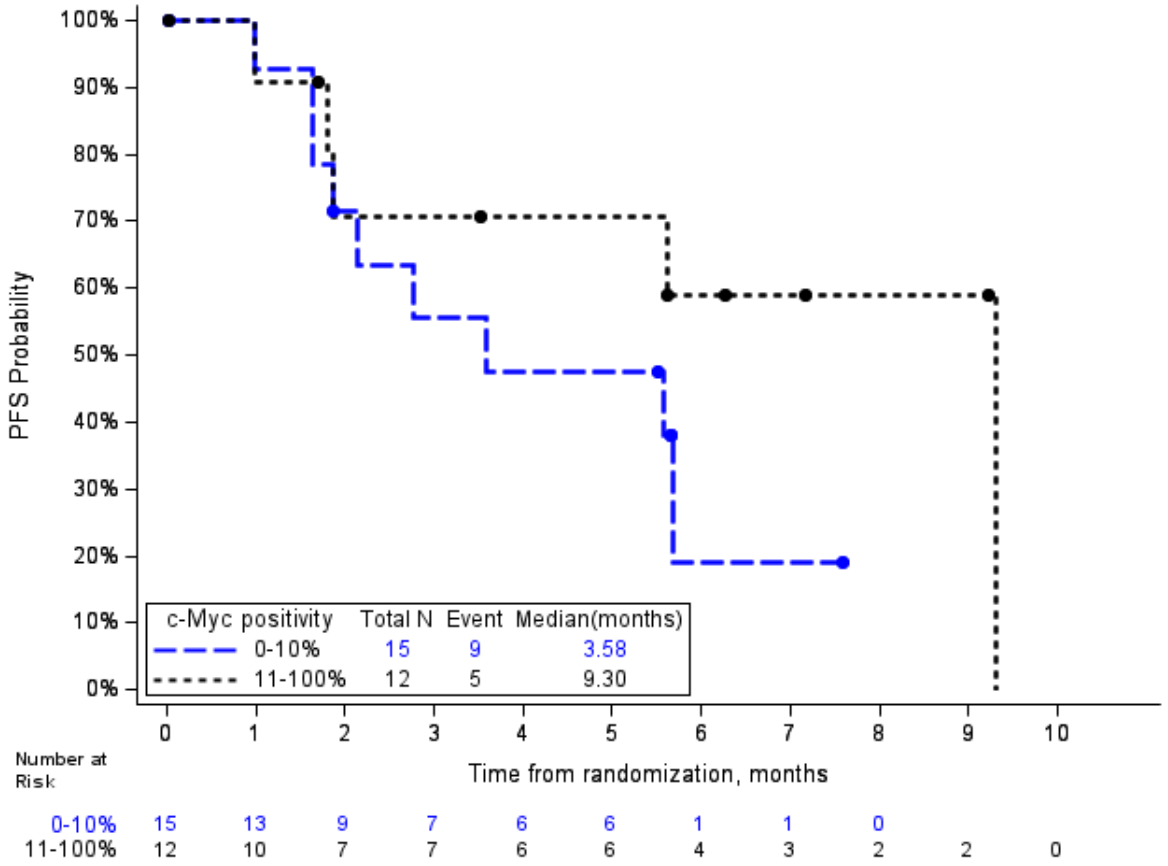


ALISCA™-Breast1 PFS by c-Myc % Positive Cells

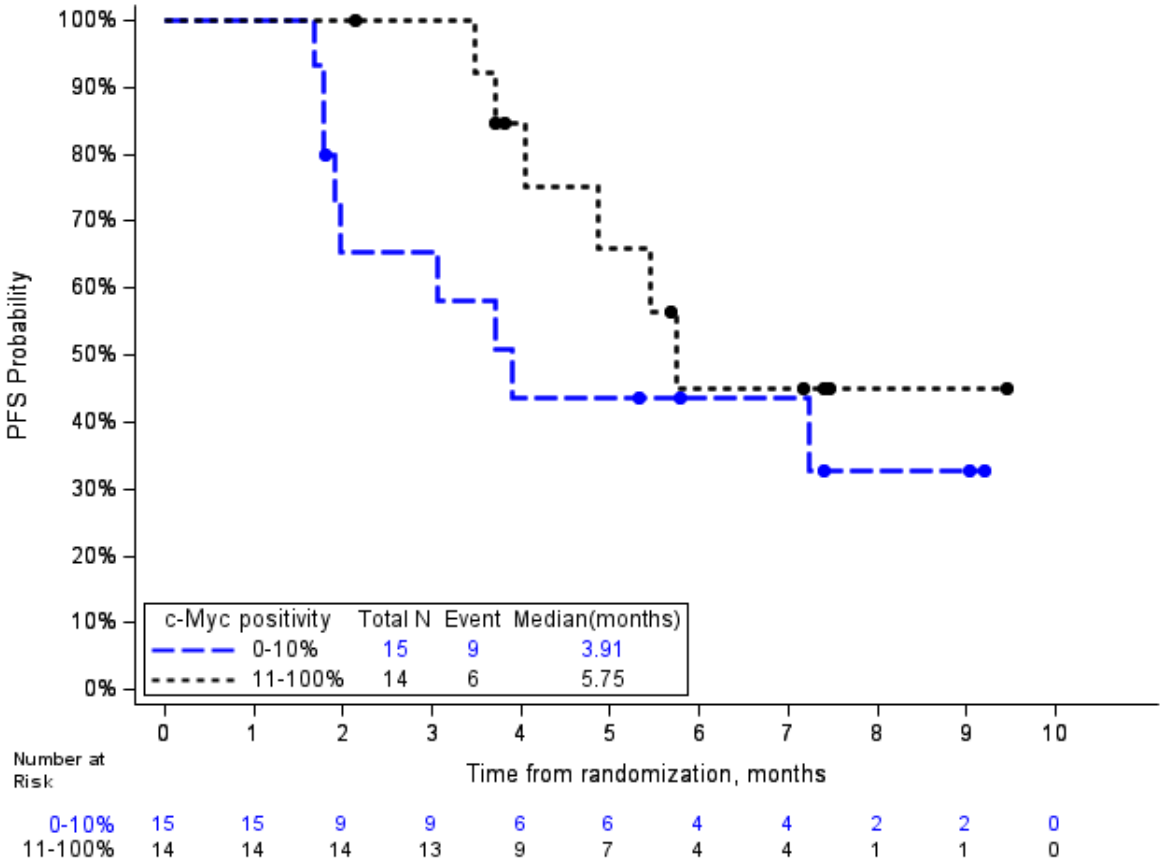


ALISCA™-Breast1 PFS by c-Myc % Positive Cells by Treatment Group

50mg BID

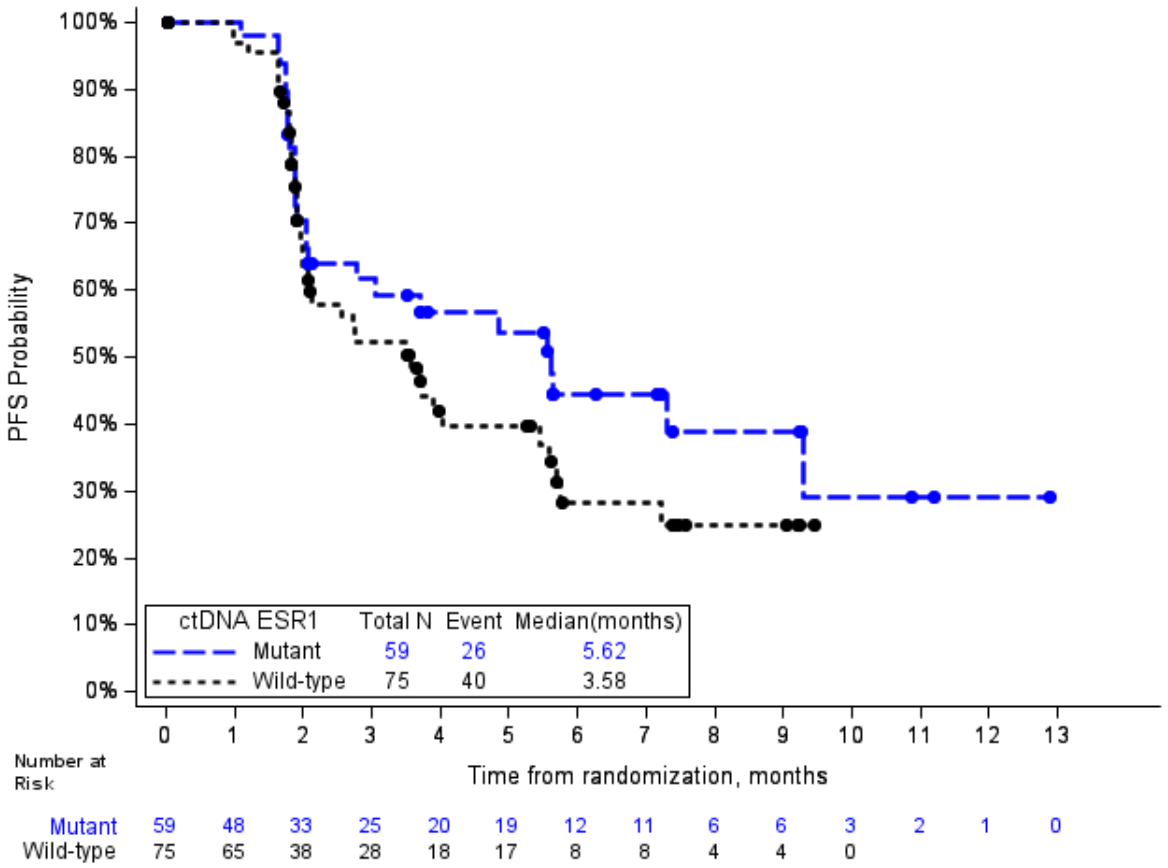


40mg BID

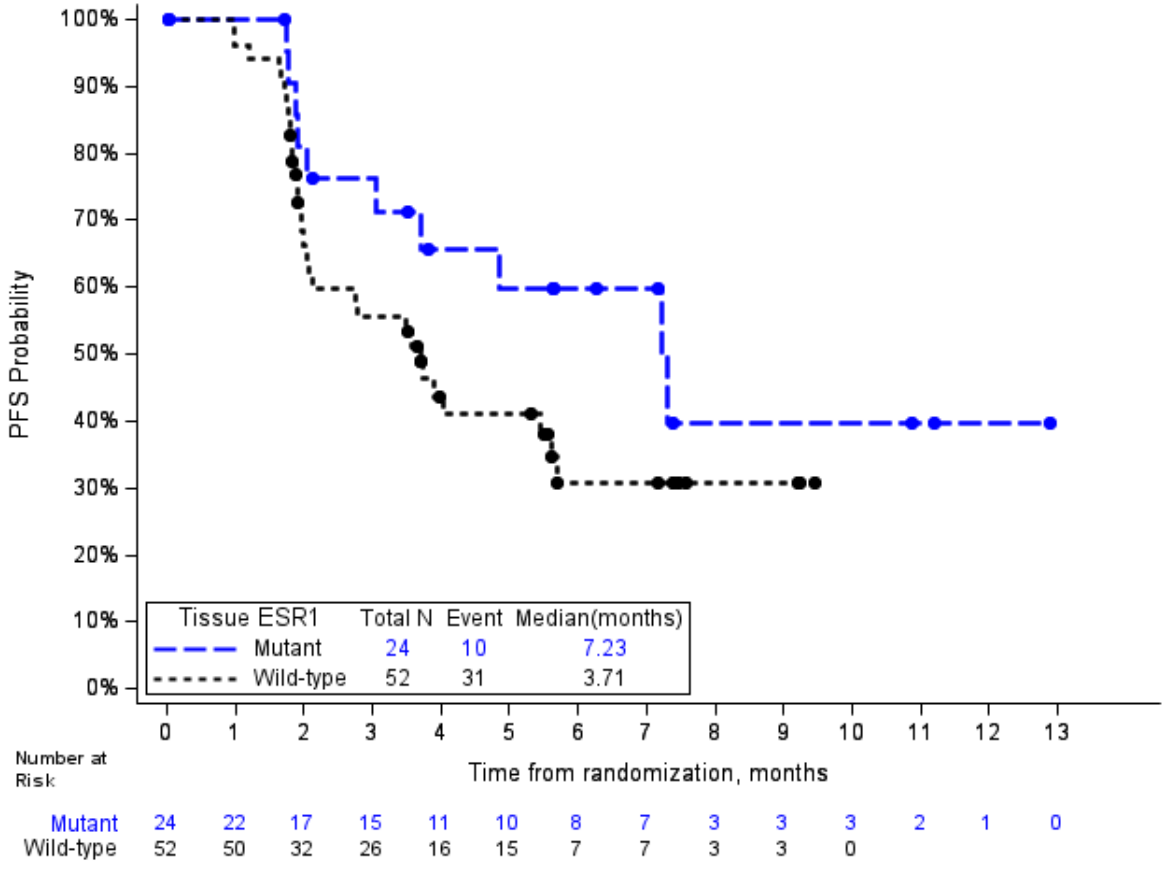


ALISCA™-Breast1 PFS *ESR1* Mutation Status

ctDNA

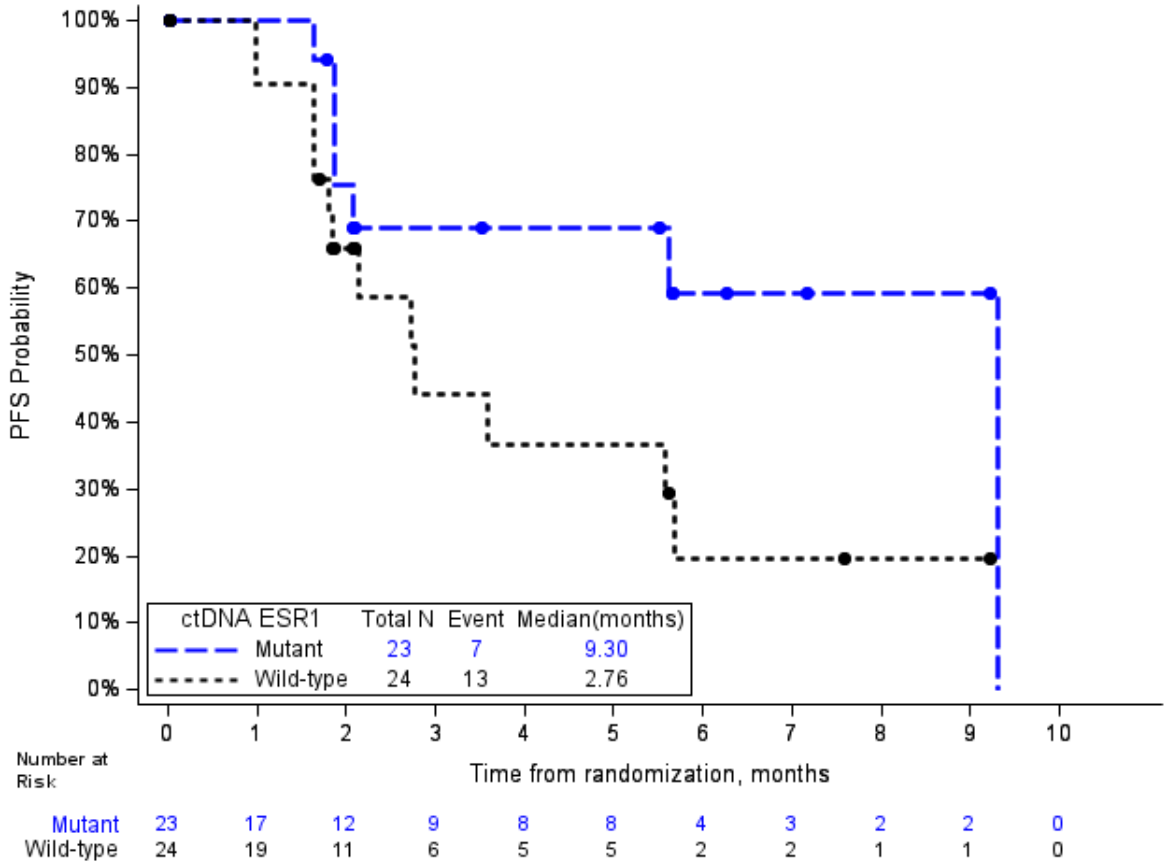


tissue

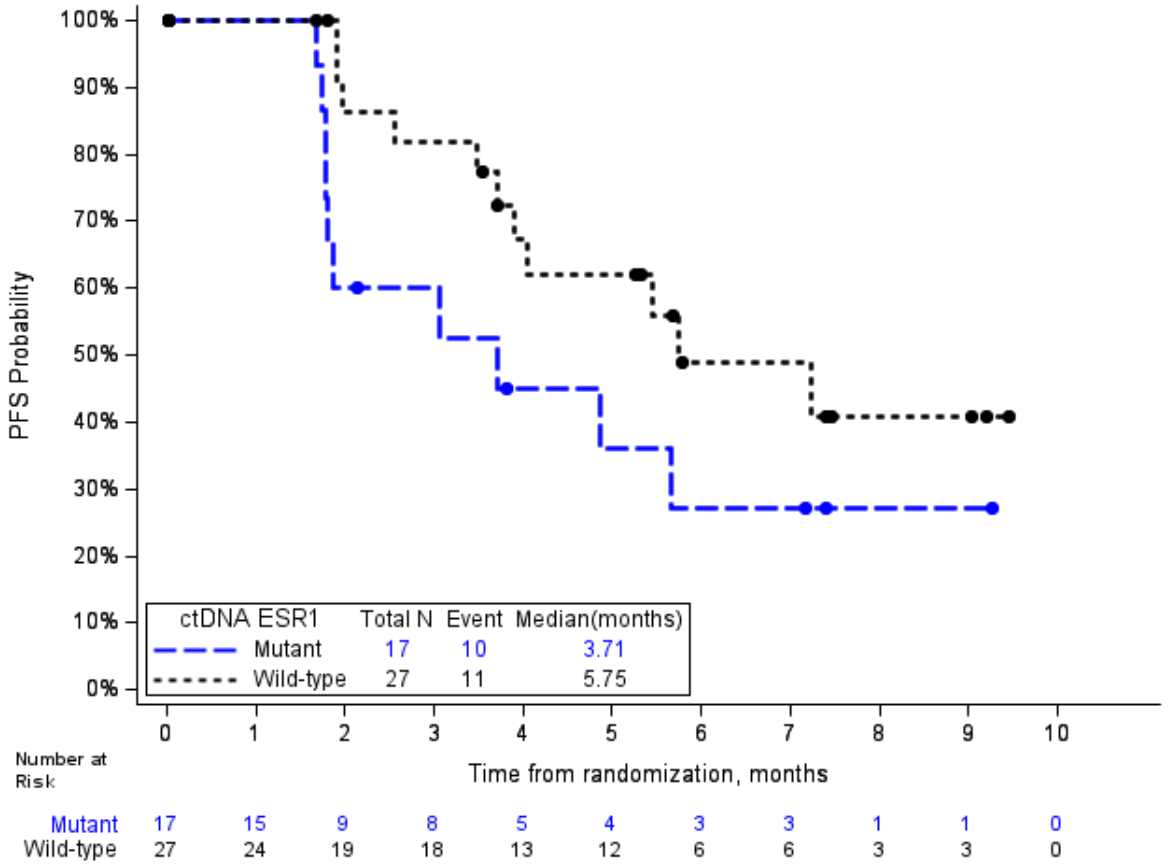


ALISCA™-Breast1 PFS by *ESR1* Mutation Status by Treatment Group – ctDNA

50mg BID

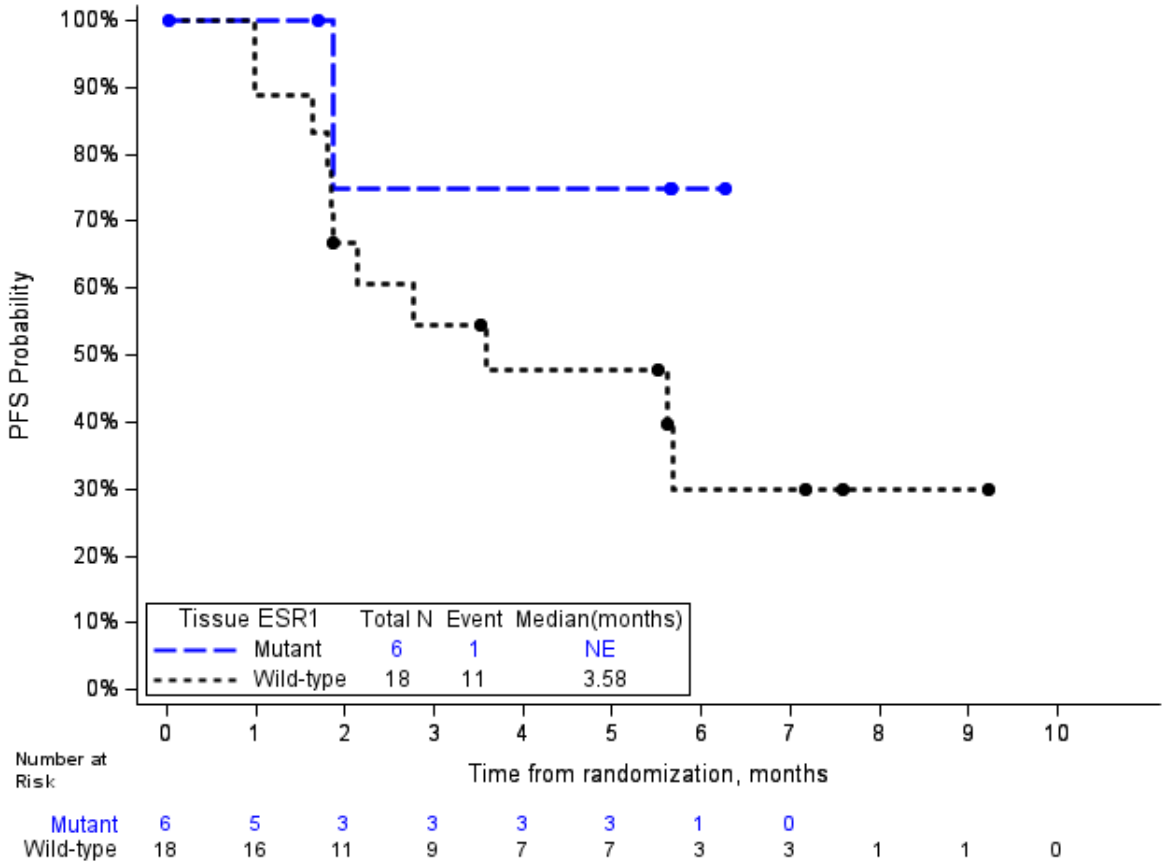


40mg BID

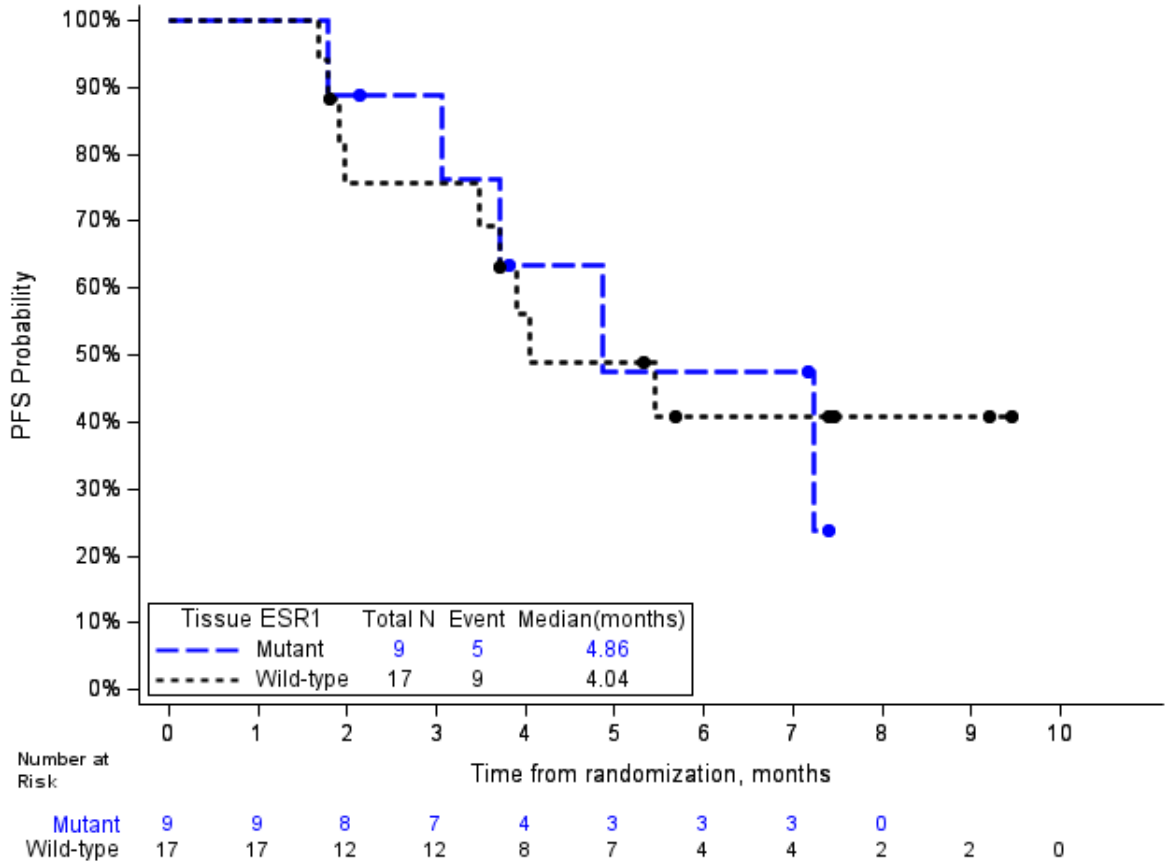


ALISCA™-Breast1 PFS by *ESR1* Mutation Status by Treatment Group – Tissue

50mg BID

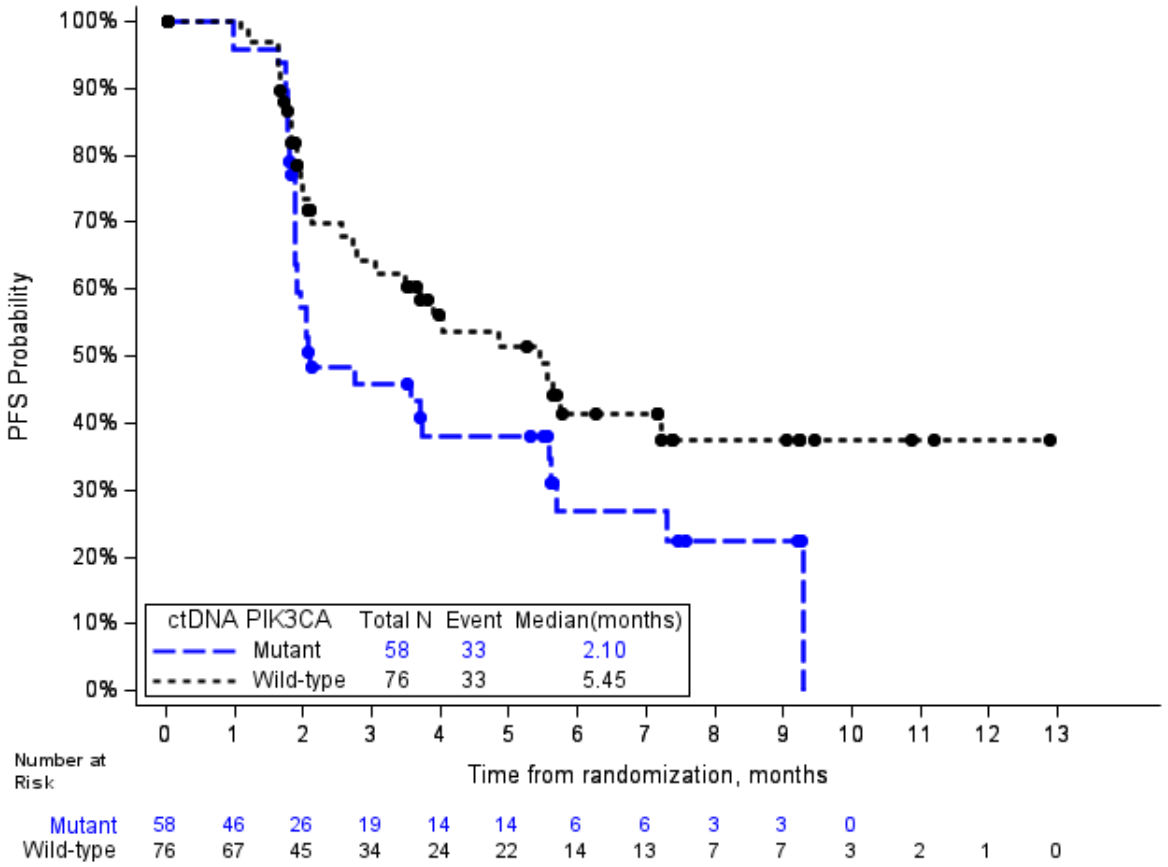


40mg BID

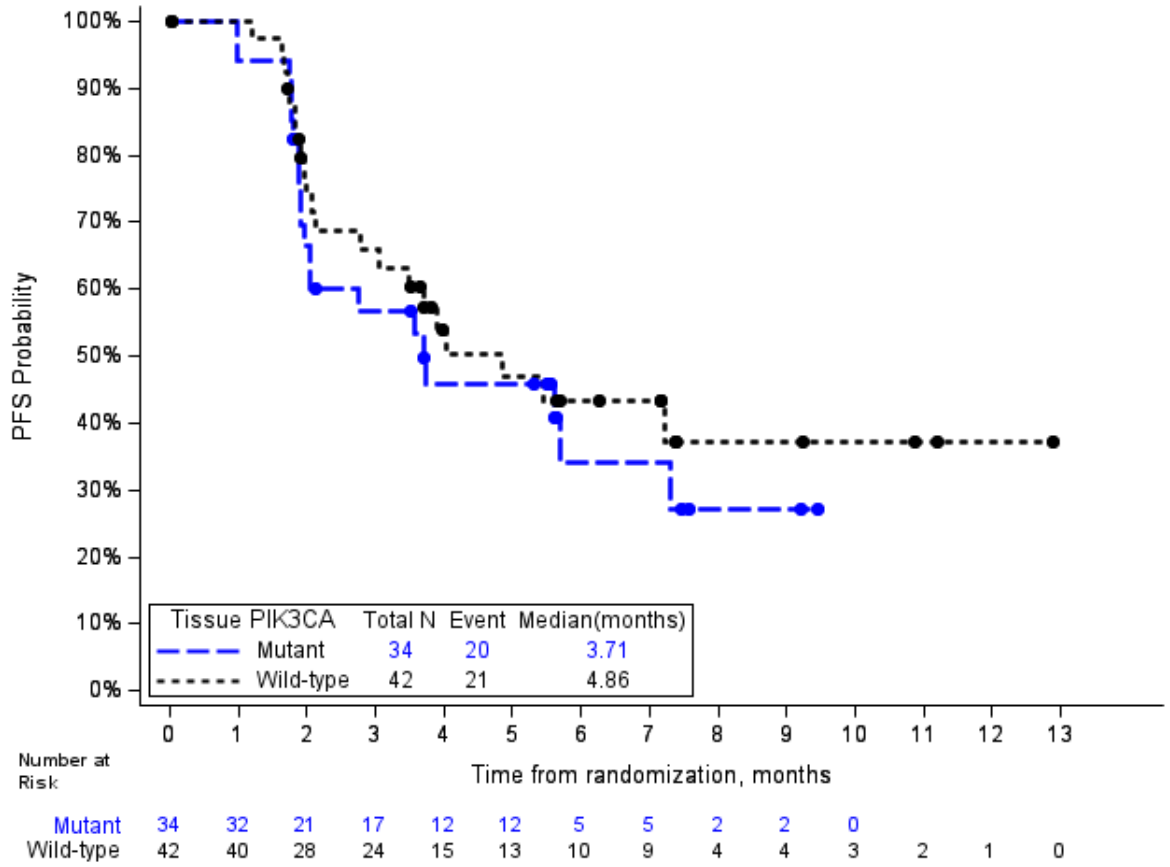


ALISCA™-Breast1 PFS *PIK3CA* Mutation Status

ctDNA

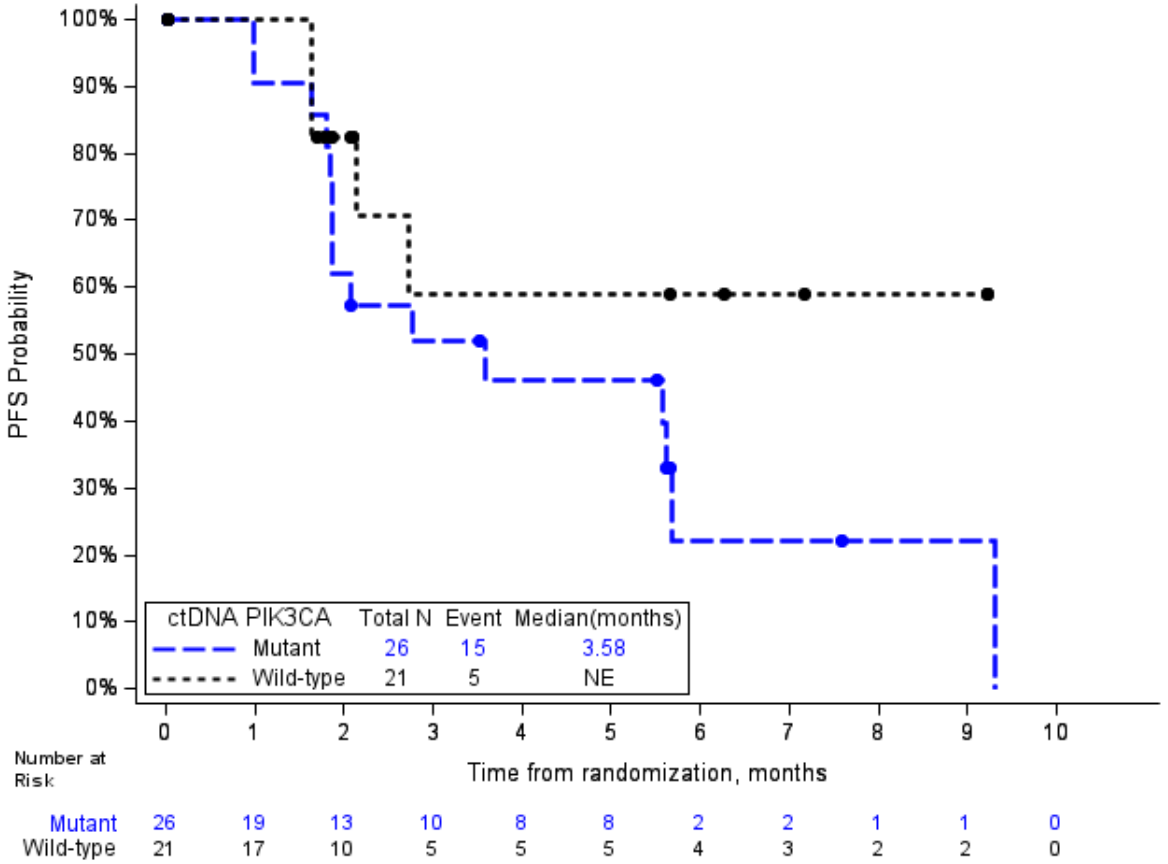


tissue

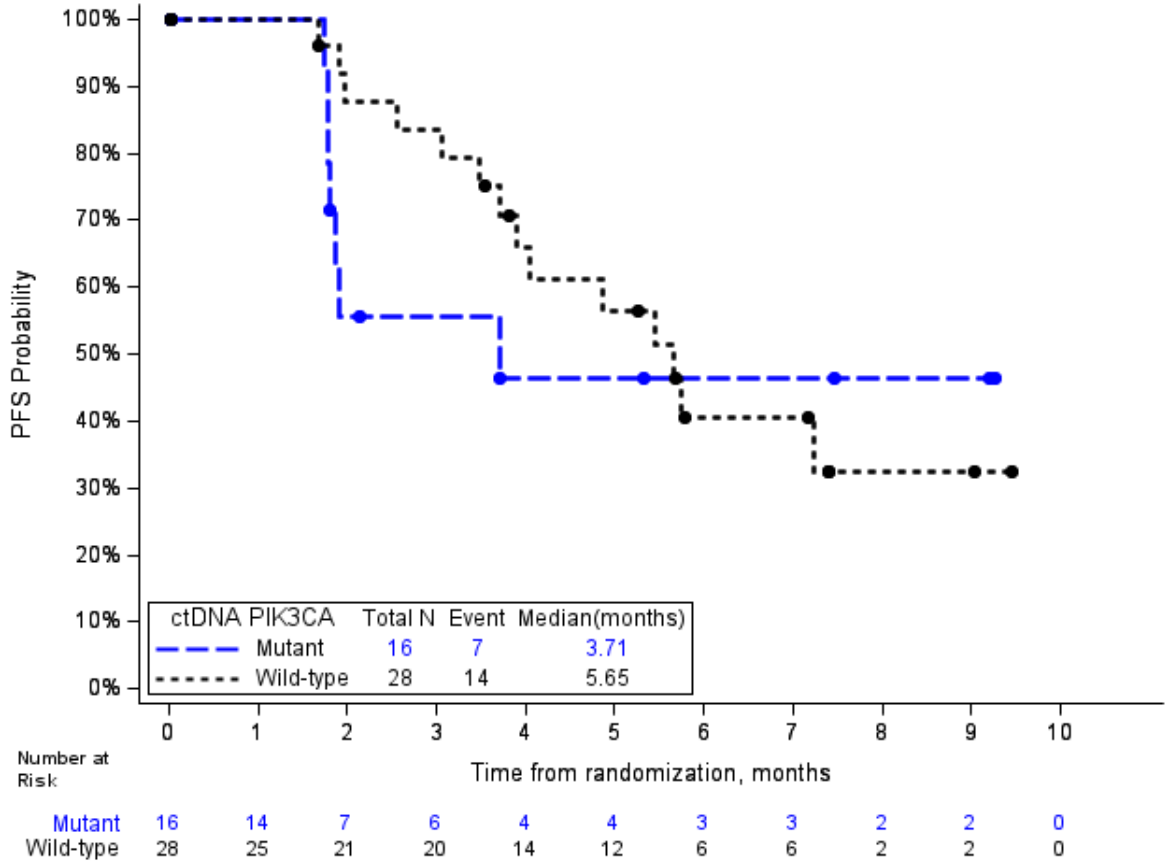


ALISCA™-Breast1 PFS by *PIK3CA* Mutation Status by Treatment Group – ctDNA

50mg BID

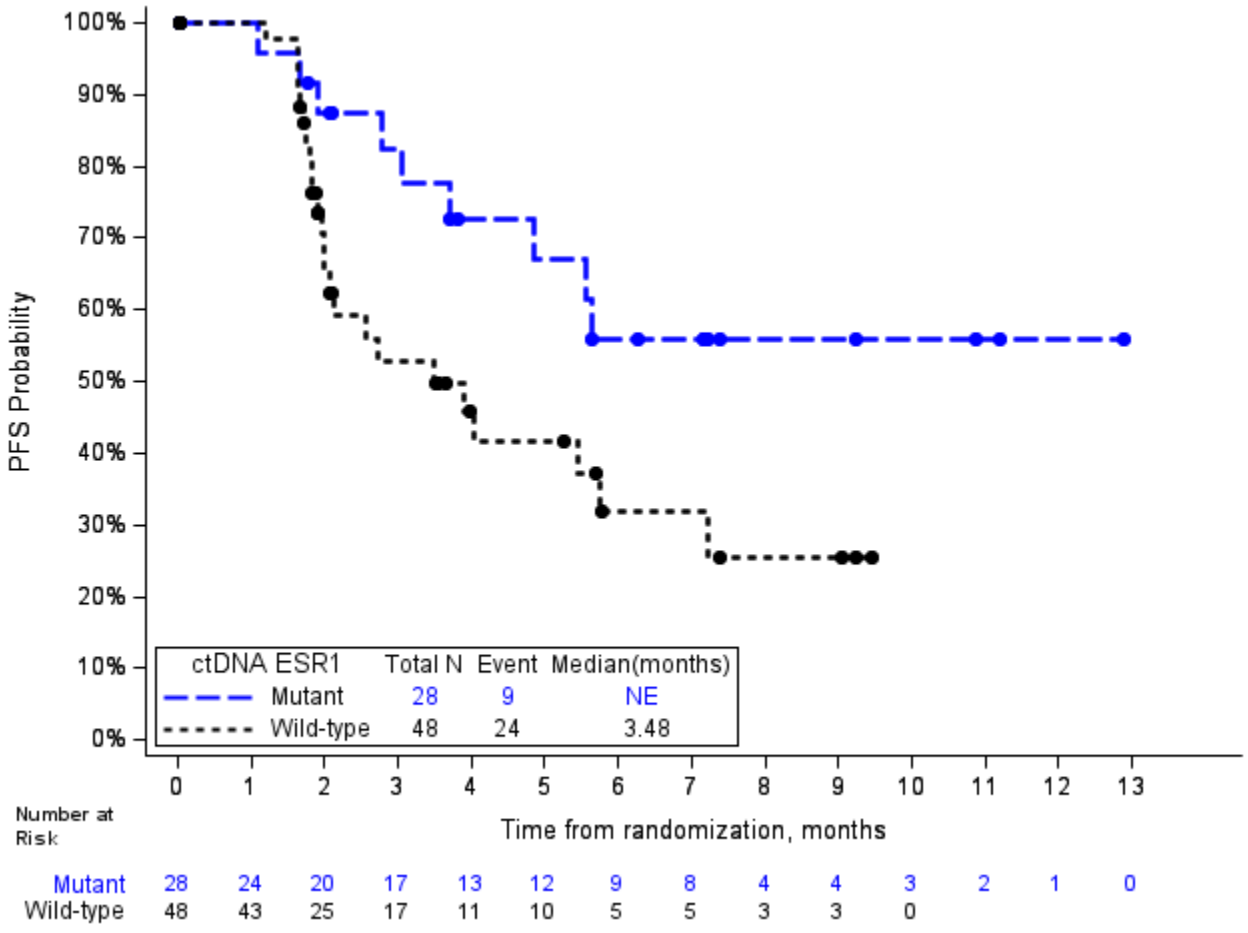


40mg BID

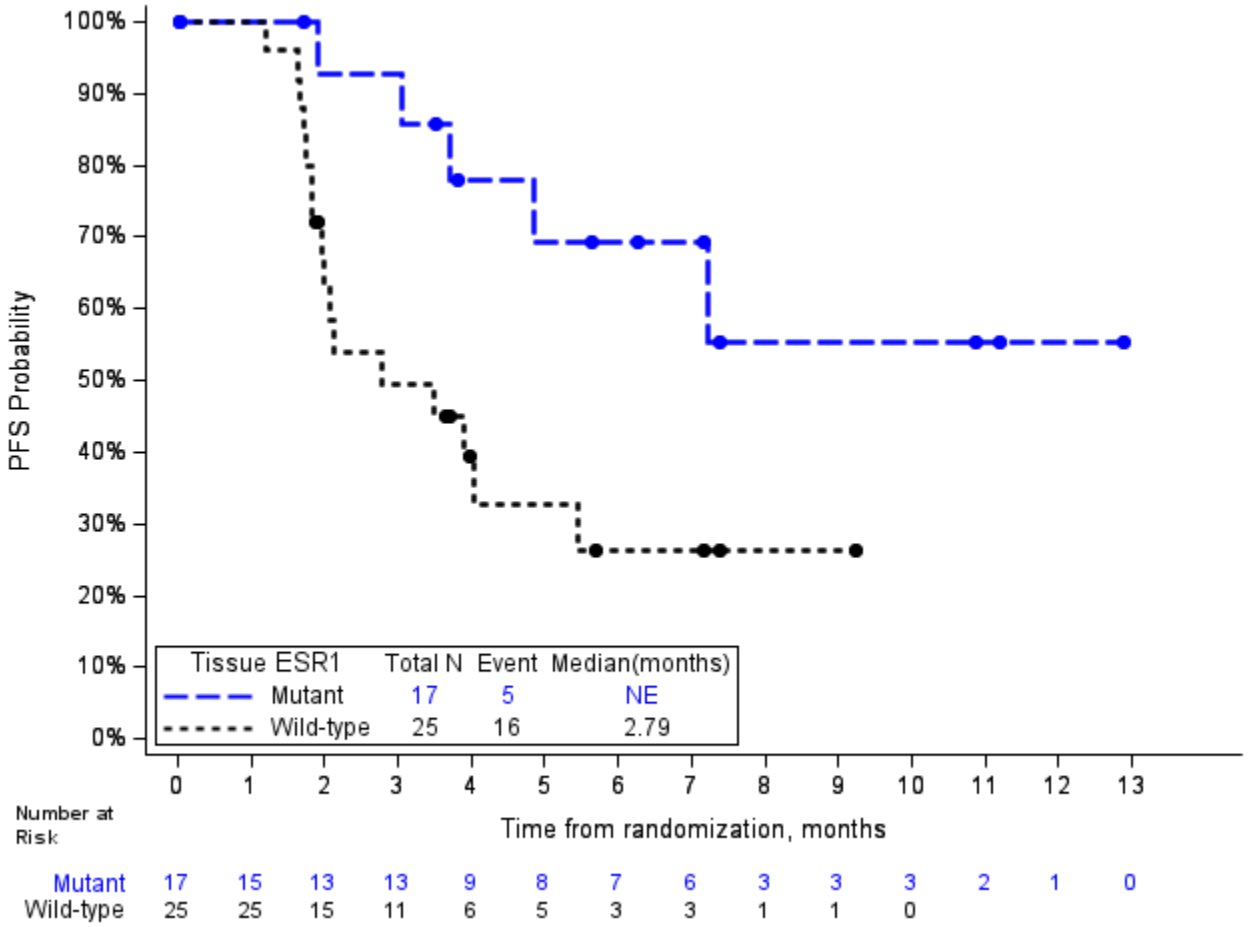


ALISCA™-Breast1 PFS Patients with *PIK3CA* Wild type by *ESR1* Mutation Status

ctDNA

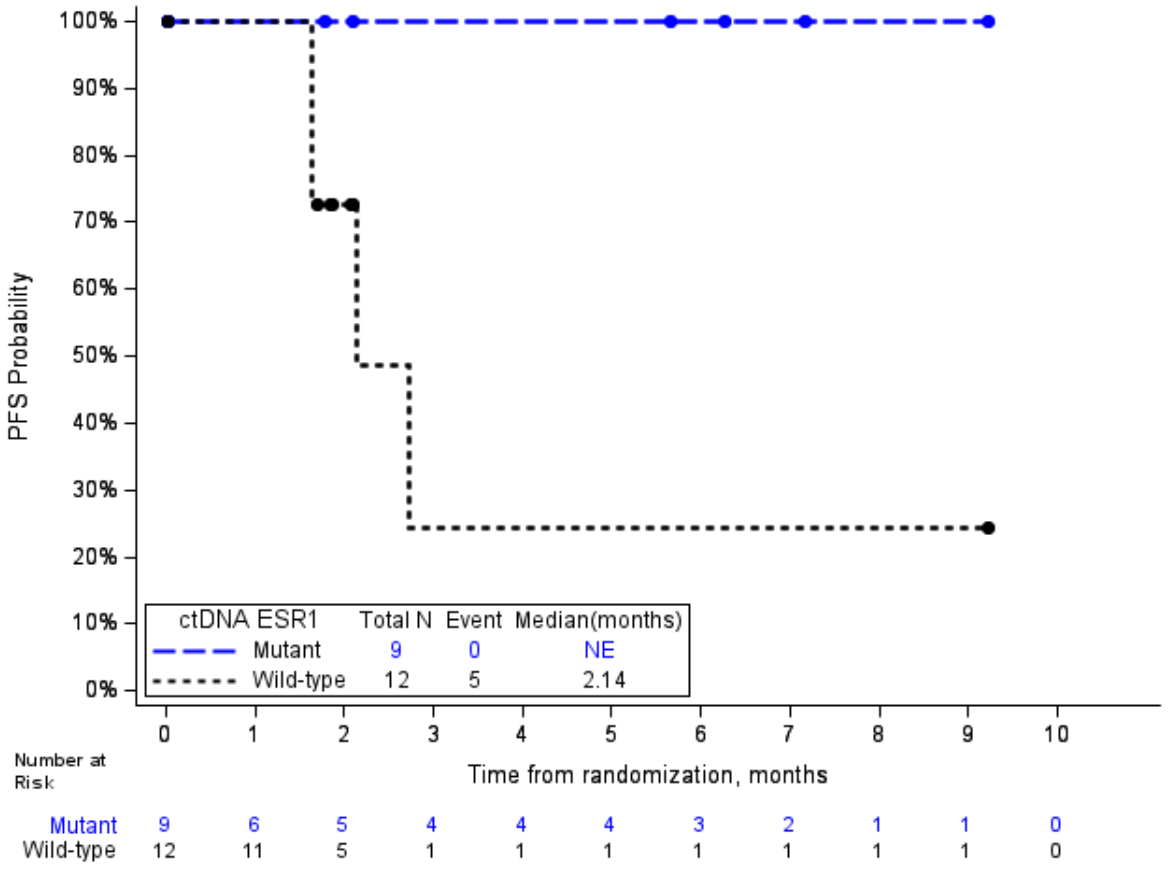


Tissue

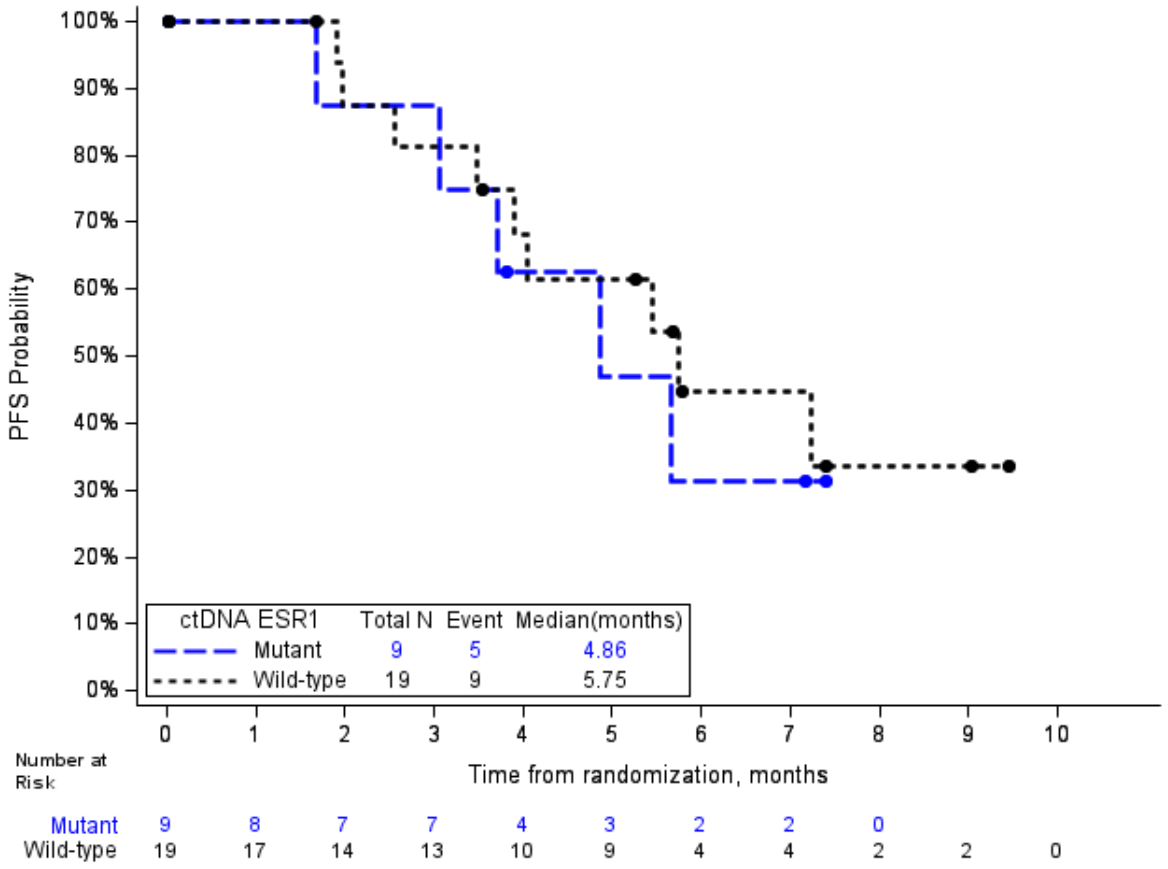


ALISCA™-Breast1 PFS Patients with *PIK3CA* Wild type by *ESR1* Mutation Status by Treatment Group – ctDNA

50mg BID

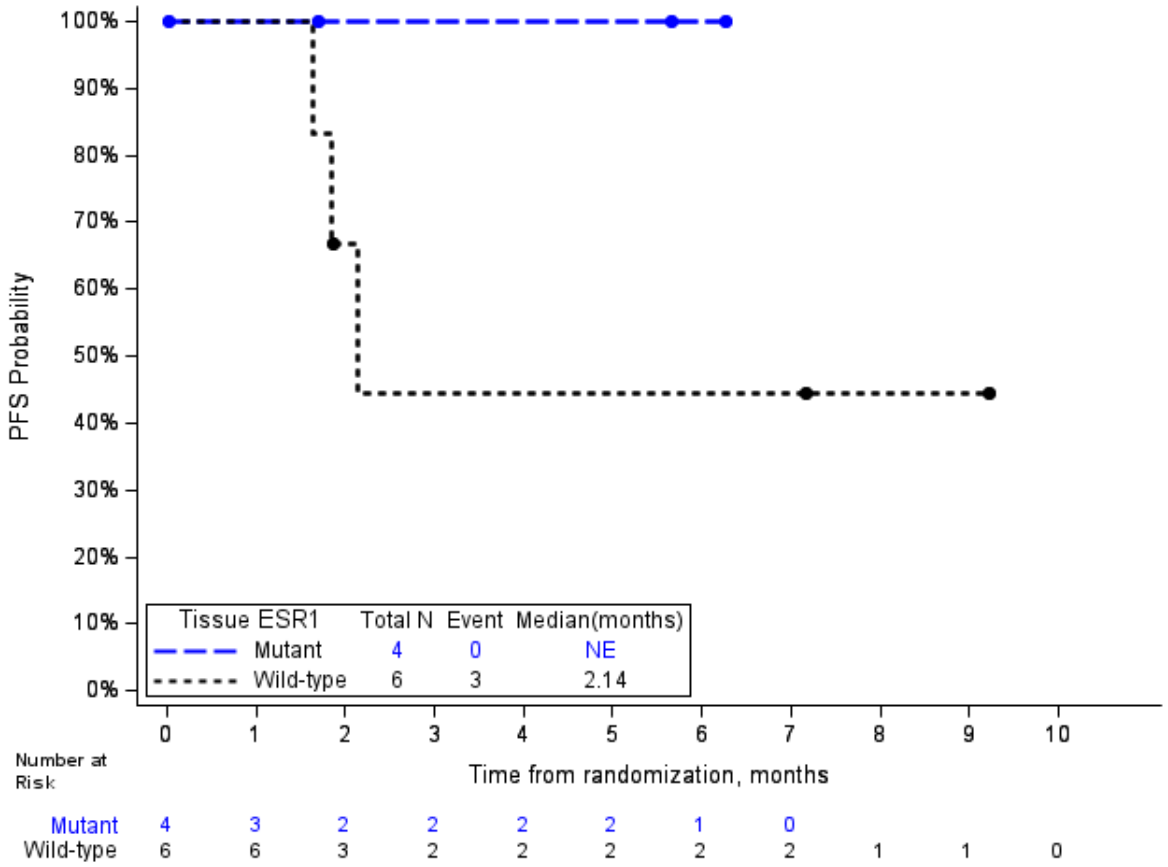


40mg BID

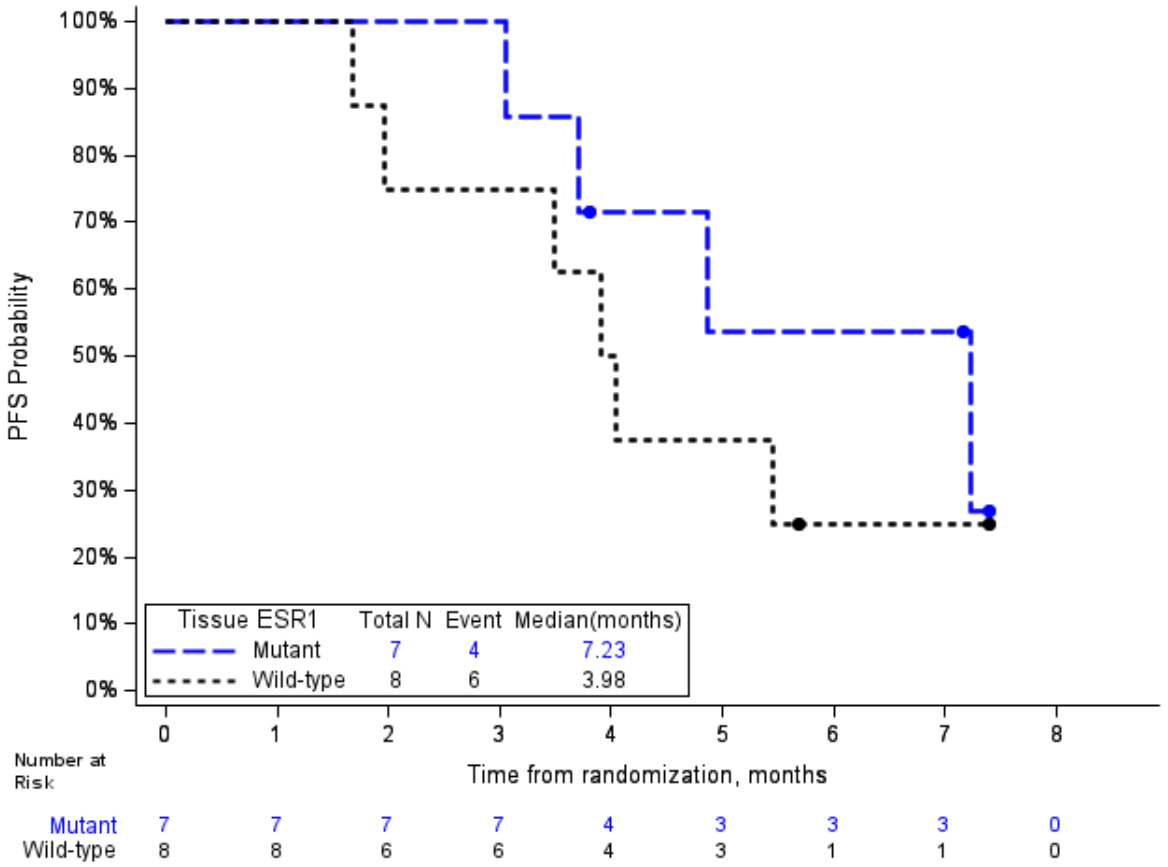


ALISCA™-Breast1 PFS Patients with *PIK3CA* Wild type by *ESR1* Mutation Status by Treatment Group – Tissue

50mg BID



40mg BID

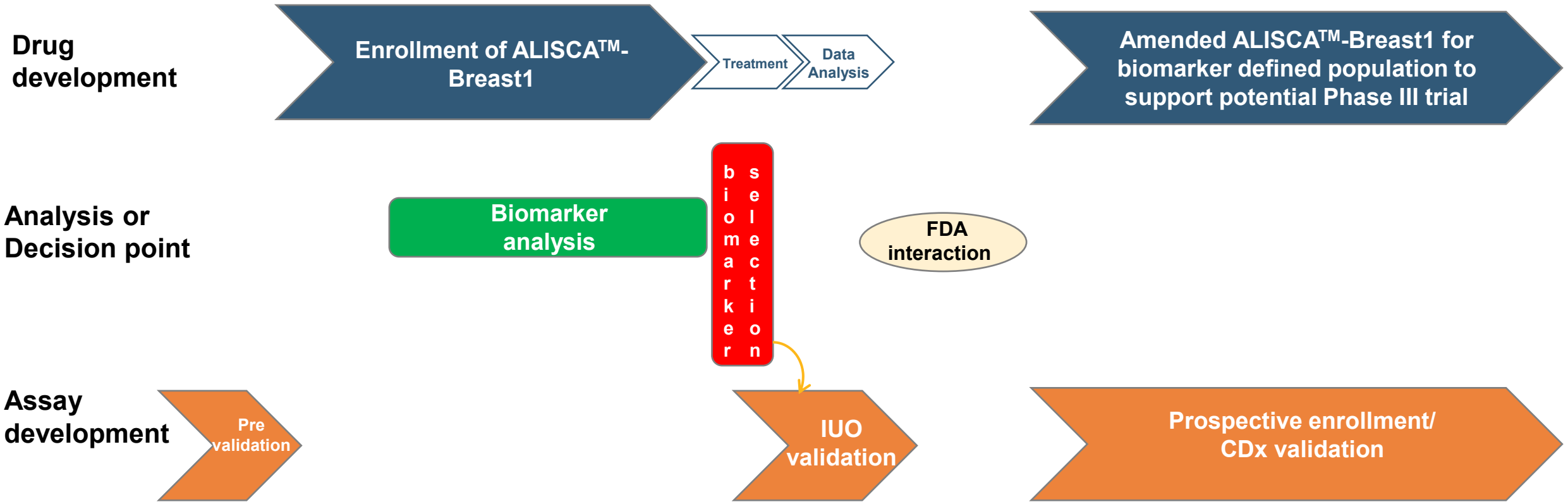


ALISCA™-Breast1 Patients with ESR1 mut and PIK3CA WT – Summary of FFPE tissue sample category and c-Myc positive cells

	Tissue DNA			ctDNA		
	PIK3CA Wild (N=42)	ESR1 Mutant (N=24)	PIK3CA Wild and ESR1 Mutant (N=17)	PIK3CA Wild (N=76)	ESR1 Mutant (N=59)	PIK3CA Wild and ESR1 Mutant (N=28)
c-Myc %positive cells (%) - n	40	23	16	46	33	17
Median	18.5	50.0	52.5	16.0	36.0	55.0
c-Myc %positive cells Category - n (%)						
0%	6 (14.3)	2 (8.3)	1 (5.9)	7 (9.2)	3 (5.1)	1 (3.6)
1-10%	11 (26.2)	3 (12.5)	2 (11.8)	13 (17.1)	6 (10.2)	2 (7.1)
11-100%	23 (54.8)	18 (75.0)	13 (76.5)	26 (34.2)	24 (40.7)	14 (50.0)

Parallel Clinical and Biomarker Development

- Comprehensive biomarker strategy supports clinical development and commercialization



ALISCA™-Breast1 – Expected Milestones

- Expand enrollment to obtain more data on biomarker directed cohorts (H2 2026)
  - PIK3CA Wild Type
  - ESR1 Mutant

- Additional interim data from ALISCA™-Breast1, a Phase II clinical trial of alisertib in combination with endocrine therapy for the treatment of ER positive HER2 Negative Metastatic Breast Cancer (H2 2026)