

# **Hormone Therapy in Breast Cancer: New Directions**



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## **Outline**

- I. Early-stage HR+, HER2 negative breast cancer
  - RxPONDER Subset Analysis: using AMH levels to predict benefit of chemotherapy in premenopausal women
- II. Advanced HR+, HER2 negative breast cancer
  - Overcoming endocrine resistance
    - postMONARCH: sequencing CDK 4/6 inhibitors:
    - INAVO 120: using triplet therapy for high risk PIK3CA mutated breast cancer
  - ADC
    - DESTINY-Breast06: T-DXd in HER2-low and HER2-ultra low breast cancer

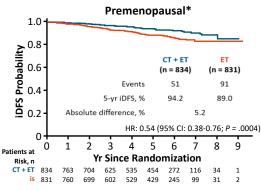


# EARLY BREAST CANCER



# **RxPONDER Subset Analysis: AMH**

- RxPONDER premenopausal women with HR+/HER2 neg breast cancer involving 1-3+ LN and a RS of ≤ 25 benefit from chemotherapy
  - Premenopausal women iDFS benefit 5.2%
  - Post menopausal women with no iDFS benefit
  - "Premenopausal" women ≥ 50 less iDFS benefit
- Correlation of serum anti-Müllerian hormone (AMH) levels on identification of premenopausal pts with HR+, HER2-negative, node-positive breast cancer most likely to benefit from adjuvant chemotherapy in RxPONDER



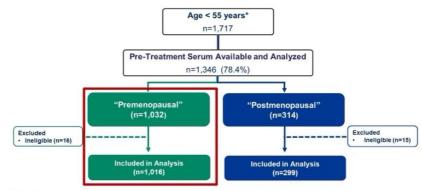
\*Last menstrual period <6 mo or 6-12 mo and <50 yr.

Source:clinicaloptions.com.



## **RxPONDER Subset Analysis: AMH**

- AMH more reliable than FSH or estradiol
  - Lower AMH reflects fewer follicles
  - AMH decreases prior to menopause before FSH rises
- Objective: to determine chemotherapy benefit if < 55 using serum markers of ovarian reserve
  - Majority of women undergone menopause by 55



\*Does not include 235 pts < 55 years from UNICANCER who will serve as validation cohort

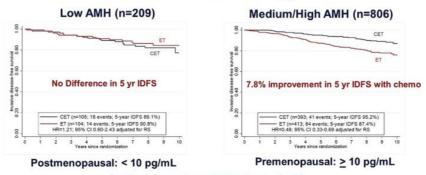
"Premenopausal": LMP < 6 months or age < 50 years with no LMP > 12 months and no BSO

Source: clinical options.com.



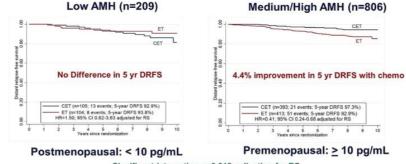
# RxPONDER Subset Analysis: AMH Level iDFS and DRFS

#### "Premenopausal" < 55 years with low AMH have no <u>IDFS</u> benefit with chemotherapy



Significant interaction p=0.019, adjusting for RS

#### "Premenopausal" < 55 years with low AMH have no <u>DRFS</u> benefit with chemotherapy



Significant interaction p=0.012, adjusting for RS

- 21% of premenopausal women < 55 had a serum AMH in postmenospausal range</li>
- Medium/high AMH levels correlate to 7.8% improvement in 5 yr iDFS w/chemo
- Medium/high AMH levels correlate to 4.4% improvement in 5-yr DRFS w/chemo

Source:clinicaloptions.com.



# **RxPONDER AMH Subset Analysis Key Takeaways**

- 21% of premenopausal women with low pre-treatment AMH levels did not benefit from chemotherapy
  - 52.2% of women 50-54 w/low AMH levels
    - < 3% for women under 45 yrs</li>
- AMH is a better indicator for chemotherapy benefit as compared to other hormone markers
- Practice changing?
  - In women whose menopausal status is unclear can be a useful tool



# ADVANCED BREAST CANCER





# **Sequencing CDK 4/6 Inhibitors Post Progression**

	MAINTAIN	PACE	PALMIRA
Patients (n)	120	220	198
1 <sup>st</sup> line CDK 4/6 inhibitor	Palbociclib (84%)	Palbociclib (90%)	Palbociclib (100%)
Endo rx	Fulvestrant (83%)	Fulvestrant (100%)	Fulvestrant (90%)
Subsequent CDK 4/6i	Ribociclib	Palbociclib	Palbociclib
PFS endo rx and CDK 4/6i	5.3 months	4.6 months	4.9 months
PFS endo rx	2.8 months	4.8 months	3.6 months



## postMONARCH: Study Design

Global, double-blind, placebo-controlled, randomized phase III trial

Adults with HR+/HER2advanced/metastatic BC; PD on 1L CDK4/6i + Al for advanced disease or recurrence on/after CDK4/6i + ET in adjuvant setting; ECOG PS ≤1 (N = 368) Abemaciclib PO + Fulvestrant IM

(n = 182)

Stratified by geographic region, visceral mets, prior CDK4/6i tx duration

Placebo PO + Fulvestrant IM (n = 186)

All patients scanned Q8W for 12 mo, then Q12W thereafter

- Primary endpoint: PFS by investigator
- Key secondary endpoints: OS, PFS by BICR, ORR, CBR, DCR, DoR, safety, QoL, PK



## postMONARCH: Key Baseline Characteristics and Prior Treatment History

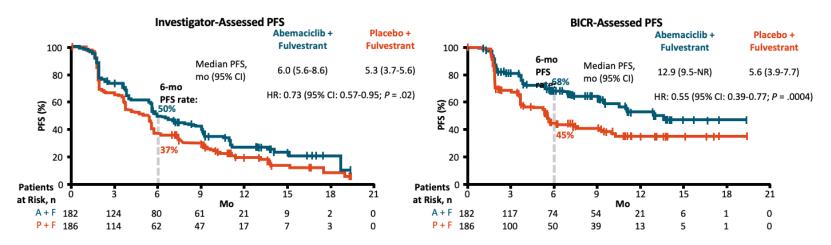
• 60% pts w/visceral disease; 20% pts w/osseous only disease

Prior Treatment History	Abemaciclib + Fulvestrant (n = 182)	Placebo + Fulvestrant (n = 186)
Setting of prior CDK4/6i therapy, %		
<ul> <li>Advanced disease</li> </ul>	100	98
<ul><li>Adjuvant</li></ul>	0	2
Prior CDK4/6i therapy, %		
<ul><li>Palbociclib</li></ul>	59	59
<ul><li>Ribociclib</li></ul>	34	33
<ul><li>Abemaciclib</li></ul>	8	8
Prior CDK4/6i therapy duration, %		
■ ≥12 mo or recurrence after adjuvant therapy	71	77
<12 mo or recurrence on adjuvant therapy	29	22
Median prior CDK4/6i therapy duration, mo (range)	19 (2-110)	21 (3-87)
<ul><li>Palbociclib</li></ul>	19	23
<ul><li>Ribociclib</li></ul>	15	18
<ul><li>Abemaciclib</li></ul>	26	21





## postMONARCH: Primary and Secondary Analyses



- 27% and 45% PFS-related event risk reduction with abemaciclib + fulvestrant per investigator and BICR assessment, respectively
- PFS by BICR affected by informative censoring: 51% with abemaciclib + fulvestrant vs 38% with fulvestrant monotherapy
- PFS benefit consistent across subgroups including by age, region, metastases, duration of prior CDK4/6i



## postMONARCH: PFS in Key Subgroups

Benefit of abemaciclib across subgroups, although not statistically significant

Median Investigator-Assessed PFS, Mo	Abemaciclib + Fulvestrant	Placebo + Fulvestrant	HR (95% CI)	<i>P</i> Value
Prior CDK4/6i therapy duration  ■ ≥12 mo or recurrence after adjuvant therapy (n = 273)  ■ <12 mo or recurrence on adjuvant therapy (n = 93)	7.0 5.5	5.4 3.0	0.70 (0.52-0.94) 0.80 (0.50-1.29)	0.63
Visceral metastases ■ No (n = 147) ■ Yes (n = 221)	11.1 5.4	5.6 3.7	0.53 (0.34-0.83) 0.87 (0.64-1.17)	0.07
ESR1 mutation* ■ Detected (n = 145) ■ Not detected (n = 175)	NR NR	NR NR	0.79 (0.54-1.15) 0.79 (0.55-1.13)	.98
PIK3CA/AKT1/PTEN alteration* ■ Detected (n = 156) ■ Not detected (n = 164)	NR NR	NR NR	0.86 (0.60-1.23) 0.73 (0.51-1.06)	.55



# postMONARCH: Safety

AE in ≥15% of Patients, %	Abemaciclib +		Placebo + Fulvestrant (n = 185)		
raticits, /	Any Grade	Grade ≥3	Any Grade	Grade ≥3	
Any	97	55	82	20	
Diarrhea	75	4	17	2	
Neutropenia	41	25	3	0	
Anemia	35	11	15	4	
Fatigue	33	3	23	1	
Nausea	33	3	18	0	
Abdominal pain	24	2	16	0	
Vomiting	20	2	6	0	
Thrombocytopenia	18	4	6	2	
Decreased appetite	18	1	7	0	
Leukopenia	18	8	3	0	
Increased AST	15	6	11	2	
Increased ALT	13	4	10	2	
Arthralgia	12	1	12	1	
Increased creatinine	11	0	2	0	

AE in ≥15% of	Abemaciclib + (n = 1		Placebo + Fulvestrant (n = 185)		
Patients, %	Any Grade Grade ≥3		Any Grade	Grade ≥3	
Cough	11	0	7	0	
VTE	5	2	3	1	
ILD	3	1	1	0	

- 1 treatment-related death occurred on abemaciclib + fulvestrant arm (pneumonia)
- AE-related treatment modifications more frequent with abemaciclib + fulvestrant vs placebo + fulvestrant
  - Dose reduction: 30% vs 3%
  - Discontinuation: 6% vs 0%



# postMONARCH Key Takeaways

- postMONARCH is the first randomized phase III trial to show a benefit of sequencing a CDK 4/6i beyond progression on a CDK 4/6i
  - Improved PFS (investigator assessed and BICR) despite control arm performing better than expected, regardless of duration of prior CDK 4/6i, and presence of visceral metastases, with safety consistent with what is known of abemaciclib
- Practice changing?
  - Abema/fulvestrant is an option to consider post progression, especially in the third of pts who did not have a biomarker driven option to pursue
    - Would consider in biomarker positive population with bone predominant disease



## **INAVO 120**

- Inavolisib is a highly potent and selective PI3Ka inhibitor
- Preclinical data in PIK3CA-mutated xenograft models showing synergy with inavolisib, CDK 4/6i, and endo rx with deep responses and blocking resistance pathways
- Phase I trial with triplet rx with manageable safety and promising activity





## **INAVO 120: Study Design**

# Key eligibility criteria Enrichment of patients with poor prognosis:

- PIK3CA-mutated, HR+, HER2- ABC by central ctDNA\* or local tissue/ctDNA test
- Measurable disease
- Progression during/within 12 months of adjuvant ET completion
- No prior therapy for ABC
- Fasting glucose <126 mg/dL and HbA<sub>1C</sub> <6.0%</li>

#### Enrolment period: December 2019 to September 2023

Inavolisib (9 mg QD PO)
+ palbociclib (125 mg PO QD D1-D21)
+ fulvestrant (500 mg C1D1/15 and Q4W)\*\*

Placebo (PO QD)
+ palbociclib (125 mg PO QD D1-D21)
+ fulvestrant (500 mg C1D1/15 and Q4W)\*\*

Until PD or toxicity

SURVIVAL FOLLOW-UP

#### Stratification factors:

- Visceral Disease (Yes vs. No)
- Endocrine Resistance (Primary vs. Secondary)†
- Region (North America/Western Europe; Asia; Other)

#### **Endpoints**

- Primary: PFS by Investigator
- Secondary: OS‡, ORR, BOR, CBR, DOR, PROs

Central testing for PIK3CA mutations was done on ctDNA using FoundationOne®Liquid (Foundation Medicine). In China, the central ctDNA test was the PredicineCARE NGS assay (Huidu). † Defined per 4th European School of Oncology (ESO) –European Society for Medical Oncology (ESMO) International Consensus Guidelines for Advanced Breast Cancer.1 Primary: relapse while on the first 2 years of adjuvant ET; Secondary: relapse while on adjuvant ET after at least 2 years or relapse within 12 months of completing adjuvant ET. ‡ OS testing only if PFS is positive; interim OS analysis at primary PFS analysis;

Source: Jhaveri, SABCS 2023.

N = 325

R

<sup>\*\*</sup> Pre-menopausal women received ovarian suppréssion. ctDNA, circulating tumor DNA; R, randomized. 1. Cardoso F, et al. Ann Oncol 2018;29:1634–1657.



### INAVO 120: Demographics, Baseline Characteristics, Prior Therapy

	Inavo+Palbo+Fulv (n=161)	Pbo+Palbo+Fulv (n=164)		Inavo+Palbo+Fulv (n=161)	Pbo+Palbo+Fulv (n=164)
Age (year)			Number of organ sites, n (	%)	
Median	53.0	54.5	1	21 (13.0)	32 (19.5)
Min-Max	27-77	29-79	2	59 (36.6)	46 (28.0)
Sex, n (%)			≥3	81 (50.3)	86 (52.4)
Female	156 (96.9)	163 (99.4)	Visceral disease, n (%)*	132 (82.0)	128 (78.0)
Race, n (%)			Liver	77 (47.8)	91 (55.5)
Asian	61 (37.9)	63 (38.4)	Lung	66 (41.0)	66 (40.2)
Black or African American	1 (0.6)	1 (0.6)	Bone only	5 (3.1)	6 (3.7)
White	94 (58.4)	97 (59.1)	ER: and PgR status, n (%)	0 (0.1)	0 (0)
ECOG PS, n (%)			ER+/PgR+	113 (70.2)	113 (68.9)
0	100 (62.1)	106 (64.6)	•	, ,	, ,
1	60 (37.3)	58 (35.4)	ER+/PgR-	45 (28.0)	45 (27.4)
Menopausal status at rando	mization, n (%)		Endocrine resistance, n (%	<b>%)**</b>	
Premenopausal	65 (40.4)	59 (36.0)	Primary	53 (32.9)	58 (35.4)
Postmenopausal	91 (56.5)	104 (63.4)	Secondary	108 (67.1)	105 (64.0)

301 (92.6%) pts were enrolled per ctDNA testing (284 [94.4%] central, 17 [5.6%] local) and 24 (7.4%) were enrolled per local tissue testing

"Viscoral" (yes/no) refers to lung, liver, brain, pleural, and peritoneal involvement; 1º Patients with evaluable bone-only disease were not eligible; patients with disease limited to the bone but with lytic or mixed lytic/blastic lesions, and at least one measurable soft-tissue component per RECIST 1.1, may be eligible: 1-Defined as 10% per ASCO-CAP guidelines." Endocrine resistance was defined per 4th ESO-[ESNO] international Concensus Guidelines for Advanced Breast Cancer, Primary resistance. Relapse within on the first 2 years of adjuvancerine therapy, secondary resistance. Relapse within on the first 2 years of adjuvancerine therapy and adjuvant endocrine therapy. ECOG PS, Eastern Cooperative Oncology Group Performance Status; ER, estrogen receptor, Fully, full-vestrant; laws, inavoilse; Ps. abb, palabocib, Ps. Pbo, placebore, Ps. (Proposterior neceptor; RECIST, Response Evaluation Criteria is Notif Unrush).

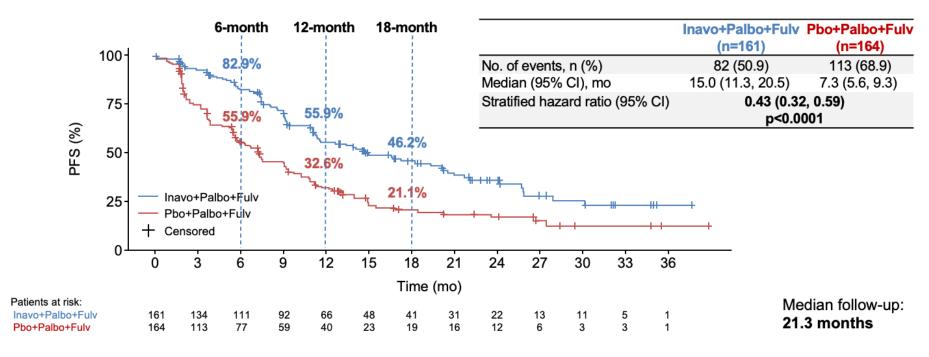
	Inavo+Palbo+Fulv (n=161)	Pbo+Palbo+Fulv (n=164)
Prior (neo)adjuvant chemotherapy, n (%)		
Yes	132 (82.0)	137 (83.5)
Prior (neo)adjuvant endocrine therapy, n (%)		
Yes	160 (99.4)	163 (99.4)
Aromatase inhibitor only	60 (37.3)	71 (43.3)
Tamoxifen only	82 (50.9)	73 (44.5)
Aromatase inhibitor and tamoxifen	18 (11.2)	19 (11.6)
Prior adjuvant CDK4/6 inhibitor, n (%)		
Yes	3 (1.9)	1 (0.6)

- Median age 53
- ~ 40% pts premenopausal
- ~ 50% pts ≥ 3 organ sites involved
- ~ 33% pts w/primary endo resistance
- 92.6% pts w/ctDNA testing
- 7.4% pts w/local tissue testing
- 82% pts rec'd chemo early stage
- ~ 50% pts tamoxifen early stage
- Small proportion rec'd adjuvant CDK 4/6i

Source: Jhaveri, SABCS 2023.

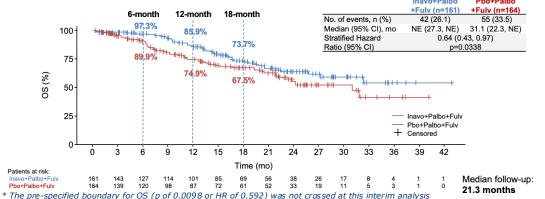


## **INAVO 120: PFS**

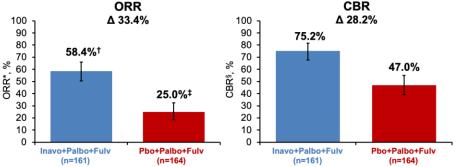




### **INAVO 120: Secondary Endpoints – Interim Analysis for OS, ORR, CBR**



- mOS NE in triplet arm vs
   31.1 mos in control arm HR
   0.64
- Prespecified boundary for OS not crossed at this interim analysis
- Improvement in ORR from 25% in control arm to 58.4% in triplet arm
- Improvement in CBR from 47% in control arm to 75.2% in triplet arm



<sup>\*</sup> CI, confidence interval; Fulv, fulvestrant; Inavo, inavolisib; mo, months; NE, not estimable; OS, overall survival; Palbo, palbociclib; Pbo, placebo.

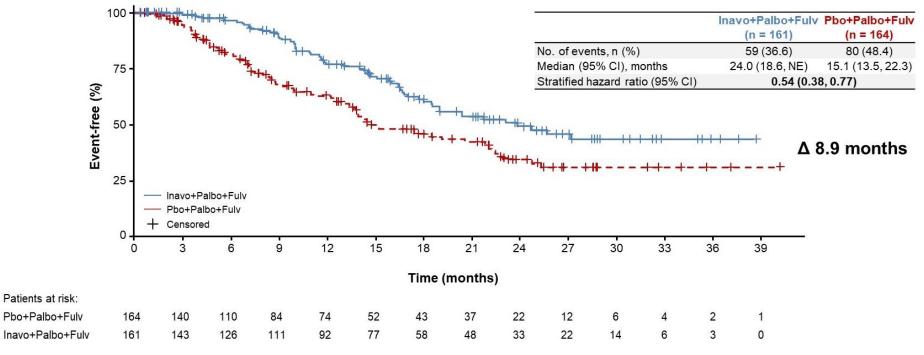
Source: Jhaveri, SABCS 2023.

Median f/up 21.3 mos

<sup>\*</sup> Patients with a CR or PR on two consecutive occasions ≥4 weeks apart per RECIST v1.1. † Seven patients with CR, 87 patients with PR, ‡ One patient with CR, 40 patients with PR, 79 patients with a CR, PR, and/or SD for ≥24 weeks per RECIST v1.1. CBR, clinical benefit rate; CR, complete response; Fulv, fulvestrant; Inavo, inavolisib; ORR, objective response rate; Palbo, palbocicilib; Pbo, placebo; PD, progressive disease; PR, partial response; RECIST, Response Evaluation Criteria in Solid Tumors; SD, stable disease.



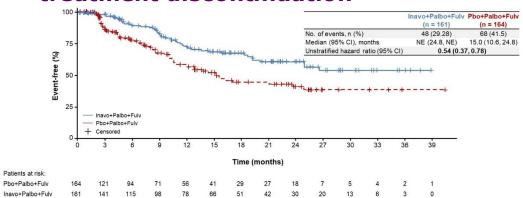
# INAVO 120: Time from randomization to end or discontinuation of next-line treatment, or death from any cause (proxy for PFS2)



Source: Juric, ASCO 2024.



# INAVO 120: Time from randomization to first subsequent chemo after treatment discontinuation



•	Prolonged time from
	randomization to first
	subsequent chemo after rx
	discontinuation with HR of
	0.54

Patients, n/N (%)	lnavo+Palbo+Fulv (n = 161)	Pbo+Palbo+Fulv (n = 164)
Discontinued treatment	93/161 (57.8)	115/164 (70.1)
No subsequent therapy – death	12/161 (7.5)	19/164 (11.6)
Received subsequent therapy*	65/161 (40.4)	82/164 (50.0)
Chemotherapy (any)	40/65 (61.5)	60/82 (73.2)
Capecitabine	21/65 (32.3)	29/82 (35.4)
ADC (any)	0	1/82 (1.2)
PI3K inhibitor (any)	2/65 (3.1)	21/82 (25.6)
Alpelisib	2/65 (3.1)	14/82 (17.1)
mTOR kinase inhibitor (any)	8/65 (12.3)	6/82 (7.3)
Everolimus	8/65 (12.3)	6/82 (7.3)
CDK4/6 inhibitor (any)	8/65 (12.3)	5/82 (6.1)
Ribociclib	1/65 (1.5)	5/82 (6.1)
Abemaciclib	3/65 (4.6)	0
Other (any)†	13/65 (20.0)	10/82 (12.2)

- 57.8% pts in triplet arm vs 70.1% pts in control arm discontinued rx
- Subsequent rx: chemotherapy 61.5% vs 73.2%
- 25.6% pts in control arm rec'd alpelisib

Source: Juric, ASCO 2024.



## **INAVO 120: Adverse Events**

Adverse Events		albo+Fulv 162)	Pbo+Palbo+Fulv (N=162)		
	All Grades	Grade 3-4	All Grades	Grade 3-4	
Neutropenia	144 (88.9%)	130 (80.2%)	147 (90.7%)	127 (78.4%)	
Thrombocytopenia	78 (48.1%)	23 (14.2%)	73 (45.1%)	7 (4.3%)	
Stomatitis/Mucosal inflammation	83 (51.2%)	9 (5.6%)	43 (26.5%)	0	
Anemia	60 (37.0%)	10 (6.2%)	59 (36.4%)	3 (1.9%)	
Hyperglycemia	95 (58.6%)	9 (5.6%)	14 (8.6%)	0	
Diarrhea	78 (48.1%)	6 (3.7%)	26 (16.0%)	0	
Nausea	45 (27.8%)	1 (0.6%)	27 (16.7%)	0	
Rash	41 (25.3%)	0	28 (17.3%)	0	
Decreased Appetite	38 (23.5%)	<2%	14 (8.6%)	<2%	
Fatigue	38 (23.5%)	<2%	21 (13.0%)	<2%	
COVID-19	37 (22.8%)	<2%	17 (10.5%)	<2%	
Headache	34 (21.0%)	<2%	22 (13.6%)	<2%	
Leukopenia	28 (17.3%)	11 (6.8%)	40 (24.7%)	17 (10.5%)	
Ocular Toxicities	36 (22.2%)	0	21 (13.0%)	0	

Key AEs are shown in **bold.** AES were assessed per CTCAE V5. Neutropenia, thrombocytopenia, stomatitis/mucosal inflammation, anemia, hyperglycemia, diarrhea, nausea and rash were assessed as medical concepts using grouped terms

AE, adverse event; ALT, alanine aminotransferase; AST, aspartate aminotransferase; Fulv, fulvestrant; Inavo, inavolisib; Palbo, palbociclib; Pbo, placebo.

#### AEs leading to discontinuation:

- 6.2% in triplet arm vs 0.6% in control arm
- Dose reductions and interruptions occurred in both arms

#### Median Time to Onset of Toxicities:

- Hyperglycemia- 7 days; Rash 29 days; Diarrhea 15 days; Stomatitis 13 days
- Dose reductions and interruptions occurred in both arms

Source: Jhaveri, SABCS 2023.

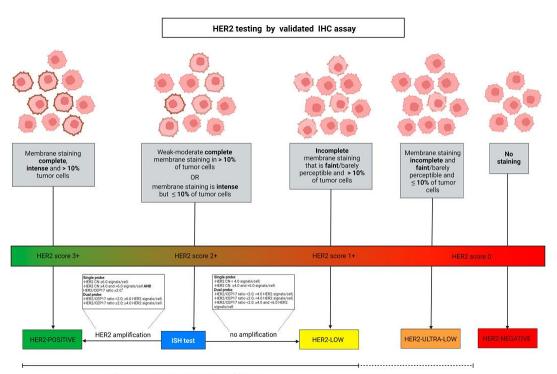


# **INAVO 120: Summary**

- Addition of inavolisib to palbociclib and fulvestrant demonstrated a statistically significant improved PFS for advanced PIK3CA mutated advanced HR+, HER2 neg ABC
  - 7.3 mos in control arm vs 15.0 mos in triplet arm (HR 0.43)
  - Sustained benefit beyond progression and delay in initiation of chemotherapy
  - Prolonged time to deterioration in pain severity, maintained HRQoL
- Trend OS improvement at first interim analysis
- Manageable safety consistent with known AEs in this class of drugs
  - Inclusion criteria of hgb a1c < 6% w/5.6% grade 3/4 hyperglycemia</li>
  - No primary ppx for hyperglycemia, rash, diarrhea, stomatitis
  - Low discontinuation rate
- First triplet that appears to overcome resistance seen in this high-risk population with manageable toxicity



## Trastuzumab deruxtecan (T-DXd) and HER2



- DB-04: T-DXd efficacy in HFR2 low tumors
  - HER2 low (60-65% HR+ ABC): 2+ or 1+ by IHC
- DB-06: T-DXd after 1 line of endo rx and includes HER2 ultra-low tumors
  - HER2 ultralow (20-25% HR+ ABC): any staining between 0 and 1+
- 85% of pts can potentially benefit from T-DXd

**Expanded spectrum of HER2 positivity** 





HER2-low: 713

HER2-ultra low: 153

# **DESTINY-Breast06: Trastuzumab Deruxtecan vs CT in Previously Treated HR+/HER2-Low or HER2-Ultralow MBC**

Multicenter, open-label, randomized phase III trial

Stratified by: prior CDK4/6 inhibitor use (yes vs no); HER2 IHC 1+ vs 2+/ISH- vs 0; prior taxane in nonmetastatic setting (yes vs no)

1:1

Patients with HR+ metastatic breast cancer with PD on ≥2 previous ET ± targeted therapy (no prior CT) for MBC\*; HER2 low (IHC 1+, or 2+/ISH-) or HER2 ultralow (IHC<sup>+</sup> >0 <1+) based on central IHC assessment using most recent evaluable IHC sample (N = 866)

**T-DXd** 5.4 mg/kg Q3W (n = 436)

Physician's choice of CT (capecitabine, paclitaxel, or *nab*-paclitaxel) (n = 430)

Until PD or toxicity

\*Also allowed: 1 prior line for MBC and PD ≤6 mo of starting 1LET + CDK4/6 inhibitor or 1 prior line for MBC and recurrence ≤24 mo of starting adjuvant ET.

†HER2 IHC >0 defined by any IHC staining up to 10% of tumor cells.

- Primary endpoint: PFS (per BICR) in HER2low population
- Key secondary endpoints: OS in HER2-low population, PFS (per BICR) and OS in ITT
- Other secondary endpoints: PFS (per INV) in HER2-low population, ORR and DoR (per BICR/INV) in HER2-low population and ITT, safety and tolerability, PROs



## **DESTINY-Breast06:** Baseline characteristics and Prior Treatment

### ITT population:

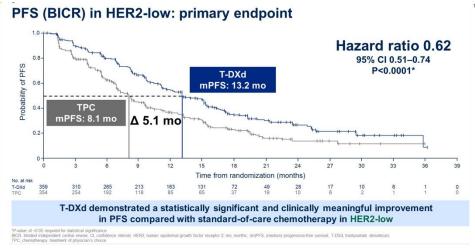
- 54% IHC 1+ disease
- 26% IHC 2+ disease
- 29% pts w/primary endo resistant disease
- 30% de novo disease at diagnosis
- 3% pts with bone only disease
- 86% pts with visceral disease

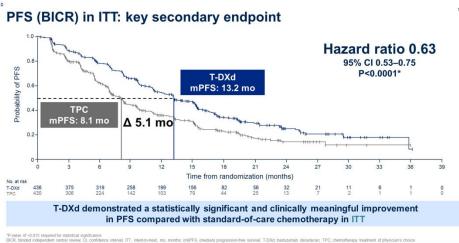
	HER2 I	Low	ш		HER2 Ultralow	
Prior Therapy for MBC	T-DXd (n = 359)	CT (n = 354)	T-DXd (n = 436)	CT (n = 430)	T-DXd (n = 76)	CT (n = 76)
Median ET lines, n (range)	2 (1-4)	2 (1-5)	2 (1-4)	2 (1-5)	2 (1-4)	2 (1-5)
No. of ET lines, n (%)  1  - ≤6 mo on 1L ET + CDK4/6i  2  ≥3	54 (15.1)	67 (19.0)	65 (14.9)	82 (19.2)	11 (14.5)	15 (19.7)
	33 (9.2)	33 (9.4)	37 (8.5)	40 (9.3)	4 (5.3)	7 (9.2)
	242 (67.6)	236 (67.0)	295 (67.8)	288 (67.3)	52 (68.4)	52 (68.4)
	62 (17.3)	49 (13.9)	75 (17.2)	58 (13.6)	13 (17.1)	9 (11.8)
Prior ET therapies, n (%)  Monotherapy  With CDK4/6i  With other targeted therapy	189 (52.6)	183 (51.7)	230 (52.8)	223 (51.9)	41 (53.9)	40 (52.6)
	318 (88.6)	316 (89.3)	388 (89.0)	385 (89.5)	69 (90.8)	69 (90.8)
	120 (33.4)	105 (29.7)	143 (32.8)	127 (29.5)	22 (28.9)	22 (28.9)
Prior adjuvant/neoadjuvant therapies, n (%)  ET  Cytotoxic CT  Taxane  Anthracycline	227 (63.2)	218 (61.6)	275 (63.1)	256 (59.5)	48 (63.2)	38 (50.0)
	192 (53.5)	196 (55.4)	228 (52.3)	234 (54.4)	36 (47.4)	38 (50.0)
	151 (42.1)	151 (42.7)	179 (41.1)	177 (41.2)	28 (36.8)	26 (34.2)
	167 (46.5)	173 (48.9)	197 (45.2)	206 (47.9)	30 (39.5)	33 (43.4)

- < 10% pts progressed w/i 6 mos of ET+ CDK 4/6i</p>
- 89% pts rec'd ET + CDK 4/6i
- Appx 60% pts rec'd adjuvant ET
- Appx 50% pts rec'd NAC/adjuvant chemo



### **DESTINY-Breast06**

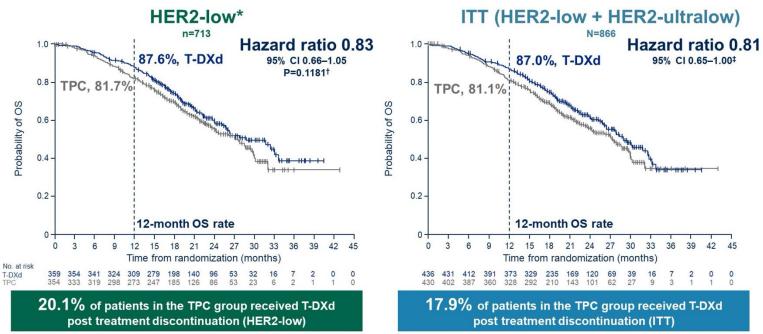






### **DESTINY-Breast06**

### OS in HER2-low and ITT: key secondary endpoints (~40% maturity)



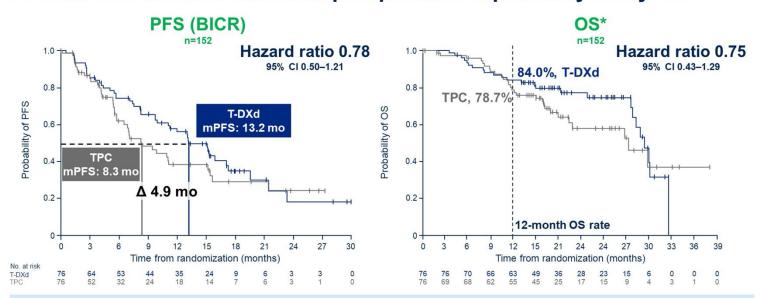
\*39.6% maturity (of total N for population) at this first interim analysis; median duration of follow up was 18.6 months (HER2-low); †P-value of <0.0046 required for statistical significance; ‡no test of significance was performed in line with the multiple testing procedure; median duration of follow up was 18.2 months (ITT)

Cl. confidence interval: HER2, human epidermal growth factor receptor 2: ITT, intent-to-treat: OS, overall survival: T-DXd, trastuzumab deruxtecan: TPC, chemotherapy treatment of physician's choice



### **DESTINY-Breast06**

### PFS and OS in HER2-ultralow: prespecified exploratory analyses



### PFS improvement with T-DXd vs TPC in HER2-ultralow was consistent with results in HER2-low

\*34.9% maturity (of total N for population) at this first interim analysis; median duration of follow up was 16.8 months BICR, blinded independent central review, Cl, confidence interval, HER2, human epidermal growth factor receptor 2; OS, overall survival; mo, months; (m)PFS, (median) progression-free survival; T-DXd, trastuzumab deruxtecan; TPC, chemotherapy treatment of physician's choice 13



# **DESTINY-Breast06: Antitumor Activity**

	HER2	HER2 Low		пт		ltralow
Outcome	T-DXd (n = 359)	CT (n = 354)	T-DXd (n = 436)	CT (n = 430)	T-DXd (n = 76)	CT (n = 76)
Confirmed ORR, n (%) • CR • PR	203 (56.5) 9 (2.5) 194 (54.0)	114 (32.2) 0 (0) 114 (32.2)	250 (57.3) 13 (3.0) 237 (54.4)	134 (31.2) 0 (0) 134 (31.2)	47 (61.8) 4 (5.3) 43 (56.6)	20 (26.3) 0 (0) 20 (26.3)
SD, n (%)	125 (34.8)	170 (48.0)	148 (33.9)	212 (49.3)	22 (28.9)	42 (55.3)
CBR, n (%)	275 (76.6)	190 (53.7)	334 (76.6)	223 (51.9)	58 (76.3)	33 (43.4)
Median DoR, mo	14.1	8.6	14.3	8.6	14.3	14.1



## **DESTINY-Breast06: TEAEs and AEs of Special Interest**

Treatment-Related TEAE in ≥20% of Patients, %	T-DXd (n = 434)		CT (n = 417)	
	Any Grade	Grade ≥3	Any Grade	Grade ≥3
Nausea	65.9	1.6	23.5	0.2
Fatigue	46.8	3.7	34.3	1.4
Alopecia	45.4	0	19.4	0.2
Neutropenia	37.6	20.7	27.6	16.5
Increased transaminases	29.3	2.3	11.0	0
Anemia	28.1	5.8	19.4	2.4
Vomiting	27.2	1.4	9.4	0
Diarrhea	23.7	1.8	22.5	2.4
Decreased appetite	23.5	1.4	9.4	0.5
Leukopenia	23.3	6.9	14.6	5.5
PPE	0.5	0	32.4	6.7

Left ventricular dysfunction, n (%)	T-DXd (n = 434)	CT (n = 417)
Decreased ejection fraction (any) Grade 1/2 Grade 3/4 Grade 5	35 (8.1) 32 (7.3) 3 (0.7) 0	12 (2.9) 11 (2.6) 1 (0.2) 0
Cardiac failure (any) Grade 1/2 Grade 3/4 Grade 5	0 0 0	3 (0.7) 1 (0.2) 2 (0.4) 0
ILD/Pneumonitis,* n (%)	(n = 434)	(n = 417)
Any grade Grade 1/2 Grade 3/4 Grade 5	49 (11.3) 43 (9.9) 3 (0.7) 3 (0.7)	1 (0.2) 1 (0.2) 0 0

<sup>\*</sup>Adjudicated as treatment related.

- Most common AE leading to rx discontinuation: ILD 5.3% w/T-DXd vs peripheral neuropathy w/TPC 1.4% w/TPC
- Most common AE leading to rx reduction: nausea 4.4% w/T-DXd vs PPE 16.5% w/TPC

Source: Clinicaloption.com, Curigliano, ASCO 2024. Abstr LBA1000. NCT04494425.



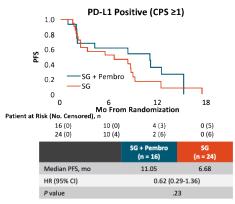
## **DESTINY-Breast06 Key Takeaways**

- T-DXd clinical and statistical benefit in HR+, HER2 low and ultra low tumors in an earlier line of rx as compared to DB-04
  - HER2-ultra low data is comparable with HER2-low data
- No new safety signals
  - 3 deaths related to ILD
- DESTINY-Breast15: T-DXd efficacy in lower HER2 expressing tumors
- Practice changing?
  - T-DXd may benefit more patients and sooner, however may not be applicable to bone only disease (3%) and SDM will be important given toxicities



## **ADCs – What Else is New?**

- SACI-IO: randomized ph II, n=110 saci/pembro vs saci in advanced HR+, HER2 neg breast cancer
  - progressed on ET and up to 1 line of chemo
  - Primary endpoint: PFS in ITT; key secondary endpoint: PFS in PDL1 CPS
     ≥ 1
  - PFS ITT 8.12 mos saci/pembro vs 6.22 mos saci, p=0.37
  - PFS PDL1 CPS  $\geq$  1 11.05 saci/pembro vs 6.68 mos saci, p=0.23
  - Small group of pts, proof of concept
  - Ongoing trials of saci-IO in other settings



Source: Clinicaloption.com.



## **Oral SERDs**

- SERDs in combination with other targeted agents:
  - ELECTRA: ph Ib/II trial of elacestrant with abemaciclib
    - Phase Ib: combination well tolerated, RP2D elacestrant 345 mg daily, abemaciclib 150 mg BID
    - N=26, CR=1, PR=4, SD=14
  - ELEVATE: phIb/II trial of elacestrant with everolimus, alpelisib, ribociclib, palbociclib, capivasertib
    - Phase Ib:
      - Elacestrant/everolimus: n=13, PR=4, SD=7; RP2D of elacestrant 345 mg daily and everolimus 7.5 mg daily
      - Elacestrant/ribociclib: n=18, PR=1, SD=10
  - Elacestrant proving to be a potential endocrine backbone with other targeted agents



## **Proposed Treatment Algorithm**







# **Questions?**