

# **Applications for Community Oncology**

*ASCO Data Review*

July 17, 2025

# 2025 ASCO Key Studies

## Breast Cancer

- **RAPID REVIEWS**
  - \*SERENA-6
  - DESTINY-Breast09
  - DESTINY-Breast06
  - AI for IHC HER2 Pathology
  - ASCENT-03
  - ASCENT-04
  - VERITAC-2
  - INAVO120
  - CompassHER2 pCR

## GU/ GI Cancer

- \*ATOMIC
- \*MATTERHORN
- DESTINY-Gastric04
- **RAPID REVIEWS**
  - BREAKWATER
  - PANOVA-3
  - AMPLITUDE

## Other Notable Studies

- \*NIVOPOSTOP
- KEYNOTE-689
- \*VERIFY
- **RAPID REVIEWS**
  - TROPION-Lung02
  - DELPHI-304
  - IMforte
  - TUXEDO-3
  - ROSELLA

\* Plenary Session

# ASCO 2025: RAPID REVIEWS

**\*SERENA-6**

**DESTINY-  
Breast09**

**DESTINY-  
Breast06**

**T-DXd  
rechallenge  
after ILD**

**ASCENT-03**

**ASCENT-04**

**VERITAC-2**

**INAVO120**

**CompassHER2  
pCR**

\* Plenary Session

SERENA-6: Camizestrant + CDK4/6i for emergent ESR1 mutations during 1L endocrine based therapy and before disease progression in HR+ HER2- mBC

\* Plenary Session

**Study Design:** Multicenter, randomized, double-blind phase III trial

Stratified by visceral disease (yes vs no); ESR1m detection (at first test vs later test); time since start of CDK4/6i + AI (<18 vs ≥18 mo); CDKi (palbociclib vs ribociclib vs abemaciclib)

- ER+/HER2- advanced breast cancer
- ≥6 mo of 1L AI + CDK4/6i (palbociclib, ribociclib, or abemaciclib)
- ctDNA-detected *ESR1*m
- No evidence of disease progression**
- ECOG PS 0 -1 (N = 315\*)

**Camizestrant 75 mg QD + Continued CDK4/6i + AI placebo (n = 157)**

**Continued AI (anastrozole or letrozole) + Continued CDK4/6i + Camizestrant placebo (n = 158)**

\*Study population derived from 3256 patients screened for ESR1m during 1L AI + CDK4/6i.

**Primary endpoint:** PFS by investigator (RECIST v1.1)

**Secondary endpoints:** PFS2, OS, safety, PROs

Select Baseline Characteristics

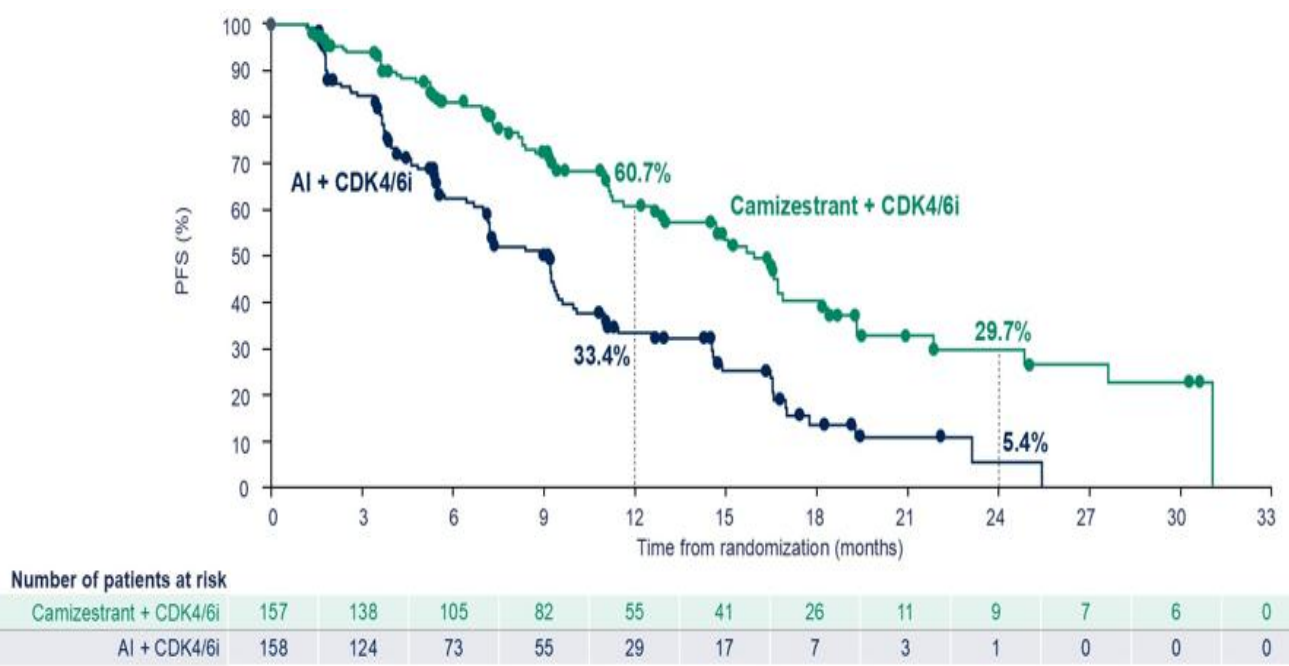
Characteristic	Cami + CDK4/6 (n = 157)	AI + CDK4/6i (n = 158)
Median age, yr (range)	61.0 (29-81)	60.5 (35-89)
Visceral metastasis, n (%)	66 (42)	71 (45)
Time since start of AI + CDK4/6i <ul style="list-style-type: none"><li>≥18 mo, n (%)</li><li>&lt;18 mo, n (%)</li><li>Median, mo (range)</li></ul>	97 (62) 60 (48) 23 (7-96)	100 (63) 58 (37) 23 (6-96)
Time of ESR1m detection <ul style="list-style-type: none"><li>At first test, n (%)</li><li>At subsequent test,* n (%)</li><li>Median, mo (range)</li></ul>	84 (54) 73 (47) 22 (4-95)	84 (53) 74 (47) 22 (6-96)
Most common ESR1m, n (%) <ul style="list-style-type: none"><li>D538G</li><li>Y537S</li><li>Y537N</li></ul>	70 (45) 61 (39) 29 (19)	82 (52) 60 (38) 25 (16)
CDK4/6i continued at randomization, n (%) <ul style="list-style-type: none"><li>Palbociclib</li><li>Ribociclib</li><li>Abemaciclib</li></ul>	119 (76) 24 (15) 14 (9)	119 (75) 23 (15) 16 (10)

\*Subsequent tests performed every 2-3 mo after first test.



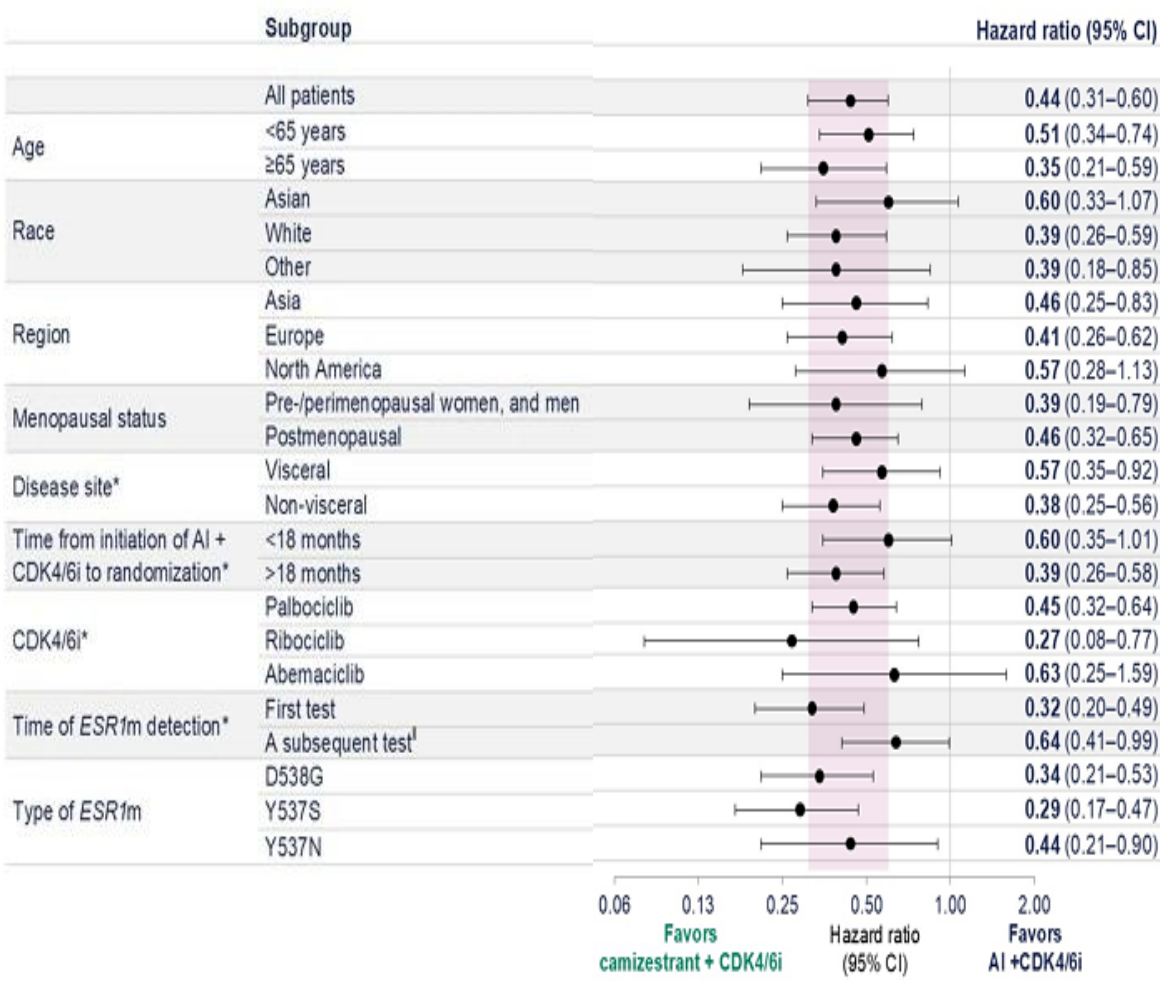
SERENA-6: Camizestrant + CDK4/6i for emergent ESR1 mutations during 1L endocrine based therapy and before disease progression in HR+ HER2- mBC

Primary Endpoint: Progression-Free Survival



Outcome	Cami + CDK4/6i (n = 157)	AI + CDK4/6i (n = 158)
PFS events	71	100
Median PFS, mo (95% CI)	16.0 (12.7-18.2)	9.2 (7.2-9.5)
Adjusted hazard ratio (95% CI)	0.44 (0.31-0.60); P <.00001	

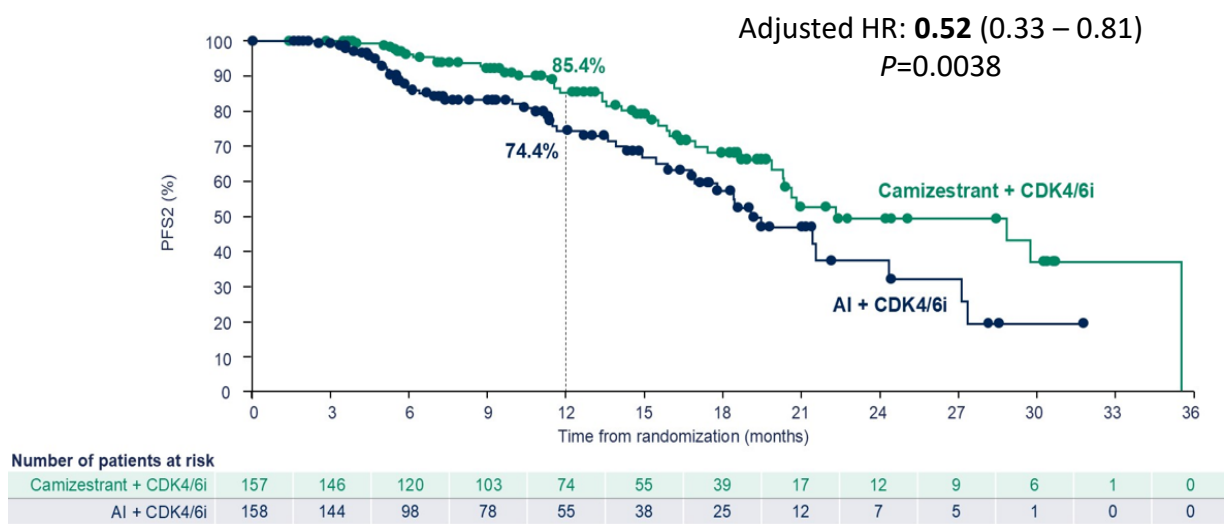
Progression-Free Survival by Subgroup



SERENA-6: Camizestrant + CDK4/6i for emergent ESR1 mutations during 1L endocrine based therapy and before disease progression in HR+ HER2- mBC

Secondary Endpoints

Second progression-free survival (PFS2)



Time to deterioration in global health status/quality of life (EORTC QLQ-C30)

	Camizestrant + CDK4/6i (n = 157)	AI + CDK4/6i (n = 158)	Adjusted HR (95% CI)
Median TTD in global health status/QoL, mo (95% CI)	(n = 107) 23.0 (13.8-NE)	(n = 95) 6.4 (2.8-14.0)	<b>0.53</b> (0.33-0.82) P <.001

Safety

Outcome	Camizestrant + CDK4/6i (n = 155)	AI + CDK4/6i (n = 155)
Any AE, n (%)	145 (94)	135 (87)
• Grade ≥3	93 (60)	71 (46)
Any Serious AE, n (%)	16 (10)	19 (12)
Any AE leading to discontinuation, n (%)		
• Camizestrant/AI	2 (1)	3 (2)
• CDK4/6i	2 (1)	2 (1)
• Both camizestrant/AI and CDK4/6i	1 (1)	2 (1)
Median treatment exposure, mo		
• Camizestrant/AI	10.1	6.3
• CDK4/6i	9.8	6.1
Mean relative dose intensity, %		
• Camizestrant/AI	99.6	99.7
• CDK4/6i	98.8	99.5

• Incidence rates of neutropenia were similar between treatment arms when adjusted for exposure time

**Switching to camizestrant with continuation of CDK4/6i guided by ctDNA improves PFS and should be a new treatment strategy...not yet FDA approved**

# ASCO 2025: RAPID REVIEWS

**\*SERENA-6**

**DESTINY-  
Breast09**

**DESTINY-  
Breast06**

**T-DXd  
rechallenge  
after ILD**

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\* Plenary Session

# DESTINY-Breast09: Phase 3 T-DXd ± Pertuzumab vs Pertuzumab + Trastuzumab + Taxane in HER2+ mBC (Interim analysis)

## Study Design: global, randomized phase 3 study

Stratified by de novo vs recurrent mBC  
HR+ or HR-; PIK3CA detected vs non-detected

- HER2+\* (IHC3+ or ISH+) advanced or mBC
- No previous chemo or HER2-targeted therapy for advanced or metastatic disease
- Previous chemo/HER2-targeted therapy allowed in neoadjuvant setting if >6 mo from metastatic disease diagnosis
- One prior line of ET for mBC permitted
- Asymptomatic/inactive brain mets allowed
- ECOG PS 0/1 (N = 1157)

T-DXd 5.4 mg/kg q3w  
(Blinded until final PFS analysis)  
(n=387)

T-DXd 5.4 mg/kg q3w +  
Pertuzumab  
(n=383)

Taxane +  
Pertuzumab + Trastuzumab (TCP)<sup>†</sup>  
(n=387)

\*Locally assessed and prospectively centrally confirmed.

<sup>†</sup>Investigator's choice: docetaxel or paclitaxel IV.

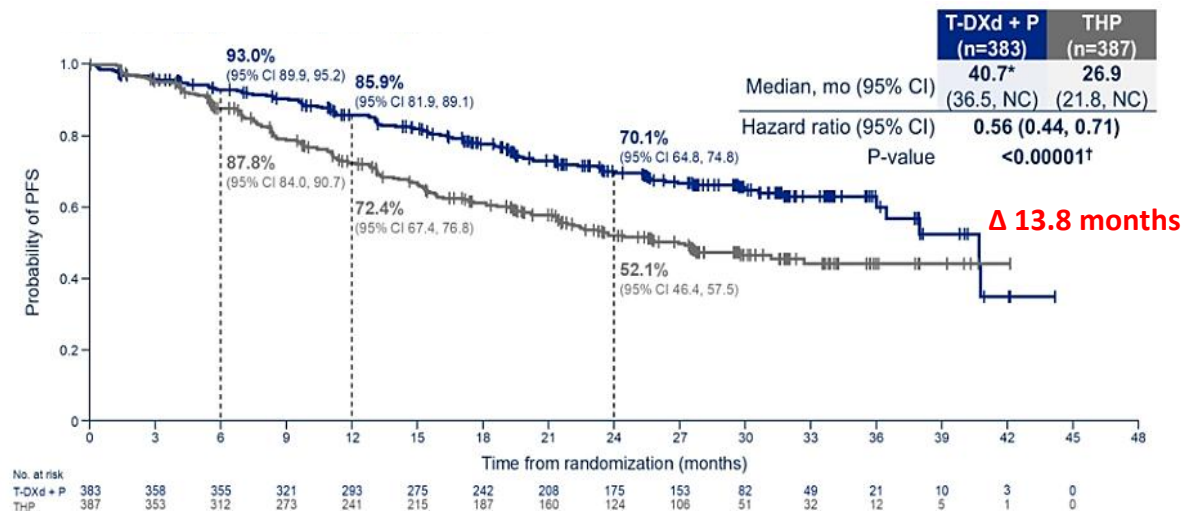
**Concurrent use of ET (AI or tamoxifen) was allowed for those with HR positive disease after six cycles of T-DXd or discontinuation of taxane in the THP arm**

Note: ~50% had *de novo* metastatic disease in each arm

**Primary endpoint:** PFS by BICR (per RECIST 1.1) up to 5 yr

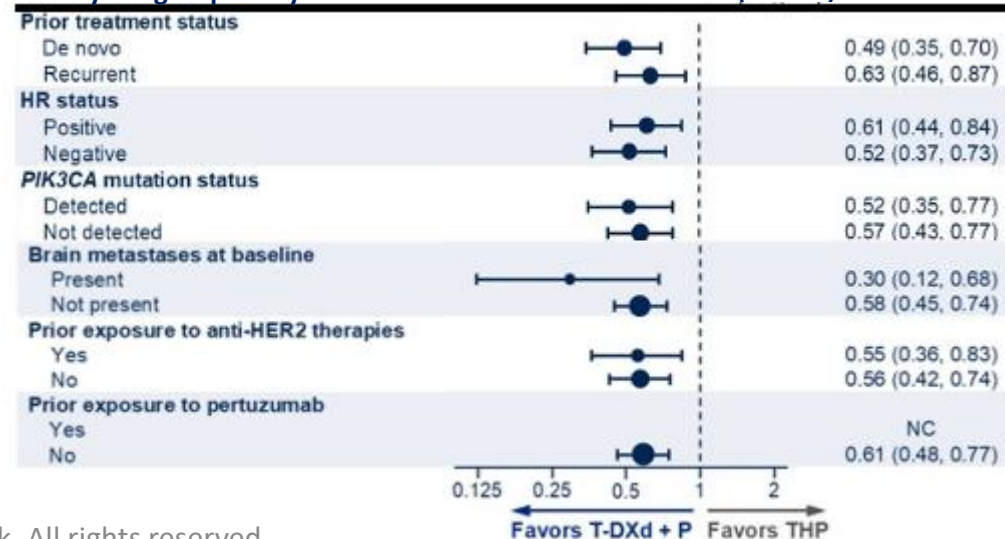
**Secondary endpoints:** PFS by investigator, OS, ORR (BICR and investigator), DoR (BICR and investigator), PFS2, safety

## Primary Endpoint: PFS by BICR



## PFS by Subgroup Analysis

## Hazard Ratio (95% CI)





# DESTINY-Breast09: Phase 3 T-DXd ± Pertuzumab vs Pertuzumab + Trastuzumab + Taxane in HER2+ mBC (Interim analysis)

## Secondary Endpoint: confirmed ORR



### Median duration of response:

- T-DXd + P: **39.2 mo**
- THP: 26.4 mo

### Remaining in Response at 24-mo:

- T-DXd + P: **73.3%**
- THP: 54.9%

### Stable disease:

- T-DXd + P: **9.9%**
- THP: 14.5%

### Median total treatment duration:

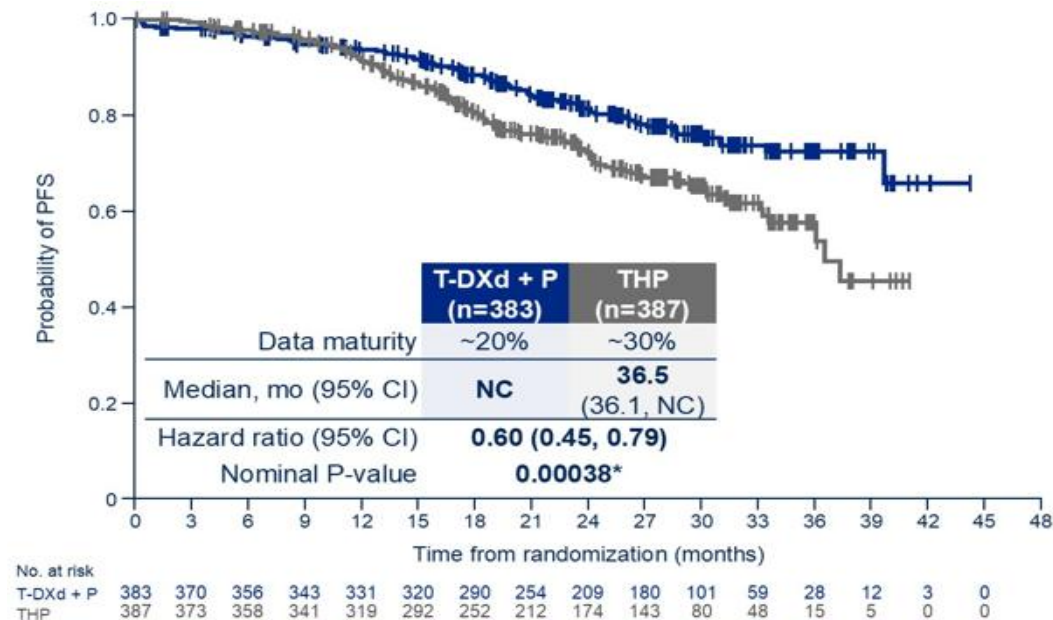
- T-DXd + P: **21.7 mo** (range .3 to 44.5)
- THP: 16.9 mo (range 0.7 to 41.7)

### Median treatment duration for taxanes:

- Docetaxel: 5.5 mo (range .7 to 37.4); median 8 cycles
- Paclitaxel: 4.4 mo (range 0.2 to 3.7); median 6 cycles

**Note Secondary Endpoint: OS - Immature, trend favoring T-DXD + P**

## Secondary Endpoint: PFS2



PFS2 defined as the time from randomization to second progression (earliest progression event following first subsequent therapy) or death. Patients may have received more than one type of therapy; patients may have received trastuzumab and pertuzumab concurrently.

32.4% of patients in the T-DXd + P arm and 46.8% of patients in the THP arm proceeded to receive 2L therapy after treatment discontinuation

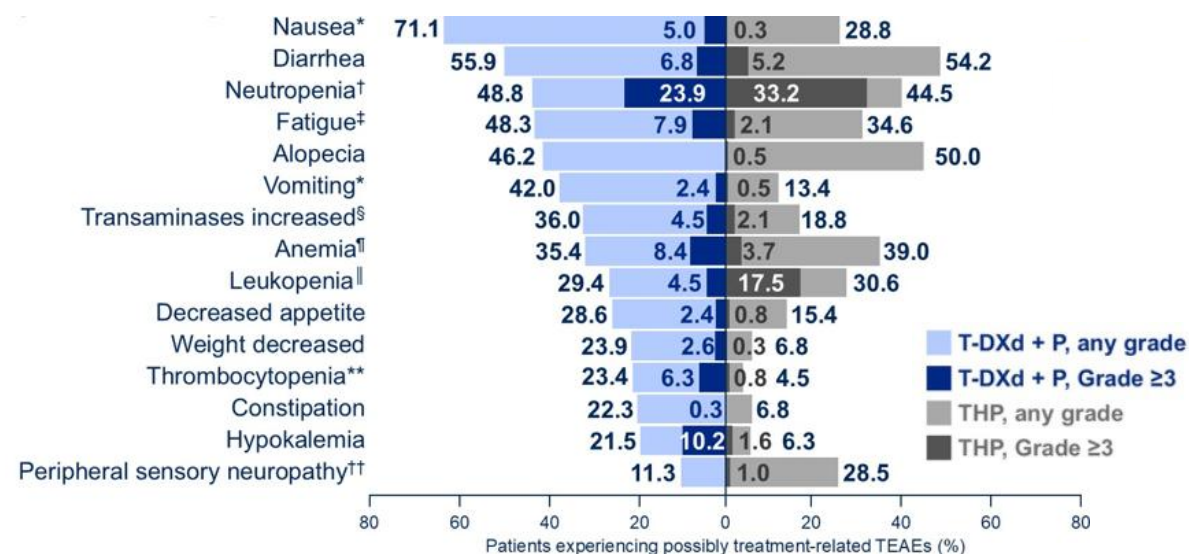
- Received HER2-directed therapies: 111 (29%) on T-DXd + P arm vs 166 (42.9%) on THP arm
- Received chemotherapy: 68 (17.8%) on T-DXd + P arm vs 57 (14.7%) on THP arm
- Received endocrine therapy: 19 (5%) on T-DXd + P arm vs 13 (3.4%) on THP arm

# DESTINY-Breast09: Phase 3 T-DXd ± Pertuzumab vs Pertuzumab + Trastuzumab + Taxane in HER2+ mBC (Interim analysis)

## Safety

Safety Summary	T-DXd + P (n = 381)	THP (n = 382)
Total exposure, patient-yr	659.7	564.0
Any TEAE, n (%)	380 (99.7)	378 (99.0)
Possible TEAE (by INV), n (%)	373 (97.9)	369 (96.6)
• Grade ≥3	209 (54.9)	200 (52.4)
Serious TEAE, n (%)	103 (27.0)	96 (25.1)
TEAE management/outcomes, n (%)		
• Treatment discontinuation	79 (20.7)	108 (28.3)
• Dose interruption/reduction	262 (68.8)	187 (49.0)
• Death	175 (45.9)	76 (19.9)
— Possible TRAE (by INV)*	13 (3.4)	3 (0.8)
	5 (1.3)	1 (0.3)

***The combination of T-DXD plus pertuzumab has the potential to be a new first-line standard of care for patients with HER2+ mBC... not yet FDA approved...***



Event	T-DXd + P (n = 381)	THP (n = 382)
<b>Adjudicated drug related ILD/pneumonitis, any</b>	12.1%	1%
• Grade 1	4.5%	2%
• Grade 2	7.1%	0.5%
• Grade 3	---	---
• Grade 4	---	---
• Grade 5	0.5%	---
<b>Left ventricular dysfunction, any</b>	11%	7.1%
• Grade 1	1%	0.3%
• Grade 2	7.9%	5.0%
• Grade 3	1.8%	1.8%
• Grade 4	0.3%	---
• Grade 5	---	---

CLEOPATRA THP	
<i>Current Approved SoC</i>	
<ul style="list-style-type: none"> <li>No prior chemotherapy or biological treatment for metastatic disease</li> </ul>	
<b>Pertuzumab + trastuzumab + docetaxel (n=402)</b>	<b>Placebo + trastuzumab + docetaxel (n=406)</b>
<b>Medium follow-up:</b> <b>99.9 months</b> 98.7 months	
<b>mPFS: 18.7</b> 12.4 months 8-year landmark PFS rates: <b>16%</b> vs 10%	
<b>mOS: 57.1</b> 40.8 months <b>8-year landmark OS rate: 37%</b> vs    23%	

PATINA TH±P → Palbo + anti-HER2 + ET		DESTINY-Breast09 T-DXd + Pertuzumab	
Not yet FDA approved			
<ul style="list-style-type: none"><li>6-8 cycles of treatment including trastuzumab with or without pertuzumab and taxane/vinorelbine</li><li>Completion of induction chemotherapy and no evidence of disease progression (CR, PR, or SD)</li></ul>		<ul style="list-style-type: none"><li>No previous chemo or HER2-targeted therapy for advanced or metastatic disease</li><li>Previous chemo/HER2-targeted therapy allowed in neoadjuvant setting if &gt;6 mo from metastatic disease diagnosis</li><li>One prior line of ET for mBC permitted</li></ul>	
Palbociclib + trastuzumab ± pertuzumab + endocrine therapy (n=261)	Placebo + trastuzumab ± pertuzumab + endocrine therapy (n=261)	T-DXd + pertuzumab (n=383)	Taxane + pertuzumab + trastuzumab (TCP)† (n=387)
Medium follow-up: 52 months		Medium follow-up: 29.2 months	
mPFS: 44.3	29.1 months	mPFS: 40.7	26.9 months
HR: 0.74 (0.58 – 0.94); P = 0.0074		HR: 0.56 (0.44 – 0.71); P = 0.00001	
Not evaluable (OS immature)	77 months	Not calculable	Not calculable
3-year OS rate: 87.0%	vs 84.7 %	HR 0.84 (OS immature)	

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\* Plenary Session

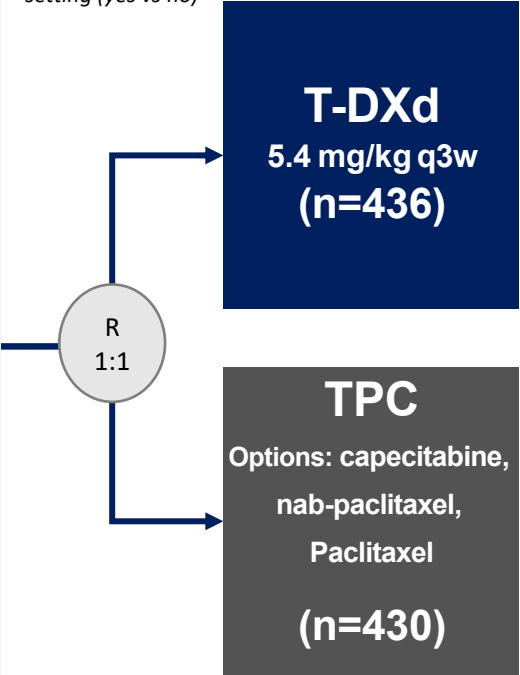


DESTINY-Breast06: Exploratory biomarker analysis of trastuzumab deruxtecan (T-DXd) vs TPC in HER2-low or ultralow HR+ mBC

**Study Design:** randomized, multicenter, open-label Phase 3 study

Stratified by Prior CDK4/6i use (yes vs no); HER2 expression (IHC 1+ vs IHC 2+/ISH- vs IHC 0 with membrane staining); Prior taxane in the non-metastatic setting (yes vs no)

- HR+ mBC
  - HER2-low (IHC 1+ or IHC 2+/ISH-) or HER2-ultralow (IHC 0 with membrane staining)\*
  - **Chemotherapy naïve in the mBC setting**
  - **Prior lines of therapy:**
    - ≥2 lines of ET ± targeted therapy for mBC **OR**
    - 1 line for mBC **AND** progression ≤6 months of starting first-line ET + CDK4/6i **OR**
    - Recurrence ≤24 months of starting adjuvant ET
- (HER2-Low = 713; HER2-ultralow = 153)



**Primary endpoints:** PFS (BICR) in HER2-low

**Key secondary endpoints:** PFS (BICR) in ITT (HER2-low + ultralow); OS in HER2-low; OS in ITT (HER2-low + ultralow); PFS2 (investigator): second progression-free survival / time from randomization to second progression or death

**Exploratory Endpoint:** Biomarkers

- Blood samples at baseline, ctDNA via GuardantOMNI™
- Biomarker evaluable population:
  - *PIK3CA*, *AKT1*, *ESR1* and *BRCA1/2* mutations investigated
    - PI3K/AKT pathway mutation in 45% of patients
    - *ESR1* mutation in 51.5% of patients
    - *BRCA1/2* in 7.7% of patients

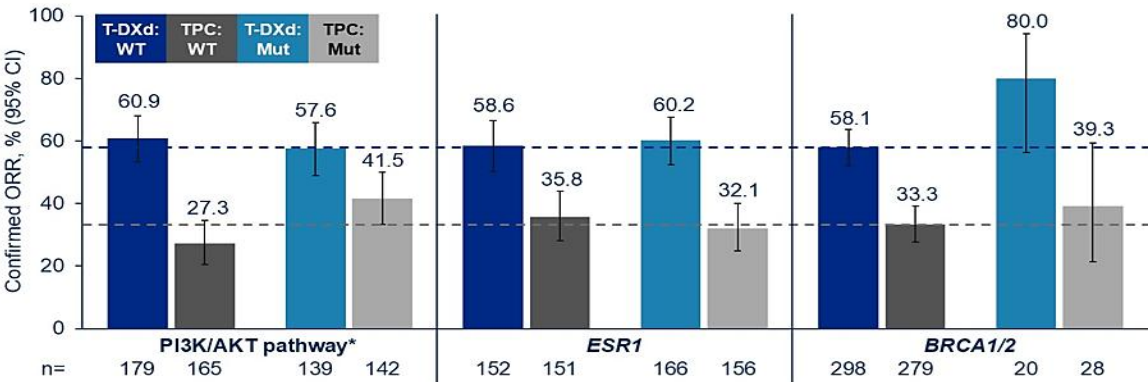
Clinical outcomes in biomarker-evaluable and ITT populations

Overall	Biomarker-evaluable population (n=625)		ITT population (N=866)	
	T-DXd (n=318)	TPC (n=307)	T-DXd (n=436)	TPC (n=430)
mPFS, mos (95% CI)	13.9 (12.3 – 15.4)	8.2 (6.9 – 9.5)	13.2 (12.0 – 15.2)	8.1 (7.0 – 9.0)
HR (95% CI)	0.63 (0.52 – 0.76)		0.64 (0.54 – 0.76)	
Confirmed ORR, % (95% CI)	59.4 (53.8 – 64.9)	33.9 (28.6 – 39.5)	57.3 (52.5 – 62.0)	31.2 (26.8 – 35.8)

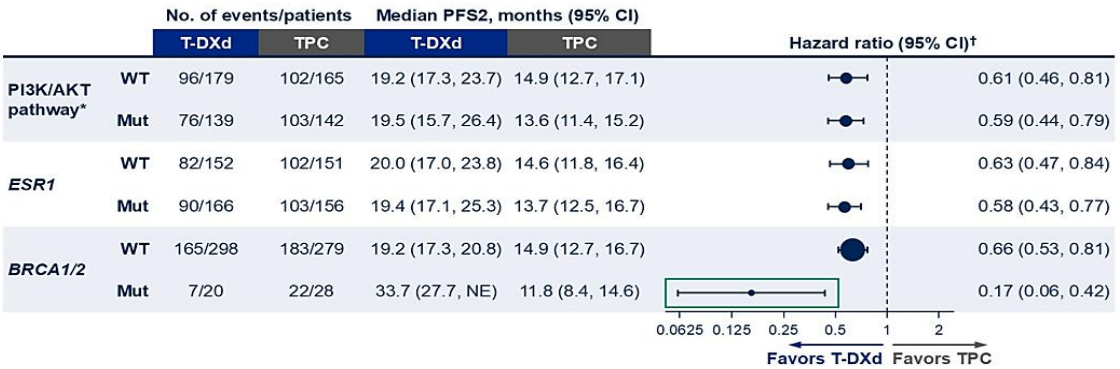
PFS (BICR) by baseline mutation status

		Wild type		Mutant	
		T-DXd	TPC	T-DXd	TPC
ESR1 mutation status	mPFS, mos (95% CI)	15.2 (12.3 – 17.3)	8.1 (6.9 – 9.6)	11.3 (9.8 – 13.5)	7.0 (5.6 – 9.3)
	HR (95% CI)	0.59 (0.44 – 0.79)		0.64 (0.49 – 0.83)	
BRCA1/2 mutation status	mPFS, mos (95% CI)	12.9 (10.9 – 14.5)	8.2 (6.9 – 9.6)	21.4 (15.2 – NE)	5.6 (4.1 – 6.9)
	HR (95% CI)	0.69 (0.56 – 0.85)		0.14 (0.05 – 0.33)	
PI3K/AKT Pathway mutation status	mPFS, mos (95% CI)	13.1 (11.1 – 15.4)	8.1 (6.8 – 9.6)	13.2 (9.9 – 15.5)	7.1 (6.0 – 9.5)
	HR (95% CI)	0.61 (0.47 – 0.79)		0.65 (0.48 – 0.87)	

Confirmed ORR (BICR) by baseline mutation status



PFS2 (investigator) by baseline mutation status



*T-DXD is an effective treatment strategy regardless of mutational status for HR+, HER2-low or –ultralow mBC after prior endocrine-based therapy*

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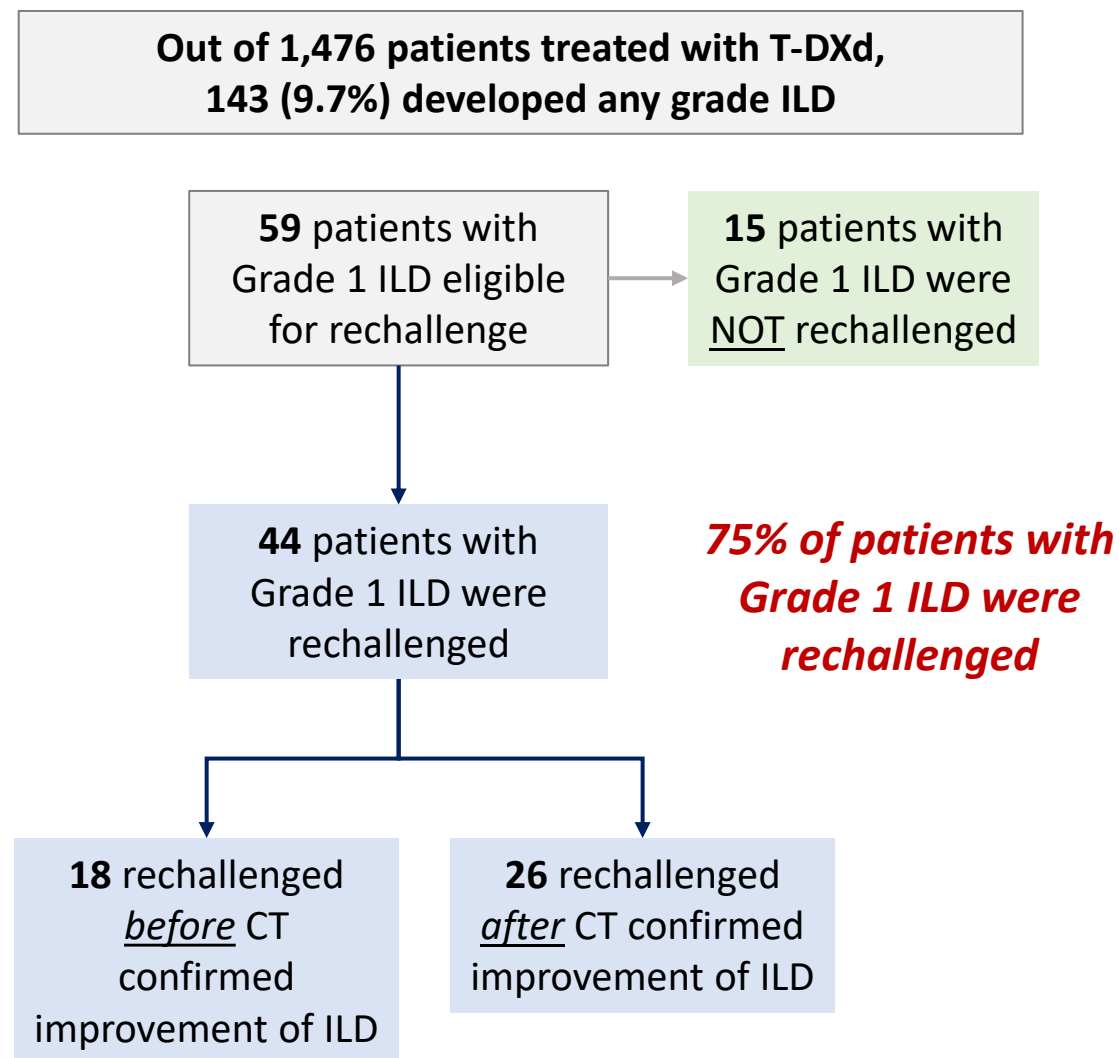
**CompassHER2  
pCR**

\* Plenary Session

## Treatment rechallenge after trastuzumab-deruxtecan related ILD

Retrospective real-world study of patients treated with T-DXd for any cancer type at 5 US institutions from 2017 - 2024

- T-DXd carries a 12-15% risk of any grade interstitial lung disease/pneumonitis (ILD) and a 1-2% risk of fatal ILD (grade 5)
- Monitoring of symptoms and imaging is critical
- **Grade 1:** Imaging finding, asymptomatic
  - Hold treatment
  - Consider steroids
  - On resolution, option for rechallenge
- **Grade 2 or greater:** Symptomatic
  - Permanently discontinue treatment
  - Administer steroids



## Treatment rechallenge after trastuzumab-deruxtecan related ILD

Retrospective real-world study of patients treated with T-DXd for any cancer type at 5 US institutions from 2017 - 2024

N, (%)	Rechallenged (n=44)	Not rechallenged (n=15)	Overall (n=59)
ILD onset from first T-DXd dose (days)	144 (77 – 216)	198 (123 – 334)	146 (81 – 246)
• Breast cancer	38 (86%)	14 (93%)	52 (88%)
• Other (GI, Gyn, Lung)	6 (14%)	1 (7%)	7 (12%)
Age at 1 <sup>st</sup> –DXd dose (years)	60 (52 – 68)	63 (48 – 72)	60 (52 – 69)
Prior # of Tx lines in ad/met setting	3 (1 – 4)	2 (2-5)	3 (1-4)
Renal impairment (CrCl <60 mL/min)	10 (23%)	3 (20%)	13 (22%)
<b>Treated with steroids</b>	<b>29 (66%)</b>	<b>6 (40%)</b>	<b>35 (59%)</b>
Duration of steroid treatment (days)	36 (21-76)	35 (25-49)	36 (21-75)
<b>Radiographic ILD improvement (days)</b>	<b>39 (22-84)</b>	<b>80 (64-99)</b>	<b>55 (24-84)*</b>

\*Radiographic ILD improvement was seen at a median of 29 days (IQR 20-70) for patients treated with steroids vs 82 days (IQR 50-108) without (p<0.001\*\*)

Median time to rechallenge was **42** days from last dose before ILD

- 3 patients (7%), intervening therapy prior to rechallenge
- 27 patients (61%), rechallenged with the dose reduction
- 17 patients (38%), rechallenged while completing steroid taper

After rechallenge patients remained on T-DXd for a median of **215** days

12 (27%) patients developed recurrent ILD

- 9 with grade 1; 2 with grade 2; 1 with grade 3

***Steroid use results in fast radiographic ILD improvement and rechallenge with T-DXd after grade 1 ILD is possible with limited, low-grade recurrence of ILD***

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## REMINDER

**ASCENT:** On April 7, 2021, the FDA granted regular approval to sacituzumab govitecan (Trodelvy, Immunomedics Inc.) for patients with unresectable locally advanced or metastatic TNBC who have received two or more prior systemic therapies, at least one of them for metastatic disease.

### Study Design: International, randomized, open-label phase III trial

Stratified by geography (N America vs rest of world),  
number of prior CT (2-3 vs >3), brain mets (yes vs no)

- Patients with mTNBC and  $\geq 2$  prior CT (no upper limit; could include PD within 12 mo of [neo]adjuvant tx)
- Prior taxane
- RECIST v1.1 measurable disease
- Permitted brain mets if stable  $\geq 4$  wk before tx
- ECOG PS 0/1 (N = 529)

**Sacituzumab govitecan**  
10 mg/kg IV on Days 1, 8 or  
21-day cycle  
(n = 267)

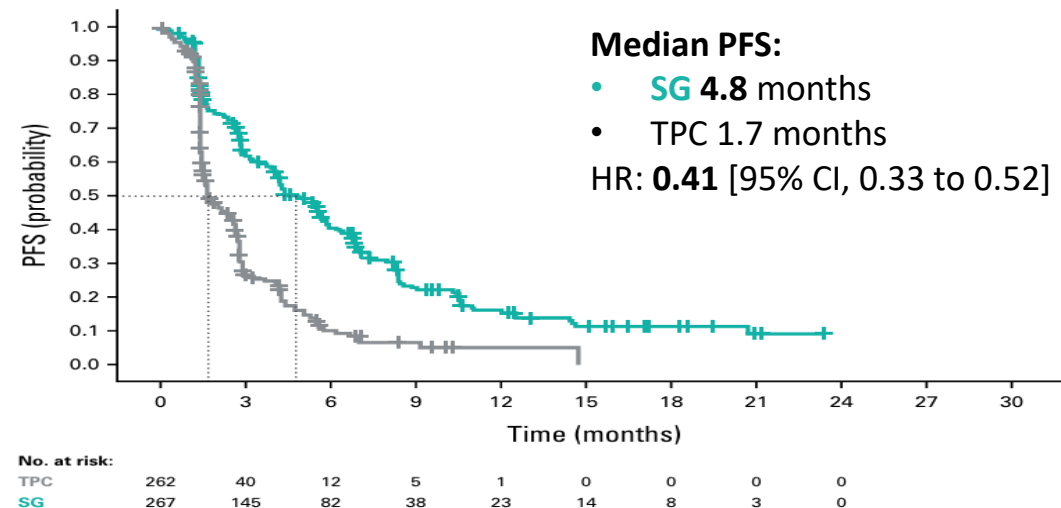
**Physician's choice of single-agent CT\***  
(n = 262)

\*Capecitabine, eribulin, gemcitabine, or vinorelbine.

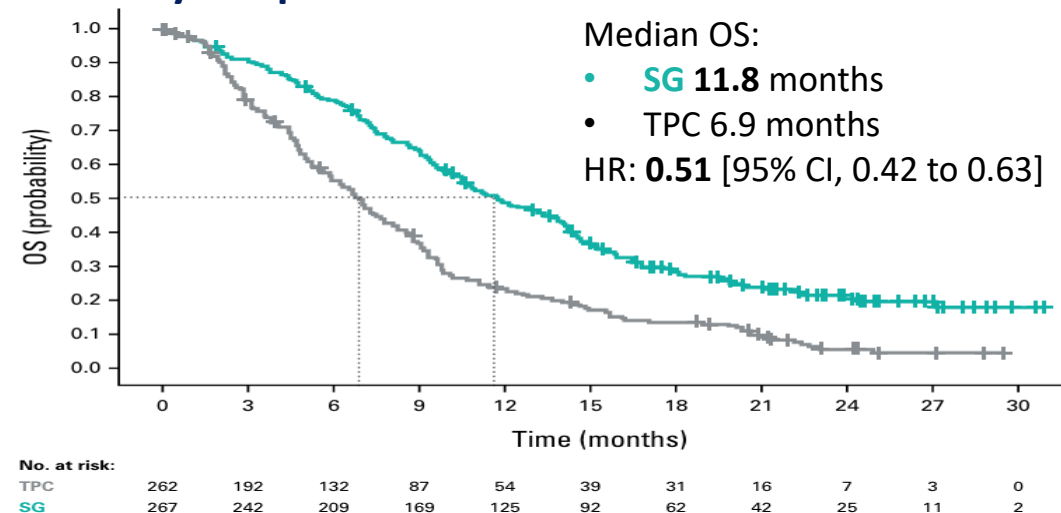
**Primary endpoint:** PFS by BICR in patients without brain mets

**Secondary endpoints:** investigator-assessed PFS, OS, ORR, DoR, TTR, safety

### Primary Endpoint: PFS



### Secondary Endpoint: OS





# ASCENT-03: Sacituzumab govitecan in patients with previously untreated mTNBC with tumors lacking PD-L1 expression or patients previously treated with anti-PD-(L)1 in early-stage setting

## Study Design

- Previously untreated locally advanced, unresectable, or metastatic TNBC
  - PD-L1- by 22C3 CPS <10 or PD-L1+ by 22C3 CPS ≥10 in patients previously treated with an aPD-(L)1 agent in the curative setting
  - ≥6 months since treatment in the curative setting
  - Prior aPD-(L)1 use allowed in the curative setting
  - PD-L1 and TNBC status centrally confirmed
  - ECOG PS 0 or 1
- N~540

**Sacituzumab govitecan**  
**10 mg/kg IV**  
 Day 1 and 8 of a 21-day cycle

**Gemcitabine 1000 mg/m<sup>2</sup> +  
 Carboplatin AUC 2 IV**  
 Day 1 and day 8 of 21-day cycle

OR

**Paclitaxel 90 mg/m<sup>2</sup> IV**  
 Day 1, 8, and 15 of 28-day cycle

OR

**nab-Paclitaxel 100 mg/m<sup>2</sup> IV**  
 Day 1, 8, and 15 of 28-day cycle

**Primary Endpoint:** PFS

**Secondary Endpoints:** OS, ORR, DOR, TTR, Safety, PROs

**May 23<sup>rd</sup> 2025, press release:**

*Gilead Sciences, Inc. announced positive topline results from the Phase 3 ASCENT-03 study of Trodelvy® (sacituzumab govitecan-hziy). The study met its primary endpoint, demonstrating a highly statistically significant and clinically meaningful improvement in progression-free survival (PFS) compared to chemotherapy in patients with first-line metastatic triple-negative breast cancer (mTNBC) who are not candidates for PD-1/PD-L1 inhibitors, meaning they are PD-L1 negative or are ineligible to receive immunotherapy.*

*Detailed results from the ASCENT-03 study will be presented at a future medical meeting and discussed with regulatory authorities*

[ASCENT 03 Trodelvy Demonstrates Highly Statistically Significant Clinically Meaningful Improvement in Progression Free Survival in Patients With First line Metastatic Triple Negative Breast Cancer Who Are Not Candidates for Checkpoint Inhibitors](#)



# ASCO 2025: RAPID REVIEWS

**\*SERENA-6**

**DESTINY-  
Breast09**

**DESTINY-  
Breast06**

**T-DXd  
rechallenge  
after ILD**

**ASCENT-03**

**ASCENT-04**

**VERITAC-2**

**INAVO120**

**CompassHER2  
pCR**

\* Plenary Session

## REMINDER

# KEYNOTE-355: Pembrolizumab plus Chemotherapy in Advanced Triple-Negative Breast Cancer

On November 13, 2020, the FDA granted accelerated approval to pembrolizumab (KEYTRUDA, Merck & Co.) in combination with chemotherapy for the treatment of patients with locally recurrent unresectable or metastatic TNBC whose tumors express PD-L1 (CPS  $\geq 10$ ) as determined by an FDA approved test.

## Study Design:

Randomized, double-blind, multicenter phase III trial

Stratified by chemotherapy (taxane vs gem/carbo); PD-L1 tumor expression (CPS  $\geq 1$  vs  $< 1$ ); previous Tx with same class of chemotherapy for EBC (Y vs N)

- Adult patients with previously untreated locally recurrent inoperable or metastatic TNBC
- Completed curative intent treatment  $\geq 6$  mo before first recurrence
- ECOG PS 0/1 (N = 847)

**Pembrolizumab  
+ Chemotherapy\***  
(n = 566)

- \*Investigator's choice of chemotherapy
- Nab-paclitaxel
  - Paclitaxel
  - Gem + carbo

**Placebo  
+ Chemotherapy\***  
(n = 281)

Until  
progression,  
toxicity, or  
completion of  
35 cycles of  
pembrolizumab  
/placebo

**Primary endpoint:** PFS and OS (PD-L1 CPS  $\geq 10$ , PD-L1 CPS  $\geq 1$ , and ITT)

**Secondary endpoints:** ORR, DoR, DCR, safety in full treated population

## Coprimary Endpoints: PFS and OS

### PFS

	Pembrolizumab + CT	Placebo + CT	HR (95% CI)
<b>PD-L1 CPS <math>\geq 10</math></b>	(n = 220)	(n = 103)	
• Median PFS, mo	<b>9.7</b>	5.6	0.66
• 12-mo PFS, %	39.1	23.0	(0.50-0.88)
<b>PD-L1 CPS <math>\geq 1</math></b>	(n = 425)	(n = 211)	
• Median PFS, mo	7.6	5.6	0.75
• 12-mo PFS, %	31.7	19.4	(0.62-0.91)
<b>ITT population</b>	(n = 566)	(n = 281)	
• Median PFS, mo	<b>7.5</b>	<b>5.6</b>	<b>0.82</b>
• 12-mo PFS, %	29.3	20.8	(0.70-0.98)

### OS

	Pembrolizumab + CT	Placebo + CT	HR (95% CI)
<b>PD-L1 CPS <math>\geq 10</math></b>	(n = 220)	(n = 103)	
• Median OS, mo	23.0	16.1	0.73 (0.55-0.95)
• 18-mo OS, %	58.3	44.7	1-sided P = .0093
• 24-mo OS, %	48.2	34.0	
<b>PD-L1 CPS <math>\geq 1</math></b>	(n = 425)	(n = 211)	
• Median OS, mo	17.6	16.0	0.86 (0.72-1.04)
• 18-mo OS, %	48.4	41.4	1-sided P = .0563
• 24-mo OS, %	37.7	29.5	
<b>ITT population</b>	(n = 566)	(n = 281)	
• Median OS, mo	17.2	15.5	0.89 (0.76-1.05)
• 18-mo OS, %	47.8	41.8	
• 24-mo OS, %	35.5	30.4	

# ASCENT-04: Sacituzumab Govitecan + Pembrolizumab in 1L setting for patient with PD-L1–Positive Advanced TNBC

## Study Design: Global, multicenter, randomized, phase III trial

Stratified by curative treatment-free interval (de novo vs recurrence within 6-12 mo vs recurrence in >12 mo); region (US/Canada/W Europe vs RoW); prior anti-PD-1/PD-L1 (yes vs no)

- Previously untreated, locally advanced unresectable or metastatic TNBC
- PD-L1 positive (CPS ≥10 using 22C3 assay)
- ≥6 mo since curative treatment (prior anti-PD-1/PD-L1 therapy allowed) (N = 443)

**Sacituzumab  
Govitecan +  
Pembrolizumab\***  
(n = 221)

Treatment  
continued until  
BICR-verified  
disease  
progression or  
unacceptable  
toxicity

**Chemotherapy +  
Pembrolizumab†**  
(n = 222)

Crossover to 2L SG  
permitted upon  
progression  
Note: (96 / 119 pts  
(81%) received SG  
monotherapy)

\*SG 10 mg/kg IV D1, 8 + Pembro 200 mg D1 of 21-day cycle.

†Paclitaxel 90 mg/m<sup>2</sup> or nab-paclitaxel 100 mg/m<sup>2</sup> D1, 8, 15 of 28-day cycle or gemcitabine 1000 mg/m<sup>2</sup> + carboplatin AUC 2 D1, 8 of 21-day cycle; Pembro 200 mg D1 of 21-day cycle.

**Primary endpoint:** PFS by BICR

**Secondary endpoints:** OS and ORR by BICR (hierarchical testing), DoR by BICR, safety, QoL

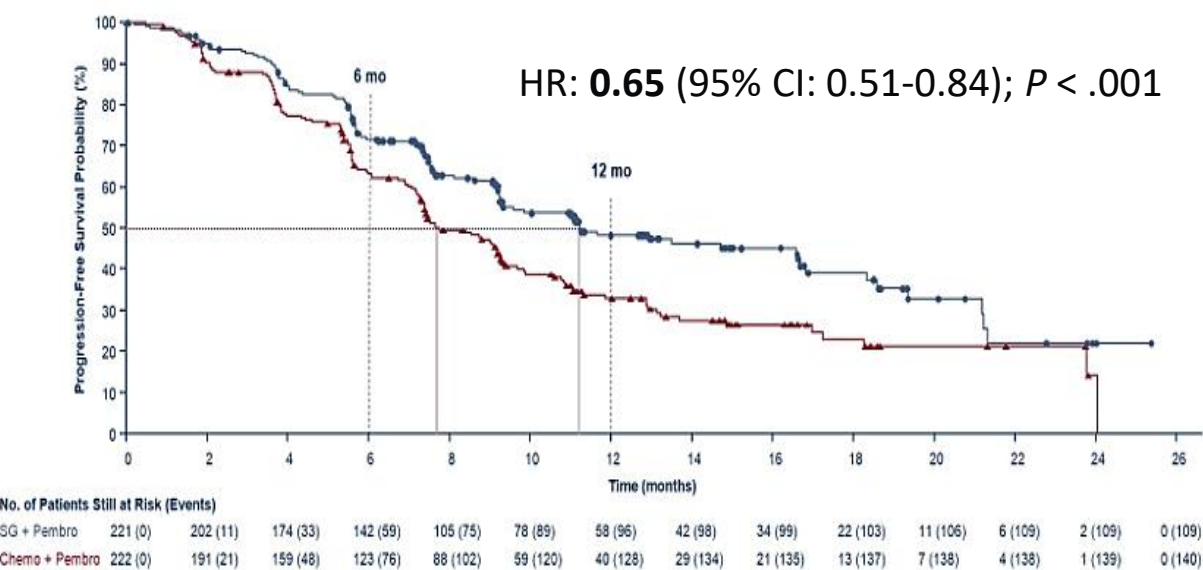
## Select Baseline Characteristics

Characteristic, n (%)	SG + Pembro (n = 221)	CT + Pembro (n = 222)
<b>ECOG PS, n (%)</b>		
• 0	156 (71)	154 (69)
• ≥1	65 (29)	67 (30)*
<b>Curative tx-free interval</b>		
• De novo	75 (34)	75 (34)
• Recurrence 6-12 mo	40 (18)	40 (18)
• Recurrence >12 mo	106 (48)	107 (48)
<b>Metastatic sites</b>		
• Lymph node	159 (72)	154 (69)
• Lung	111 (50)	95 (43)
• Bone	61 (28)	45 (20)
• Liver	55 (25)	57 (26)
• Brain	8 (4)	6 (3)
• Other	81 (37)	71 (32)
<b>Prior anti-PD-1/PD-L1 therapy</b>	9 (4)	11 (5)
<b>CT selected†</b>		
• Taxane	116 (52)	114 (51)
• Gem/carbo	105 (48)	108 (49)

Note: Treatment arms were consistent for age, sex, race, geographical region

\*1 patient had ECOG PS ≥2. †CT was selected prior to randomization; 2 randomized patients did not receive tx.

Primary Endpoint: PFS by BICR (ITT population)



	SG + Pembro (n = 221)	CT + Pembro (n = 222)
Events, n	109	140
Median PFS, mo (95% CI)	11.2 (9.3-16.7)	7.8 (7.3-9.3)
6-mo PFS, % (95% CI)	72% (65-77)	63% (56-69)
12-mo PFS, % (95% CI)	48% (41-56)	33% (26-40)

Median follow-up: 14.0 mo (range: 0.1-28.6)

PFS by subgroup analysis

	SG + Pembro		CT + Pembro		HR (95% CI)
	n	Median PFS, Mo (95% CI)	n	Median PFS, Mo (95% CI)	
Age					
• <65 yr	163	11.3 (9.3-16.8)	165	7.5 (7.0-9.2)	0.61 (0.45-0.82)
• ≥65 yr	58	11.1 (7.5-NR)	57	9.3 (7.3-13.2)	0.85 (0.52-1.39)
ECOG PS					
• 0	158	12.9 (9.3-16.8)	154	8.7 (7.3-9.9)	0.65 (0.48-0.88)
• ≥1	65	9.2 (7.5-18.3)	67	7.5 (5.6-9.3)	0.66 (0.43-1.03)
Geographic region					
• US/Canada/W Europe	85	11.7 (7.5-19.4)	85	7.4 (5.7-9.9)	0.65 (0.43-0.98)
• Rest of World	136	11.2 (9.3-16.7)	137	8.4 (7.4-9.3)	0.66 (0.48-0.91)
Curative tx-free interval					
• De novo	75	8.1 (7.3-18.6)	75	7.7 (6.1-11.9)	0.89 (0.59-1.34)
• Recurrence 6-12 mo	40	9.9 (5.7-16.8)	40	7.2 (4.4-9.1)	0.62 (0.36-1.08)
• Recurrence ≥12 mo	106	16.6 (11.0-NR)	107	8.7 (7.3-10.8)	0.52 (0.35-0.76)
Prior (neo)adjuvant anti-PD-1/PD-L1 therapy					
• Yes	9	7.5 (0.9-NR)	11	6.6 (2.1-NR)	1.08 (0.31-3.75)
• No	212	11.7 (9.3-16.8)	211	7.8 (7.4-9.3)	0.65 (0.50-0.84)
CT selected prior to randomization					
• Taxane	116	11.1 (8.6-16.7)	114	9.2 (7.2-12.9)	0.82 (0.58-1.17)
• Gem/carbo	105	11.3 (9.2-21.2)	108	7.4 (6.9-9.0)	0.52 (0.36-0.75)

ASCENT-04: Sacituzumab Govitecan + Pembrolizumab in 1L setting for patient with PD-L1–Positive Advanced TNBC

Secondary Endpoints

Outcome	SG + Pembro (n = 221)	CT + Pembro (n = 222)
ORR, % (95% CI)	60 (52.9-66.3)	53 (46.4-59.9)
• Stratified OR (95% CI)	1.3 (0.9-1.9)	
Best overall response, n (%)		
• CR	28 (13)	18 (8)
• PR	104 (47)	100 (45)
• SD	70 (32)	70 (32)
– SD ≥6 mo	23 (10)	29 (13)
• PD	9 (4)	26 (12)
• NE	10 (5)	8 (4)
Median Time To Response, mo (range)	1.9 (1.0-9.3)	1.9 (1.1-11.4)
Median Duration of Response, mo (95% CI)	16.5 (12.7-19.5)	9.2 (7.6-11.3)
Median Overall Survival, mo (95% CI)	NR (25.6-NR)	NR (NR-NR)
• Events, n	53	61

Note: OS data immature at primary analysis (26% maturity rate)

Safety: AEs consistent with known profiles of SG and Pembro

Event, n (%)	SG + Pembro (n = 221)		CT + Pembro (n = 222)	
TEAE	220 (>99)		219 (>99)	
• Grade ≥3	158 (71)		154 (70)	
Treatment-emergent SAE	84 (38)		68 (31)	
• Treatment-related	61 (28)		42 (19)	
TEAE leading to treatment d/c	26 (12)		68 (31)	
TEAE leading to dose interruption	171 (77)		162 (74)	
TEAE leading to dose reduction	78 (35)		96 (44)	
TEAE leading to death	7 (3)		6 (3)	
• Treatment-related	3 (1)		1 (<1)	
Median Duration of treatment, mo	SG: 8.9	P: 8.5	CT: 6.2	P: 6.4

The combination of SG + P is a potential new treatment option for select patients previously untreated with PD-L1 positive locally advanced or metastatic TNBC

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**VERITAC-2**

**INAVO120**

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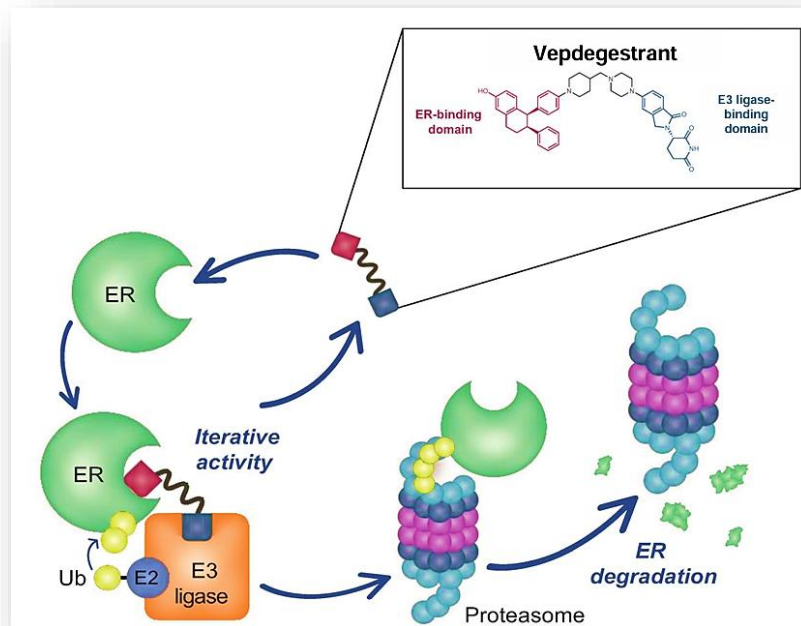
\* Plenary Session

# VERITAC-2: Vepdegestrant, a potential oral therapy option for patients with previously treated ESR1-mutant ER+, HER2+ mBC

June 6, 2025: submission of a NDA to the FDA based on the results from VERITAC-2

## Mechanism of Action

- Vepdegestrant is a selective oral PROTAC (PROteolysis Targeting Chimera) estrogen receptor (ER) degrader that targets both wild-type and mutant estrogen receptors
- Vepdegestrant has a unique MOA that directly harnesses the ubiquitin-proteasome system to degrade estrogen receptors



Békés M, et al. Nat Rev Drug Discov 2022;21(3):181-200. Gough SM, et al. Clin Cancer Res. 2024;30(16):3549-3563. Hamilton EP, et al. Futur Oncol. 2024;20(32):2447-55

## Study Design: International, open-label, randomized phase III study

Stratified by ESR1 mutation (yes vs no) and visceral disease (yes vs no)

- ER+/HER2- advanced or metastatic BC
- Prior therapy
  - 1 prior line of CDK4/6i + ET
  - ≤1 additional line of ET
  - Most recent ET given for ≥6 mo
  - No prior chemotherapy** in advanced/metastatic setting
  - No prior SERD (e.g., fulvestrant, elacestrant)
- Radiological progression during or after last line of therapy

(N = 624)

28-day Treatment Cycles

**Vepdegestrant**  
200 mg PO QD  
(n = 313)

**Fulvestrant**  
500 mg IM\*  
(n = 311)

\*Day 1 and 15 of cycle 1; Day 1 thereafter.

**Primary endpoint:** PFS by BICR in all patients and ESR1m population

**Secondary endpoints:** OS, CBR and ORR by BICR, safety

*Note: OS data is immature; ongoing follow-up*

Data cutoff date: Jan 31, 2025



## KEY DATA

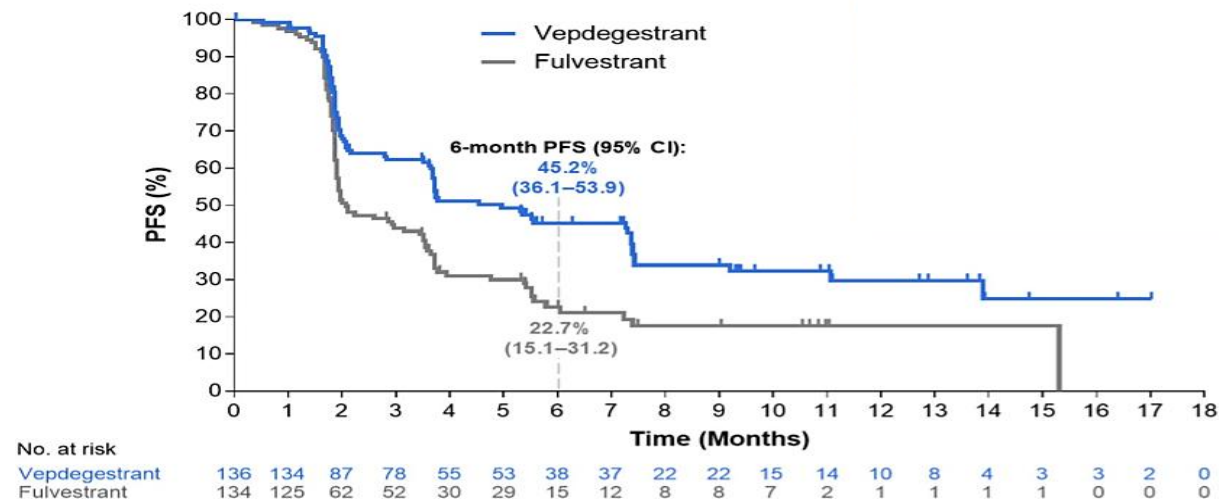
# VERITAC-2: Vepdegestrant, a potential oral therapy option for patients with previously treated ESR1-mutant ER+, HER2+ mBC

## Baseline characteristics

Characteristic, %	Patients With ESR1m		All Patients	
	Vep (n = 136)	Fulv (n = 134)	Vep (n = 313)	Fulv (n = 311)
Median age, yr (range)	60 (26-87)	60 (34-85)	60 (26-89)	60 (28-85)
Female, %	99	100	99	100
Postmenopausal, %	79	79	78	78
Race, %				
• White	43	51	47	46
• Black	3	4	2	2
• Asian	45	37	39	41
• Unknown/NR	9	7	12	9
ECOG PS 0/1, %	57/43	57/43	61/39	64/36
ESR1m, %	100	100	43	43
Sites of disease, %				
• Visceral	68	68	63	63
• Liver metastasis	46	44	40	36
• Bone only	18	18	18	20
Prior lines of therapy				
• 1 / 2	82 / 18	80 / 20	82 / 18	76 / 23

- 100% of patients had received prior endocrine therapy
- 100% of patients had received prior CDK4/6i

## Primary Endpoint: Patients With ESR1m



Patients with ESR1m	Vepdegestrant (n = 136)	Fulvestrant (n = 134)
Median f/u, mo	7.4	6.0
Events, n (%)	79 (58)	95 (71)
Median PFS, mo (95% CI)	5.0 (3.7-7.4)	2.1 (1.9-3.5)
Stratified HR (95% CI)	0.57 (0.42-0.77); 2-sided P <0.001	
PFS in all patients	Vepdegestrant (n = 313)	Fulvestrant (n = 311)
Median f/u, mo	7.4	7.2
Events, n (%)	186 (59)	198 (64)
Median PFS, mo (95% CI)	3.7 (3.6-5.3)	3.6 (2.2-3.8)
Stratified HR (95% CI)	0.83 (0.68-1.02); 2-sided P = 0.07	



## VERITAC-2: Vepdegestrant, a potential oral therapy option for patients with previously treated ESR1-mutant ER+, HER2+ mBC

### Secondary Endpoints

Outcome	Patients With ESR1m		All Patients	
	Vepdegestrant (n = 121)	Fulvestrant (n = 119)	Vepdegestrant (n = 274)	Fulvestrant (n = 272)
<b>CBR by BICR</b>	42.1	20.2	34.3	28.7
• OR (95% CI)	2.88 (1.57-5.39)		1.29 (0.89-1.91)	
• P Value	<0.001		0.16	
<b>ORR by BICR</b>	18.6 (n = 97)	4.0 (n = 100)	10.9 (n = 221)	3.6 (n = 222)
• OR (95% CI)	5.45 (1.69-22.73)		3.23 (1.38-8.71)	
• P Value	0.001		0.003	
<b>Deaths,* n</b>	43		80	

### Safety

AEs, %	Vepdegestrant (n = 312)	Fulvestrant (n = 307)
<b>TEAEs</b>		
• Any	87	81
• Grade ≥3	<b>23</b>	<b>18</b>
• Serious	10	9
• Leading to tx discontinuation	3	1
• Leading to dose reduction	2	NA
<b>TRAEs</b>		
• Any	57	40
• Grade ≥3	<b>8</b>	3

- Elevated fatigue 27% any grade vep arm vs 16% any grade fulv arm
- QT prolongation:**
  - 10% and 1% TEAEs in vepdegestrant and fulvestrant arms, respectively
- QT interval substudy** (n = 88): no large QT-prolonging effect
  - Mild increase (11.1 ms) in mean QTcF from BL, with upper 90% CI (13.7 ms) <20 ms

***In a head-to-head study with fulvestrant, vepdegestrant, a novel oral therapy, could be consider as a potential treatment option for patients with previously treated ESR1-mutant ER+, HER2- mBC***

## COMPARISON

## ESR1m, ER+/HER2- mBC

	<b>VERITAC-2</b> International, open-label, randomized phase 3		<b>DESTINY-Breast06</b> Randomized, multicenter, open-label Phase 3		<b>EMERALD</b> Randomized, open-label, phase 3	
<b>Patients with ESR1m</b>	<b>Vepdegestrant</b> (n = 136)	<b>Fulvestrant</b> (n = 134)	<i>Biomarker evaluable population</i> <b>T-DXd</b> (n=166)		<b>Elacestrant</b> (n=115)	<b>Fulvestrant or AI</b> (n=113 total; 83 fulvestrant)
<b>Study Inclusion Criteria</b>	<ul style="list-style-type: none"> <li>ER+/HER2- advanced or metastatic BC</li> <li><b>1 prior line of CDK4/6i + ET</b></li> <li><b>≤1 additional line of ET</b></li> <li>Most recent ET given for ≥6 mo</li> <li><b>No prior chemotherapy</b> in advanced/metastatic setting</li> <li>No prior SERD (e.g., fulvestrant, elacestrant)</li> </ul>		<ul style="list-style-type: none"> <li>HR+ , HER2-low or ultralow mBC</li> <li><b>Chemotherapy naïve</b> in the mBC setting</li> <li>Prior lines of therapy:               <ul style="list-style-type: none"> <li><b>≥2 lines of ET ± targeted therapy</b> for mBC <u>OR</u></li> <li>1 line for mBC <u>AND</u> progression ≤6 months of starting first-line ET + CDK4/6i <u>OR</u></li> <li>Recurrence ≤24 months of starting adjuvant ET</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>ER+/HER2- advanced or metastatic BC</li> <li>Progression on <b>1-2 lines of ET, at least one in combination with a CDK4/6i</b></li> <li><b>≤1 line of chemotherapy</b> for advanced or metastatic disease</li> </ul>	
<b>Median PFS, mo</b> <b>(95% CI)</b>	<b>5.0</b> (3.7-7.4)	2.1 (1.9-3.5)	<b>11.3</b> (9.8 – 13.5)	7.0 (5.6 – 9.3)	<b>3.8</b> (2.2 – 7.3)	1.9 (1.9 – 2.1)
<b>Stratified HR</b> <b>(95% CI)</b>	<b>0.57</b> (0.42-0.77) 2-sided P <0.001		<b>0.64</b> (0.49 – 0.83)		<b>0.55</b> (0.39 – 0.77) P=0.0005	

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\* Plenary Session

## KEY DATA

# INAVO120: Final overall survival analysis of inavolisib + palbociclib + fulvestrant in 1L PIK3CA mutated HR+, HER2- endocrine resistant advanced BC

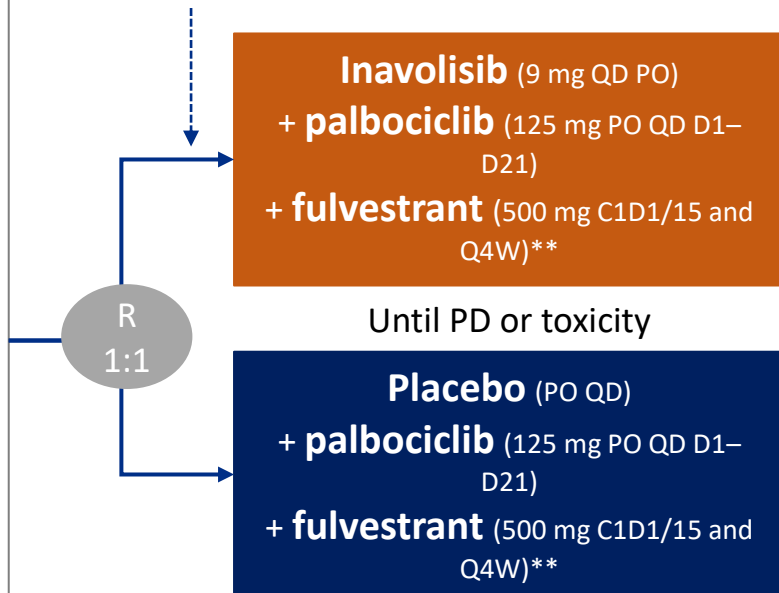
On **October 10, 2024**, the FDA approved inavolisib (Itovebi, Genentech, Inc.) with palbociclib and fulvestrant for adults with endocrine-resistant, PIK3CA-mutated, HR+ve, HER2-ve, locally advanced or metastatic breast cancer, as detected by an FDA-approved test, following recurrence on or after completing adjuvant endocrine therapy.

## Study Design: Randomized, double-blind, placebo-controlled, Phase 3 study

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

- 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 HbA1C <6.0%

N = 325

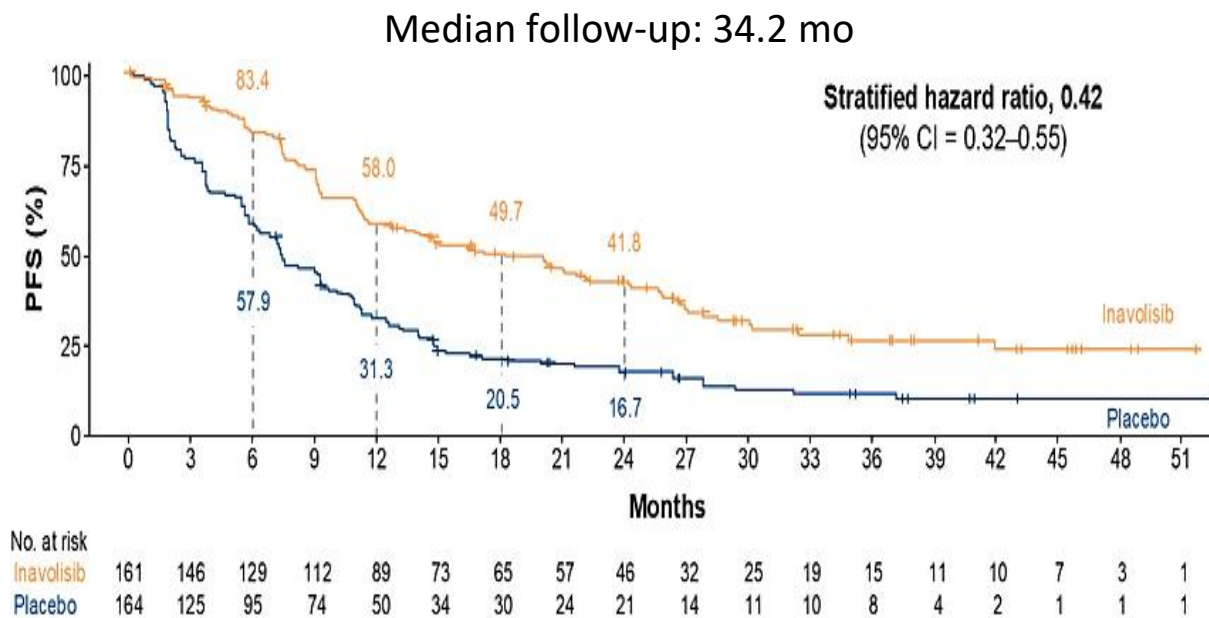


Enrollment period: December 2019 to September 2023

**Primary endpoint:** PFS by Investigator

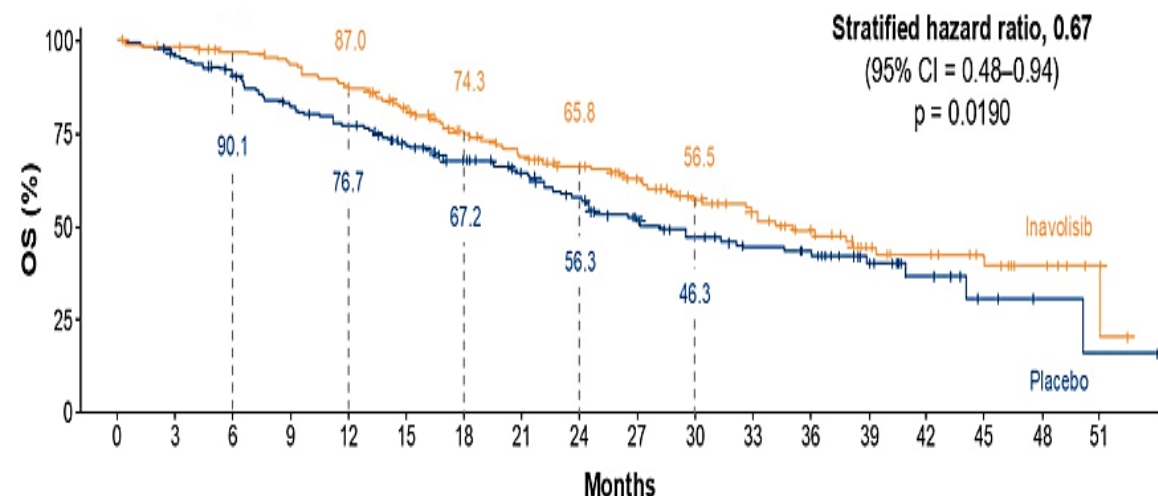
**Secondary endpoints:** OS‡, ORR, BOR, CBR, DOR, PROs

## Updated PFS



**Inavolisib (n = 161) Placebo (n = 164)**

Events, n (%)	103 (64.0)	141 (86.0)
Median PFS, mos (95% CI)	17.2 (11.6-22.2)	7.3 (5.9-9.2)
HR: <b>0.42</b> (95% CI: 0.32-0.55)		

**INAVO120:** Final overall survival analysis of inavolisib + palbociclib + fulverstrant in 1L PIK3CA mutated HR+, HER2- endocrine resistant advanced BC**Final Overall Survival**

No. at risk																			
Inavolisib	161	155	149	142	131	114	99	88	78	67	54	43	34	22	19	13	7	1	
Placebo	164	155	142	127	119	104	90	77	63	48	42	36	32	18	10	4	2	1	

**Inavolisib (n = 161)****Placebo (n = 164)****Deaths, n (%)**

72 (44.7%)

82 (50.0%)

**Median OS, mos  
(95% CI)****34.0**

(28.4 – 44.8)

27.0

(22.8 – 38.7)

**HR: 0.67 (95% CI: 0.48-0.94); p=0.0190****OS by Subgroup analysis**

Subgroup	Patients, n		Median OS, months			Hazard ratio (95% CI)
	Inavolisib	Placebo	Inavolisib	Placebo		
All patients	161	164	34.0	27.0		0.76 (0.55-1.04)
Age						
<65 years	136	130	36.0	26.8		0.65 (0.46-0.92)
≥65 years	25	34	14.4	NR		1.65 (0.77-3.51)
Geographic region						
Asia	58	62	32.7	27.0		0.78 (0.45-1.34)
North America or Western Europe	63	64	30.2	29.3		0.95 (0.56-1.59)
Other	40	38	36.0	16.6		0.53 (0.28-0.98)
ECOG performance status score at baseline						
0	100	106	39.2	36.0		0.69 (0.45-1.05)
1	60	58	27.1	26.8		0.85 (0.52-1.38)
Menopausal status at randomization						
Pre-menopausal	52	52	32.7	23.9		0.67 (0.38-1.19)
Post-menopausal	104	111	34.0	28.0		0.81 (0.55-1.19)
Visceral disease						
No	29	36	38.0	40.7		1.06 (0.46-2.46)
Yes	132	128	33.0	24.1		0.70 (0.50-0.99)
Liver metastasis at enrollment						
No	84	73	38.0	36.0		0.87 (0.53-1.44)
Yes	77	91	28.8	21.9		0.72 (0.48-1.10)
No. of organs with metastases at enrollment						
1	21	32	NR	31.9		0.77 (0.28-2.10)
2	58	46	44.8	24.1		0.51 (0.28-0.90)
≥3	82	86	28.8	24.2		0.86 (0.57-1.30)
Resistance to endocrine therapy						
Primary	54	58	25.9	22.8		0.69 (0.42-1.14)
Secondary	107	105	37.7	34.3		0.77 (0.51-1.16)
Hormone receptor status						
ER-positive, PR-negative	45	45	25.9	38.7		1.16 (0.65-2.08)
ER-positive, PR-positive	113	113	39.2	24.5		0.60 (0.41-0.88)
Previous endocrine therapy						
Aromatase inhibitor and tamoxifen	18	19	NR	NR		1.15 (0.38-3.44)
Aromatase inhibitor only	60	71	26.3	24.2		0.89 (0.56-1.41)
Tamoxifen only	82	73	44.8	36.0		0.68 (0.42-1.11)

0.10 0.67 1.00 10.00  
Inavolisib better Placebo better

## KEY DATA

# INAVO120: Final overall survival analysis of inavolisib + palbociclib + fulvestrant in 1L PIK3CA mutated HR+, HER2- endocrine resistant advanced BC

## ORR and DoR

Outcome	Inavolisib (n = 161)	Placebo (n = 164)
ORR, %	62.7%	28.0%
• Difference (95% CI)	34.7 (24.5-44.8); P <.0001	
	Inavolisib (n = 101)	Placebo (n = 46)
Median DoR, mo (95% CI)	19.2 (14.7-28.3)	11.1 (8.5-20.2)
• Events, n (%)	58 (57.4)	33 (71.7)
	Inavolisib (n = 161)	Placebo (n = 164)
Median time to first subsequent CT, mo (95% CI)	35.6 (25.4-NR)	12.6 (10.4-16.1)
• Events, n (%)	64 (39.8%)	94 (57.3%)
• Hazard ratio (95% CI)	0.43 (0.30-0.60)	

## OS by Subgroup analysis

AEs, n (%)	Inavolisib (n = 161)	Placebo (n = 163)
Any grade	161 (100)	163 (100)
• Grade 3/4	146 (90.7)	138 (84.7)
• Grade 5*	6 (3.7)	2 (1.2)
• Serious	44 (27.3)	22 (13.5)
AE leading to treatment discontinuation		
• Inavolisib/placebo	11 (6.8)	1 (0.6)
• Palbociclib	10 (6.2)	0
• Fulvestrant	6 (3.7)	0
AE leading to dose reduction		
• Inavolisib/placebo	24 (14.9)	6 (3.7)
• Palbociclib	65 (40.4)	56 (34.4)
• Inavolisib associated with higher frequency of some AEs i.e., hyperglycemia (63.4% vs 13.5%), stomatitis or mucosal inflammation (55.3% vs 28.8%), ocular toxicities (29.2% vs 16.0%), rash (26.7% vs 19.6%), diarrhea (52.2% vs 16.0%), nausea (29.2% vs 19.6%)		

***Adding inavolisib to palbociclib and fulvestrant may be considered a new standard of care that can benefit select patients with PIK3CA-mutated, HR +ve, HER2 -ve advanced breast cancer...the hyperglycemia with this regimen is a huge clinical problem - particularly knowing that they excluded patients with diabetes.***

	<b>INAVO120</b> Randomized, double-blind, placebo-controlled, Phase 3		<b>DESTINY-Breast06</b> Randomized, multicenter, open-label Phase 3	
<b>Patients with PI3K/AKT Pathway mutation status</b>	<b>Inavolisib + palbociclib + fulvestrant (n=161)</b>	<b>Placebo + palbociclib + fulvestrant (n=164)</b>	<i>Biomarker evaluable population</i> <b>T-DXd (n=166)</b>	<b>TPC (n=156)</b>
<b>Study Inclusion Criteria</b>	<ul style="list-style-type: none"> <li>PIK3CA-mutated, HR+, HER2- ABC by central ctDNA* or local tissue/ctDNA test</li> <li>Measurable disease</li> <li>Progression during/within 12 months of adjuvant ET completion</li> <li><b>No prior therapy for advanced BC</b></li> <li>Fasting glucose &lt;126 mg/dL and HbA1C &lt;6.0%</li> </ul>		<ul style="list-style-type: none"> <li>HR+ , HER2-low or ultralow mBC</li> <li><b>Chemotherapy naïve</b> in the mBC setting</li> <li>Prior lines of therapy:                             <ul style="list-style-type: none"> <li><b>≥2 lines of ET ± targeted therapy for mBC <u>OR</u></b></li> <li>1 line for mBC <u>AND</u> progression ≤6 months of starting first-line ET + CDK4/6i <u>OR</u></li> <li>Recurrence ≤24 months of starting adjuvant ET</li> </ul> </li> </ul>	
<b>Median PFS, mo (95% CI)</b>	<b>17.2</b> (11.6-22.2)	<b>7.3</b> (5.9-9.2)	<b>13.2</b> (9.9 – 15.5)	<b>7.1</b> (6.0 – 9.5)
<b>Stratified HR (95% CI)</b>	<b>HR: 0.42</b> (0.32 - 0.55)		<b>0.65</b> (0.48 – 0.87)	
<b>ORR</b>	<b>62.7%</b>	<b>28.0%</b>	<b>57.6%</b>	<b>41.5%</b>

# ASCO 2025: RAPID REVIEWS

**\*SERENA-6**

**DESTINY-  
Breast09**

**DESTINY-  
Breast06**

**T-DXd  
rechallenge  
after ILD**

**ASCENT-03**

**ASCENT-04**

**VERITAC-2**

**INAVO120**

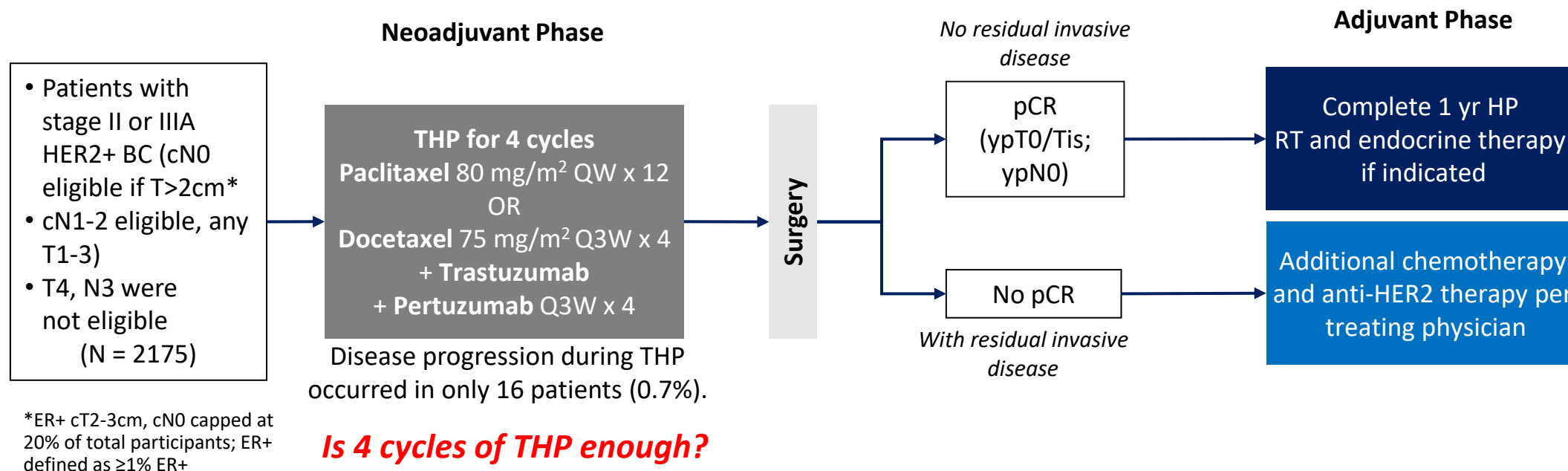
**CompassHER2  
pCR**

\* Plenary Session



# CompassHER2 pCR: Can we predict using clinicopathologic factors and molecular tools who will achieve pCR and benefit from less intensive chemotherapy in operable HER2+ BC?

## Study Design: Single-arm phase II trial



**Primary endpoint:** 3-yr RFS > 92% in patients with pCR overall and in ER+/HER2+ and ER-/HER2+ cohorts

**Secondary endpoints:** 3-yr iDFS, DDFS, DRFS, RFI, OS, breast cancer-specific survival in patients with pCR; 3-yr EFS in all patients; safety and tolerability; biomarkers<sup>2</sup>

Current analysis: includes clinical factors, HER2Dx pCR likelihood score, generated from the HER2Dx test that incorporates 27 genes associated with immune activation (14 genes), luminal differentiation (5 genes), tumor cell proliferation (4 genes), and HER2 amplicon (4 genes, including ERBB2)

# CompassHER2 pCR: Can we predict using clinicopathologic factors and molecular tools who will achieve pCR and benefit from less intensive chemotherapy in operable HER2+ BC?

## pCR Rates by Clinicopathologic Factors Univariable Analysis

pCR (ypT0/Tis ypN0)	All Patients (n = 2141*)	ER-/HER2+ (n = 774*)	ER+/HER2+ (n = 1337*)
All patients, % (95% CI)	43.8 (41.6-45.9)	63.7 (60.2- 67.1)	32.5 (30-35)
<b>Age, %</b>			
• <50 yr	43.6	63.5	34.0
• 50-70 yr	47	67.9	34.2
• >70 yr	31.9	48.7	21.1
<b>ECOG PS, %</b>			
• 0	44.7	65.4	32.9
• 1	37.4	51.6	29.7
<b>Grade, %</b>			
• 1	26.9	60	21.1
• 2	37.2	63	27.9
• 3	49.5	64	37.9
<b>ER+ cells</b>			
• 0	63.7	63.7	--
• 1-10	62.5	--	62.5
• 11-70	51.6	--	51.6
• >70	22.5	--	22.5
<b>HER2 IHC</b>			
• 3+	50.3	67.6	39.3
• 2+	11.9	26.0	8.0
<b>Taxane</b>			
• Paclitaxel	46.5	68.5	34.2
• Docetaxel	39.3	55.9	29.7

## Association Between HER2Dx pCR Score and Observed pCR Rate

Parameter	ER- (n = 230)			P Value for HER2Dx High vs Low
	High HER2Dx (n = 147)	Medium HER2Dx (n = 70)	Low HER2Dx (n = 13)	
Patients %	64	30	6	
pCR rate, %	70	74	31	<0 .01

Parameter	ER+ (n = 339)			P Value for HER2Dx High vs Low
	High HER2Dx (n = 36)	Medium HER2Dx (n = 89)	Low HER2Dx (n = 263)	
Patients %	11	26	63	
pCR rate, %	58	61	18	<0 .01

***ER-negative status, lower ER expression ( $\leq 70\%$ ) in ER+ tumors, HER2 IHC of 3+ (vs IHC 2+/ISH+), weekly paclitaxel and higher HER2DX pCR score are all associated with improved pCR in patients with Stage II and III HER2+ BC***

***Note in trials with 6-8 pre-operative cycles of THP the pCR rate ~20% higher***

ASCO 2025:

**SERENA-6:** Switching to camizestrant with continuation of CDK4/6i guided by ctDNA improves PFS and should be a new treatment strategy...not yet FDA approved...

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**DESTINY-Breast09:** The combination of T-DXD plus pertuzumab has the potential to be a new first-line standard of care for patients with HER2+ mBC...not yet approved...more to come...

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**DESTINY-Breast06:** T-DXD is an effective treatment strategy regardless of mutational status for HR+, HER2-low or –ultralow mBC after prior endocrine-based therapy...FDA approved since January 2025

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**Treatment rechallenge after trastuzumab-deruxtecan related ILD:** Steroid use results in fast radiographic ILD improvement and rechallenge with T-DXd after grade 1 ILD is possible with limited, low-grade recurrence of ILD

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**ASCENT-03:** Positive topline results from the Phase 3 ASCENT-03 study of sacituzumab govitecan-hziy suggest benefit for 1L metastatic TNBC patients...not yet approved in earlier line setting, more to come...

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**ASCENT-04:** The combination of sacituzumab govitecan-hziy plus pembrolizumab is a potential new treatment option for select patients previously untreated with PD-L1 positive locally advanced or metastatic TNBC...not yet approved...more to come...

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**VERITAC-2:** Vepdegestrant, benefitted patients with previously treated ESR1-mutant ER+, HER2- mBC: mPFS 5.0 mos. EMERALD, elacestrant vs fulvestrant in ESR1m, ER+/HER2- mBC  $\leq 1$  prior chemo: mPFS 3.8 mos HR 0.55

---

**INAVO120:** Adding inavolisib to palbociclib and fulvestrant is a new standard of care that can benefit select patients with PIK3CA-mutated, HR+ve, HER2-ve advanced breast cancer...the hyperglycemia with this regimen is a huge clinical problem - particularly knowing that they excluded patients with diabetes

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**CompassHER2 pCR:** Clinicopathologic factors and HER2DX scores can be utilized to identify patients who have no residual disease after THP and surgery, and can forgo further chemotherapy

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## Breast Cancer

## Key Takeaways

Q&A

@EdithAPerezMD



# 2025 ASCO Key Studies

## Breast Cancer

- RAPID REVIEWS
  - \*SERENA-6
  - DESTINY-Breast09
  - DESTINY-Breast06
  - AI for IHC HER2 Pathology
  - ASCENT-03
  - ASCENT-04
  - VERITAC-2
  - INAVO120
  - CompassHER2 pCR

## GU/ GI Cancer

- \*ATOMIC
- \*MATTERHORN
- DESTINY-Gastric04
- **RAPID REVIEWS**
  - BREAKWATER
  - PANOVA-3
  - AMPLITUDE

## Other Notable Studies

- \*NIVOPOSTOP
- KEYNOTE-689
- \*VERIFY
- **RAPID REVIEWS**
  - TROPION-Lung02
  - DELPHI-304
  - IMforte
  - TUXEDO-3
  - ROSELLA

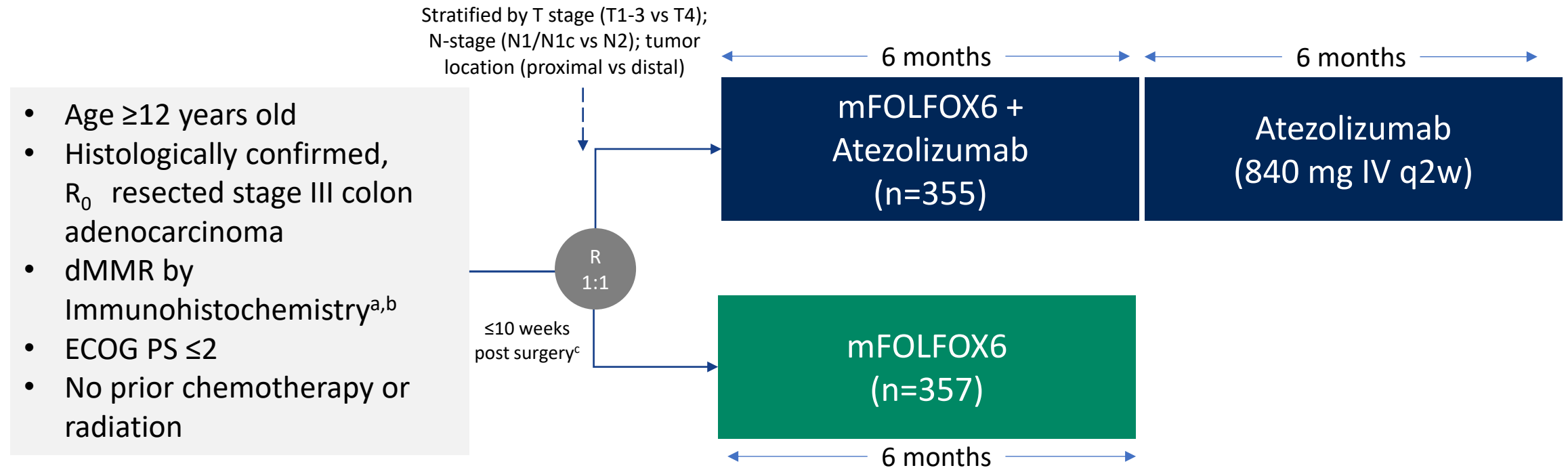
\* Plenary Session

\* Plenary Session

Does the addition of atezolizumab to standard of care chemotherapy benefit patients with stage III deficient mismatch repair dMMR colon cancer?

# ATOMIC: Phase 3 of mFOLFOX6 +/- atezolizumab for 1 year

**Study Design:** Randomized, multicenter, open label phase 3 study



**Primary endpoints:** Disease-free survival (DFS)

**Secondary endpoints:** Overall survival (OS), adverse event (AE) profile

Data cutoff (Feb 4, 2025)  
median follow-up was 37.1 months  
(Q1, Q3: 24.2, 55.7)

<sup>a</sup>dMMR by immunohistochemistry (IHC) locally or at site-selected reference laboratory. Retrospective central confirmation of dMMR also performed. <sup>b</sup>Lynch syndrome included. <sup>c</sup>One cycle of mFOLFOX6 prior to randomization permitted.

## Baseline characteristics

	mFOLFOX6 + Atezo (n = 355)	mFOLFOX6 (n = 357)
<b>Median age, years</b> (Q1 - Q3, range)	65 (51.0 - 73.0)	63 (48.0 - 73.0)
<b>Sex, n</b>		
• Female	186 (52.4%)	206 (57.7%)
• Male	169 (47.6%)	151 (42.3%)
<b>Race, n</b>		
• White	302 (85.1%)	305 (85.4%)
• Black	28 (7.9%)	22 (6.2%)
• Other	25 (6.0%)	30 (8.4%)
<b>Primary tumor site, n</b>		
• Proximal	301 (84.8%)	296 (82.9%)
• Distal	53 (14.9%)	57 (16.0%)
• Multiple	1 (0.3%)	4 (1.1%)

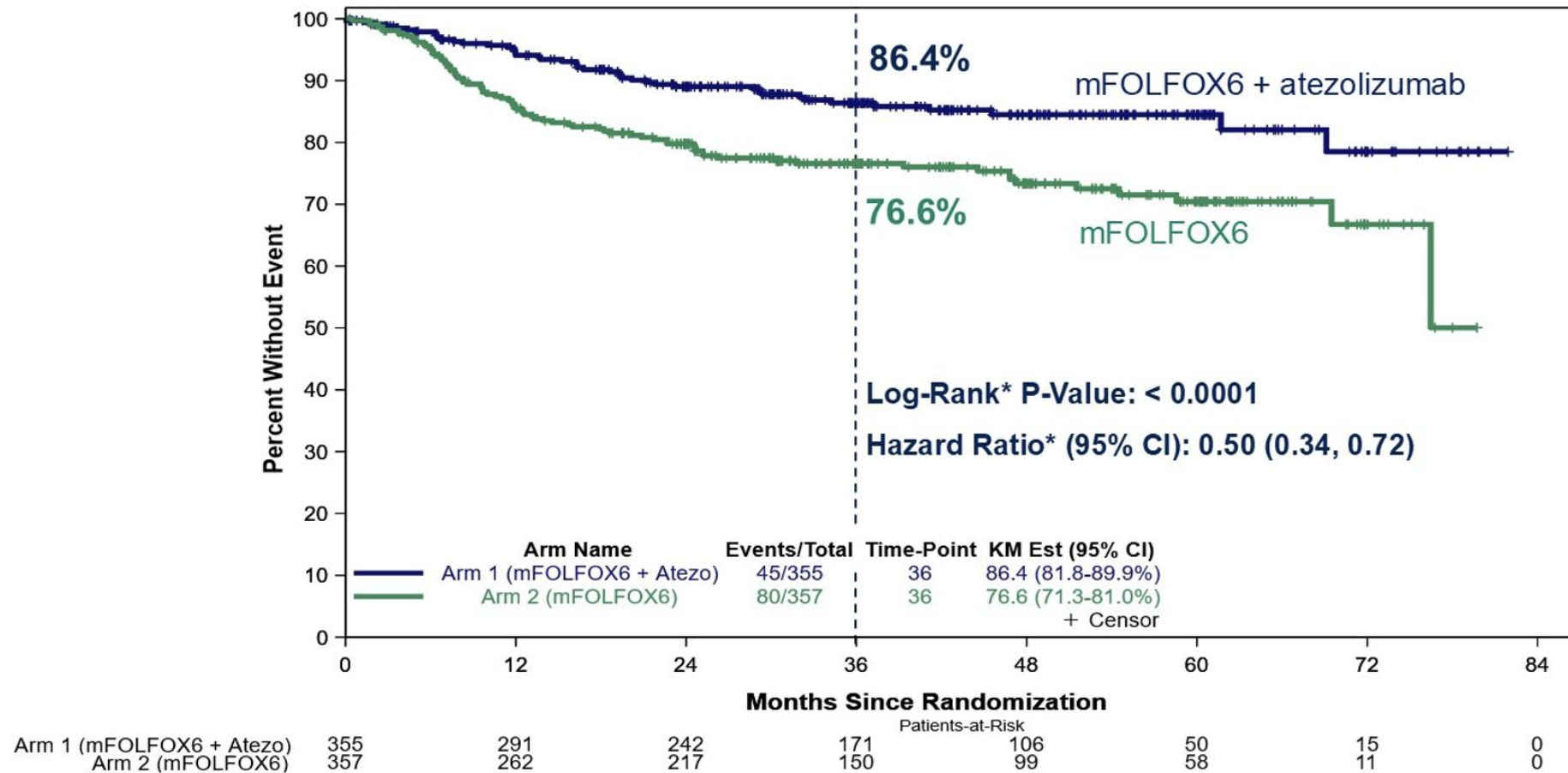
Q1, first quartile  
Q3, third quartile

	mFOLFOX6 + Atezo (n = 355)	mFOLFOX6 (n = 357)
<b>T stage, n</b>		
• Tx	0	1 (0.3%)
• T1	11 (3.1%)	4 (1.1%)
• T2	30 (8.5%)	22 (6.2%)
• T3	202 (56.9%)	216 (60.5%)
• T4	112 (31.5%)	114 (31.9%)
<b>N stage, n</b>		
• N1/N1c	226 (63.7%)	225 (63.0%)
• N2	129 (36.3%)	132 (37.0%)
<b>Risk group,* n</b>		
• Low	164 (46.2%)	164 (45.9%)
• High	191 (53.8%)	193 (54.1%)
<b>ECOG PS, n</b>		
• 0	238 (67.0%)	225 (63.0%)
• 1	111 (31.3%)	127 (35.6%)
• 2	6 (1.7%)	5 (1.4%)



# ATOMIC: Phase 3 of mFOLFOX6 +/- atezolizumab for 1 year

## Primary Endpoint: Disease-free survival (DFS)



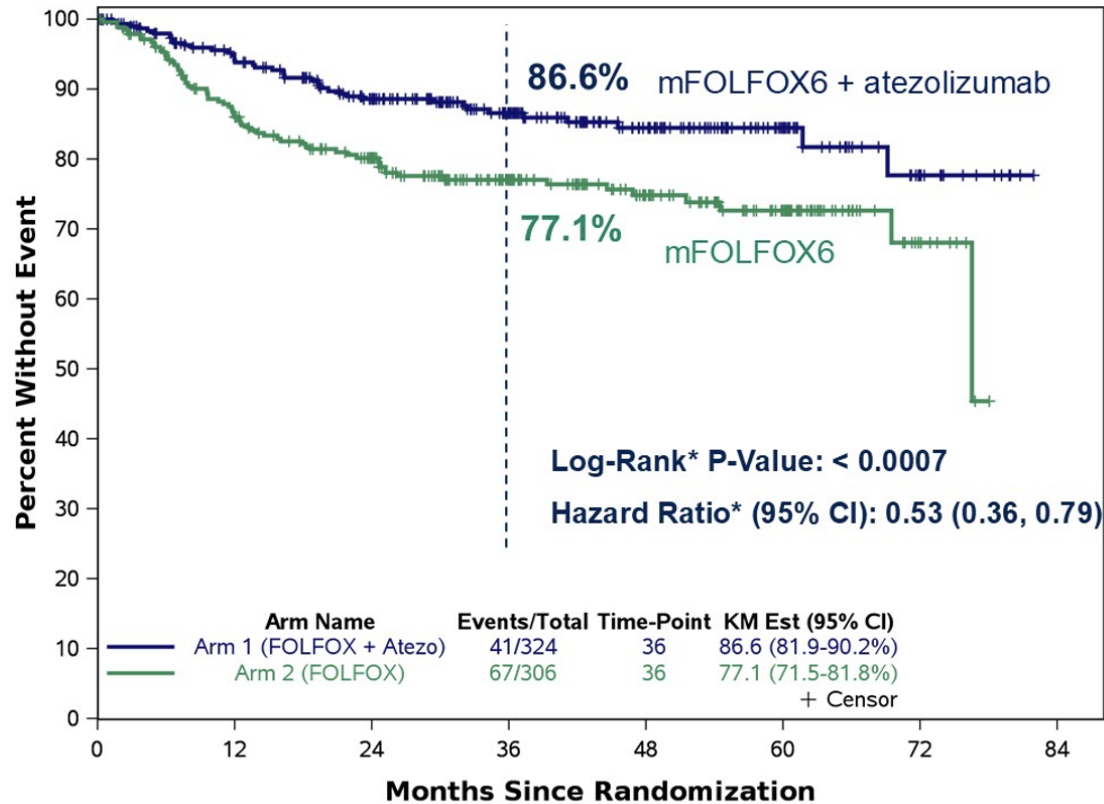
Confirmed dMMR by central reference laboratory: Log-Rank P-Value: 0.0007, HR (95% CI): 0.53 (0.36,0.79)

\*Stratified by randomization factors

Median follow-up = 37.2 mos

## Secondary Endpoints

### DFS: dMMR by central reference lab



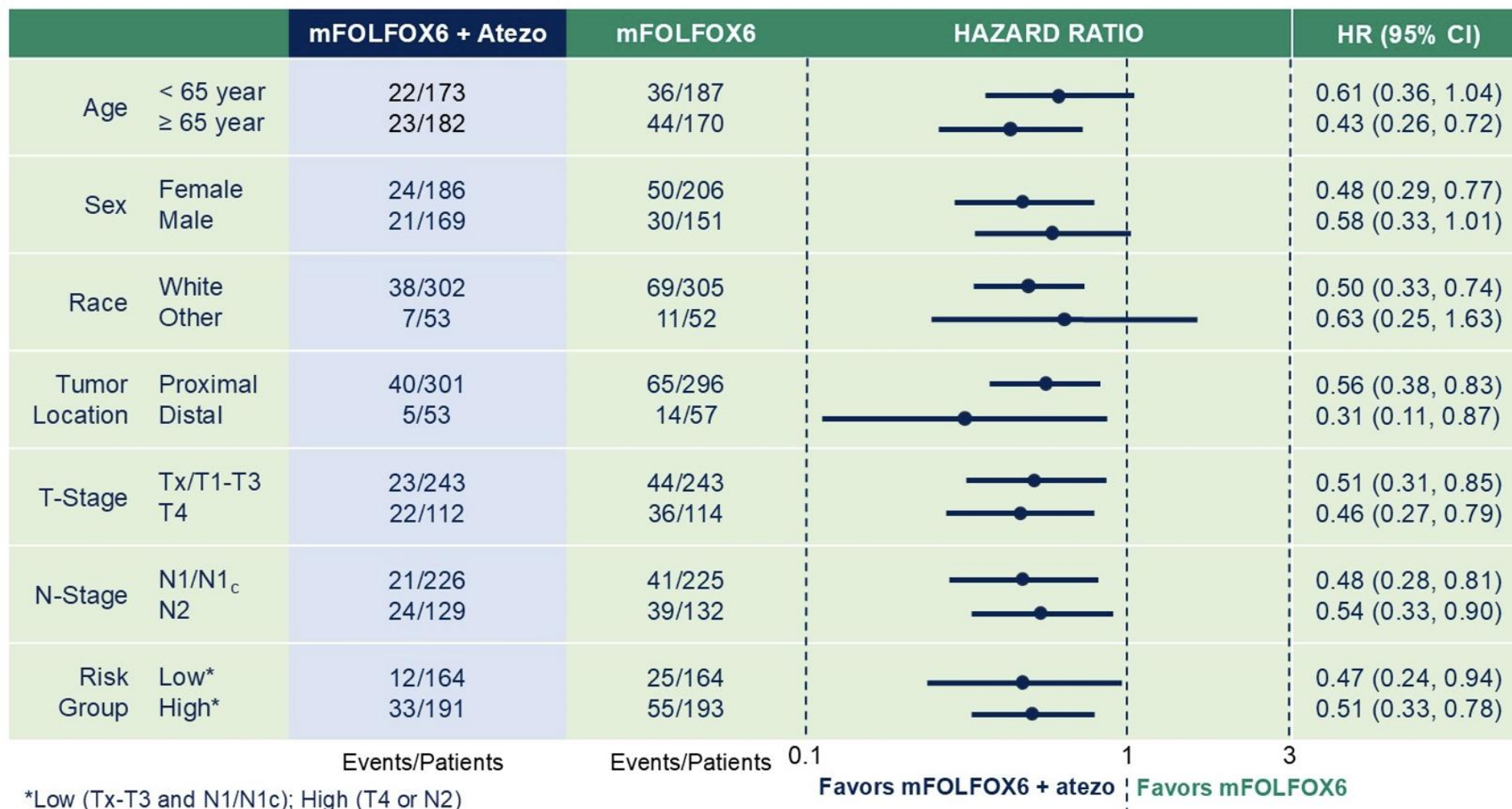
	0	12	24	36	48	60	72	84
Arm 1 (FOLFOX + Atezo)	324	264	218	156	96	44	13	0
Arm 2 (FOLFOX)	306	230	190	130	84	49	9	0

\*Stratified by randomization factors  
Median follow-up = 37.2 mos

### Overall survival

- OS data are not mature
- Median (Q1, Q3) OS follow-up:
  - 42.5 (27.9, 60.5) months
- The OS comparison may be confounded by subsequent immunotherapy

## DFS by Subgroup



## Safety Summary

	mFOLFOX6 + Atezo (n = 346) <sup>#</sup>	mFOLFOX6 (n = 334) <sup>#</sup>
Any Grade AE, (n)	100% (346)	95.1 % (329)
• Treatment-related	99.7% (345)	94.2% (326)
Grade 3-4 AE, (n)	83.8% (290)	69.1% (239)
• Treatment-related	72.3% (250)	59.2% (205)
Grade 5 AE, (n)	1.7% (6)	0.6% (2)
• Treatment-related	0.6% (2)*	0.0% (0)

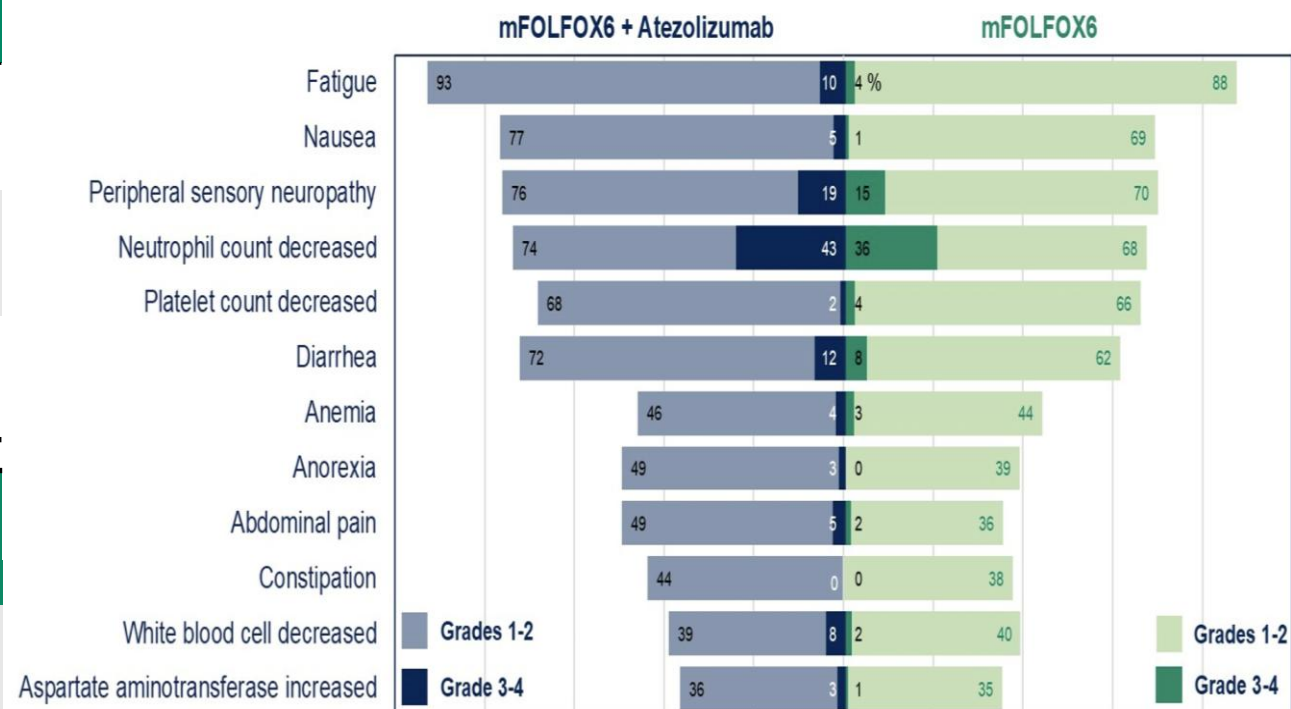
## Immune-Related AEs

	mFOLFOX6+ Atezo (n = 346) <sup>#</sup>		mFOLFOX6 (n = 334) <sup>#</sup>	
	Grade 1/2	Grade 3/4	Grade 1/2	Grade 3/4
Adrenal insufficiency	0.3%	0.9%	0%	0%
Hyperglycemia	17.9%	2.6%	9.0%	1.2%
Hypothyroidism	20.5%	0%	3.6%	0%
Colitis	5.5%	1.2%	0.6%	0%
Diarrhea	60.1%	12.1%	53.3%	8.4%
Generalized muscle weakness	7.8%	0.9%	3.3%	0%
Maculopapular rash	13.3%	0.9%	6.0%	0%

#Recived at least one dose of treatment

\*1 sudden death NOS (possibly related); 1 sepsis (possibly related)

## AEs Occurring in &gt;35% of Evaluable\* Patients



## Neutrophil count decrease

Grade 3, n	100 (28.9%)	97 (29.0%)
Grade 4, n	49 (14.2%)	23 (6.9%)

\*Evaluable patients: received at least 1 treatment dose

# Efficacy of Neoadjuvant IO in dMMR Colon Cancer

Study	Treatment Regimen	Treatment duration	No. of patients	pCR or cCR rate	Grade 3-4 AEs
NICHE-2 <i>N Engl J Med.</i> 2024;390(21):1949-1958.	NIVO + IPI	4 weeks	115	68%	5%
Xu et al., ASCO 2024	Sintilimab ± IBI310	6 weeks	101	78% vs 47%	10% (mono) 6% (dual)
NICHE-3 <i>Nat Med.</i> 2024;30(11):3284-3290.	NIVO + relatlimab	8 weeks	59	68%	10%
PICC <i>Lancet Gastroenterol Hepatol.</i> 2022;7(1):38-48.	Toripalimab + celecoxib	12 weeks	34	88%	3%
PICC <i>Lancet Gastroenterol Hepatol.</i> 2022;7(1):38-48.	Toripalimab (w/o celecoxib)	12 weeks	34	65%	3%
NEOPRISM	Pembro	6 weeks	32	58%	6%
IMHOTEP <i>Ann Oncol.</i> 2024;35(suppl 2):S429.	Pembro	4-8 weeks	77	47% (1 cycle) 68% (2 cycles)	13%
<i>N Engl J Med</i> 2025;392:2297-2308	Dostarlimab	6 months	22	82%	6%



- The addition of PD-L1 inhibitor (atezolizumab) to mFOLFOX6 is practice-changing and, if approved, could be considered a new standard of care adjuvant treatment for patients with dMMR stage III colon cancer
  - Not yet FDA approved or included in the NCCN Guidelines
- The safety of mFOLFOX6 + atezolizumab was in line with the known safety profiles of each individual therapy
  - Increase in non-febrile neutropenia was manageable

*The addition of PD-L1 inhibitor (atezolizumab) to mFOLFOX6 is practice changing and, if approved, could be considered a new standard of care adjuvant treatment for patients with dMMR stage III colon cancer*

*Emergence of neoadjuvant IO (without chemo) is gaining momentum but the combination of IO and chemo in the adjuvant setting with ATOMIC has set a high bar*

# 2025 ASCO Key Studies

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  - \*SERENA-6
  - DESTINY-Breast09
  - DESTINY-Breast06
  - AI for IHC HER2 Pathology
  - ASCENT-03
  - ASCENT-04
  - VERITAC-2
  - INAVO120
  - CompassHER2 pCR

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\* Plenary Session

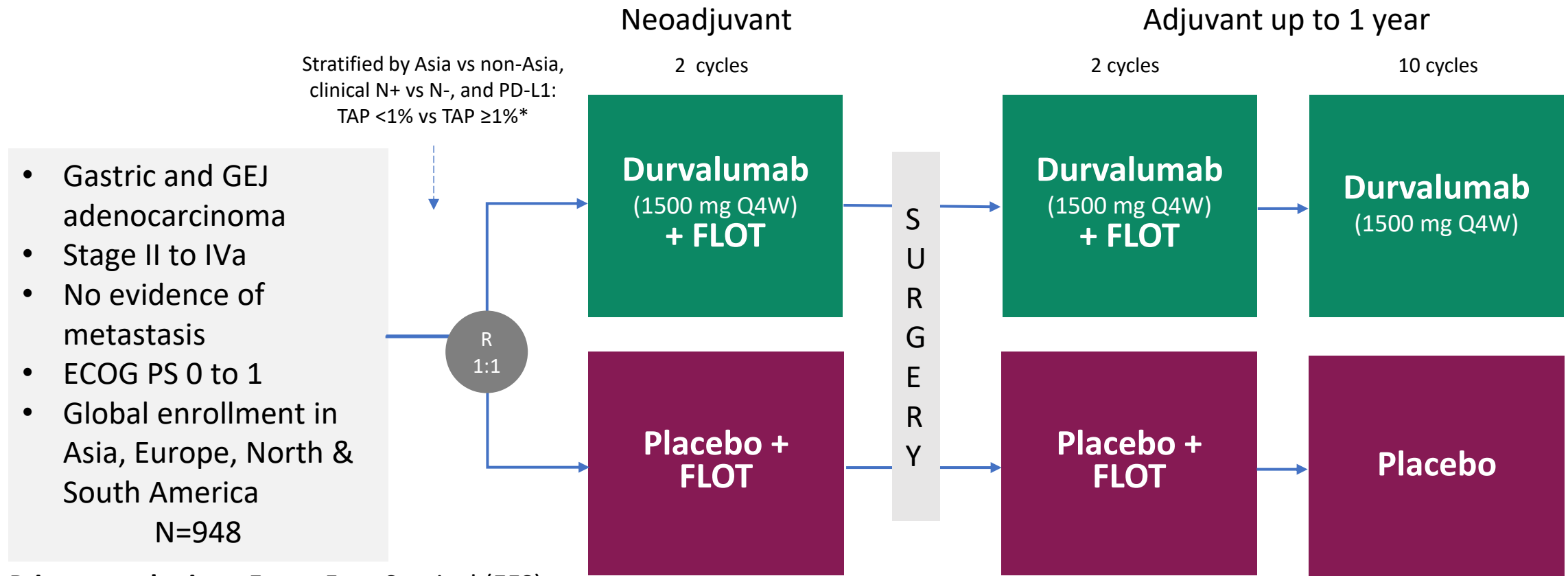


\* Plenary Session

Does the addition of the PD-L1 inhibitor durvalumab to standard of care neoadjuvant/adjuvant FLOT chemotherapy benefit patients with resectable Gastric/Gastroesophageal Junction Cancer (GC/GEJC)?

# MATTERHORN: neoadjuvant/adjutant FLOT +/- durvalumab

**Study Design:** Global, phase 3, randomized, double-blind, placebo-controlled study



**Primary endpoints:** Event-Free Survival (EFS)

**Secondary endpoints:** Overall Survival (OS), Path Complete Response (pCR), Disease-Free Survival (DFS)

FLOT: 5-Fluorouracil 2600 mg/m<sup>2</sup>, leucovorin 200 mg/m<sup>2</sup>, oxaliplatin 85 mg/m<sup>2</sup>, docetaxel 50 mg/m<sup>2</sup>, on Days 1 and 15 Q4W, 4 doses (two cycles) pre-and post-operative: durvalumab: 150 mg on day 1 Q4W, 2 doses (two cycles) of durvalumab or placebo pre- and post-operative, followed by 10 dose of post-operative durvalumab or placebo monotherapy. Participants underwent surgery 4-8 weeks after last dose of neoadjuvant therapy. Adjuvant began 4-12 weeks post-surgery. Durvalumab / placebo monotherapy may be continued if FLOT is discontinued due to toxicity.

\*Measured by IHC using VENTANA PD-L1 (SP263) CDx Assay (Roche Diagnosis; IUO)

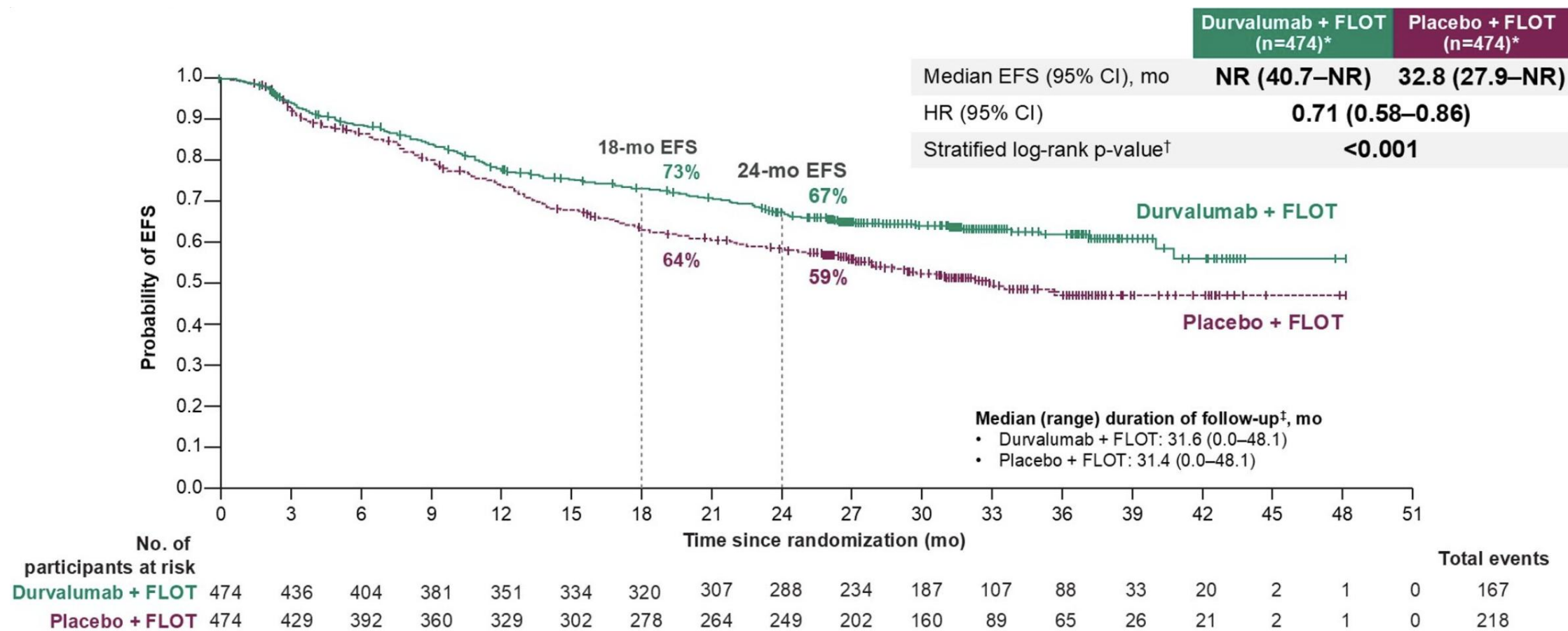
## Baseline characteristics

	Durvalumab + FLOT (n = 474)*	Placebo + FLOT (n = 474)*
<b>Median age, yr (range)</b>	62 (26-84)	63 (28-83)
<b>Male</b>	69%	75%
<b>Geographic region</b>		
• Non-Asia	81%	81%
• Asia	19%	19%
<b>ECOG PS</b>		
• 0	71%	77%
• 1	29%	23%
<b>Site of tumor</b>		
• Gastric	68%	67%
• GEJ	32%	33%
<b>Primary tumor stage</b>		
• T4	25%	25%
• Non-T4	75%	75%

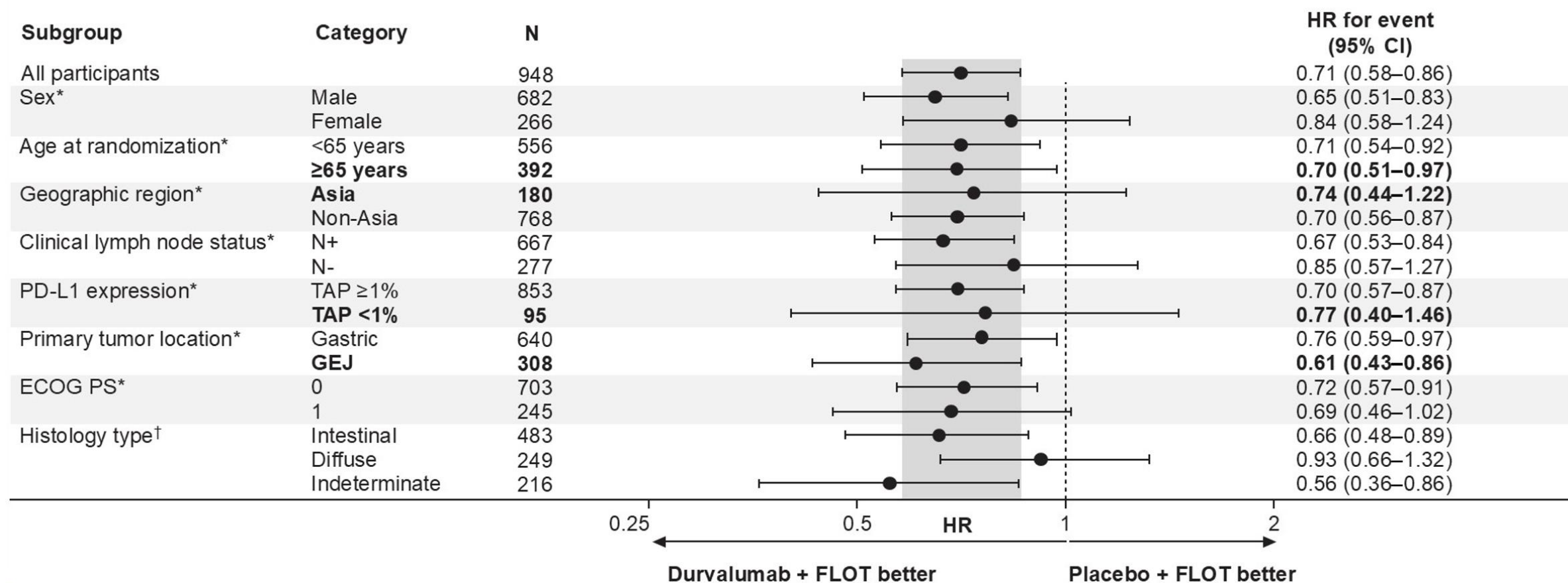
	Durvalumab + FLOT (n = 474)*	Placebo + FLOT (n = 474)*
<b>Clinical lymph node status<sup>a</sup></b>		
• N+	69%	70%
<b>PD-L1 expression by TAP</b>		
• <1%	10%	10%
• ≥1%	90%	90%
<b>Histology type<sup>b</sup></b>		
• Intestinal	52%	50%
• Diffuse	27%	25%
• Unspecified/mixed/other	21%	25%
<b>MSI status<sup>c</sup></b>		
• MSI-high	5%	5%
• Not MSI-high	64%	65%
• Not evaluable/missing	31%	30%

\*Full analysis set (all randomized participants regardless of treatment received). <sup>a</sup>As recorded at randomization on the Interactive Response Technology System or Randomization and Trial Supply Management. <sup>b</sup>Measured by IHC using VENTANA PD-L1 (SP263) CDx Assay (Roche Diagnostic: IUO). <sup>c</sup>MSI was measured by a clinical trial assay based on FoundationOne CDx in a research use only capacity.

## Primary Endpoint: Event-Free Survival (EFS)



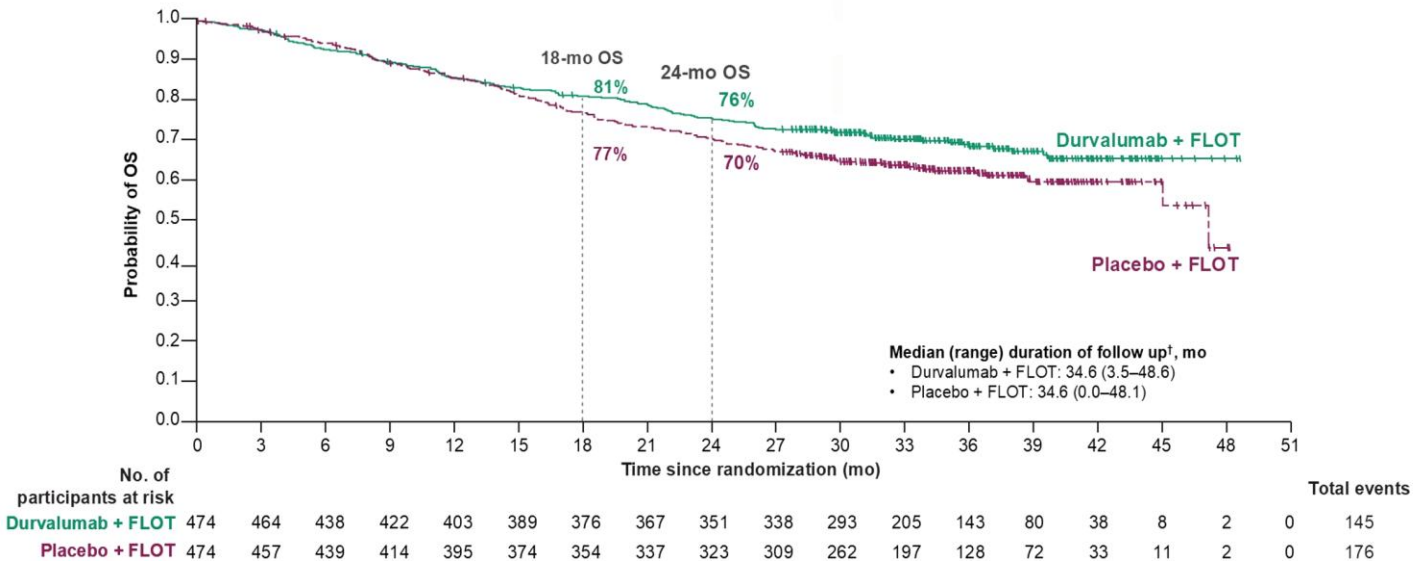
## Event Free Survival in Key Subgroups



\*Pre-specified per protocol. †Assessed post hoc per local laboratory

## Key Secondary Endpoints

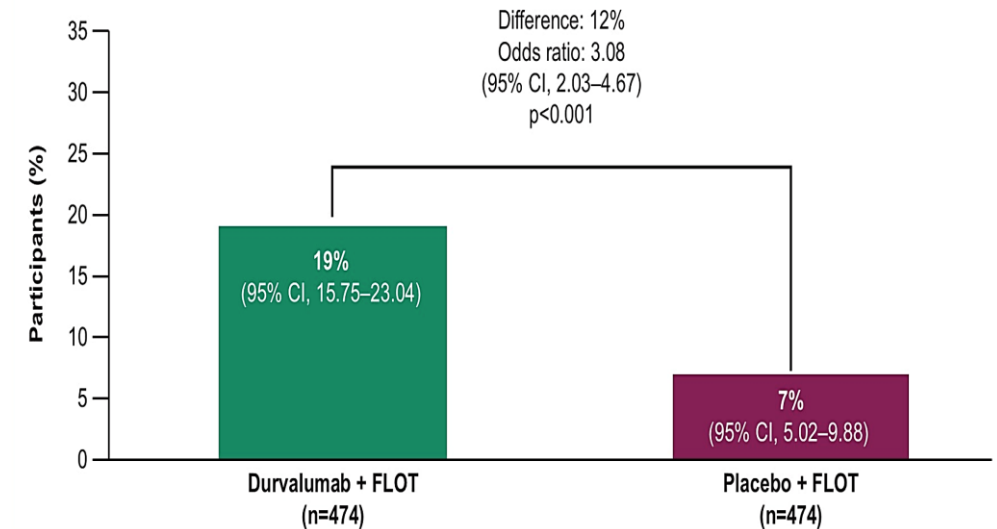
## Overall Survival



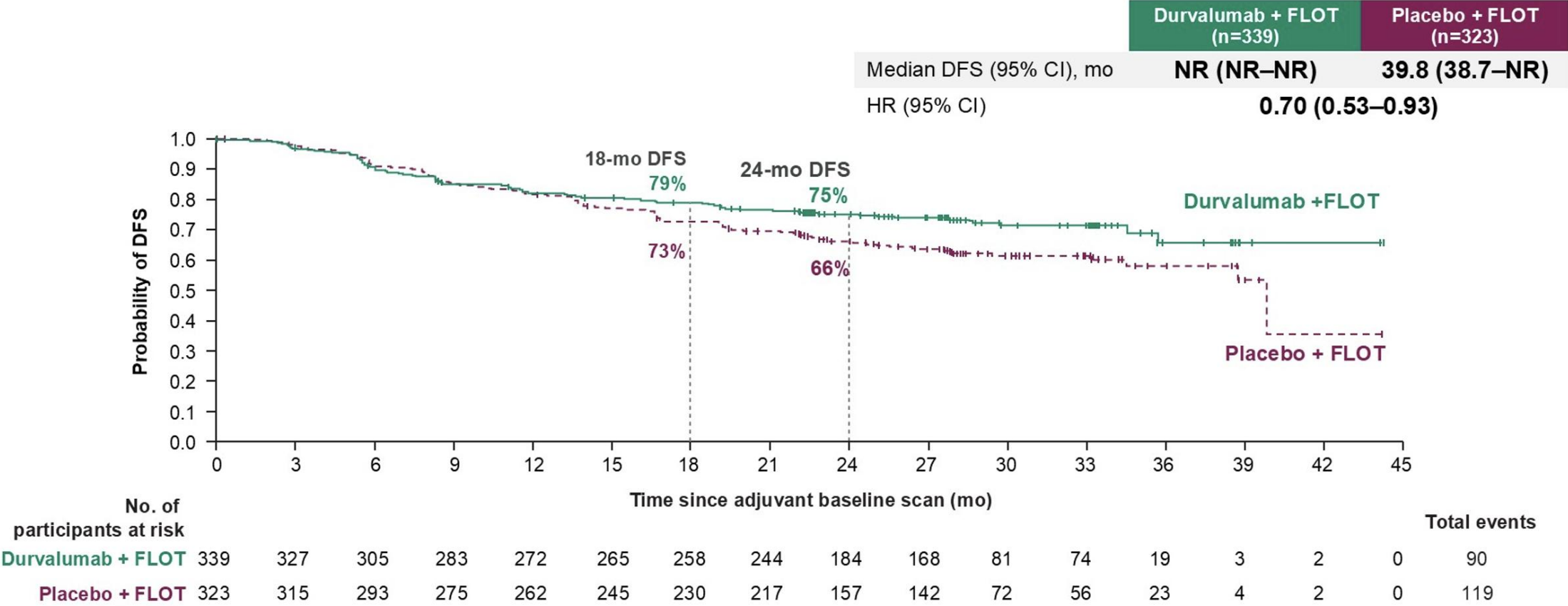
	Durvalumab + FLOT (n = 474)	Placebo + FLOT (n = 474)
Median OS (95% CI), mo	NR (NR-NR)	47.2 (45.1-NR)
■ HR (95% CI)	0.78 (0.62-0.97)	
■ Stratified log-rank P	.025*	

\*significance threshold  $P < .0001$ 

## pCR



Secondary Endpoint: Disease-Free Survival (DFS)





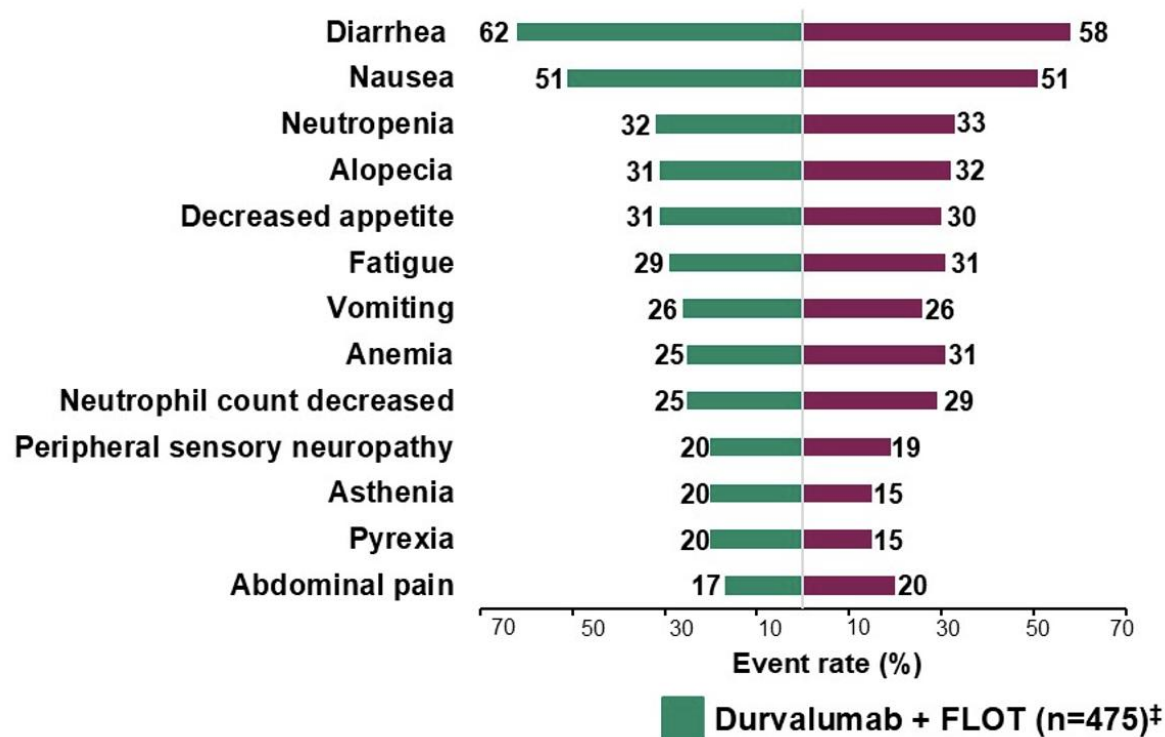
## Safety

	Durvalumab + FLOT (n = 475)	Placebo + FLOT (n = 469)
<b>Any grade AEs</b>	<b>99%</b>	<b>99%</b>
• Possibly related to any study treatment	95%	95%
<b>Grade 3 or 4 AEs</b>	<b>72%</b>	<b>71%</b>
• Possibly related to any study treatment	60%	59%
<b>Serious AE</b>	<b>48%</b>	<b>44%</b>
<b>AE Leading to discontinuation of any study treatment</b>	<b>30%</b>	<b>23%</b>
Durvalumab or placebo	10%	6%
Any FLOT	25%	20%
<b>AE with outcome of death</b>	<b>5%</b>	<b>4%</b>
• Possibly related to durvalumab or placebo	1%	<1%
• Possibly related to FLOT	1%	<1%
<b>ImAE (any grade)*</b>	<b>23%</b>	<b>7%</b>
Grade 3 or 4 immune-mediated AE	7%	4%
<b>Any AE leading to surgery not being performed</b>	<b>1%</b>	<b>&lt;1%</b>
<b>Any AE leading to a delay in surgery<sup>†</sup></b>	<b>2%</b>	<b>3%</b>

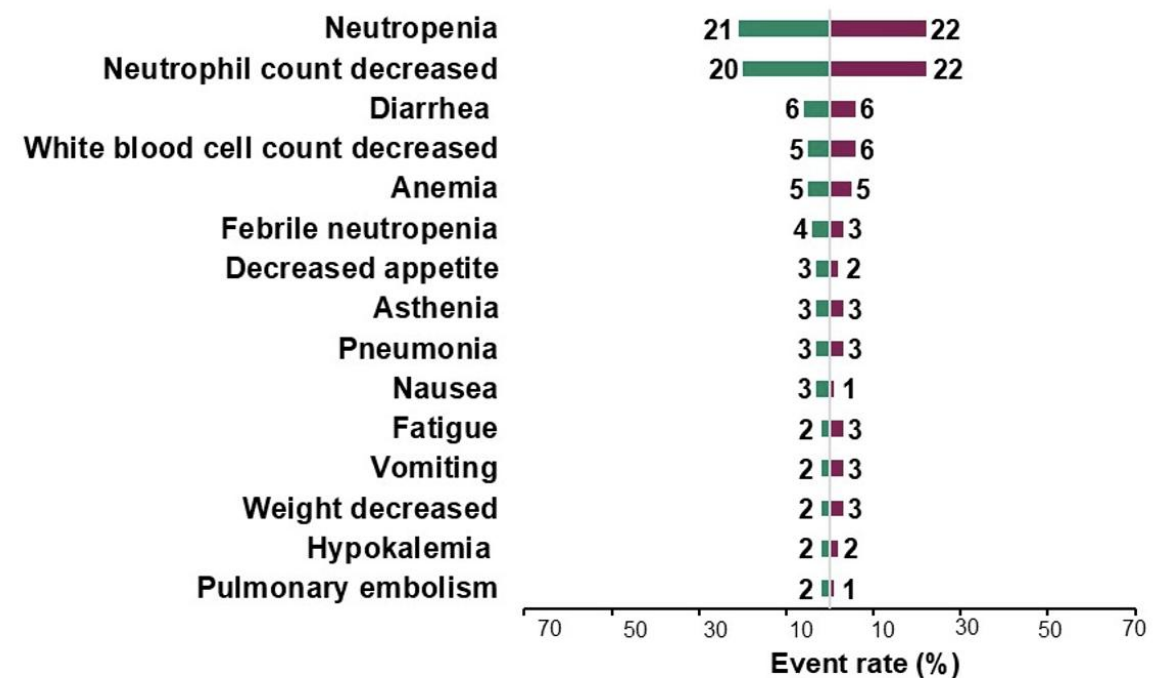
\*Excludes AEs of special interest group of infusion or hypersensitivity reactions. <sup>†</sup>A surgical delay is defined as surgery occurring >8 weeks (56 days) after the last dose of neoadjuvant treatment.

## Common AEs

## Most common AEs of any grade\*



## Most common maximum Grade 3 or 4 AEs†



\*AEs of any grade occurred in  $\geq 20\%$  of participants in any treatment group. †Grade 3 or 4 AEs occurred in  $\geq 2\%$  of any treatment group. ‡ Safety analysis set (participants who received at least one dose of study treatment); one participant in the placebo + FLOT group received a single dose of durvalumab and is, therefore, included in the durvalumab + FLOT group for the safety analysis.

- The addition of durvalumab to neoadjuvant/adjuvant FLOT could be a new treatment option for patients with localized gastric and GEJ cancers
  - Significant improvement in EFS (HR: 0.71; 95% CI: 0.58-0.86,  $P < .001$ ), consistent across subgroups
  - Increased pCR: 19% vs 7% (OR: 3.08; 95% CI: 2.03-4.67;  $P < .001$ )
- EFS benefit was consistent across subgroups and geographic regions
- Rates of AEs were expected, no new safety concerns were identified
- Early OS data trending positive (HR 0.78)
  - Final OS analysis pending; 33.9% maturity at interim analysis

*Neoadjuvant/adjuvant durvalumab with chemotherapy (FLOT) benefits patients with localized gastric and GEJ adenocarcinoma and could be a new treatment option*

*Not yet FDA approved*

# 2025 ASCO Key Studies

## Breast Cancer

- RAPID REVIEWS
  - \*SERENA-6
  - DESTINY-Breast09
  - DESTINY-Breast06
  - AI for IHC HER2 Pathology
  - ASCENT-03
  - ASCENT-04
  - VERITAC-2
  - INAVO120
  - CompassHER2 pCR

## GU/ GI Cancer

- \*ATOMIC
- \*MATTERHORN
- DESTINY-Gastric04
- **RAPID REVIEWS**
  - BREAKWATER
  - PANOVA-3
  - AMPLITUDE

## Other Notable Studies

- \*NIVOPOSTOP
- KEYNOTE-689
- \*VERIFY
- **RAPID REVIEWS**
  - TROPION-Lung02
  - DELPHI-304
  - IMforte
  - TUXEDO-3
  - ROSELLA

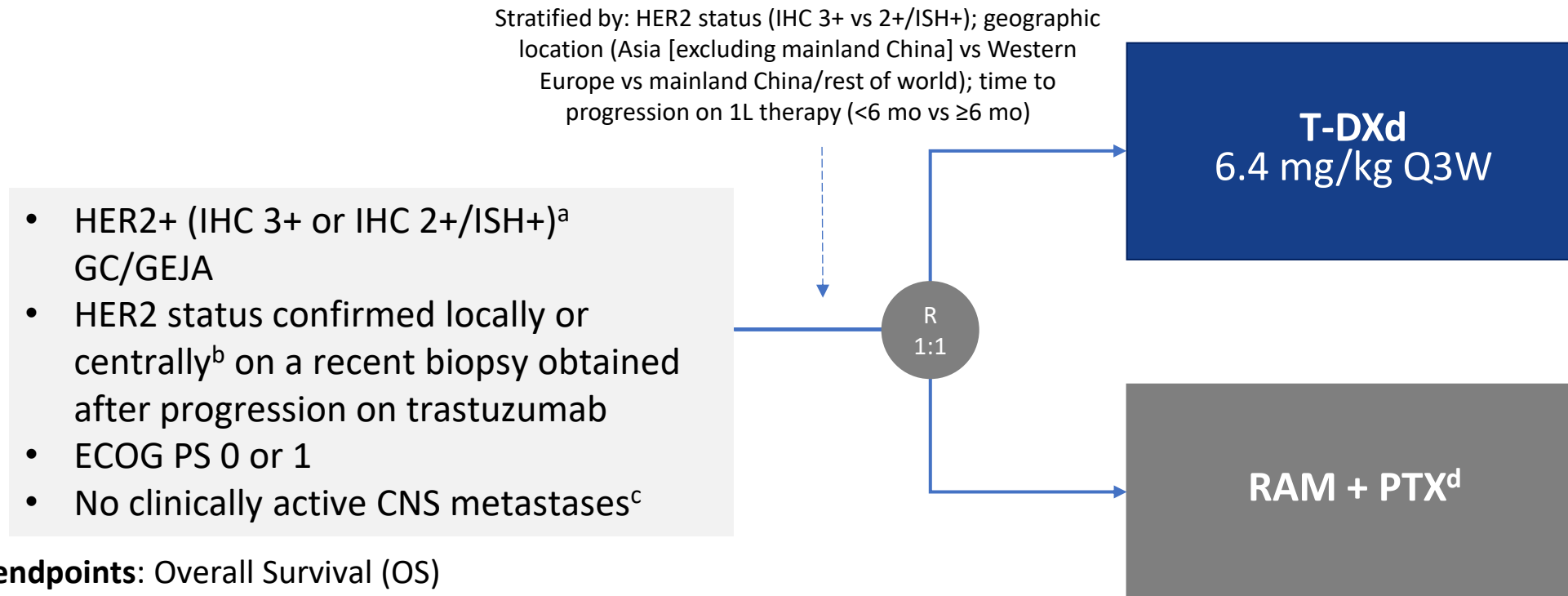
\* Plenary Session

Does trastuzumab deruxtecan (T-DXd) improve outcomes compared to ramucirumab plus paclitaxel in patients with HER2+ metastatic gastric or gastroesophageal junction adenocarcinoma (GC/GEJA) in the second-line setting?

*On January 15, 2021, the FDA approved fam-trastuzumab deruxtecan-nxki (Enhertu, Daiichi Sankyo) for adult patients with locally advanced or metastatic HER2-positive gastric or gastroesophageal (GEJ) adenocarcinoma who have received a prior trastuzumab-based regimen based on the phase 2 DESTINY-Gastric01 trial.*

# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

**Study Design:** Global, multicenter, randomized, phase 3 trial



**Primary endpoints:** Overall Survival (OS)

**Secondary endpoints:** PFS (INV), Confirmed ORR (INV), DCR (INV), DOR (INV), Safety

**Exploratory endpoints:** PROs

<sup>a</sup>As classified by the 2017 ASCO-CAP guidelines for HER2 testing in gastroesophageal adenocarcinoma. <sup>b</sup>Study protocol originally mandated HER2 status be determined centrally but was later amended to allow local determination. <sup>c</sup>Clinically active CNS metastases were defined as being untreated and symptomatic or requiring therapy with corticosteroids or anticonvulsants. Patients with clinically inactive CNS metastases could be enrolled. <sup>d</sup>RAM administered as 8 mg/kg on days 1 and 15 of each 28-day cycle and PTX administered as 80 mg/m<sup>2</sup> on days 1, 8, and 15 of 28-day cycle.

# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## Baseline characteristics

	T-DXd (n = 246)	RAM + PTX (n = 248)
<b>Age, median (range), years</b>	63.2 (21.1-84.1)	64.3 (31.9-87.0)
<b>Male, n</b>	187 (76.0%)	205 (82.7%)
<b>Geography,<sup>a</sup> n</b>		
• Asia (ex-China)	57 (23.2%)	60 (24.2%)
• Western Europe	140 (56.9%)	139 (56.0%)
• Other*	49 (19.9%)	49 (19.8%)
<b>Race, n</b>		
• White	116 (47.2%)	130 (52.4%)
• Black	0	2 (0.8%)
• Asian	101 (41.1%)	97 (39.1%)
• Other	28 (11.4%)	19 (7.7%)
<b>ECOG PS</b>		
• 0/1	39.4%/60.2%	35.5%/63.7%
• 2/missing	0.4%/0%	0.4%/0.4%
<b>Primary tumor location, n</b>		
• Gastric	153 (62.2%)	149 (60.1%)
• GEJ	93 (37.8%)	99 (39.9%)

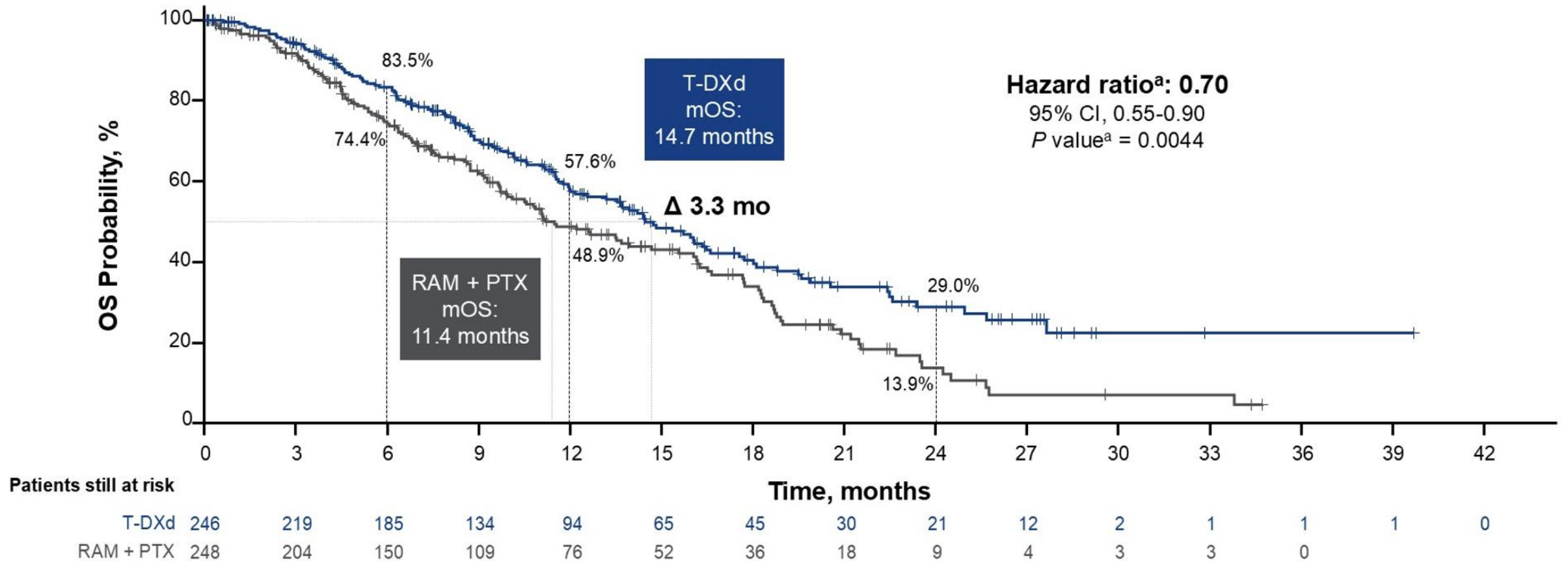
	T-DXd (n = 246)	RAM + PTX (n = 248)
<b>HER2 status,<sup>a,b</sup> n</b>		
• IHC 2+/ISH+	39 (15.9%)	40 (16.1%)
• IHC 3+	207 (84.1%)	208 (83.9%)
<b>TTP on 1L therapy,<sup>a</sup> n</b>		
• <6 mo	61 (24.8%)	61 (24.6%)
• ≥6 mo	185 (75.2%)	187 (75.4%)
<b>Prior treatment with ICI, n</b>	39 (15.9%)	38 (15.3%)
<b>Metastatic sites, n</b>		
• <2	73 (29.7%)	75 (30.2%)
• ≥2	173 (70.3%)	173 (69.8%)
<b>Liver metastases, n</b>	147 (59.8%)	158 (63.7%)
<b>Brain metastases, n</b>	16 (6.5%)	18 (7.3%)

<sup>a</sup>Stratification factor by interactive response therapy. <sup>b</sup>Local or central HER2 status.



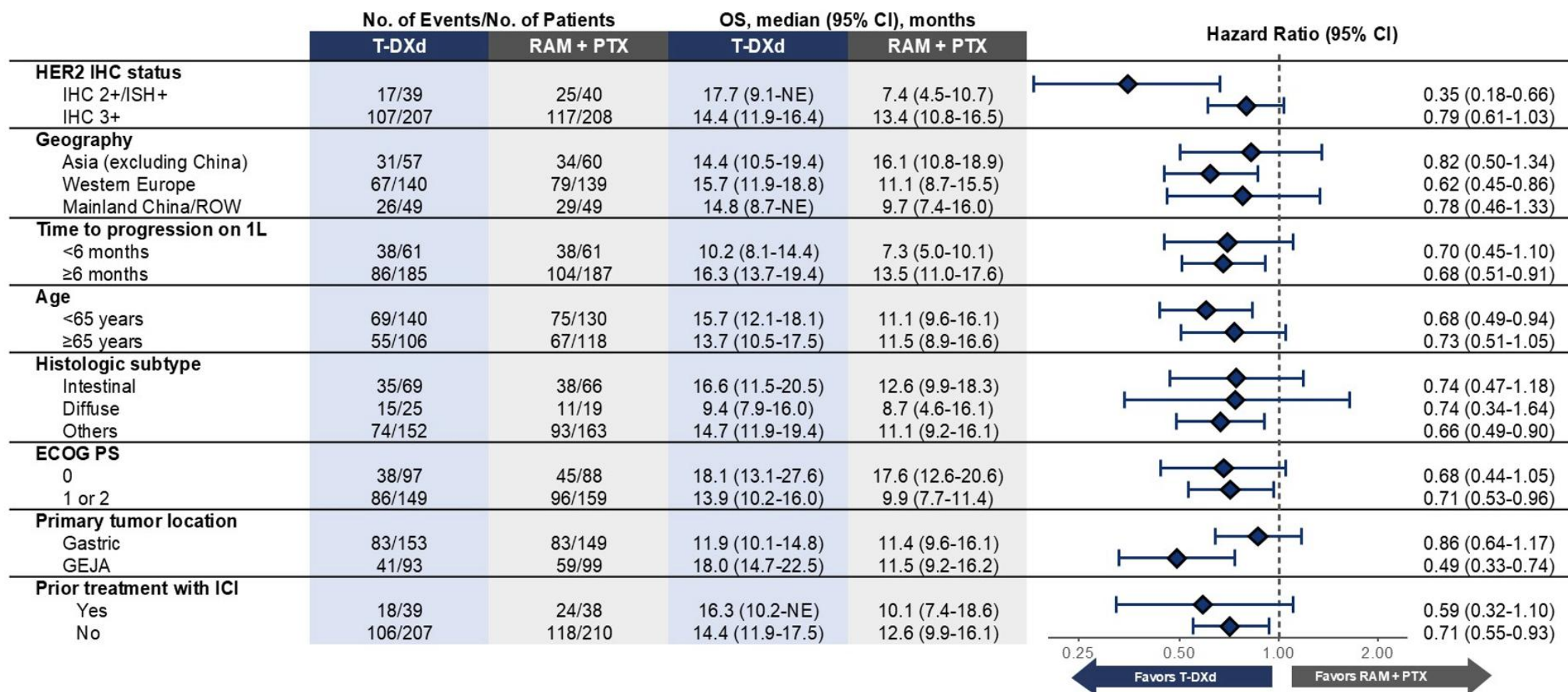
# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## Primary Endpoint: Overall Survival (OS)



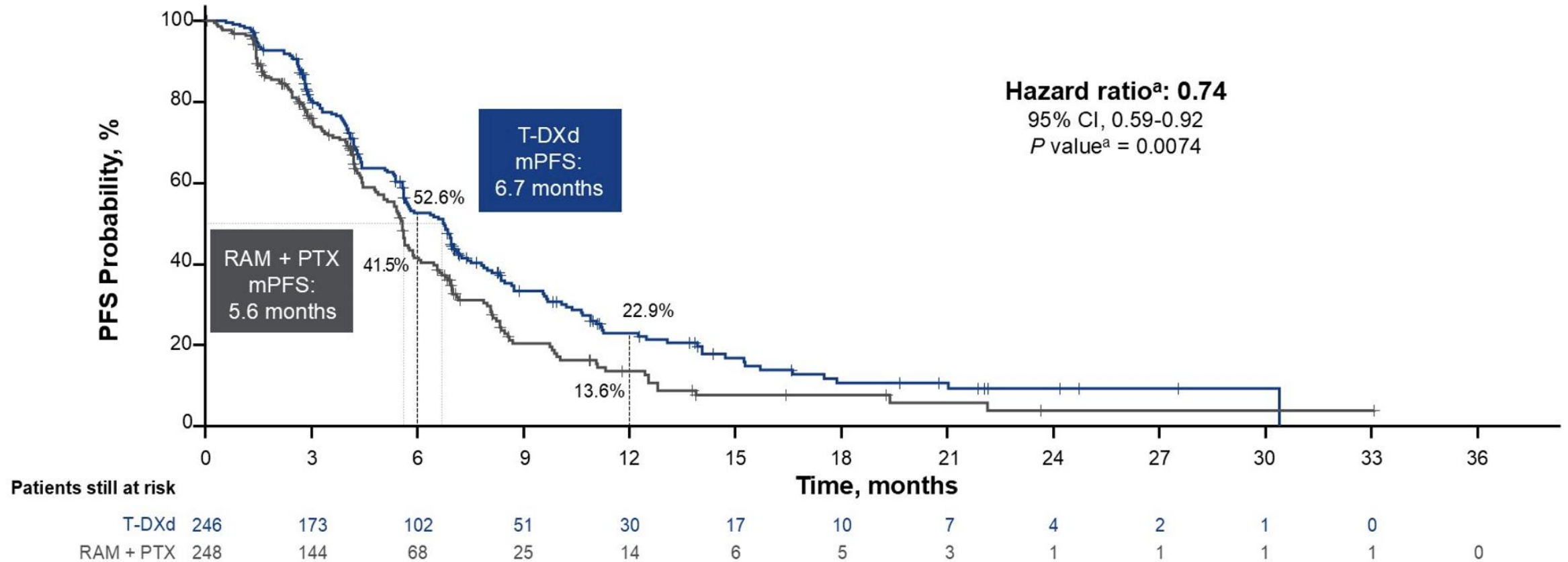
# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## Overall Survival by Subgroups



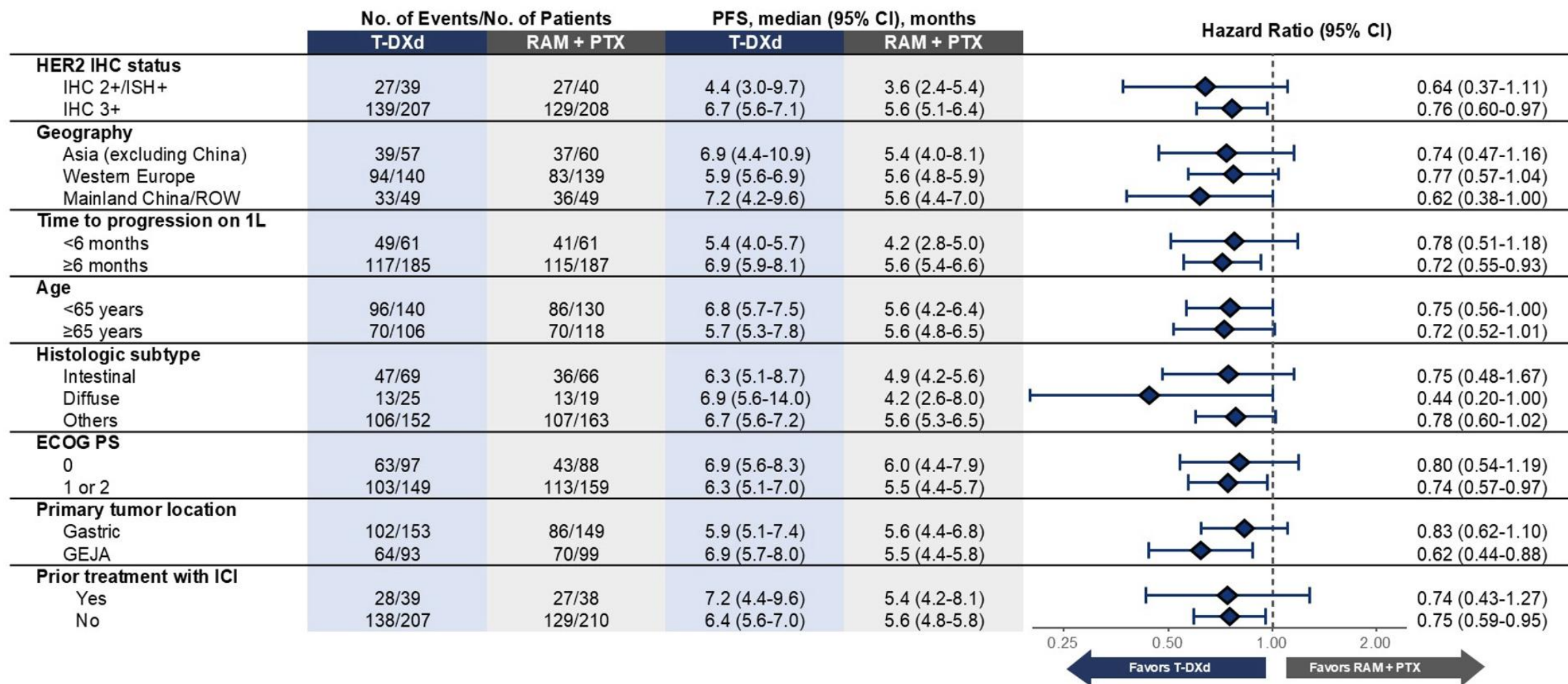
# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## Key Secondary Endpoints: PFS



# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## PFS by Subgroups



# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

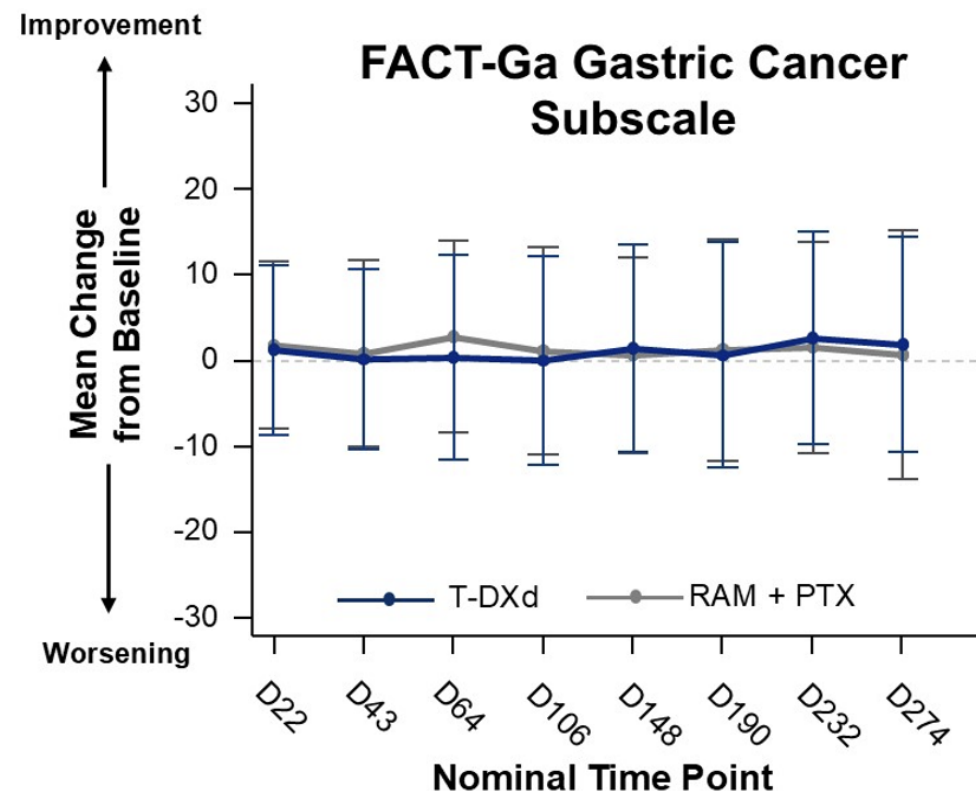
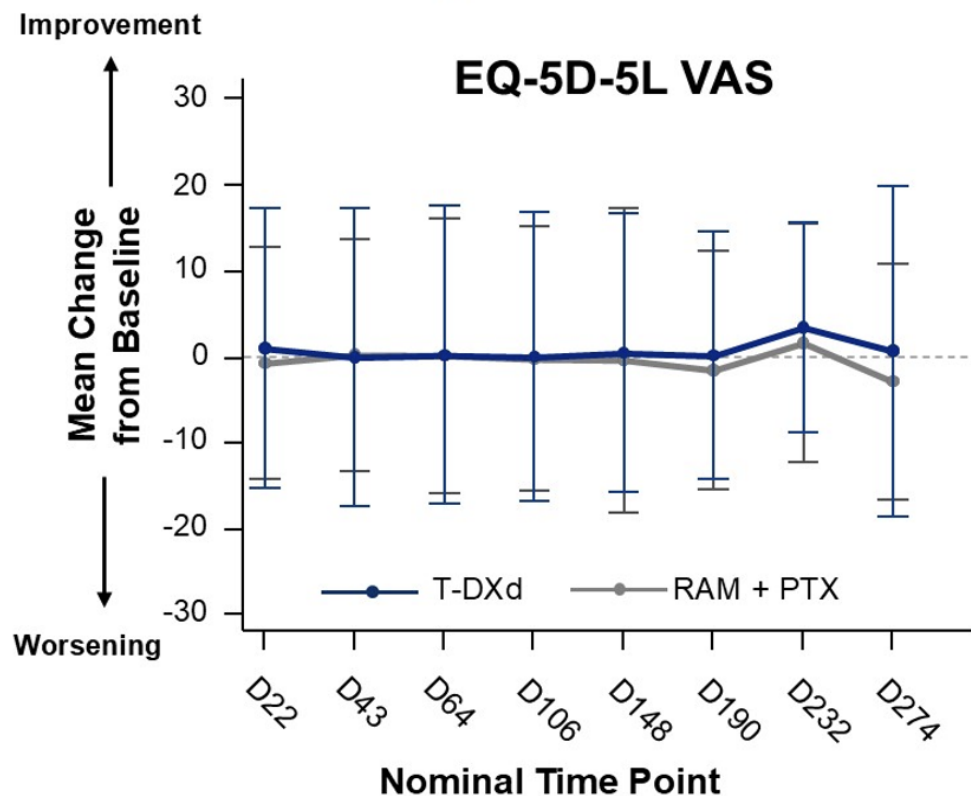
## Key Secondary Endpoints: Confirmed ORR and DOR

	T-DXd (n = 246)	RAM + PTX (n = 248)
<b>Confirmed ORR (95% CI)</b>	<b>44.3%</b> <b>(37.8-50.9)</b>	<b>29.1%</b> <b>(23.4-35.3)</b>
• P value	0.0006	
• Difference (95% CI)	15.1% (6.1-24.2)	
<b>DOR, median (95% CI), mo</b>	<b>7.4 (5.7-10.1)</b>	<b>5.3 (4.1-5.7)</b>
<b>DCR (95% CI)</b>	<b>91.9% (87.7-95.1)</b>	<b>75.9% (70.0-81.2)</b>
<b>Confirmed BOR, n</b>		
• CR	7 (3.0%)	3 (1.3%)
• PR	97 (41.3%)	66 (27.8%)
• SD	112 (47.7%)	111 (46.8%)
• PD	13 (5.5%)	22 (9.3%)
• NE	6 (2.6%)	35 (14.8%)



# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## Exploratory endpoint: Patient-Reported Outcomes



D, day; EQ-5D-5L, EuroQol 5-Dimension, 5-Level; FACT-Ga, Functional Assessment of Cancer Therapy-gastric; HRQOL, health-related quality of life; PTX, paclitaxel; RAM, ramucirumab; T-DXd, trastuzumab deruxtecan; VAS, visual analog scale. \*Median treatment duration was 5.4 months with T-DXd and 4.6 months with RAM + PTX. †Baseline completion rates for the EQ-5D-5L VAS and FACT-GA subscale were 98.2% and 99.1%, respectively, in the T-DXd arm, and 99.5% and 97.5% in the RAM + PTX arm. ‡Results for an arm were no longer considered informative once the number of patients who had the specified visit dropped below 10%, which occurred after D274. §Defined as a  $\geq 10$  point change from baseline.

# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## Safety Summary

	T-DXd (n = 244)	RAM + PTX (n = 233)
<b>Any TEAE, n</b>	244 (100%)	228 (97.9%)
• Drug related	227 (93.0%)	213 (91.4%)
<b>Grade ≥3 TEAEs, n</b>	166 (68.0%)	172 (73.8%)
• Drug related	122 (50.0%)	126 (54.1%)
<b>Serious TEAEs, n</b>	100 (41.0%)	101 (43.3%)
• Drug related	45 (18.4%)	41 (17.6%)
<b>TEAEs associated with dose discontinuation, n</b>	35 (14.3%)	40 (17.2%)
• Drug related	28 (11.5%)	31 (13.3%)
<b>TEAEs associated with dose interruption, n</b>	137 (56.1%)	141 (60.5%)
• Drug related	94 (38.5%)	119 (51.1%)
<b>TEAEs associated with dose reduction, n</b>	77 (31.6%)	87 (37.3%)
• Drug related	76 (31.1%)	84 (36.1%)
<b>TEAEs associated with death, n</b>	22 (9.0%)	35 (15.0%)
• Drug related <sup>a</sup>	4 (1.6%)	2 (0.9%)

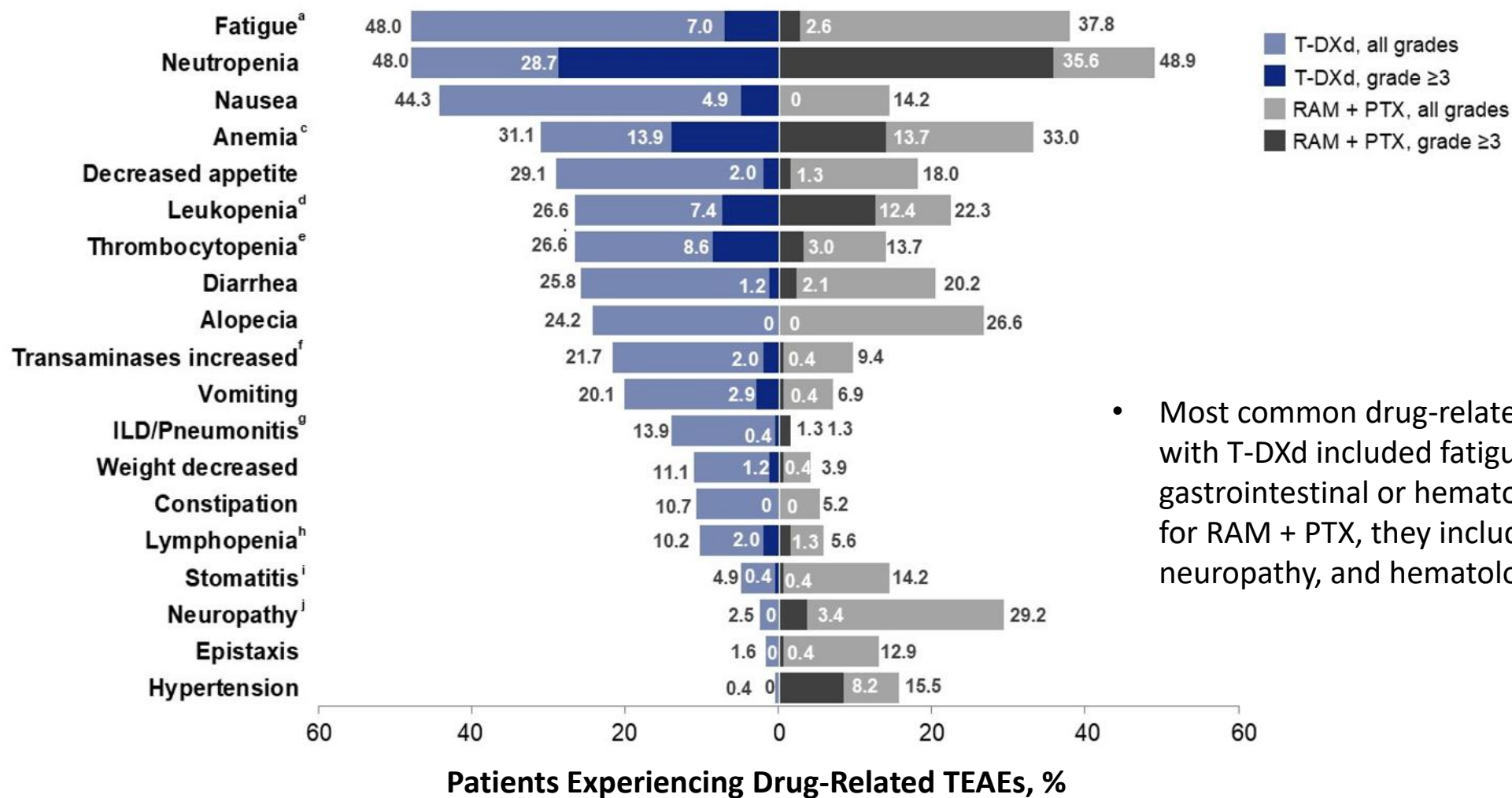
- Median treatment duration:
  - **T-DXd:** 5.4 mo  
(range, 0.7-30.3 mo)
  - **RAM + PTX:** 4.6 mo  
(range, 0.9-34.9 mo)
- Similar incidence of the drug-related grade ≥3 TEAEs, serious TEAEs, treatment discontinuations, and deaths were observed in the 2 arms

<sup>a</sup>Drug-related adverse events that were associated with death occurred in 4 patients (1.6%) who received T-DXd (upper gastrointestinal hemorrhage, intestinal obstruction, sudden death, and death not otherwise specified in 1 patient each) and in 2 patients (0.9%) who received RAM + PTX (gastric perforation and ILD in 1 patient each).



# DESTINY-Gastric04: Phase 3 of T-DXd vs Ramucirumab + Paclitaxel in 2L

## Drug-Related TEAEs in $\geq 10\%$ of Patients



- Most common drug-related TEAEs with T-DXd included fatigue or AEs of gastrointestinal or hematologic nature; for RAM + PTX, they included fatigue, neuropathy, and hematologic AEs

- DESTINY-Gastric04 is the first phase 3 trial of ENHERTU in HER2-positive advanced gastric cancer
- T-DXd demonstrated a statistically significant and clinically meaningful improvement in OS compared with RAM + PTX in patients with HER2+ metastatic GC/GEJA in the 2L setting
  - Median OS: 14.7 vs 11.4 mo (HR: 0.70;  $P = 0.0044$ )
  - Improvement also noted in PFS, confirmed ORR, DCR, and DoR with T-DXd vs RAM +PTX
- No new safety signals were reported and patient-reported QoL was maintained

*Trastuzumab deruxtecan should be considered as a standard second-line therapy for patients with metastatic HER2-positive gastric cancer with prior progression on a trastuzumab-containing regimen*

# ASCO 2025: RAPID REVIEWS

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BREAKWATER

PANOVA-3

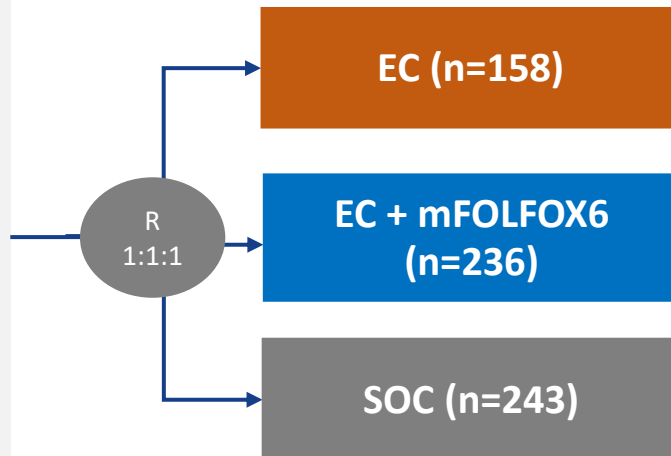
AMPLITUDE

# BREAKWATER: 1L encorafenib + cetuximab + mFOLFOX6 PSF and updated OS analyses in BRAF V600E-mutant metastatic colorectal cancer

## Study Design: Open-label, multicenter, phase 3 study

Stratified by US/Canada vs Europe vs Rest of World  
and ECOG PS (0 vs 1)

- Age ≥16 years (or ≥18 based on country)
- No prior systemic treatment for metastatic disease
- Measurable disease (RECIST 1.1)
- BRAF V600E-mutant mCRC by local or central laboratory testing
- ECOG PS 0 or 1
- Adequate bone marrow, hepatic, and renal function



Data cutoff: January 6, 2025

**Primary endpoint:** PFS by BICR, ORR by BICR

**Secondary endpoints:** OS

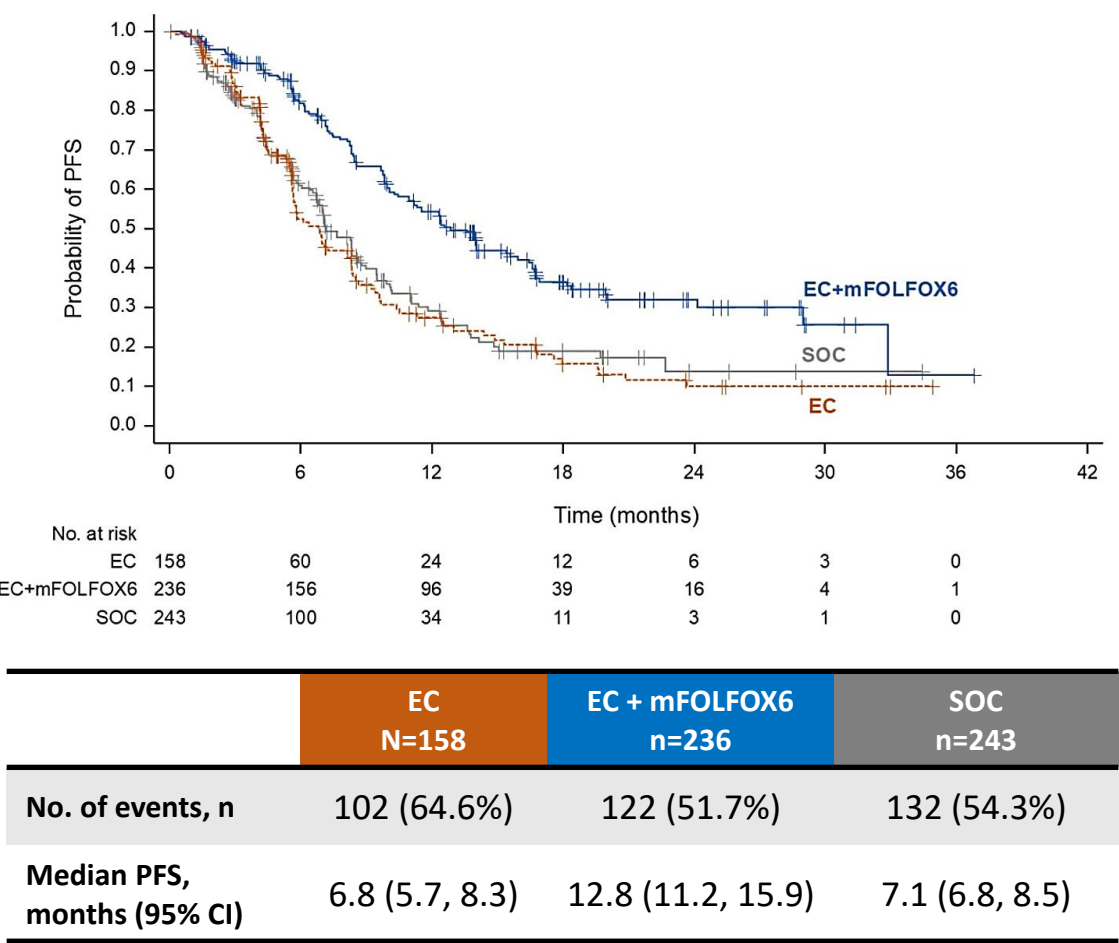
## Select Baseline Characteristics

Characteristic	EC (n = 158)	EC + mFOLFOX-6 (n = 236)	SOC (n = 243)
<b>Median age, yr (range)</b>	59 (26-84)	60 (24-81)	62 (28-84)
<b>ECOG PS, n</b>			
▪ 0	79 (50.0%)	128 (54.2%)	131 (53.9%)
▪ 1	74 (46.8%)	104 (44.1%)	98 (40.3%)
<b>No. of organs involved*</b>			
▪ ≤2	86 (54.4%)	119 (50.4%)	127 (52.3%)
▪ ≥3	72 (45.6%)	117 (49.6%)	116 (47.7%)
<b>Liver metastases*</b>	94 (59.5%)	147 (62.3%)	160 (65.8%)
<b>CEA at baseline</b>			
▪ ≤5 µg/L	50 (31.6%)	64 (27.1%)	63 (25.9%)
▪ >5 µg/L	102 (64.6%)	167 (70.8%)	163 (67.1%)
<b>CRP at baseline</b>			
▪ ≤10 mg/L	91 (57.6%)	125 (53.0%)	118 (48.6%)
▪ ≥10 mg/L	61 (38.6%)	105 (44.5%)	108 (44.4%)

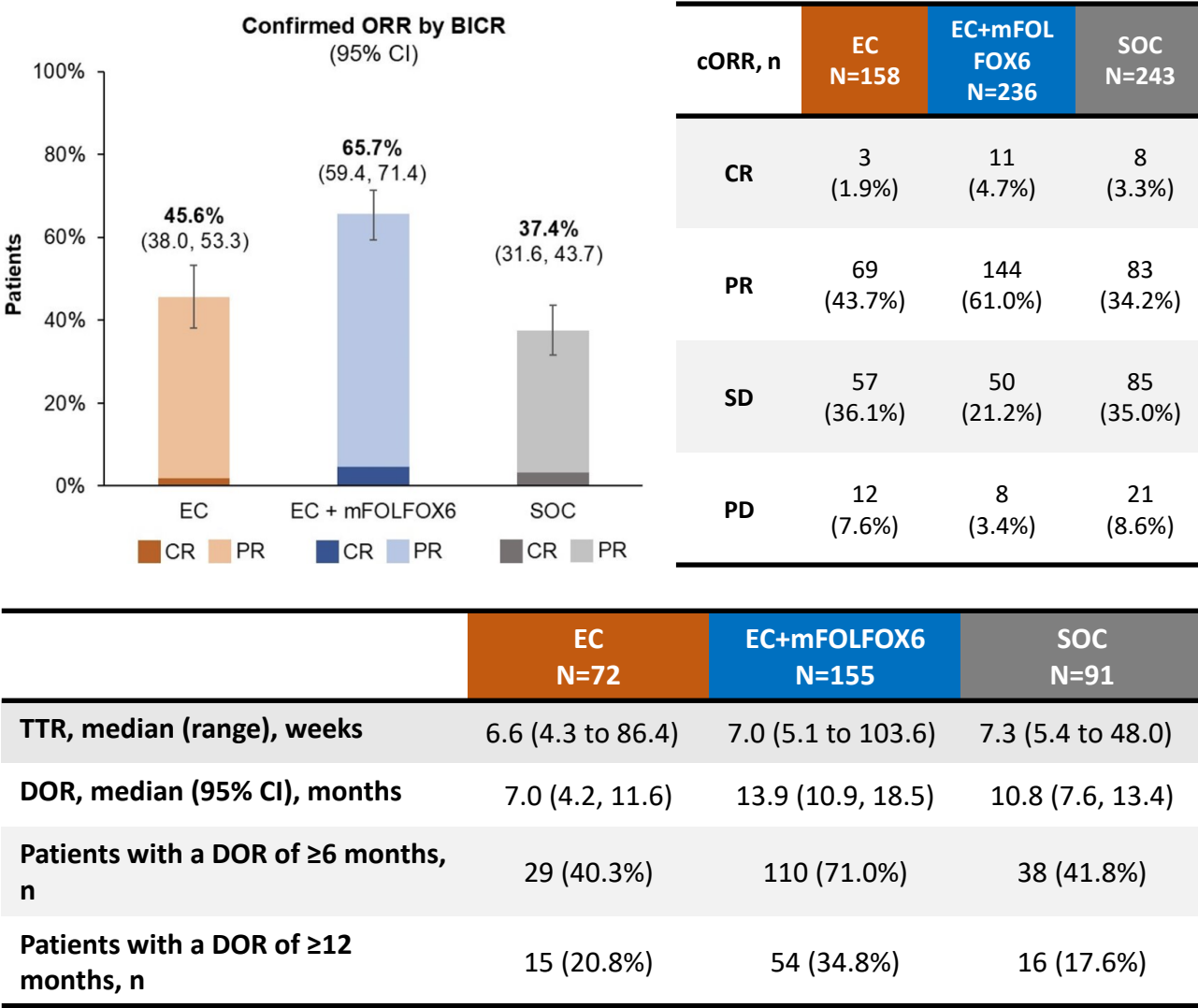
\*Based on blind independent central review

**BREAKWATER:** 1L encorafenib + cetuximab + mFOLFOX6, PFS and updated OS analyses in BRAF V600E-mutant metastatic colorectal cancer

Primary Endpoint: PFS by BICR

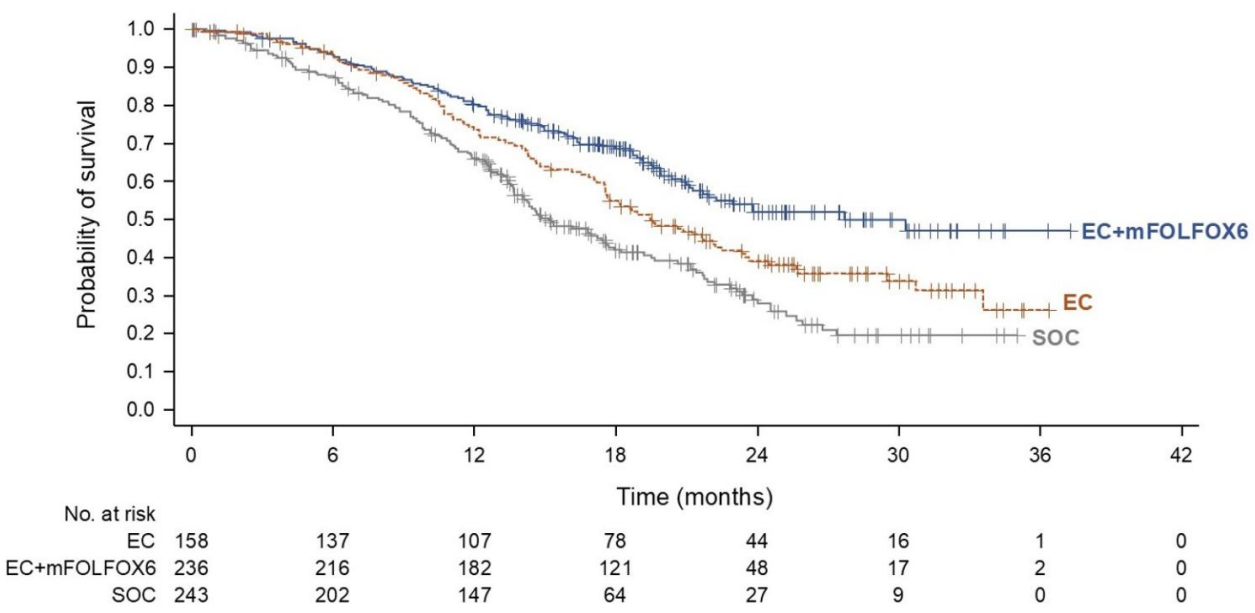


Primary Endpoint: ORR by BICR



**BREAKWATER:** 1L encorafenib + cetuximab + mFOLFOX6 PSF and updated OS analyses in BRAF V600E-mutant metastatic colorectal cancer

Secondary Endpoints: Overall Survival



	EC N=158	EC + mFOLFOX6 n=236	SOC n=243
No. of events, n	92 (58.2%)	94 (39.8%)	148 (60.9%)
Median OS, months (95% CI)	19.5 (17.6, 22.5)	30.3 (21.7, NE)	15.1 (13.7, 17.7)

\*Sepsis (preferred term).

Safety Summary	EC (n = 153)	EC + mFOLFOX-6 (n = 232)	SOC (n = 229)
Duration of treatment, median (range), weeks	27.0 (2.0-153.6)	49.8 (1.3-161.9)	25.9 (2.0-150.0)
All causality			
• TEAE	149 (97.4%)	232 (100%)	227 (99.1%)
• Grade 3 or 4 TEAE	65 (42.5%)	189 (81.5%)	153 (66.8%)
• Grade 5 TEAE	4 (2.6%)	10 (4.3%)	10 (4.4%)
• Serious TEAE	46 (30.1%)	107 (46.1%)	89 (38.9%)
• TEAE leading to permanent d/c	20 (13.1%)	62 (26.7%)	40 (17.5%)
• TEAE leading to dose reduction	16 (10.5%)	152 (65.5%)	124 (54.1%)
• TEAE leading to dose interruption	63 (41.2%)	212 (91.4%)	168 (73.4%)
Treatment-related			
• AE related to any drug	136 (88.9)	232 (100%)	272 (94.%8)
• Grade 3 or 4 TREA	24 (15.7%)	177 (76.3%)	134 (58.5%)
• Grade 5	0	0	1 (0.4)*
• Serious AE related to any drug	10 (6.5%)	45 (19.4%)	50 (21.8%)

*EC + mFOLFOX6 is practice-changing 1L therapy as a new SOC for BRAF V600E-mutant mCRC*

*On December 20, 2024, the FDA granted accelerated approval to encorafenib (Braftovi, Array BioPharma Inc., a subsidiary of Pfizer Inc.) with cetuximab and mFOLFOX6 for patients with metastatic colorectal cancer (mCRC) with a BRAF V600E mutation, as detected by an FDA-approved test.*

# ASCO 2025: RAPID REVIEWS

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BREAKWATER

PANOVA-3

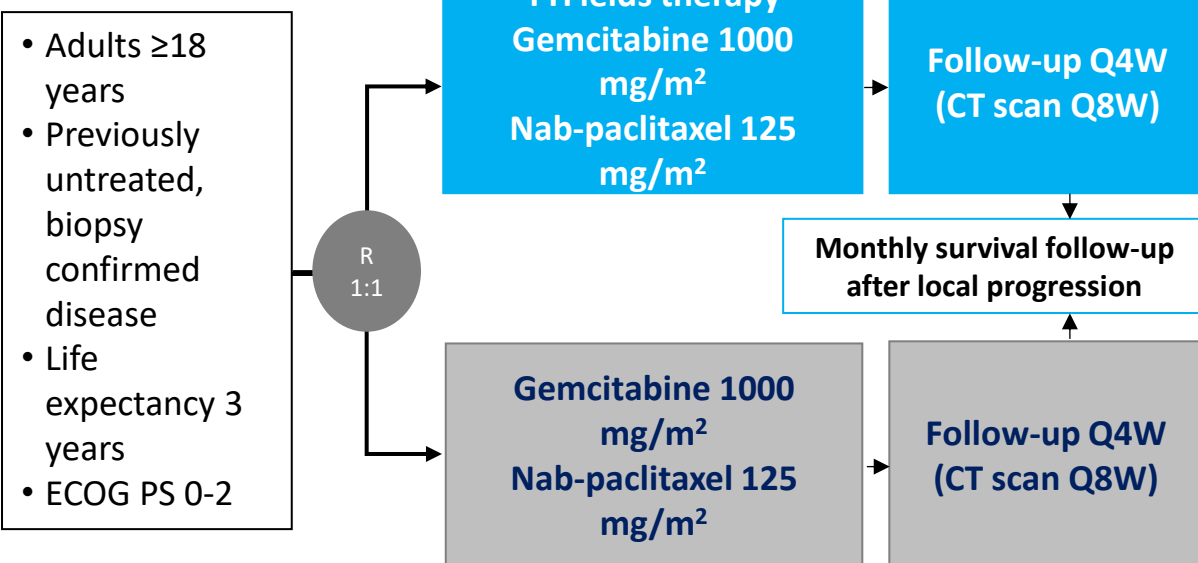
AMPLITUDE



# **PANOVA-3:** Phase 3 study of Tumor Treating Fields (TTFields) with gemcitabine and nab-paclitaxel (GnP) for locally advanced pancreatic adenocarcinoma (LA-PAC)

## Study Design: Phase 3 study

Stratified by ECOG  
PS & region



**Primary endpoint:** OS

**Secondary endpoints:** PFS, local PFS, pain-free survival, 1-yr survival rate, ORR, safety

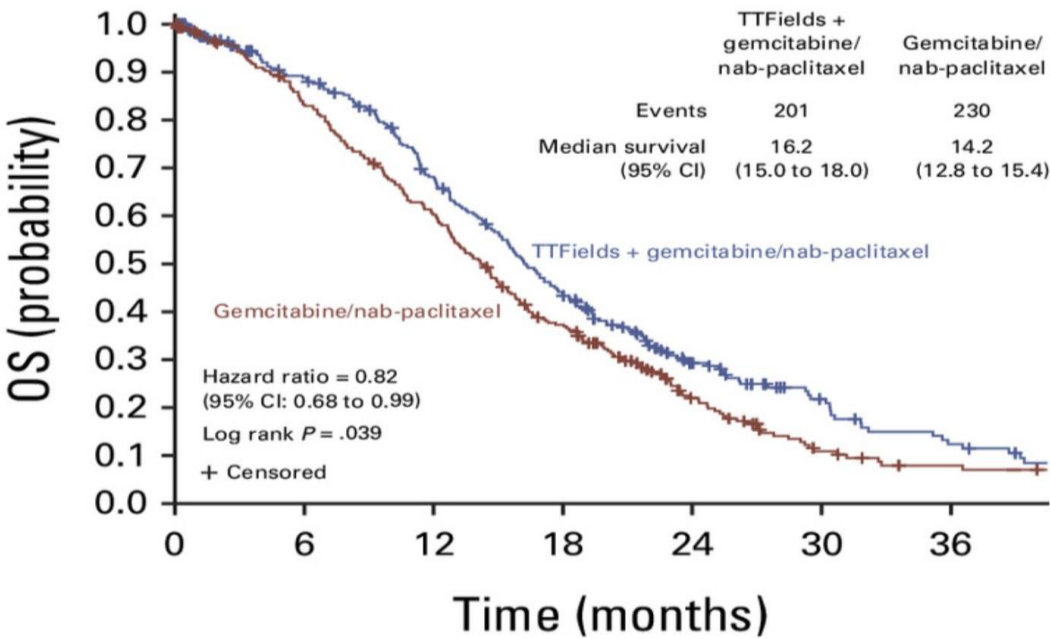
Enrollment: March 2018 – March 2023  
Data cutoff: October 16, 2024

## Select Baseline Characteristics

	TTFields + GnP (n=285)	GnP (n = 286)	Overall (n=571)
<b>Median age (range), years</b>	67 (31, 90)	67.5 (40, 88)	67 (31, 90)
<b>Gender, n</b>			
• Male	147 (51.6%)	125 (43.7%)	272 (47.6%)
• Female	138 (48.4%)	161 (56.3%)	299 (52.4%)
<b>ECOG PS, n</b>			
• 0	109 (38.2%)	111 (38.8%)	220 (38.5%)
• 1	166 (58.2%)	163 (57.0%)	329 (57.6%)
• 2	10 (3.5%)	12 (4.2%)	22 (3.9%)
<b>CA 19-9, n</b>			
• Normal ( $\leq 37$ U/mL)	48 (16.8%)	44 (15.4%)	92 (16.1%)
• Elevated (38-1,000 U/mL)	140 (49.1%)	152 (53.1%)	292 (51.1%)
• High ( $>1,000$ U/mL)	88 (30.9%)	79 (27.6%)	167 (29.2%)
• Untested	9 (3.2%)	11 (3.8%)	20 (3.5%)

PANOVA-3: Phase 3 study of Tumor Treating Fields (TTFields) with gemcitabine and nab-paclitaxel (GnP) for locally advanced pancreatic adenocarcinoma (LA-PAC)

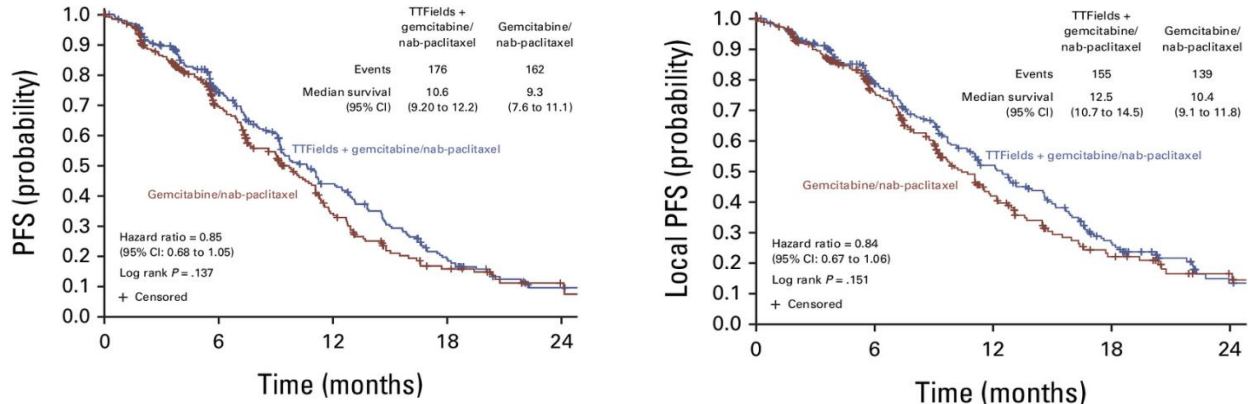
Primary Endpoint: OS



Number at risk:

TTFields + gemcitabine/nab-paclitaxel	285	224	166	104	50	26	14
Gemcitabine/nab-paclitaxel	286	228	164	98	41	16	9

Secondary Endpoint: PFS and local PFS



Number at risk:

TTFields + gemcitabine/nab-paclitaxel	285	153	79	30	9
Gemcitabine/nab-paclitaxel	286	133	50	17	6

Safety Summary

AE, n (%)	TTFields + GnP (n = 274)		GnP (n = 273)	
	All grades	Grade ≥3	All grades	Grade ≥3
Serious AE	147 (53.6%)	143 (52.2%)	131 (48.0%)	130 (47.6%)
AE leading to device discontinuation	23 (8.4%)		NA	
AE leading to chemotherapy discontinuation	47 (17.2%)		43 (15.8%)	
AE leading to death	17 (6.2%)		16 (5.9%)	

TTFields with GnP is a potential new standard paradigm for unresectable LA-PAC

# ASCO 2025: RAPID REVIEWS

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BREAKWATER

PANOVA-3

AMPLITUDE

## KEY DATA

**AMPLITUDE:** Niraparib and abiraterone acetate plus prednisone for metastatic castration-sensitive prostate cancer patients with alterations in homologous recombination repair genes

**Study Design:** Randomized, double-blind, placebo-controlled trial

Stratified by BRCA2 vs CDK12  
vs all other alterations, prior  
docetaxel (yes vs no), and  
disease volume (high vs low)

- mCSPC
- Alteration in ≥1 HRR eligible gene: BRCA1, BRCA2, BRIP1, CDK12, CHEK2, FANCA, PALB2, RAD51B, RAD54L
- ECOG PS 0-2

R

1:1

**Niraparib (200 mg QD)  
+  
AAP (1000 mg QD + 5 mg QD)  
+ ADT  
(n=348)**

**Placebo  
+  
AAP (1000 mg QD + 5 mg QD)  
+ ADT  
(n=348)**

Prior allowed treatments in mCSPC:  
ADT ≤6 months, Docetaxel ≤6 cycles,  
APP ≤45 days, Palliative RT

Data cutoff: January 7, 2024

**Primary endpoint:** rPFS by investigator review

**Secondary endpoints:** Time to symptomatic progression, OS, safety

## Select Baseline Characteristics

	Niraparib + AAP (n=348)	Placebo + AAP (n = 348)
Median age (range), years	68 (40-88)	67 (40-92)
Median PSA at initial diagnosis (range, ng, mL	112 (0.1-17475)	102 (0.1-15900)
ECOG PS score, n		
• 0	242 (70%)	218 (63%)
• ≥1	106 (30%)	130 (37%)
Gleason score at initial diagnosis, 8, n	276 (79%)	262 (75%)
Metastatic stage at diagnosis, M1 (Synchronous), n	301 (86%)	302 (87%)
Disease volume, High, n	269 (77%)	271 (78%)
Prior docetaxel use in mCSPC, n	54 (16%)	56 (16%)
Site of metastases, n		
• Bone only	146 (42%)	154 (44%)
• Visceral	57 (16%)	54 (16%)
• Lymph nodes	173 (50%)	161 (46%)
BRCA alternation, n	191 (55%)	196 (56%)

## KEY DATA

**AMPLITUDE:** Niraparib and abiraterone acetate plus prednisone for metastatic castration-sensitive prostate cancer patients with alterations in homologous recombination repair genes

### Endpoints

	Niraparib + AAP (n=348)	Placebo + AAP (n = 348)
<b>Primary Endpoint</b>		
• Median rPFS, months		
• BRCAm	NE	26.0
• HRRm (ITT)	NE	29.5
<b>Secondary Endpoints</b>		
<b>Median time to symptomatic progression, months</b>		
• BRCAm	NE	NE
• HRRm	NE	NE
<b>Median OS, months</b>		
• BRCAm	NE	NE
• HRRm	NE	NE

### Safety Summary

	Niraparib + AAP (n = 347)*	Placebo + AAP (n = 348)
<b>TEAEs</b>	346 (>99%)	341 (98%)
<b>Treatment-related TEAEs</b>	309 (89%)	257 (74%)
<b>Grade 3 or 4 TEAEs</b>	261 (75%)	205 (59%)
<b>Treatment-related grade 3 or 4 TEAEs</b>	193 (56%)	105 (30%)
<b>SAEs</b>	136 (39%)	96 (28%)
<b>Treatment-related SAEs</b>	44 (13%)	11 (3%)
<b>TEAs leading to treatment discontinuation</b>	<b>51 (15%)</b>	<b>36 (10%)</b>
<b>TEAEs leading to dose reduction</b>	76 (22%)	24 (7%)
<b>TEAEs leading to death</b>	14 (4%)	7 (2%)

\*One randomized patient never received the study treatment

***Niraparib and abiraterone acetate plus prednisone could become a new treatment for patients with mCSPC and HRR gene alteration***

ASCO 2025:

**ATOMIC:** Atezolizumab plus mFOLFOX6 could be considered a new standard adjuvant treatment for patients with stage III deficient DNA mismatch repair colon cancer... not yet FDA approved

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GI/GU  
Cancer

**MATTERHORN:** Perioperative durvalumab with chemotherapy (FLOT) could be a new standard treatment for patients with localized gastric and GEJ adenocarcinoma... not yet FDA approved

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Key

Takeaways

**DESTINY-Gastric04:** Trastuzumab deruxtecan should be considered as a standard second-line therapy for patients with metastatic HER2-positive gastric cancer... FDA approved since January 2021

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**BREAKWATER:** Encorafenib plus cetuximab with mFOLFOX6 is could be a new standard first-line therapy for patients with BRAF V600E-mutant metastatic colorectal cancer... FDA approval since December 2024

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Q&A

**PANOVA-3:** Tumor Treating Fields (radiation) with gemcitabine and nab-paclitaxel is a potential new standard paradigm for unresectable locally advanced pancreatic adenocarcinoma... not yet FDA approved

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@SujithKalmadiMD

**AMPLITUDE:** Niraparib and abiraterone acetate plus prednisone could become a new standard treatment for patients with metastatic castration-sensitive prostate cancer with alterations in homologous recombination repair genes... not yet FDA approved

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# 2025 ASCO Key Studies

## Breast Cancer

- RAPID REVIEWS
  - \*SERENA-6
  - DESTINY-Breast09
  - DESTINY-Breast06
  - AI for IHC HER2 Pathology
  - ASCENT-03
  - ASCENT-04
  - VERITAC-2
  - INAVO120
  - CompassHER2 pCR

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- \*MATTERHORN
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- **RAPID REVIEWS**
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  - PANOVA-3
  - AMPLITUDE

## Other Notable Studies

- \*NIVOPOSTOP
- KEYNOTE-689
- \*VERIFY
- **RAPID REVIEWS**
  - TROPION-Lung02
  - DELPHI-304
  - IMforte
  - TUXEDO-3
  - ROSELLA

\* Plenary Session



\* Plenary Session

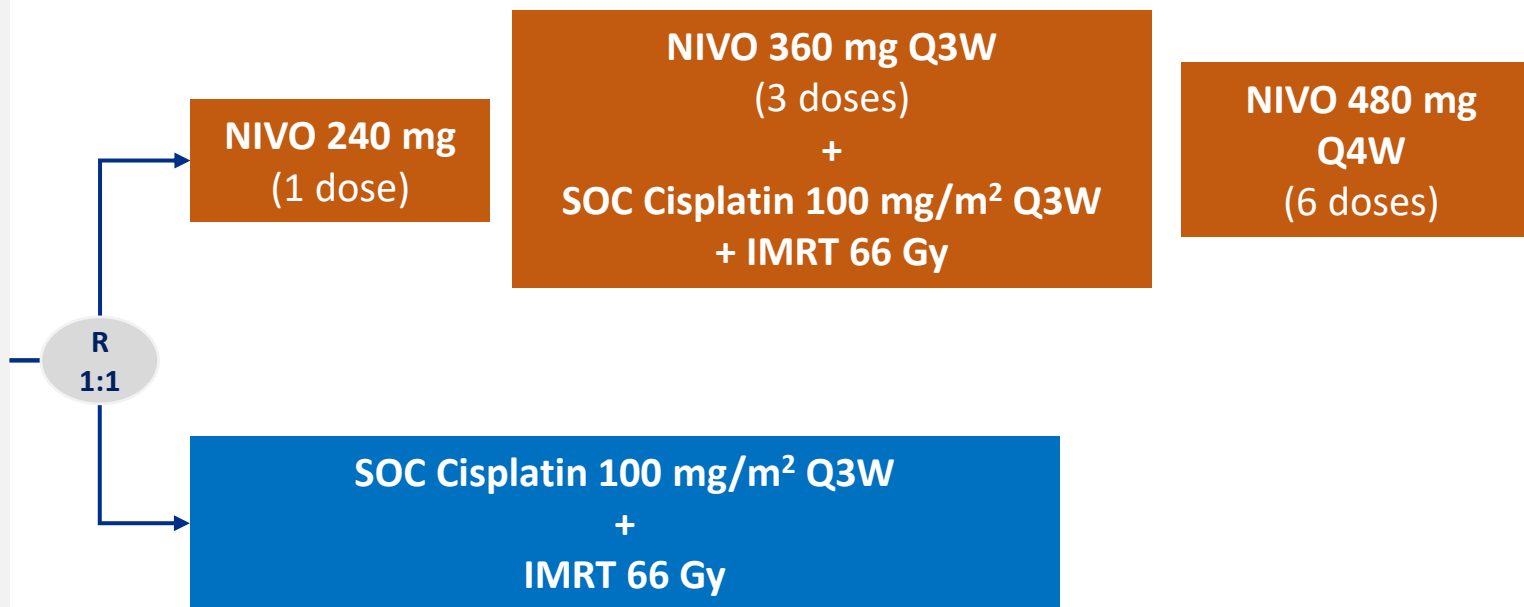
Does nivolumab added to radio-chemotherapy  
benefit patients with resected head and neck  
squamous cell carcinoma at high risk of relapse?

# NIVOPOSTOP: Nivolumab plus SOC for treatment of high-risk LA-HNSCC

**Study Design:** Multicenter, open-label, randomized, phase 3 investigator sponsored study

- Adult patients < 75 y/o
- ECOG PS 0-1
- SCC of the oral cavity, oropharynx, larynx, or hypopharynx with
  - Complete macroscopic surgical resection
  - Stage III or IV
  - High-risk pathological features of relapse (high-risk features are extracapsular extension or + margins, multiple peri-neural invasions and numerous involved nodes)

N=680



**Primary endpoint:** Disease-free survival (DFS) per investigator assessments

**Secondary endpoints:** Overall survival (OS), Safety

# NIVOPOSTOP: Nivolumab plus SOC for treatment of high-risk LA-HNSCC

## Baseline characteristics

	NIVO + CRT (n=332 <sup>a</sup> )	CRT (n=334 <sup>a</sup> )
<b>Median age (IQR), y</b>	59 (53-65)	59 (53-64)
<b>Sex</b>		
• Male	250 (75%)	257 (77%)
• Female	82 (25%)	77 (23%)
<b>ECOG PS</b>		
• 0	169 (51%)	168 (50%)
• 1	163 (49%)	166 (50%)
<b>Smoking status</b>		
• Current	179 (54%)	161 (48%)
• Former	108 (33%)	109 (33%)
• Never	45 (14%)	64 (19%)
<b>Median no. packs-years (IQR)</b>	40 (25-50)	40 (25-45)

	NIVO + CRT (n=332 <sup>a</sup> )	CRT (n=334 <sup>a</sup> )
<b>Tumor site and p16 status</b>		
• Oral cavity	192 (58%)	193 (58%)
• Hypopharynx	43 (13%)	40 (12%)
• Larynx	40 (12%)	41 (12%)
• OPC p16-	41 (12%)	43 (13%)
• OPC p16+	16 (5%)	17 (5%)

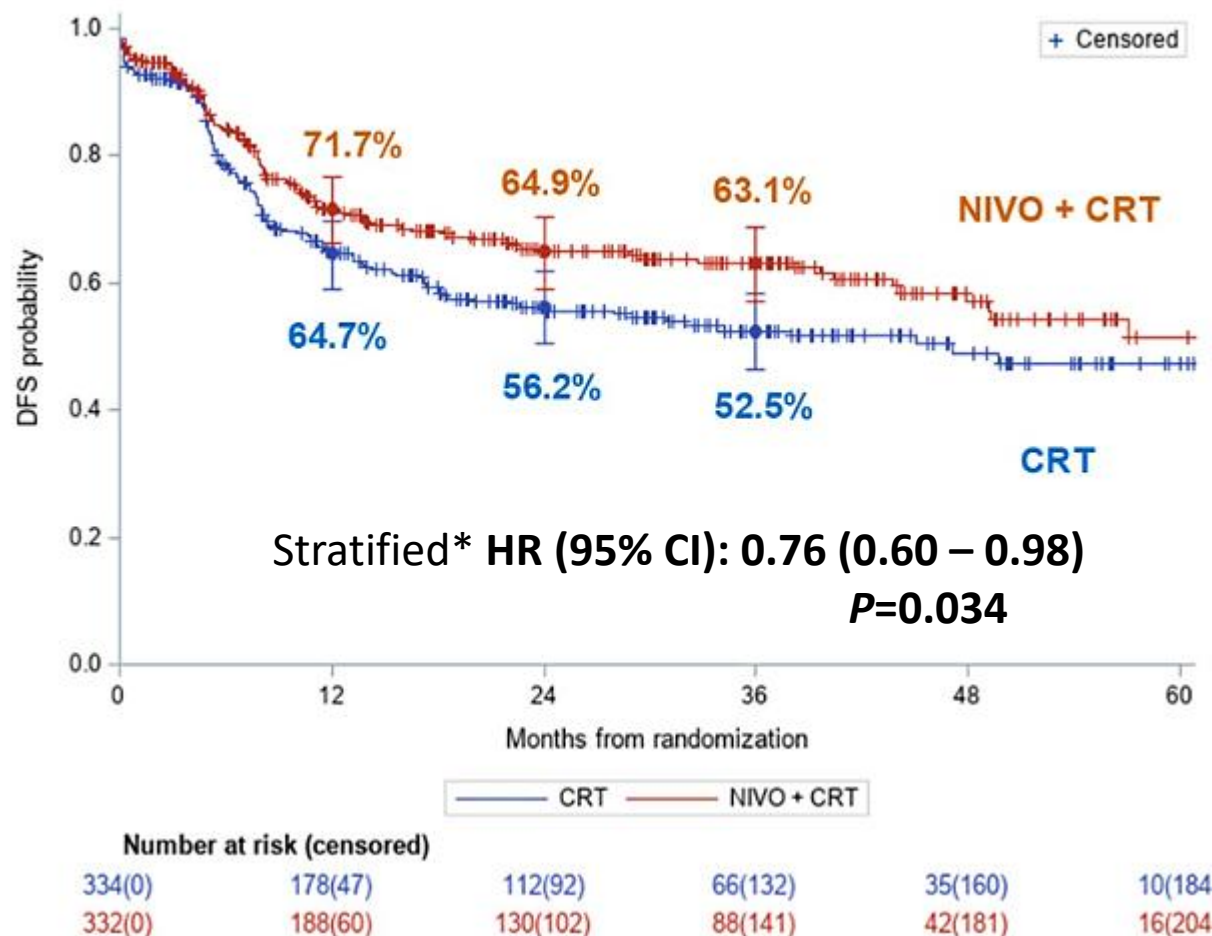
<sup>a</sup>Analysis was based on 666 patients randomized before the data cut off when the required number of DFS events was reached.

OPS: Oropharyngeal cancer; IQR: Interquartile Range; CRT: cisplatin + radiation

Data cut-off date: April 30, 2024

# NIVOPOSTOP: Nivolumab plus SOC for treatment of high-risk LA-HNSCC

**Primary Endpoint:** Disease-free survival (DFS) per investigator assessments



## Specific DFS events

	NIVO + CRT	CRT
<b>DFS events, n</b>	112	140
• Loco-regional	39	61
• Loco-regional + distant	16	22
• Distant	37	40
• Death	20	17

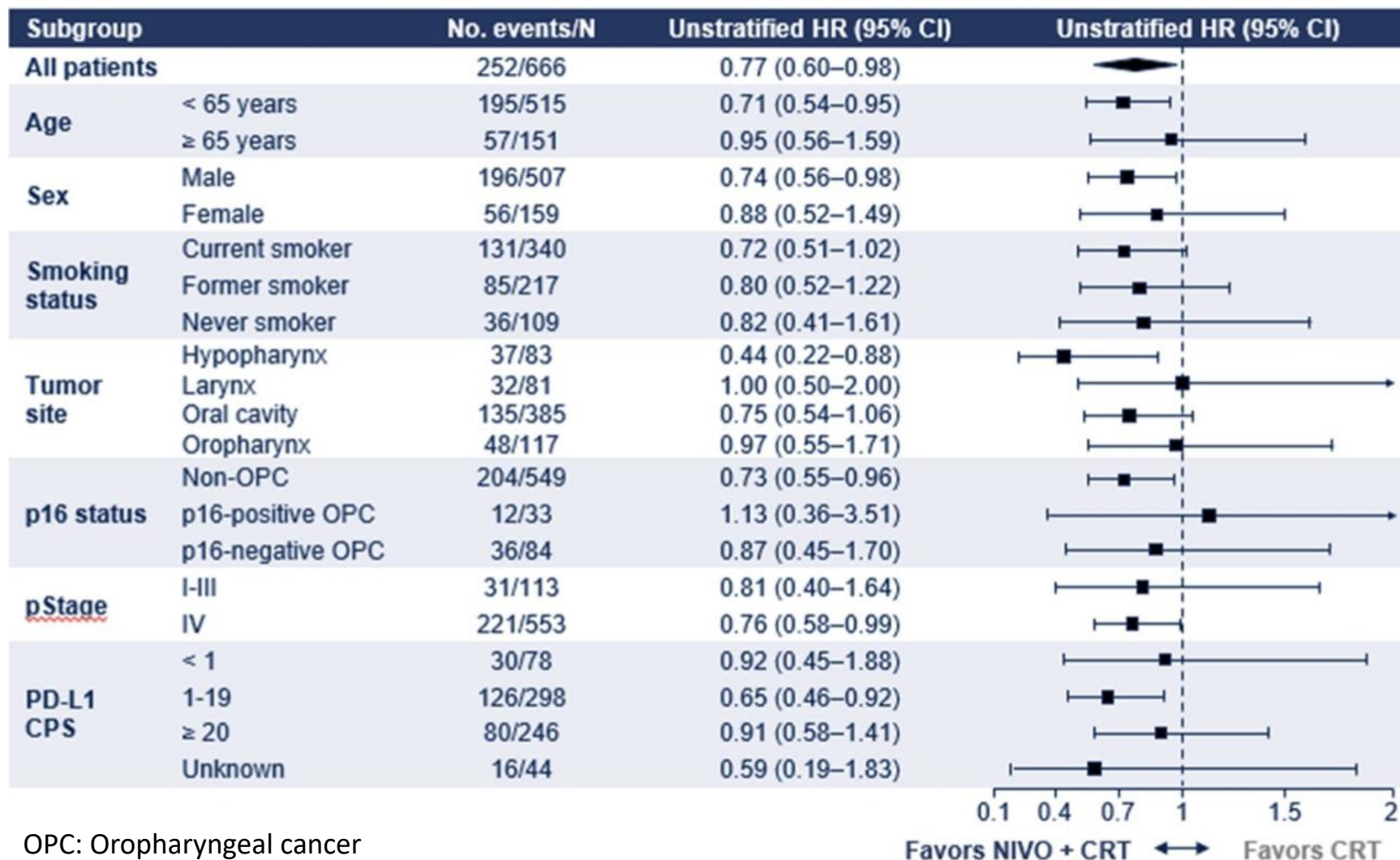
Analysis based on 252 DFS events at the data cutoff pf April 30th, 2024

Median follow up: 30.3 months

\*HR stratified for p16 status (OPC p16 positive vs OPC p16 negative and non –OPC) in Cox model

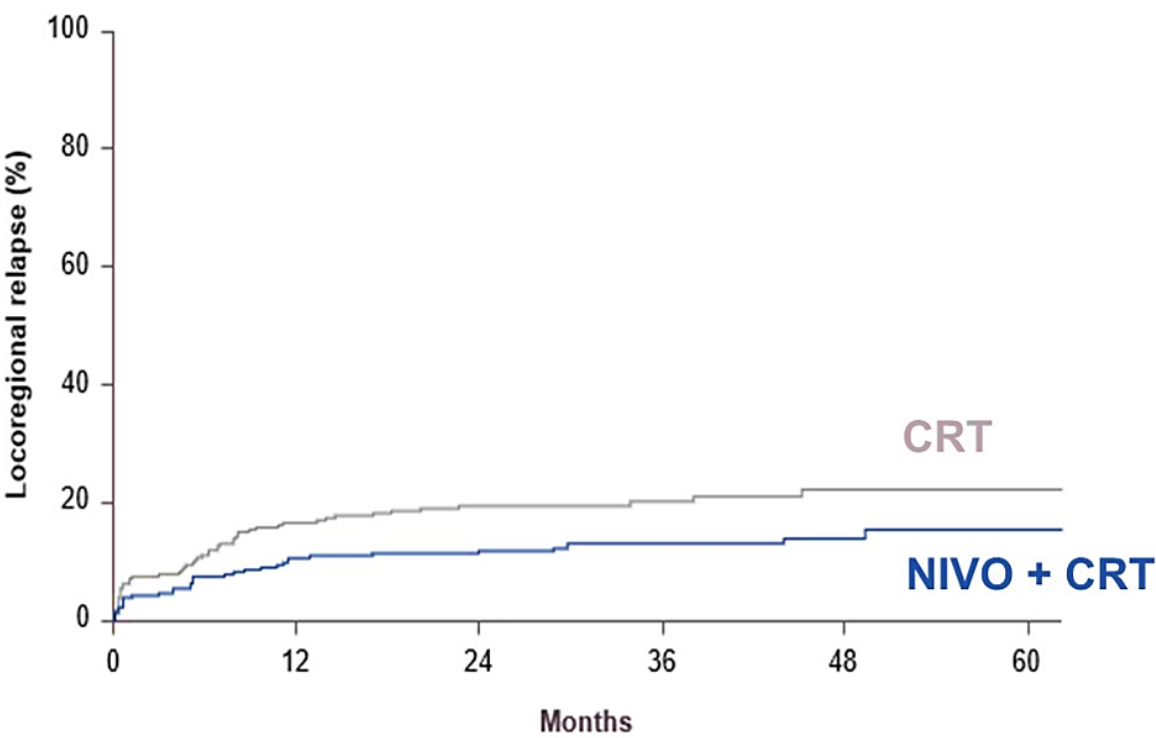
# NIVOPOSTOP: Nivolumab plus SOC for treatment of high-risk LA-HNSCC

## Disease Free Survival in Subgroups



# NIVOPOSTOP: nivolumab plus SOC for treatment of high-risk LA-HNSCC

## Cumulative incidence of local regional relapses alone



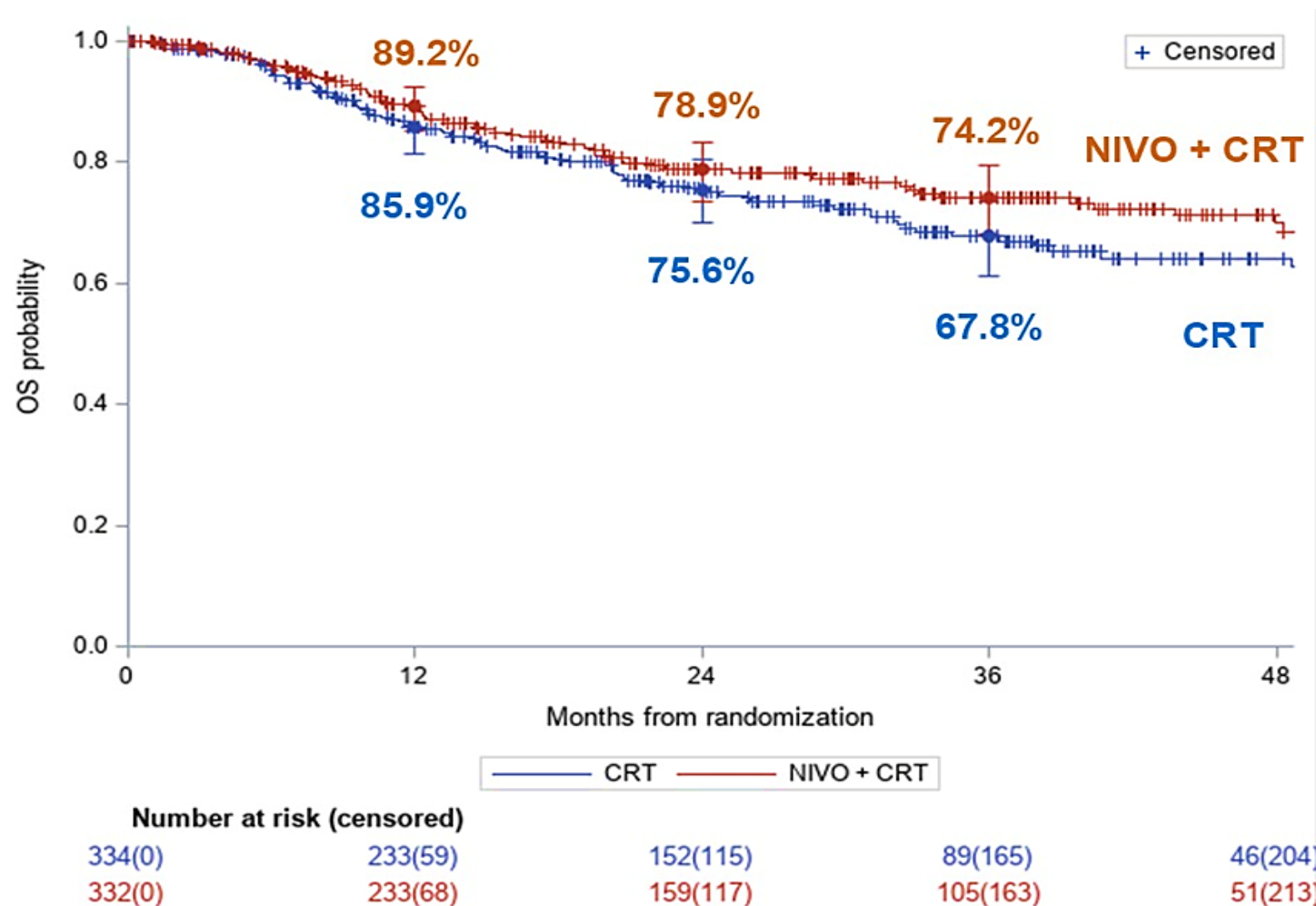
	NIVO + CRT (N=332)	CRT (N=334)
Events, n	39	61
Cumulative Incidence, %		
1-year	11	16
2-year	12	19
3-year	13	20
Stratified sub-HR (95% CI)		0.63 (0.42-0.94)

Sub-distribution HR stratified for p16 status (OPC p16 positive vs OPC p16 negative and non-OPC) in Fine-Gray model

CRT: cisplatin + radiation

# NIVOPOSTOP: nivolumab plus SOC for treatment of high-risk LA-HNSCC

## Secondary Endpoint: Overall Survival (descriptive\*)



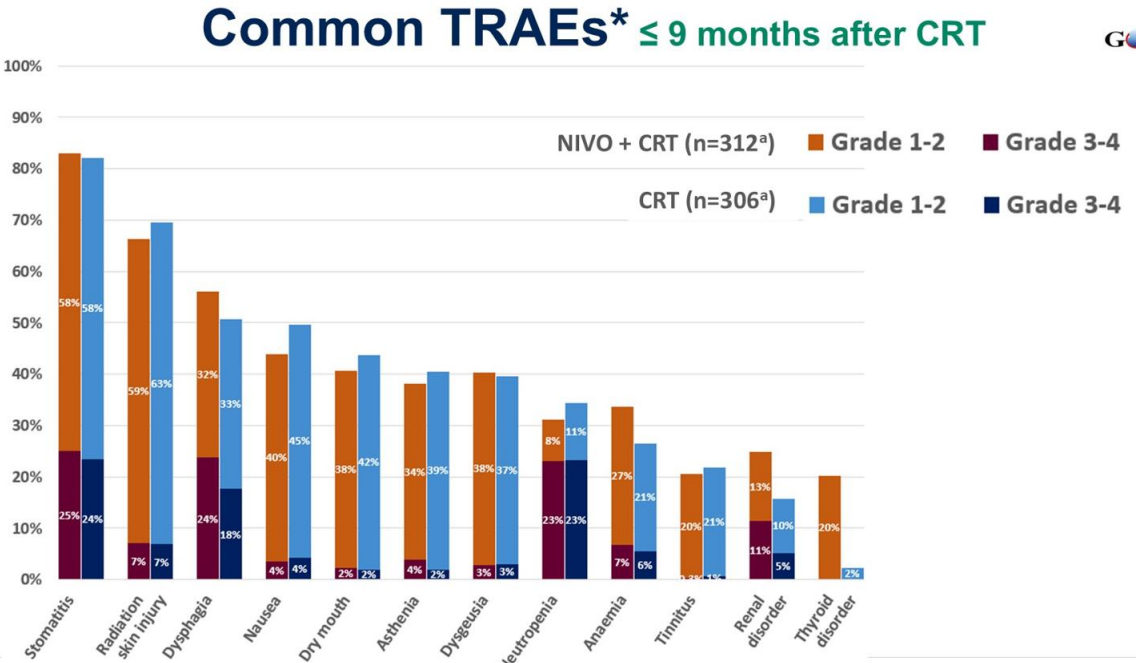
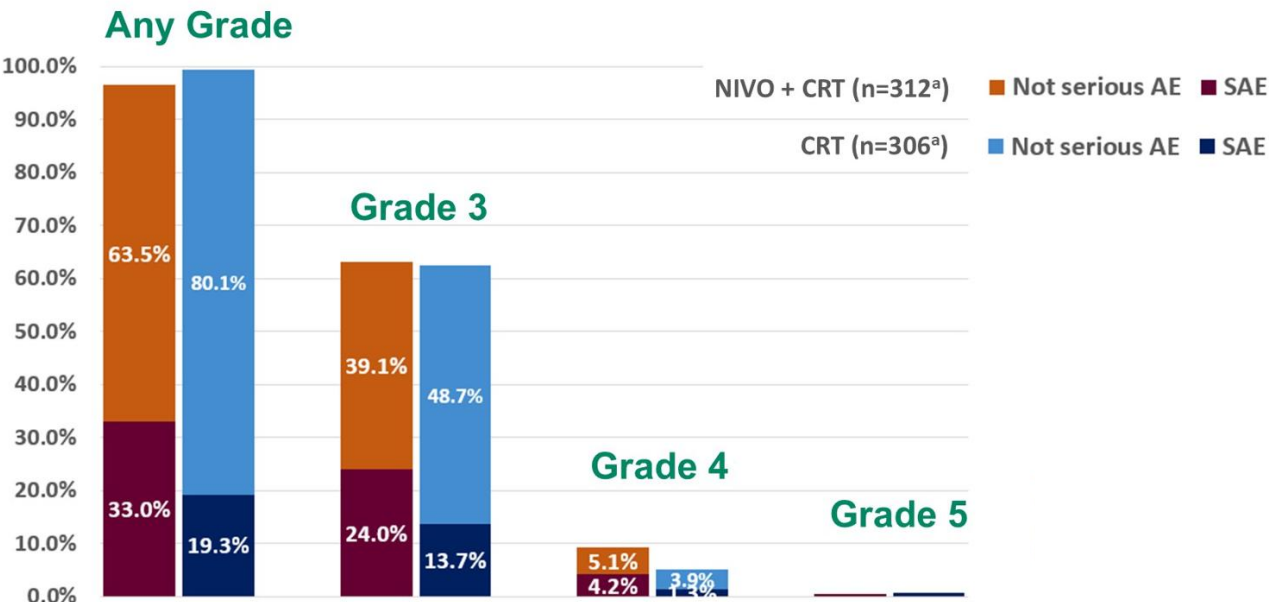
\*Note: OS could not be formally tested since the pre-specified number of deaths was not reached.

At data cutoff, 158 patients died.



# NIVOPOSTOP: nivolumab plus SOC for treatment of high-risk LA-HNSCC

## Safety: Treatment Related Adverse Events (TRAE)\*



Late TRAEs > 9 months after CRT	NIVO + CRT (n = 234)				CRT (n = 235)			
	Any grade	Grade 3	Grade 4	Grade 5	Any grade	Grade 3	Grade 4	Grade 5
Late treatment-related AEs								
Any, n	78 (33.3%)	10 (4.3%)	0	0	72 (30.6%)	8 (3.4%)	0	0
Serious, n	3 (1.3%)	3 (1.3%)	0	0	1 (0.4%)	1 (0.4%)	0	0
Late nivolumab-related AEs								
Any, n	10 (4.3%)	2 (0.9%)	0	0	N/A	N/A	N/A	N/A
Serious, n	2 (0.9%)	2 (0.9%)	0	0	N/A	N/A	N/A	N/A

\*Maximal grade of any TRAE per patient  
<sup>a</sup>Safety evaluated in 618 patients who received at least one dose of any study treatment

- The benefit-risk ratio of adding nivolumab to post operative SOC cisplatin-RT appears to be favorable
  - The primary endpoint was met: DFS significantly improved (HR: 0.76)
  - Moderate increased toxicity, without increase in treatment-related deaths

*Post-operative nivolumab added to SOC cisplatin-RT benefited patients with resected high-risk LA-SCCHN and could be a potential new standard of care treatment option*

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  - DESTINY-Breast06
  - AI for IHC HER2 Pathology
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- \*MATTERHORN
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  - ROSELLA

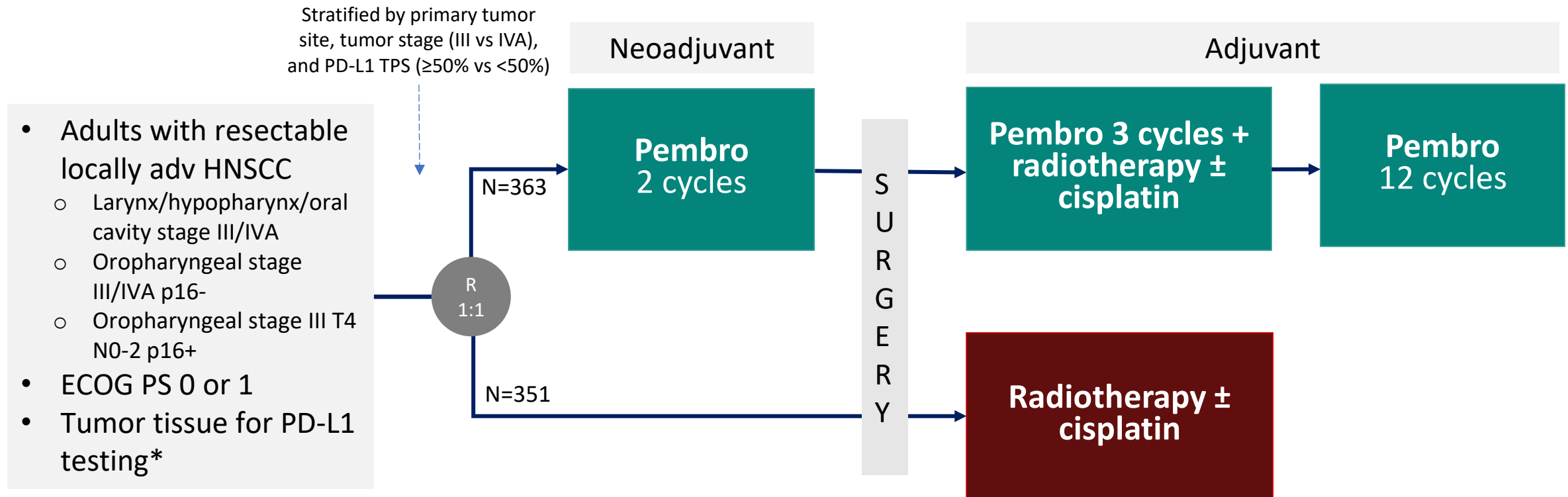
\* Plenary Session

Does adding neoadjuvant/adjuvant pembrolizumab to standard of care (chemo + RT) benefit patients with advanced head and neck squamous cell carcinoma (HNSCC)?

*On **June 12, 2025**, the FDA approved **pembrolizumab** (Keytruda, Merck) for adults with resectable locally advanced head and neck squamous cell carcinoma (HNSCC) whose tumors express PD-L1 [Combined Positive Score (CPS)  $\geq 1$ ] as determined by an FDA-approved test, as a single agent as neoadjuvant treatment, continued as adjuvant treatment in combination with radiotherapy (RT) with or without cisplatin after surgery, and then as a single agent.*

***This is the first approval for HNSCC in 6 years and the first overall perioperative approval for locally advanced HNSCC***

## Study Design: Open-label, randomized, phase 3 study



**Primary endpoint:** EFS per RECIST 1.1 by BICR

**Secondary endpoints:** Major pathological response by BIPR (mPR;  $\leq 10\%$  residual invasive SCC in resected primary tumor + all sampled regional lymph nodes), OS, Safety

**Exploratory endpoints:** Locoregional failure rate, DMFS, second cancers

Median follow up (time from randomization to data cutoff date): 38.3 months (9.0 – 66.5)

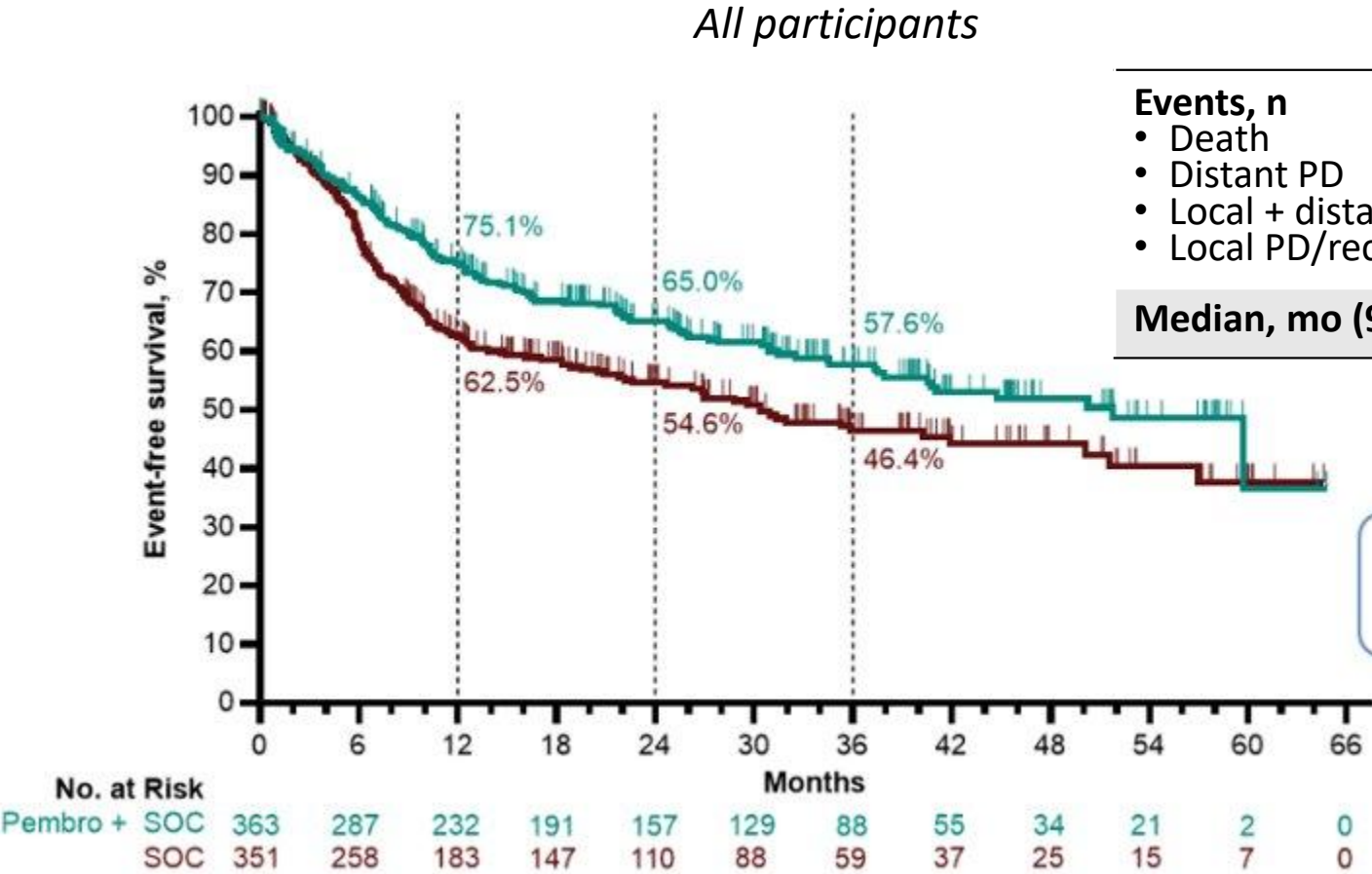
\*Assessed by PD-L1 IHC 22C3 pharmDx; TPS=% tumor cells with membranous PD-L1 staining; CPS=number of PD-L1-staining cells + total # viable tumor cells x 100.

## Baseline Characteristics

	Pembro + SoC	SoC
<b>Median age (range), years</b>	60.0 (29-82)	61.0 (22-87)
<b>Male, n (%)</b>	286 (78.8%)	277 (78.9%)
<b>Current/ former smoker, n (%)</b>	293 (80.7%)	267 (76.1%)
<b>Alcohol use—yes, n (%)</b>	150 (68.9%)	238 (67.8%)
<b>Primary tumor site, n (%)</b>		
• Oral cavity	219 (60.3%)	213 (60.7%)
• Larynx	81 (22.3%)	73 (20.8%)
• Hypopharynx	28 (7.7%)	26 (7.4%)
• Oropharynx	35 (9.6%)	38 (10.8%)
• Missing	0	1 (0.3%)
<b>Positive HPV status, n (%)</b>	12 (3.3%)	15 (4.3%)
<b>PD-L1 CPS <math>\geq 10</math>, n (%)</b>	234 (64.5%)	231 (65.8%)
<b>PD-L1 <math>\geq 1</math>, n (%)</b>	347 (95.6%)	335 (95.4%)



Primary Endpoint: EFS by BICR



	Pembro + SoC (N=363)	SOC (N=351)
Events, n	136 (37.5%)	159 (45.3%)
• Death	67 (18.5%)	64 (18.2%)
• Distant PD	26 (7.2%)	51 (14.5%)
• Local + distant PD	4 (1.1%)	7 (2.0%)
• Local PD/recurrence	39 (10.7%)	37 (10.5%)
Median, mo (95% CI)	51.8 (37.5-NR)	30.4 (21.8-50.1)

HR 0.73, 95% CI 0.58–0.92,  
P=.0041\*

NR, not reached.

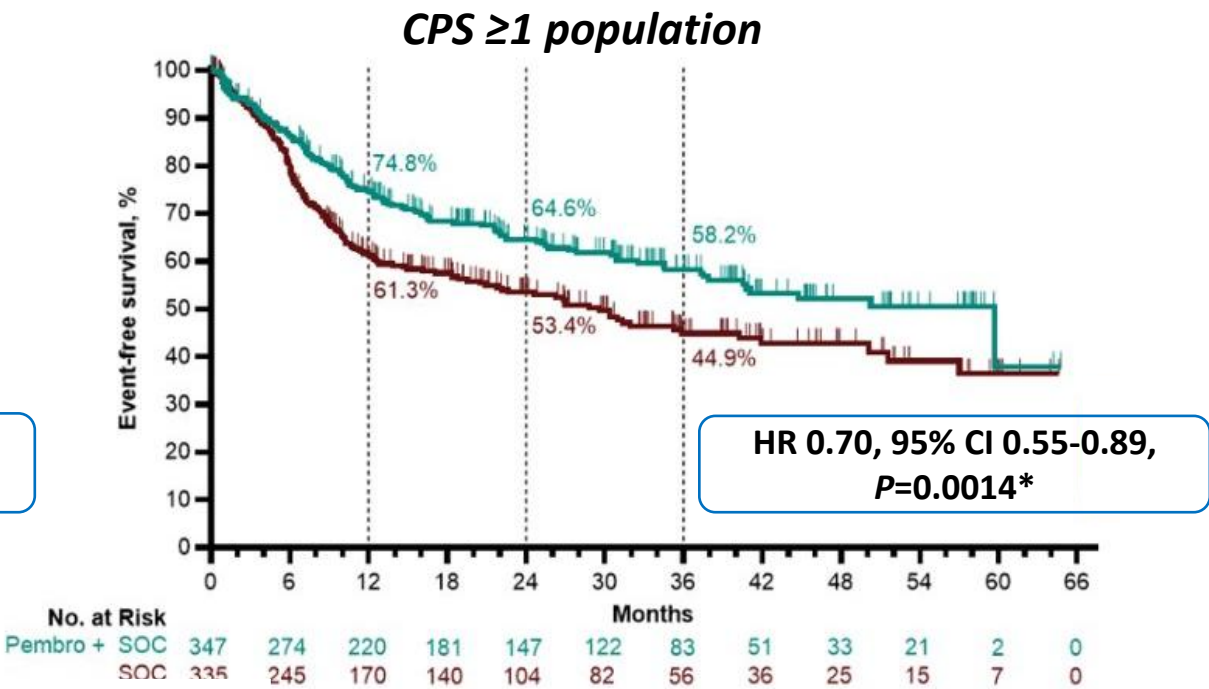
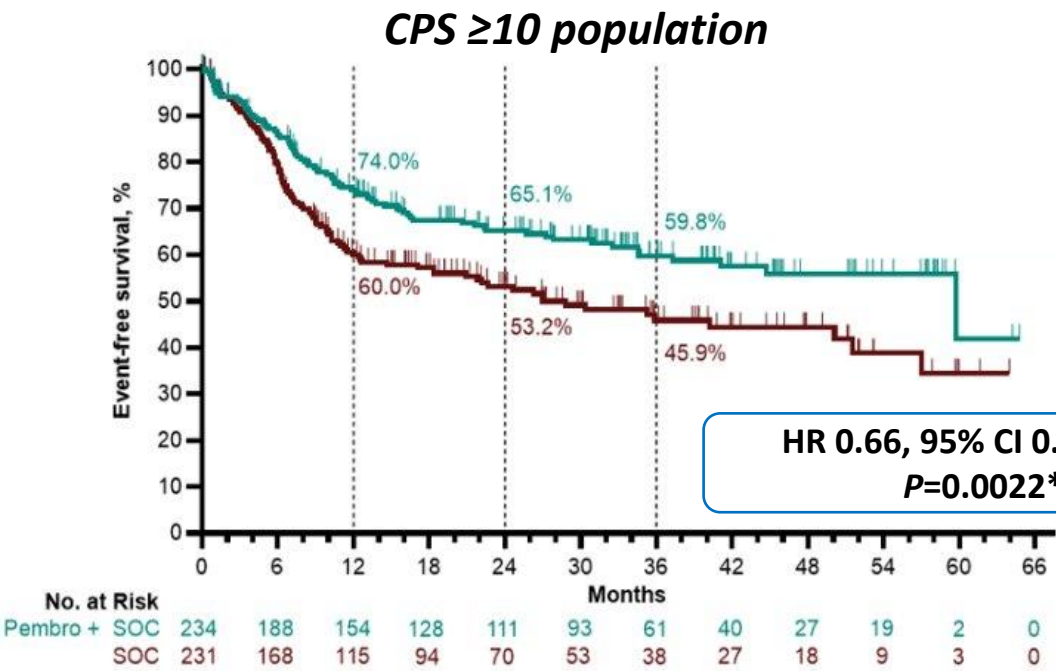
\*Significance boundary was met at IA1.

Data cutoff date: 25 July 2024

# KEYNOTE-689: neo/adj pembro for HNSCC

## BICR's EFS by PD-L1 status

BICR: Blind independent central review



	Pembro + SoC (n=234)	SOC (n=231)
Events, n	85 (36.3%)	107 (46.3%)
Median, mo (95% CI)	59.7 (41.1-NR)	26.9 (18.9-51.5)

	Pembro + SOC (n=347)	SOC (n=335)
Events, n	128 (36.9%)	156 (46.6%)
Median, mo (95% CI)	59.7 (37.9-NR)	29.6 (19.5-41.9)

NR, not reached. \*Significant boundary was met at Interim Analysis 1.

Data cutoff date: 25 July 2024  
Median follow-up: 38.3 months (9.0-66.5).

Secondary endpoints

Pathological Response by CPS, for all Participants

	CPS ≥10 Population		CPS ≥1 Population		All Participants	
	Pembro + SOC (n=234)	SOC (n=231)	Pembro + SOC (n=347)	SOC (n=335)	Pembro + SOC (n=363)	SOC (n=351)
mPR, n (%)	32 (13.7%)	0	34 (9.8%)	0	34 (9.4%)	0
Estimated difference (95% CI)	13.7 (9.7-18.7)		9.8 (7.0-13.3)		9.3 (6.7-12.8)	
P value*	<0.00001		<0.00001		<0.00001	
pCR, n (%)	10 (4.3)	0	11 (3.2)	0	11 (3.0)	0
Estimated difference (95% CI)	4.2 (2.1 – 7.6)		3.1 (1.6 – 5.6)		3.0 (1.5 – 5.3)	

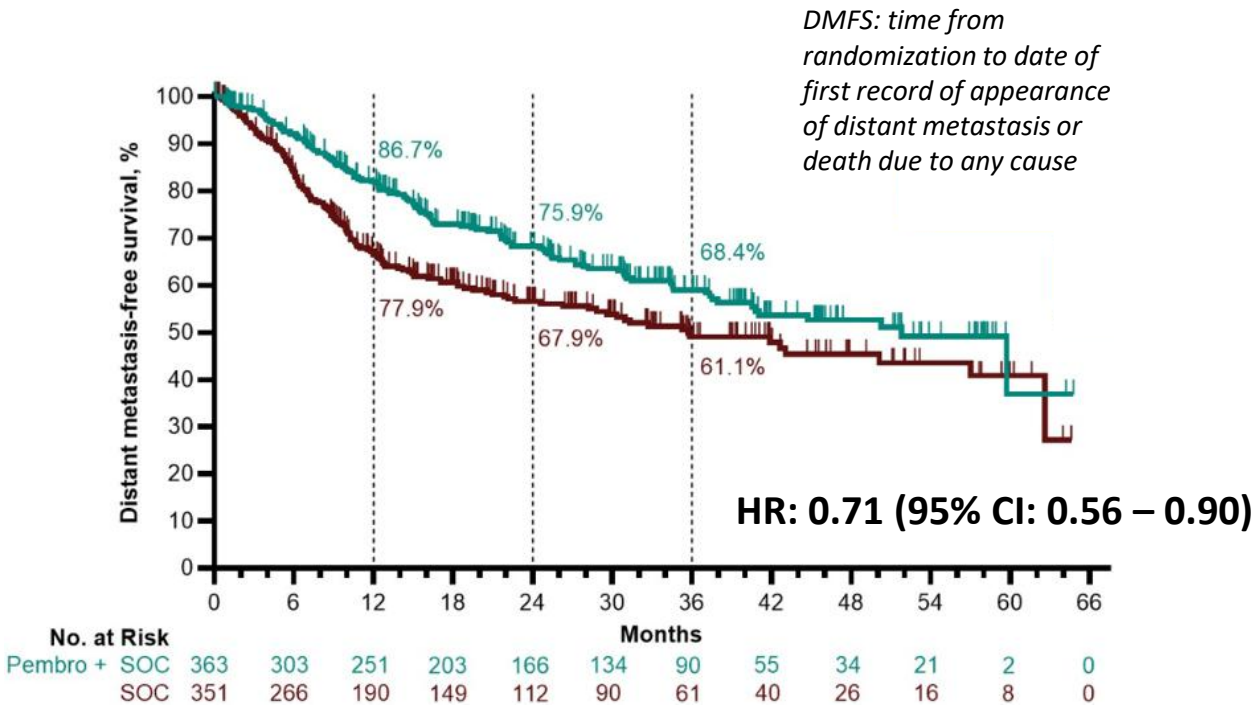
MPR (≤10% residual invasive SCC) and pCR evaluated by blinded independent pathology review.

\*Significance boundary was met at Interim Analysis 1

CPS: Combined positive score

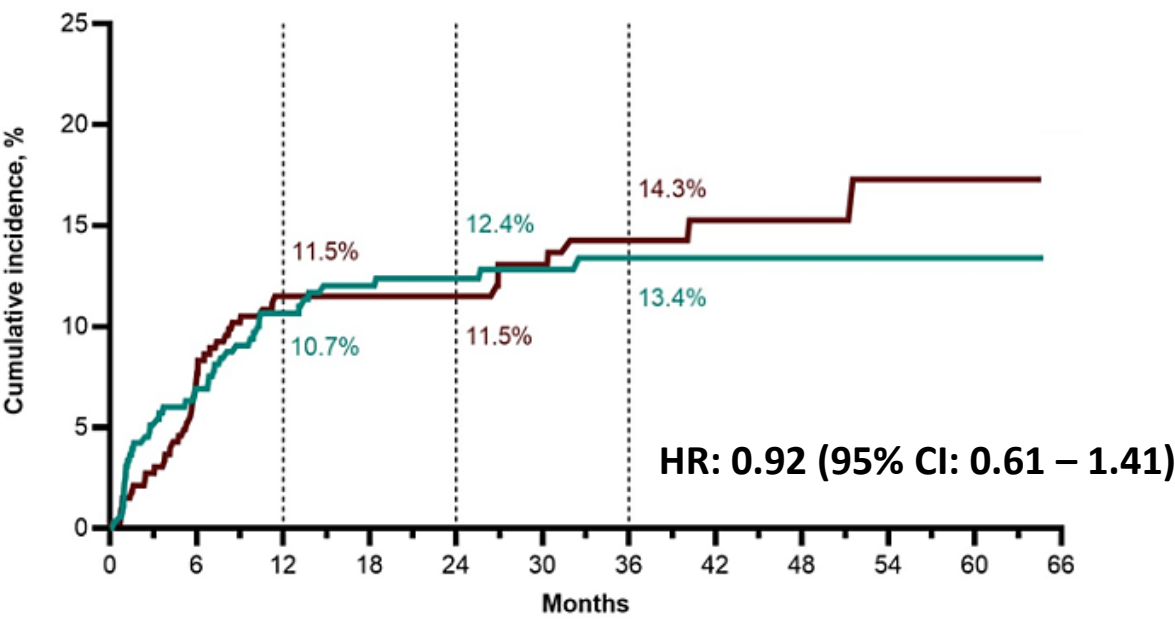
Exploratory Endpoints

Distant metastasis-free survival, All Participants



	Pembro + SOC (n=363)	SOC (n=351)
Events, n	127 (35.0%)	148 (42.2%)
Median, mo (95% CI)	51.8 (37.9-NR)	35.7 (26.3-57.0)

Time to Locoregional Failure, All Participants



	Pembro + SOC (n=363)	SOC (n=351)
Events, n	136 (37.5%)	159 (45.3%)

Summary of Safety, As-Treated Population

	Pembro + SoC (n=361)	SOC (n=315)
Median (range) duration of therapy, mo	9.1 (0.03-22.3)	2.9 (0.03-7.2)
Treatment-related adverse events, n		
• Any grade	294 (81.4%)	258 (81.9%)
• Grade ≥3	161 (44.6%)	135 (42.9%)
• Serious	69 (19.1%)	33 (10.5%)
• Led to discontinuation	64 (17.7%)	39 (12.4%)
• Led to death	4 (1.1%) <sup>a</sup>	1 (0.3%) <sup>b</sup>
Immune-mediated adverse events, n		
• Any grade	156 (43.2%)	32 (10.2%)
• Grade ≥3	36 (10.0%)	2 (0.6%)

<sup>a</sup>Renal failure, COVID-19 pneumonia, death, and pneumonitis (n=1 each). <sup>b</sup>Acute kidney injury.  
As-treated population included all pts with ≥1 dose study treatment (including surgery only).

Data cutoff date: 25 July 2024

KEYNOTE-689: Pembro + SOC	NIVOPOSTOP: Nivo + CRT		KEYNOTE-412: Pembro + CRT	JAVELIN Head and Neck 100: Avelumab + CRT	
<i>FDA approved June 12, 2025</i>	<i>Not yet FDA approved</i>		<i>Did not meet primary endpoint</i>	<i>Did not meet primary endpoint</i>	
<ul style="list-style-type: none"> <li>Larynx/hypopharynx/oral cavity stage III/IVA</li> <li>Oropharyngeal stage III/IVA p16-</li> <li>Oropharyngeal stage III T4 N0-2 p16+</li> <li>ECOG PS 0 to 1</li> </ul>	<ul style="list-style-type: none"> <li>SCC of the oral cavity, oropharynx, larynx, or hypopharynx with complete macroscopic surgical resection</li> <li>Stage III or IV, and high-risk pathological features of relapse</li> </ul>		<ul style="list-style-type: none"> <li>Locally advanced HNSCC</li> <li>Oropharyngeal p16 positive (T4, N3), oropharyngeal p16 negative (any T3-T4, any N2a-3)</li> <li>Larynx, hypopharynx/ oral cavity (any T3-4, any N2a-3)</li> </ul>	<ul style="list-style-type: none"> <li>Historically confirmed oropharynx, hypopharynx, larynx, or oral cavity</li> <li>Previously untreated</li> </ul>	
<div>Neoadj</div> <div>Pembro→ Adj</div> <div>Pembro + radiotherapy ± cisplatin (n = 363)</div> <div>Adj Radiotherapy ± cisplatin (n = 351)</div>	Adj Nivolumab + cisplatin + IMRT (n=332)	Cisplatin + IMRT (n=334)	Pembrolizumab + cisplatin-radiotherapy (n=402)	Placebo+ cisplatin-radiotherapy (n=402)	<div>Avelumab+ cisplatin-radiotherapy (n=350)</div> <div>Placebo+ cisplatin-radiotherapy (n=347)</div>
Median follow-up: <b>38.3 months</b>	Median follow-up: <b>30.3 months</b>		Median follow-up: <b>47.7 months</b>		Median follow-up: <b>14.6</b> 14.8 months
<div>mEFS: <b>51.8</b> 30.4 months</div> <div>HR: <b>0.73</b> (0.58-0.92); <i>P</i> = 0.0041</div>	<div><b>3-year DFS: 63.1%</b> vs 52.5%</div> <div>HR: <b>0.76</b> (0.60-0.98); <i>P</i> = 0.034</div>		<div>mEFS: NR 46.6 months</div> <div><b>*Significance threshold: <math>p \leq 0.024</math></b></div> <div>HR: <b>0.83</b> (0.68-1.03); <i>P</i> = 0.043*</div>		<div>mPFS: NR NR</div> <div>HR: <b>1.21</b> (0.93–1.57) <i>P</i> = 0.92</div>
<div>mDMFS: <b>51.8</b> 35.7 months</div> <div>HR: <b>0.71</b> (0.56-0.90)</div>	<div><i>OS immature</i></div> <div><b>3-year OS rate: 74.2%</b> vs 67.8%</div>		<div>mOS: NR NR</div> <div><b>Estimated 3-year OS rate: 72%</b> vs 70%</div>		<div>mOS: NR NR</div> <div>HR: <b>1.31</b> (0.93-1.85) <i>P</i> = 0.94</div>



- The addition of neoadjuvant and adjuvant pembrolizumab to SOC improved EFS in resectable LA HNSCC irrespective of PD-L1 status
- OS benefit did not reach statistical significance at first interim analysis; additional follow-up is ongoing
- Neoadjuvant pembrolizumab did not alter surgical completion rate
- No new safety signals observed in the neoadjuvant, concurrent with (chemo)radiotherapy, and adjuvant pembrolizumab settings

*Neoadjuvant pembrolizumab followed by surgery and adjuvant pembrolizumab concurrent with and after postoperative (chemo)radiotherapy benefits patients and should be a new standard of care in the treatment of patients with resectable locally advanced head and neck cancer*

*Now FDA approved!*



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  - DESTINY-Breast09
  - DESTINY-Breast06
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  - ASCENT-03
  - ASCENT-04
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  - CompassHER2 pCR

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- \*MATTERHORN
- DESTINY-Gastric04
- **RAPID REVIEWS**
  - BREAKWATER
  - PANOVA-3
  - AMPLITUDE

## Other Notable Studies

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- KEYNOTE-689
- \***VERIFY**
- **RAPID REVIEWS**
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  - IMforte
  - TUXEDO-3
  - ROSELLA

\* Plenary Session

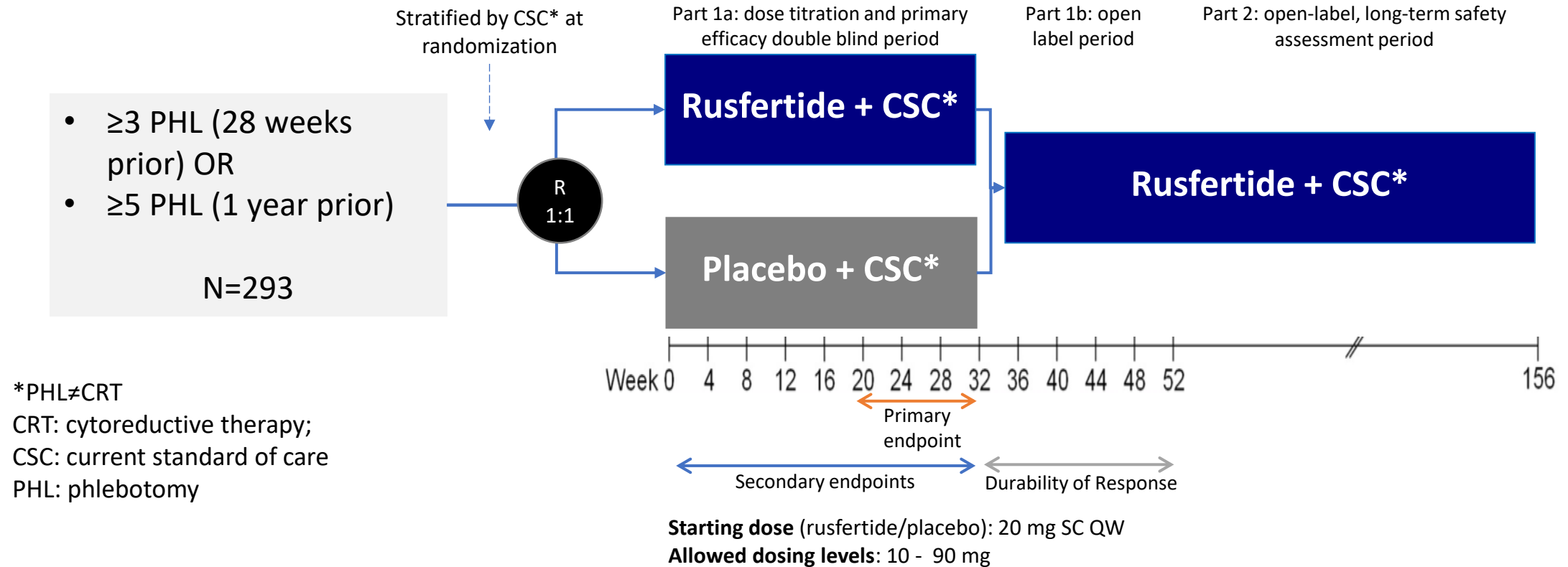
\* Plenary Session

# Does the hepcidin mimetic rusfertide added to standard of care benefit patients with polycythemia vera (PV)?

*Rusfertide is a first-in-class subcutaneous peptide mimetic of the endogenous hormone hepcidin, the principal regulator of iron homeostasis*

# VERIFY: Rusfertide + SOC as treatment for PV

## Study Design: Phase 3, double-blind, placebo-controlled study



**Primary endpoint:** **Weeks 20-32**, Clinical response (absence of phlebotomy eligibility, i.e., confirmed hematocrit (Hct)  $\geq 45\%$  and  $\geq 3\%$  higher than baseline or Hct  $\geq 48\%$ )

**Secondary endpoints:** **Weeks 0-32**, Mean number of phlebotomies, proportion of patients with Hct  $< 45\%$ , mean change from baseline in PROMIS Fatigue SF-8a Score, and mean change from baseline in MFSAF TSS7

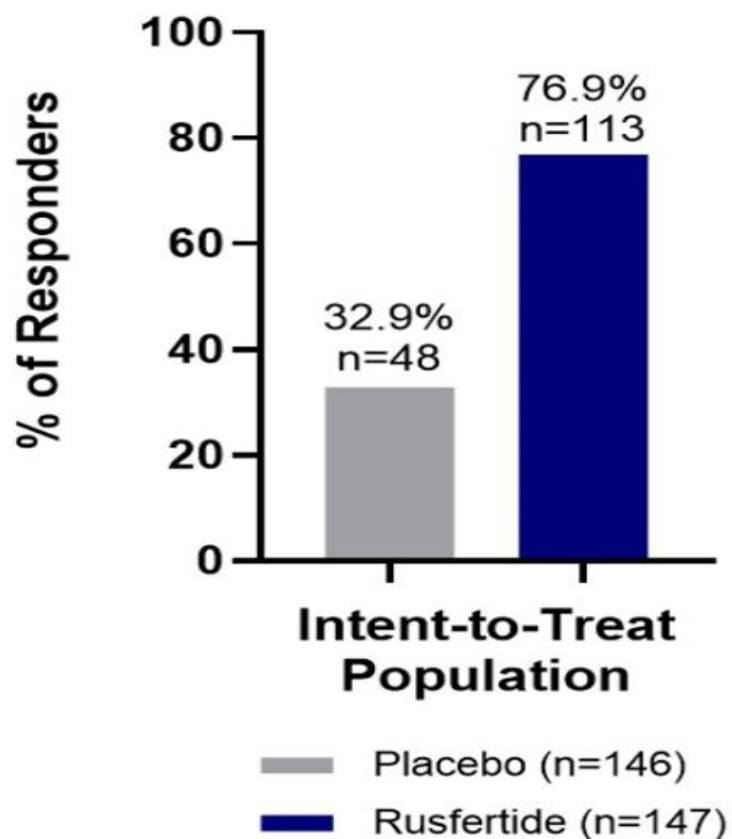
Data cutoff: January 7, 2025

## Baseline Characteristics

	Placebo + CSC (n=146)	Rusfertide + CSC (n=147)	Total (N=293)
<b>Median age (range), years</b>	57 (27-82)	58 (28-86)	57 (27-86)
<b>Gender, n</b>			
• Male	108 (74.0%)	106 (72.1%)	214 (73.0%)
• Female	38 (26.0%)	41 (27.9%)	79 (27.0%)
<b>Risk Category, n</b>			
High Risk (age ≥60 years old and/or prior TE)	70 (47.9%)	66 (44.9%)	136 (46.4%)
<b>Disease Characteristics</b>			
• Age at PV diagnosis (years), median (range)	51 (22-81)	53 (17-84)	52 (17-84)
• PV duration (years), median (range)	3 (0.2-29.2)	2.8 (0.2-26.4)	2.9 (0.2-29.2)
<b>Phlebotomy History – 28 Weeks Prior to Study Treatment</b>			
• Number of TPs, mean ± SD	4.1 ± 1.4	4.2 ± 1.6	4.2 ± 1.5
• Patient requiring ≥7 TPs, n	7 (4.8%)	16 (10.9%)	23 (7.8%)

TE, thromboembolic event  
TP, therapeutic phlebotomy

## Primary Endpoint: Clinical response (Week 20-32)



	Placebo + CSC (n=146)	Rusfertide + CSC (n=147)
Responders <sup>a</sup> , n	48 (32.9%)	113 (76.9%)
p-value*	<0.0001	
Non-responders, n	98 (67.1%)	34 (23.1%)

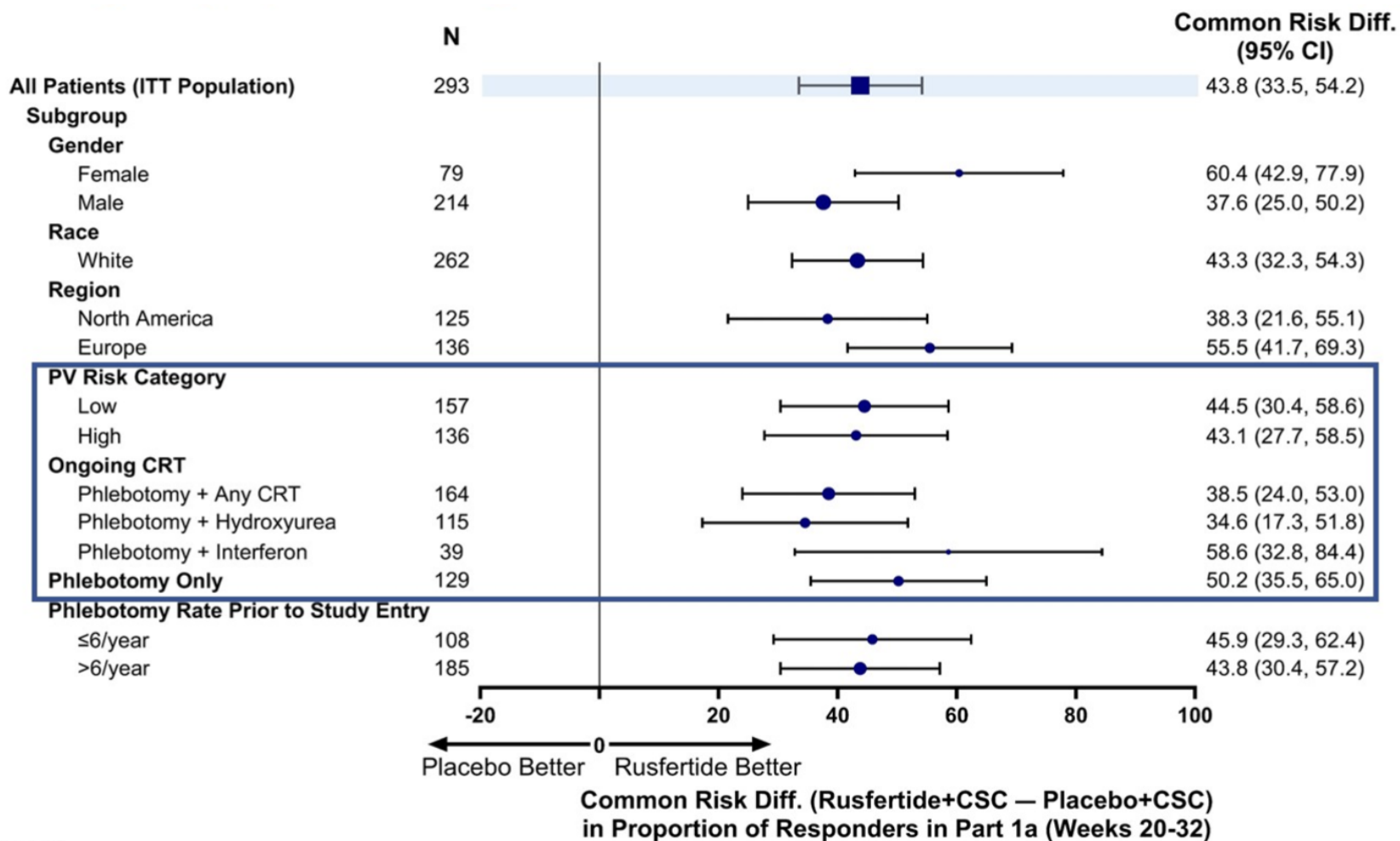
<sup>a</sup>Responder = absence of phlebotomy eligibility (confirmed Hct  $\geq 45\%$  and  $\geq 3\%$  higher than baseline Hct OR Hct  $\geq 48\%$ ), no phlebotomies, and completion of Part 1a.

CSC: current standard of care

\*p-value based on Cochran-Mantel-Haenszel test

# VERIFY: Rusfertide + SOC as treatment for PV

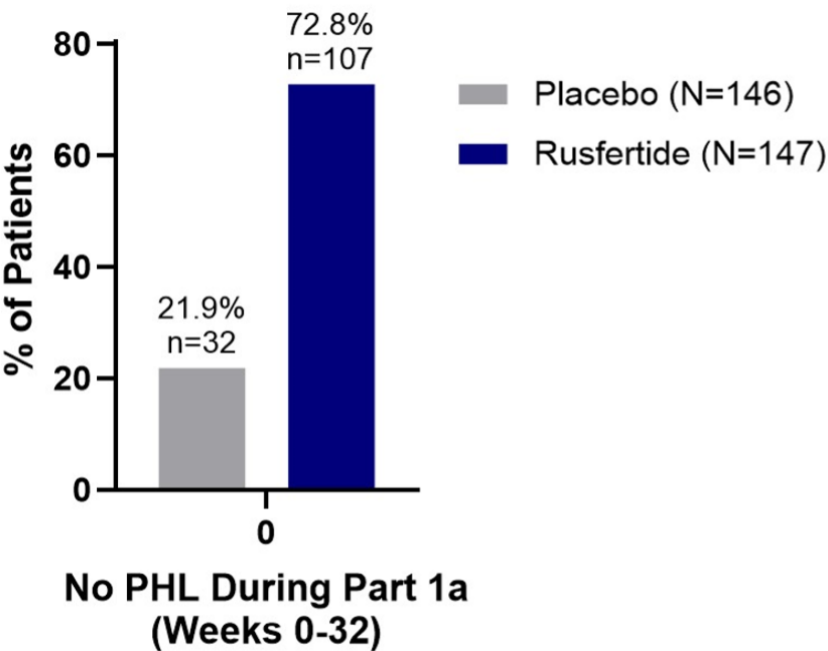
## Clinical response across subgroups



CRT: cytoreductive therapy

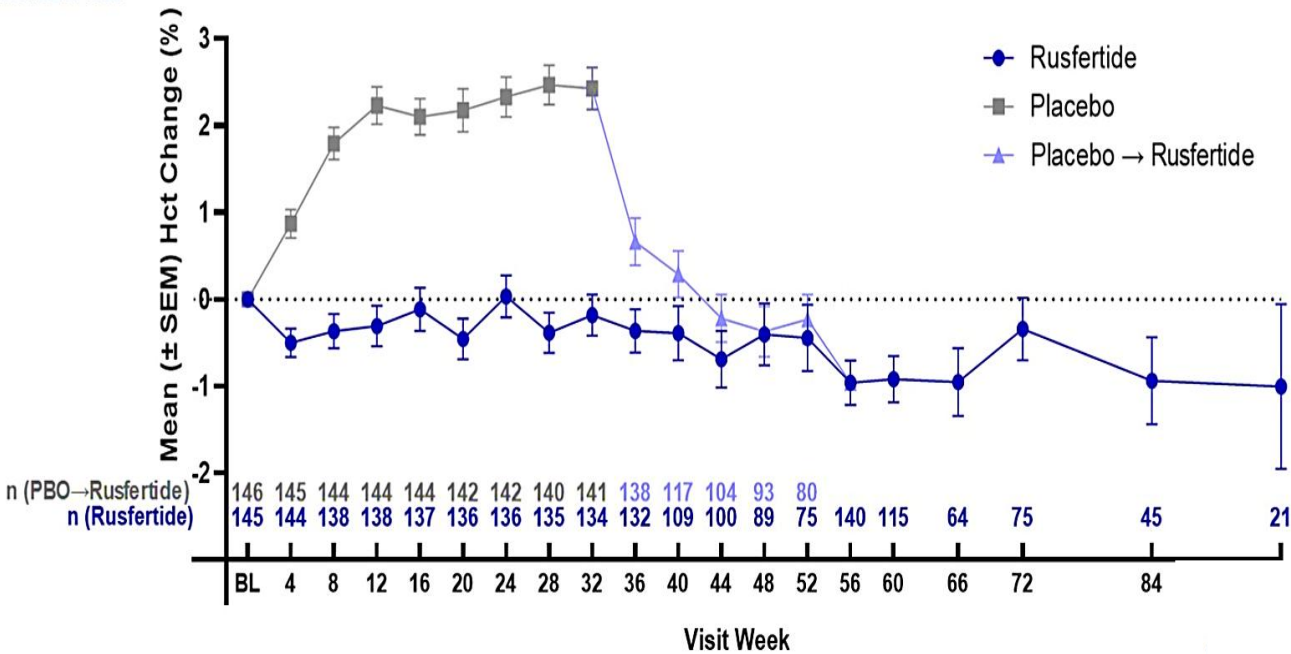
Secondary Endpoints

Number of Phlebotomies at week 32



	Placebo + CSC (n=146)	Rusfertide + CSC (n=147)
Mean (Std Dev)	1.8 (1.5)	0.5 (1.2)
p-value	<0.0001	

Hct <45% at week 32



	Placebo + CSC (n=146)	Rusfertide + CSC (n=147)
Hct <45% (baseline through week 32), n (%)	21 (14.4%)	92 (62.6%)
p-value	<0.0001	

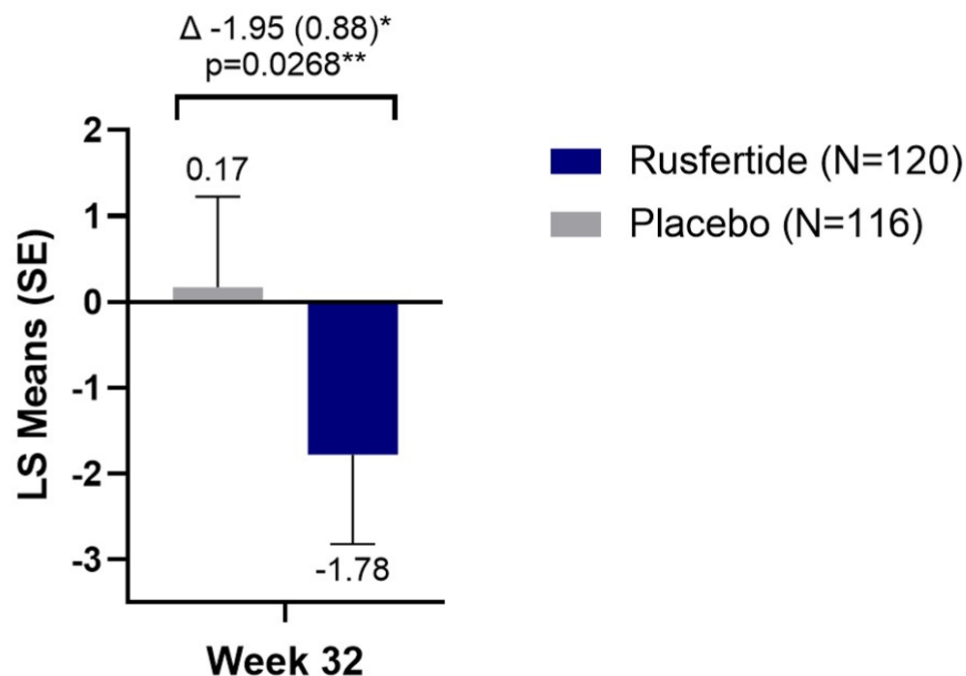
CSC: current standard of care



## Secondary Endpoints

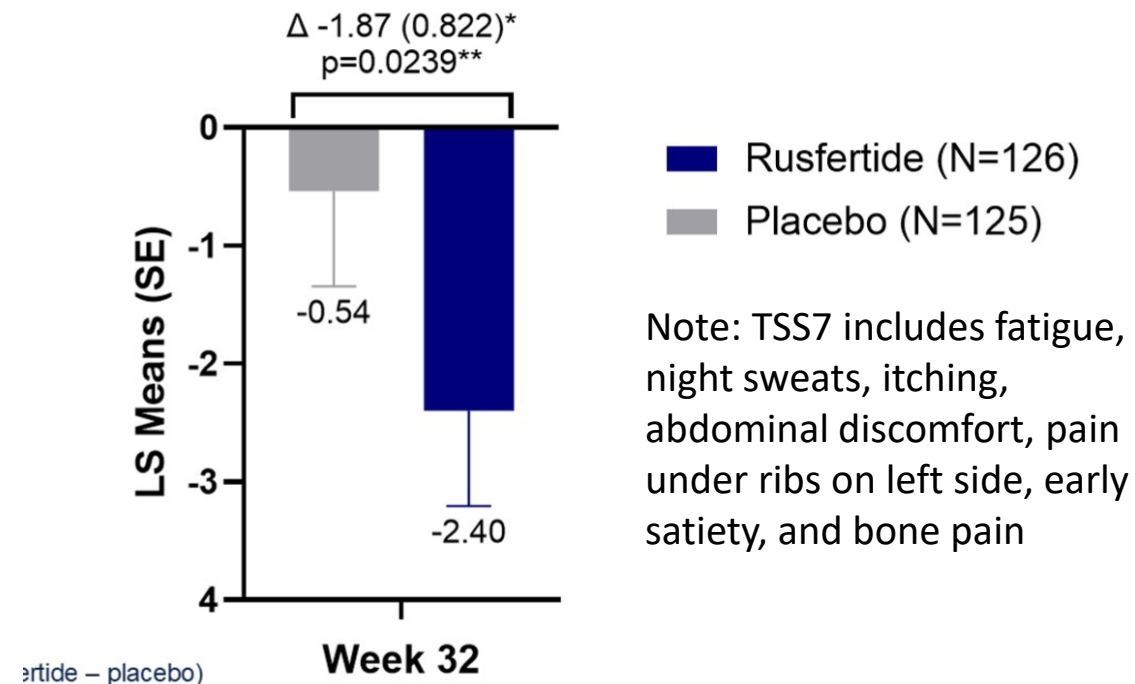
### PROMIS Fatigue SF-8a Total T-score at week 32

#### LS Means Difference at Week 32:



### MFSAF TSS7 at week 32

#### LS Means Difference at Week 32:



PROMIS: patient-reported outcomes measurement information system

MFSAF: Myelofibrosis Symptom Assessment Form

TSS7: Total Symptom Score (TSS) derived from a 7-item subset of a larger symptom assessment tool

TSS7 myelofibrosis symptom assessment form version 4.0 total symptom score dash 7 item

## Safety

Most Frequent TEAEs	Placebo + CSC (n=146)	Rusfertide + CSC (n=145)
Patients with at least 1 TEAE	126 (86.3%)	129 (89%)
Injection site reaction	48 (32.9%)	81 (55.9%)
Anemia	6 (4.1%)	23 (15.9%)
Fatigue	23 (15.8%)	22 (15.2%)
Headache	17 (11.6%)	15 (10.3%)
COVID-19	16 (11.0%)	14 (9.7%)
Pruritus	14 (9.6%)	14 (9.7%)
Diarrhea	8 (5.5%)	12 (8.3%)
Dizziness	9 (6.2%)	12 (8.3%)
Arthralgia	12 (8.2%)	11 (7.6%)
Constipation	11 (7.5%)	11 (7.6%)
Abdominal distension	8 (5.5%)	10 (6.9%)
Thrombocytosis	0	10 (6.9%)

Cancer Events	Placebo + CSC (n=146)	Rusfertide + CSC (n=145)
Patients with ≥1 Cancer Event, n	7 (4.8%)	1 (0.7%)
Basal cell carcinoma	3 (2.1%)	0
Squamous cell carcinoma	1 (0.7%)	1 (0.7%)
1 (0.7%)	1 (0.7%)	0
Colorectal cancer	1 (0.7%)	0
Prostate cancer	1 (0.7%)	0

Median treatment exposure was 32 weeks in both groups

- Medium (min – max) dose was 30 (10 – 90) mg in the rusfertide group
- Serious AEs occurred in 3.4% in the rusfertide group and 4.8% in the placebo group (none related to rusfertide)
- Discontinuations rates due to TEAEs were 2.7% in the placebo group and 5.5% in the rusfertide group

RESPONSE-2: Ruxolitinib		VERIFY: Rusfertide + CSC	
FDA approval <b>Dec 4, 2014</b> : for the treatment of polycythemia vera in adults who have had an inadequate response to or are intolerant of hydroxyurea		<b>Not yet approved</b>	
<ul style="list-style-type: none"> <li>PV requiring phlebotomy</li> <li>Spleen volume greater than 450 cm<sup>3</sup></li> <li>Resistant/ intolerant to hydroxyurea</li> <li>No prior systemic therapy</li> </ul>		<ul style="list-style-type: none"> <li>Three or more phlebotomy 28 weeks prior or five or more phlebotomy 1 year prior</li> </ul>	
Open-label, randomized, phase 3b study Median follow-up: 5 years (260 weeks)		Ongoing, global, randomized, placebo-controlled trial	
Ruxolitinib, 10 mg twice daily (n=74)	Best available therapy* (n=75)	Rusfertide + CSC (n=147)	Placebo + CSC (n=146)
Cross over allowed at week 28+: 58 (77%) of BAT crossed over to Rux; 97 pts received Rux until week 260 (59 Rux + 38 BAT cross over arm)		<b>Primary endpoint:</b> Clinical responders (absence of phlebotomy eligibility)	
Hematocrit control		77%	33%
22% (95% CI 13–33)		Weeks 20-32: p <0.0001	
Not reported due to small n of responders		Hematocrit control	
60/74 required phlebotomies		62.6%	14.4%
106 /75 required phlebotomies		p <0.0001	
5-year OS: 96%		40/147 required phlebotomies	114/146 required phlebotomies
91%		---	---

- Rusfertide added to current standard of treatment (phlebotomy ± cytoreductive therapy) could be a new treatment option for patients with polycythemia vera
  - Not yet FDA approved
- Rusfertide resulted in a statistically significant reduction in the mean number of PHLs and improved Hct control
- Demonstrate a statistically significant improvement in the PROMIS Fatigue SF-8a and MFSAF PROs in pts with PV
- Manageable safety profile consistent with prior studies

*Rusfertide plus phlebotomy ±  
cytoreductive  
therapy improved patient outcomes  
and could be a potential new  
treatment option for patients with PV*

*Rusfertide has received Orphan Drug  
designation and Fast Track designation from  
the U.S. FDA*

# ASCO 2025: RAPID REVIEWS

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TROPION-  
Lung02

DELPHI-  
304

IMforte

TUXEDO-3

ROSELLA

TROPION-Lung02: Datopotamab deruxtecan (Dato-DXd) plus pembrolizumab with or without chemotherapy in 1L mNSCLC  
Final report

**Study Design:** Multicenter, open-label, *phase 1b: safety* and efficacy in advanced or metastatic NSCLC without actionable genomic alterations

- Advanced or metastatic NSCLC **without** actionable genomic alterations\*
- ≤1 line of Platinum-based CT (cohorts 1 and 2) or treatment-naïve (cohort 2 [enrolled after June 30, 2022] and 3-6)

\*EGFR, ALK, ROS1, NTRK, BRAF, RET, or MET.

**Primary objectives:** safety and tolerability

**Secondary objectives:** efficacy

Exploratory retrospective testing of outcomes based on TROP2 biomarker analyses

Data cut-off: April 29, 2024

First-line Patients Only	
Cohort 1 (n = 2)	Dato-DXd 4 mg/kg IV Q3W + Pembrolizumab 200 mg IV Q3W
Cohort 2 (n = 40)	Dato-DXd 6 mg/kg IV Q3W + Pembrolizumab 200 mg IV Q3W
Cohort 3 (n = 14)	Dato-DXd 4 mg/kg IV Q3W + Pembrolizumab 200 mg IV Q3W + Carboplatin AUC 5
Cohort 4 (n = 26)	Dato-DXd 6 mg/kg IV Q3W + Pembrolizumab 200 mg IV Q3W + Carboplatin AUC 5
Cohort 5 (n = 8)	Dato-DXd 4 mg/kg IV Q3W + Pembrolizumab 200 mg IV Q3W + Cisplatin 75 mg/m <sup>2</sup>
Cohort 6 (n = 6)	Dato-DXd 6 mg/kg IV Q3W + Pembrolizumab 200 mg IV Q3W + Cisplatin 75 mg/m <sup>2</sup>

Baseline Characteristic	Doublet (n = 42)	Triplet (n = 54)
Median age, yr (range)	65 (48-83)	64 (33-78)
Male, n	32 (76.2%)	34 (63.0%)
Asian race, n	31 (73.8%)	23 (42.6%)
Histology, n		
• Nonsquamous	32 (76.2%)	40 (74.1%)
• Squamous	10 (23.8%)	14 (25.9%)
History of brain metastases, n	4 (9.5%)	10 (18.5%)
ECOG PS 1, n	24 (57.1)	33 (61.1%)
Dato-DXd dosing, n		
• 4 mg/kg	2 (4.8%)	22 (40.7%)
• 6 mg/kg	40 (95.2%)	32 (59.3%)
PD-L1 expression, n		
• <50%	30 (71.4%)	40 (74.1%)
• ≥50%	5 (11.9%)	10 (18.5%)
• NE	7 (16.7%)	4 (7.4%)

# TROPION-Lung02: Datopotamab deruxtecan (Dato-DXd) plus pembrolizumab with or without chemotherapy in 1L mNSCLC

## Primary Endpoint: Safety (summary)

Event, n (%)	Doublet (n = 42)	Triplet (n = 54)
<b>TRAE, n</b>	39 (92.9%)	54 (100%)
• Grade ≥3	17 (40.5%)	30 (55.6%)
<b>TEAEs associated with dose modifications</b>		
• Dose reduction of any drug	8 (19.0%)	14 (25.9%)
• Dose reduction of Dato-DXd	8 (19.0%)	7 (13.0%)
• Discontinuation of any drug	14 (33.3%)	20 (37.0%)
• Discontinuation of Dato-DXd	13 (31.0%)	16 (29.6%)
<b>Serious TRAEs, n</b>	5 (11.9%)	12 (22.2%)
• Grade ≥3	4 (9.5%)	9 (16.7%)
<b>AEs of special interest</b>		
• Oral mucositis/stomatitis	26 (61.9%)	22 (40.7%)
– Grade 3	2 (4.8%)	1 (1.9%)
• Adjudicated drug-related ILD/pneumonitis	11 (26.2%)	14 (25.9%)
– Grade 3	2 (4.8%)	1 (1.9%)
• Ocular surface events	9 (21.4%)	18 (33.3%)
– Grade 3	1 (2.4%)	2 (3.7%)

## Secondary Endpoint: Efficacy

Parameter	Doublet (n = 42)	Triplet (n = 54)
Confirmed ORR, n (%)	23 ( <b>54.8%</b> )	30 (55.6%)
[95% CI]	[38.7-70.2]	[41.4-69.1]
Median DoR, mo	<b>20.1</b>	13.7
(95% CI)	(9.7-NE)	(5.7-NE)
DCR, n (%)	37 ( <b>88.1%</b> )	48 (88.9%)
[95% CI]	[74.4-96.0]	[77.4-95.8]
Median TTR, mo	1.4	1.4
(Range)	(1.2-7.0)	(1.2-9.6)
Median PFS, mo	<b>11.2</b>	6.8
(95% CI)	(8.2-21.3)	(5.5-11.1)
Median OS, mo	NE	17.4
(95% CI)	(19.2-NE)	(9.1-NE)

*Efficacy benefit regardless of PD-L1 expression*

*Safety profile was consistent with the known toxicities of each agent, and no new safety signals*

**More to come...TROPION-Lung07 (1L mNSCLC, PD-L1 <50%) and TROPION-Lung08 (1L mNSCLC, PD-L1 ≥50%)**



# Recent FDA Approval: *Dato-DXd Monotherapy*

*On June 23, 2025, the FDA granted accelerated approval to **datopotamab deruxtecan-dlnk** (Datroway, Daiichi Sankyo, Inc.) for adults with **locally advanced or metastatic EGFR-mutated NSCLC** who have received **prior EGFR-directed therapy and platinum-based chemotherapy***

- Pooled subgroup of 114 patients (**TROPION-Lung05 and TROPION-Lung01**)
- Locally advanced or metastatic EGFR-mutated NSCLC
- Prior treatment with an EGFR-directed therapy and platinum-based chemotherapy
- Received datopotamab deruxtecan-dlnk at the recommended dose of 6 mg/kg (up to a maximum of 540 mg for patients  $\geq 90$  kg), as an intravenous infusion once every 3 weeks, until disease progression or unacceptable toxicity.

The major efficacy outcome measures were confirmed overall response rate (ORR) and duration of response (DOR) determined by blinded independent central review per RECIST v1.1.

- ORR: 45% (95% CI: 35, 54)
- Median DOR: 6.5 months (95% CI: 4.2, 8.4)

TROPION-Lung05 (NCT04484142): multicenter, single-arm trial

TROPION-Lung01 (NCT04656652): multicenter, open-label, randomized controlled trial

[FDA grants accelerated approval to datopotamab deruxtecan-dlnk for EGFR-mutated non-small cell lung cancer | FDA](#)



# ASCO 2025: RAPID REVIEWS

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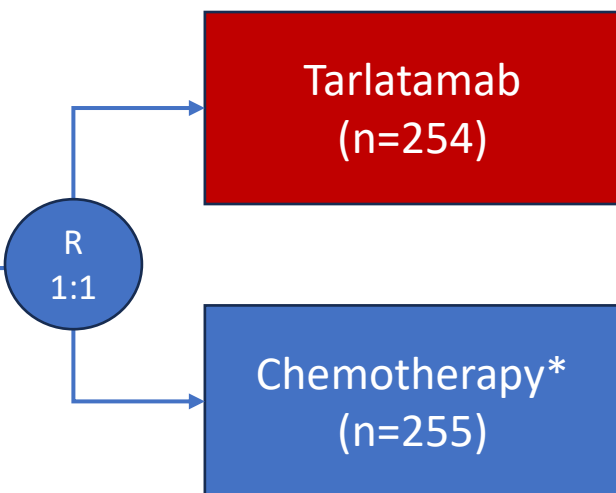
TUXEDO-3

ROSELLA

**Study Design:** randomized controlled phase 3 study

Stratified by: prior anti PD L1 exposure (yes or no), chemotherapy free interval (<90 days vs ≥ 90 days to <180 days vs ≥ 280 days); Presence of (previous/current) brain metastases (yes or no); Intended chemotherapy (topotecan/amrubicin vs lurbinectedin)

- Histologically or cytologically confirmed SCLC
- Progression after 1L platinum-based chemo ± anti PD-(L)1
- ECOG PS 0 or 1
- Asymptomatic, treated or untreated brain metastases



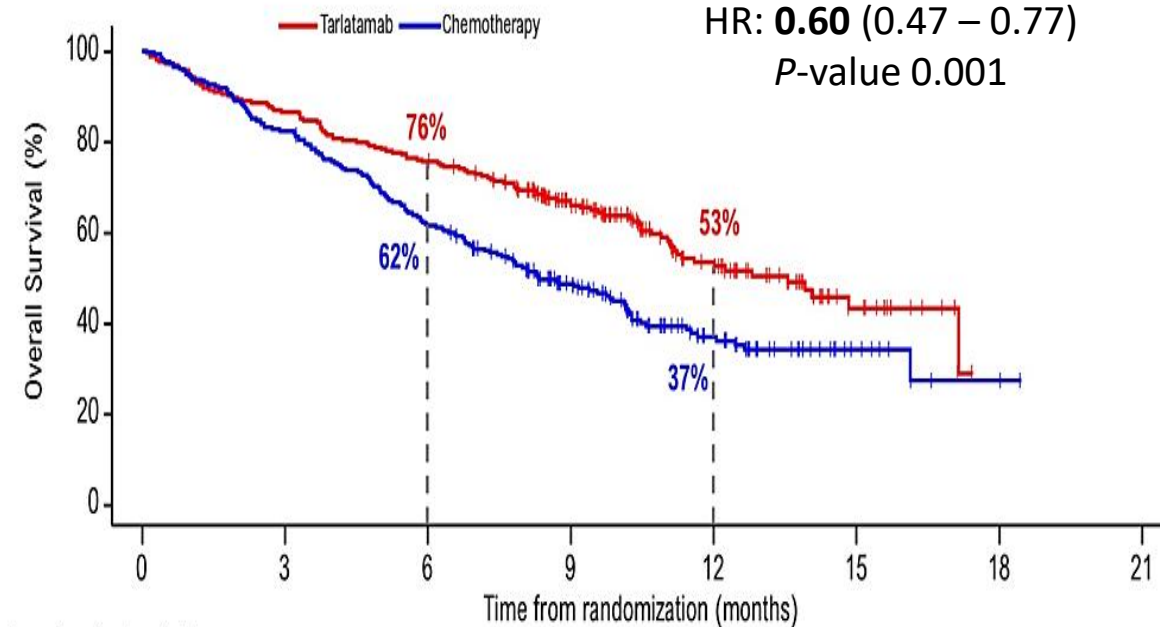
\*Topotecan (n=185); amrubicin (n=23); lurbinectedin (n=47)

**Primary Endpoint:** OS

**Secondary Endpoint:** PFS, PROs, OR, DCR, DOR, Safety

**Primary Endpoint:** Overall Survival

**mOS:** Tarlatamab **13.6** mos  
Chemotherapy **8.3** mos  
**HR: 0.60 (0.47 – 0.77)**  
**P-value 0.001**



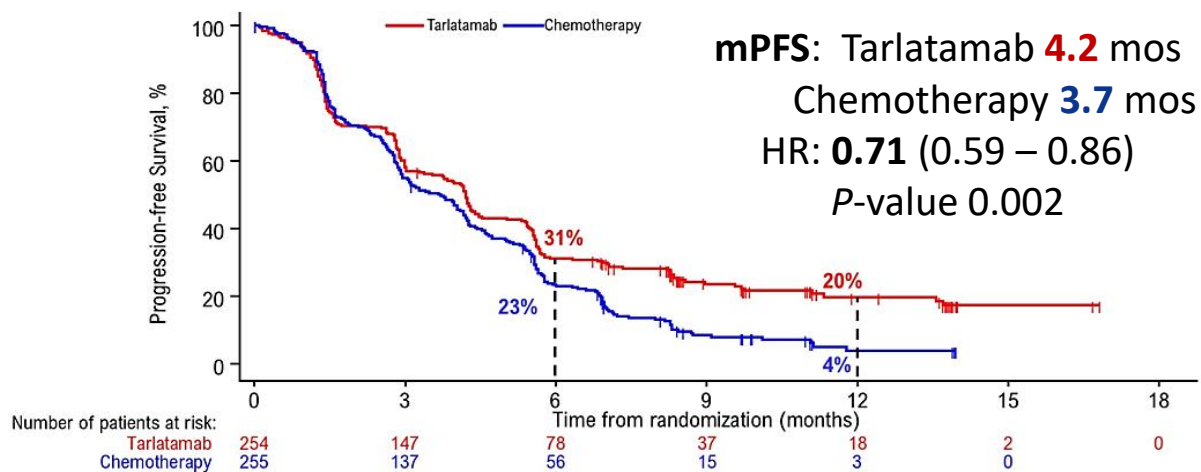
Number of patients at risk:

Tarlatamab	254	220	192	131	60	17	0
Chemotherapy	255	210	156	97	42	9	2

# DELLphi-304: Tarlatamab as a 2L treatment for SCLC

## Primary analysis

### Key Secondary Endpoint: Progression-Free Survival



### Safety Summary

(Safety analysis set, at least one dose of Tx)

	Tarlatamab (n=252)	Chemotherapy (n=244)
<b>Median duration of treatment, mos</b>	4.2 (<1 – 17)	2.5 (<1 – 15)
• All grade TEAEs, n (%)	249 (99%)	243 (100%)
• All grade TRAEs, n (%)	235 (93%)	223 (91%)
• Grade 3 TRAEs, n (%)	67 (27%)	152 (62%)
• Serious TRAEs, n (%)	70 (28%)	75 (31%)
• TRAEs, dose interruption/reduction, n (%)	48 (19%)	134 (55%)
• TRAEs, discontinuation, n (%)	7 (3%)	15 (6%)
• Tx-related grade 5 events, n (%)	1 (0.4%)	4 (2)

### Response Data and Summary

	Tarlatamab (n=254)	Chemotherapy (n=255)
<b>Best overall Response, n (%)</b>		
• CR	3 (1%)	0 (0%)
• PR	84 (34%)	52 (20%)
• SD	84 (33%)	112 (44%)
• PD	56 (22%)	50 (20%)
• Not evaluable	25 (10%)	41 (16%)
<b>ORR, %</b>	<b>35% (29-41)</b>	<b>20% (16-26)</b>
<b>Median duration of Response, mos</b>	6.9	5.5
<b>Median time to objective response, mos</b>	1.5	1.4
<b>Ongoing response at data cutoff, n (%)</b>	42 (47%)	8 (15%)

***Tarlatamab previously granted accelerated approval (May 2024) based on the phase 2 DELLphi-301 study***

***Phase 3 DELLphi-304 trial confirms survival benefit of tarlatamab in SCLC compared to SoC chemotherapy***

# ASCO 2025: RAPID REVIEWS

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TROPION-  
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IMforte

TUXEDO-3

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# IMforte Lurbinectedin and atezolizumab combination granted US FDA priority review for first line maintenance treatment of ES-SCLC

## Study Design

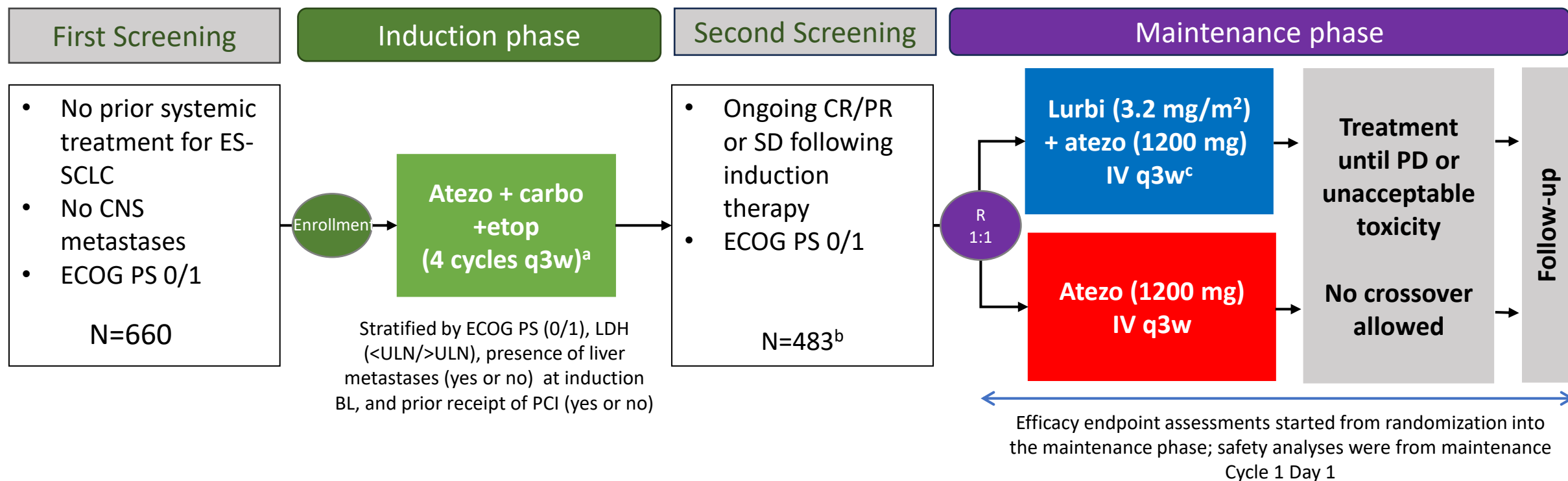
- Ongoing phase III, randomized, multicenter maintenance trial
- Evaluating the efficacy, safety, and pharmacokinetics of lurbinectedin plus atezolizumab compared with standard-of-care, first-line maintenance with atezolizumab alone in adults (aged  $\geq 18$  years) with ES-SCLC, following induction therapy with carboplatin, etoposide, and atezolizumab.
- The primary endpoints for this study are OS and independent review facility-assessed PFS

- **Press release: DUBLIN, June 10, 2025**  
*/PRNewswire/ -- Jazz Pharmaceuticals plc (Nasdaq: JAZZ) today announced the U.S. Food and Drug Administration (FDA) has accepted the supplemental New Drug Application (sNDA) for Zepzelca® (lurbinectedin) in combination with atezolizumab (Tecentriq®) as a first-line maintenance treatment for people with extensive-stage small cell lung cancer (ES-SCLC) whose disease has not progressed after first-line induction therapy with atezolizumab, carboplatin, and etoposide for Priority Review.*
- *A Prescription Drug User Fee Act (PDUFA) action date of October 7, 2025.*



# IMforte: Lurbinectedin to 1L chemo + Atezolizumab treatment for ES-SCLC in patients without progression after chemo

## Study Design: Global, open-label, randomized phase 3 trial



**Primary Endpoint:** Independent review facility-assessed (IRF) PFS, OS

**Secondary Endpoint:** INV-PFS, ORR, DOR, Safety

Clinical cutoff: July 29, 2024

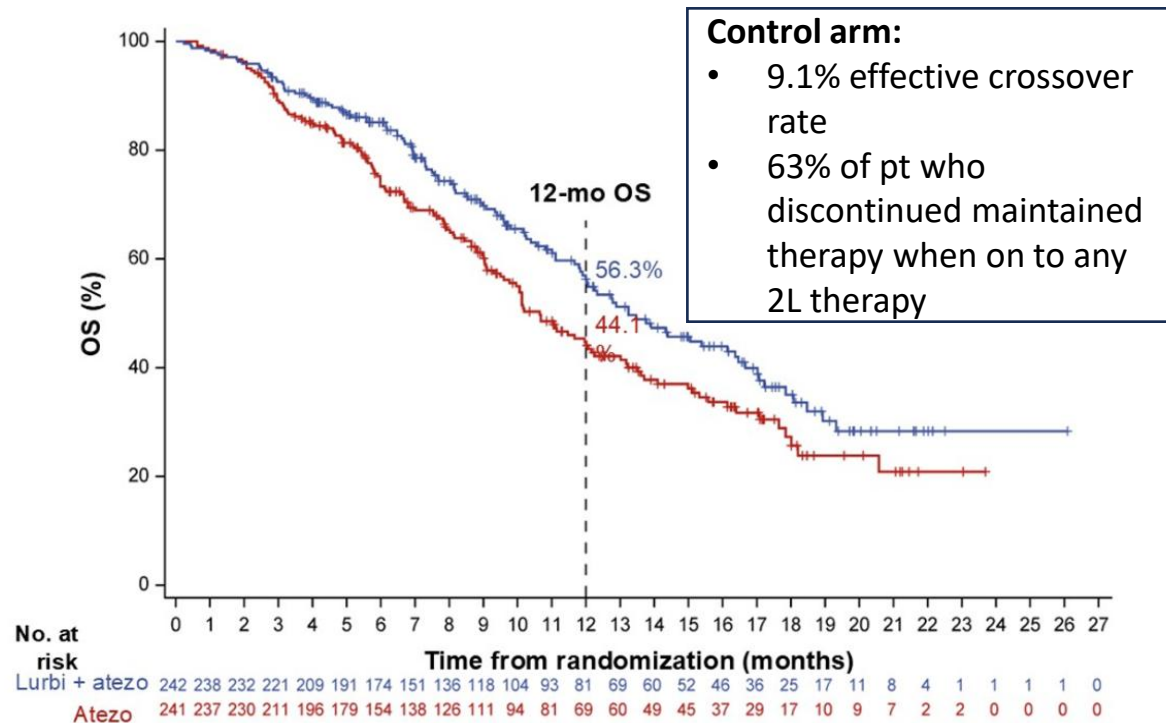
<sup>a</sup>Administered per standard dose. <sup>b</sup>73% of patients continued from induction to maintenance.

<sup>c</sup>With prophylactic granulocyte colony-stimulating factor and anti-emetics.



# IMforte: Lurbinectedin to 1L chemo + Atezolizumab treatment for ES-SCLC in patients without progression after chemo

## OS benefits in 1L ES-SCLC



OS*	Lurbi + atezo (n=242)	Atezo (n=241)
Events, n	113 (46.7%)	136 (56.4%)
OS, median (95% CI), mo	13.2 (11.9, 16.4)	10.6 (9.5, 12.2)
Stratified HR (95% CI)	0.73 (0.57, 0.95)	
Stratified P value (2-sided)	0.0174	
a boundary (2-sided)	0.0313	

## Efficacy vs Toxicity

Patients with $\geq 1$ AE, n	Lurbi + atezo (n=242)	Atezo (n=240)
All-cause AEs	235 (97.1%)	194 (80.8%)
Grade $\geq 3$ AEs	92 (38.0%)	53 (22.1%)
Treatment-related Grade $\geq 3$ AEs	62 (25.6%)	14 (5.8%)
Grade 5 AEs	12 (5.0%)	6 (2.5%)
Treatment-related Grade 5 AEs	2 (0.8%)	1 (0.4%)
Serious AEs	75 (31.0%)	41 (17.1%)
AEs leading to discontinuation of any study drug	15 (6.2%)	8 (3.3%)
AEs leading to dose interruption/modification of any study drug	92 (38.0%)	33 (13.8%)

***Lurbinectedin + 1L chemo + ICI improved survival in ES-SCLC in patient without progression after chemo***

# ASCO 2025: RAPID REVIEWS

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TROPION-  
Lung02

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TUXEDO-3

ROSELLA

# TUXEDO-3: patritumab deruxtecan (HER3-DXd) in active brain mets (breast cancer, NSCLC) and in solid tumors with leptomeningeal disease

**Study Design:** open-label single-arm, three cohort, non-comparative phase 2 trial

- ≥18 yrs old
- **mBC with active brain mets (N=20; cohort 1)**
  - ≥1 measurable (≥10 mm) brain lesions
- **AdvNSCLC with active brain mets (N=20; cohort 2)**
  - ≥1 measurable (≥10 mm) brain lesions
- **Any adv solid tumor with type I/II LMD (N=20; cohort 3)**
- ≥1 line of systemic therapy in the adv setting
- KPS ≥70%
- ECOG PS ≤2
- LVEF ≥50%

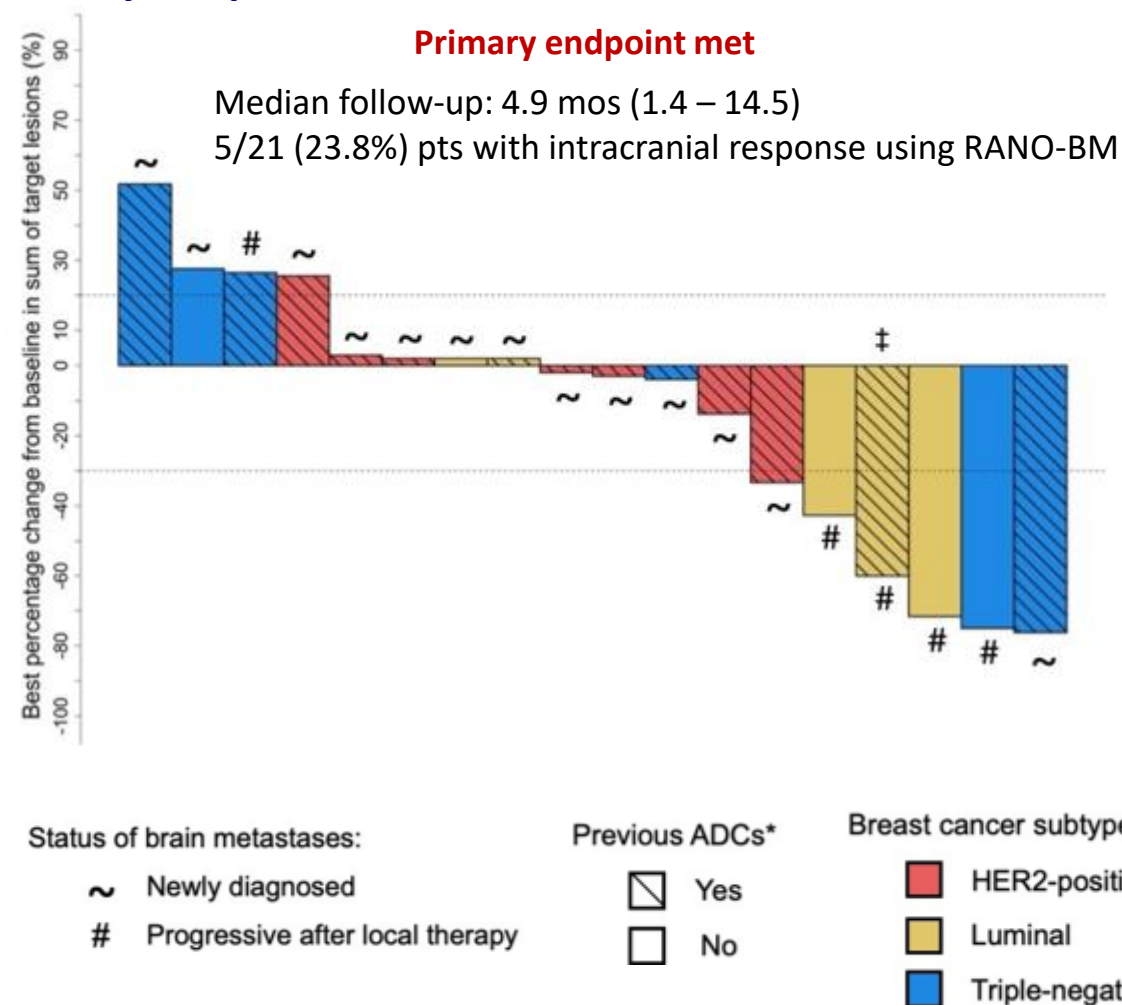
## HER3-DXd

5.6 mg/kg IV every 21 days until PD, discontinuation or death

### Primary Endpoints:

- **Cohort 1:** intracranial ORR (met if ≥15% pts with response)
- **Cohort 2:** intracranial ORR (met if ≥15% pts with response)
- **Cohort 3:** 3-month OS rate (met if ≥15% pts alive after 3-mos)

### Primary Endpoint: Metastatic BC with active brain mets

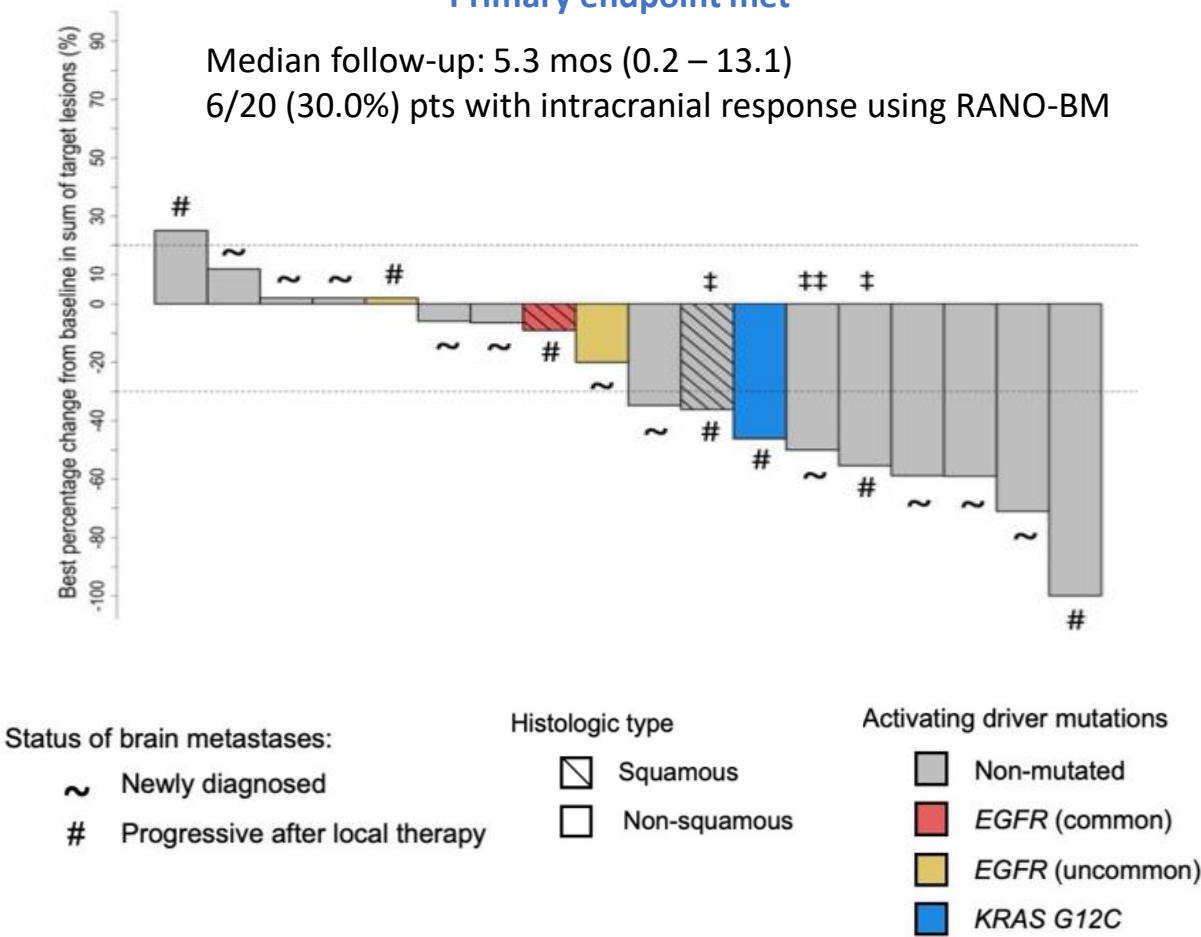


TUXEDO-3: patritumab deruxtecan (HER3-DXd) in active brain mets (breast cancer, NSCLC) and in solid tumors with leptomeningeal disease

Primary Endpoint: Metastatic NSCLC with active brain mets

Primary endpoint met

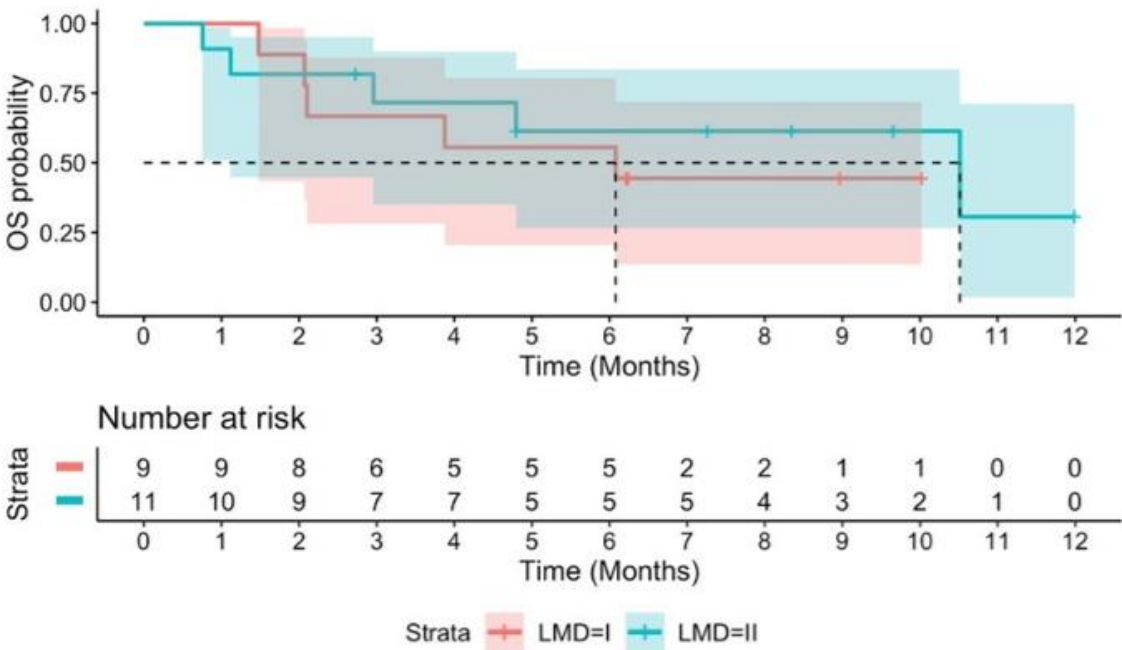
Median follow-up: 5.3 mos (0.2 – 13.1)  
6/20 (30.0%) pts with intracranial response using RANO-BM



Primary Endpoint: Metastatic Solid Tumors with LMD

Primary endpoint met

Median follow-up: 5.4 mos (0.8 – 12.0)  
13/20 (65.0%) pts alive after 3-mos



**HER2-DXd has potential to benefit patients with active brain mets or leptomeningeal disease**

# ASCO 2025: RAPID REVIEWS

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## KEY DATA

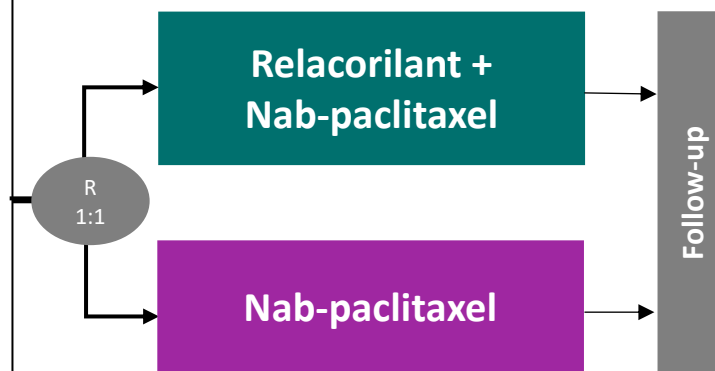
# ROSELLA: Relacorilant in Combination with Nab-Paclitaxel vs Nab-Paclitaxel monotherapy in patients with Platinum-Resistant Ovarian Cancer

Relacorilant, is a selective glucocorticoid receptor modulator; on July 14, 2025, a NDA was submitted to the FDA based on ROSELLA with a PDUFA date of December 30, 2025

## Study Design: Phase 3, randomized, open-label, global multicenter study

- Epithelial ovarian, primary peritoneal or fallopian tube cancer
- ECOG PS 0 or 1
- Progression <6 mo after the last dose of platinum therapy (excluding no response to, or progression in <1 mo of primary platinum)
- 1-3 prior lines of therapy
- Prior bevacizumab required

Stratified by prior lines of therapy (1 vs >1) and region (N America vs Europe vs Korea, Australia, and Latin America)



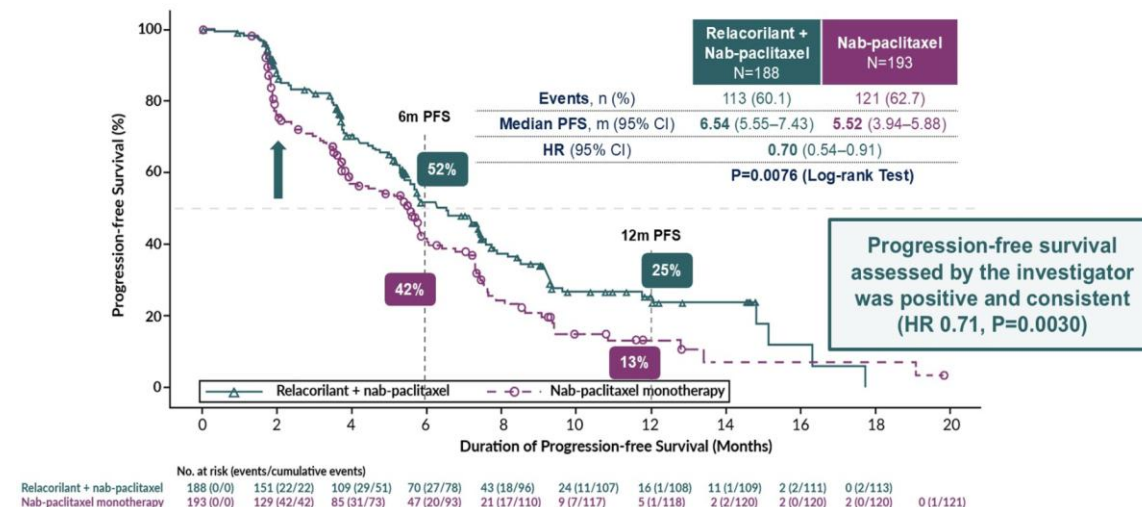
Data cutoff: 24 February 2025

**\*381 women were in the phase 3 trial**

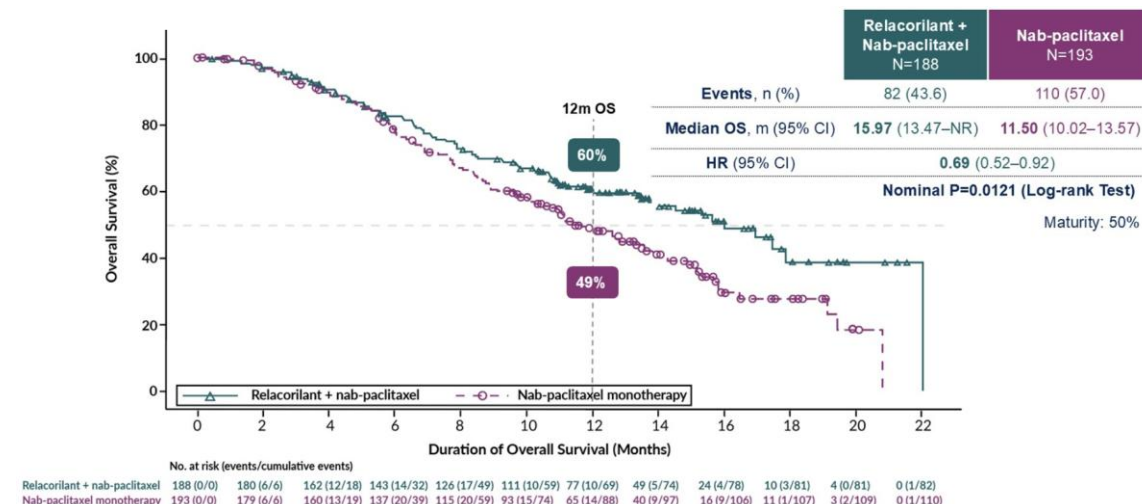
**Primary Endpoint:** PFS by RECIST v1.1 per blinded independent central review, OS

**Secondary Endpoint:** PFS by RECIST v1.1 Investigator, ORR, DoR, CBR (RECIST v1.1), response by CA-125 GCIG criteria, combine response (RECIST v1.1 and CA-125 GCIG criteria), Safety

## PFS assessed by blinded review



## Overall Survival





# ROSELLA: Relacorilant in Combination with Nab-Paclitaxel vs Nab-Paclitaxel monotherapy in patients with Platinum-Resistant Ovarian Cancer

## Secondary Endpoints:

	Relacorilant + Nab-paclitaxel (N=188)	Nab-paclitaxel (N=190)
<b>Objective Response Rate, n</b>	69 (36.9%)	58 (30.1%)
	<b>6.8% improvement</b> P=0.17 (Stratified Cochran-Mantel-Haenszel Test)	
• <b>Complete Response, n</b>	6 (3.2%)	4 (2.1%)
• <b>Partial Response, n</b>	63 (33.7%)	54 (28.0%)
• <b>Stable Disease, n</b>	77 (41.2%)	68 (35.2%)
• <b>Progressive Disease, n</b>	32 (17.1%)	52 (26.9%)
• <b>Not Evaluable, n</b>	9 (4.8%)	15 (7.8%)
<b>Clinical Benefit Rate, n (Response or stable disease maintained for 24 weeks)</b>	96 (51.1%)	75 (38.9%)
	<b>12.2% improvement</b> P=0.016 (Stratified Cochran-Mantel-Haenszel Test)	

## Safety Summary

	Relacorilant + Nab-paclitaxel (N=188)	Nab-paclitaxel (N=190)
<b>Weeks of Nab-paclitaxel Therapy, mean (range)</b>	23.2 (0.1-90.3)	18.6 (0.1-68.1)
<b>Any TEAEs, n</b>	188 (100%)	189 (99.5%)
<b>Grade ≥3 TEAEs</b>	140 (74.5%)	113 (59.5%)
<b>Serious AEs, n</b>	66 (35.1%)	45 (23.7%)
<b>All Death on treatment or within 30 days of the last dose, n</b>	10 (5.3%)	8 (4.2%)
<b>Dose reductions of Relacorilant Due to TEAEs, n</b>	13 (6.9%)	--
<b>Dose reductions of Nab-paclitaxel Due to TEAEs, n</b>	91 (48.4%)	60 (31.6%)
<b>Interruptions of Nab-paclitaxel (+ Relacorilant) Due to TEAEs, n</b>	137 (72.9%)	104 (54.7%)
<b>Discontinuation of Nab-paclitaxel (+ Relacorilant) Due to TEAEs, n</b>	17 (9.0%)	15 (7.9%)

***Adding relacorilant to nab-paclitaxel improved survival for patients with platinum-resistant ovarian cancer***



ASCO 2025:

## Other Cancers

## Key Takeaways

## Q&A

@EricSchaeferMD

**NIVOPOSTOP:** *Post-operative nivolumab added to SOC cisplatin-RT benefited patients for resected high-risk LA-SCCHN and could be proposed as a new standard treatment... not yet FDA approved*

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**KEYNOTE-689:** *Neoadjuvant pembrolizumab followed by surgery and adjuvant pembrolizumab concurrent with and after postoperative (chemo)radiotherapy could be a new standard of care in the treatment of patients with resectable locally advanced head and neck cancer... FDA approved since June 2025*

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**VERIFY:** *Rusfertide plus phlebotomy ± cytoreductive therapy improved patient outcomes and should be considered as a new treatment option for patients with PV... not yet FDA approved*

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**TROPION-Lung02:** *Dato-DXd + pembrolizumab ± platinum chemotherapy showed encouraging activity in patients with NSCLC in 1L and 2L setting. More to come...TROPION-Lung07 (1L mNSCLC, PD-L1 <50%) and TROPION-Lung08 (1L mNSCLC, PD-L1 ≥50%)*

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**DELLPHI-304:** *Phase 3 study confirmed that 2L tarlatamab improved medical survival compared to chemo SOC... accelerated FDA approval granted in May 2024*

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**IMforte:** *Lurbinectedin + 1L chemo+ICI improved survival in ES-SCLC in patient without progression after chemo... not yet FDA approved*

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**TUXEDO-3:** *HER3-DXd showed activity to benefit patients with active brain mets or leptomeningeal disease... not yet FDA approved*

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**ROSELLA:** *Adding Relacorilant to nab-paclitaxel improved mOS in patients with platinum-resistant ovarian cancer... not yet FDA-approved...PDUFA date Dec 30, 2025*

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