

Sacituzumab Govitecan Plus Pembrolizumab vs Chemotherapy Plus Pembrolizumab in Patients With Previously Untreated, PD-L1 Positive, Advanced or Metastatic Triple-Negative Breast Cancer: Primary Results From the Randomized, Phase 3 ASCENT-04/KEYNOTE-D19 Study

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Key Takeaways: ASCENT-04/KEYNOTE-D19

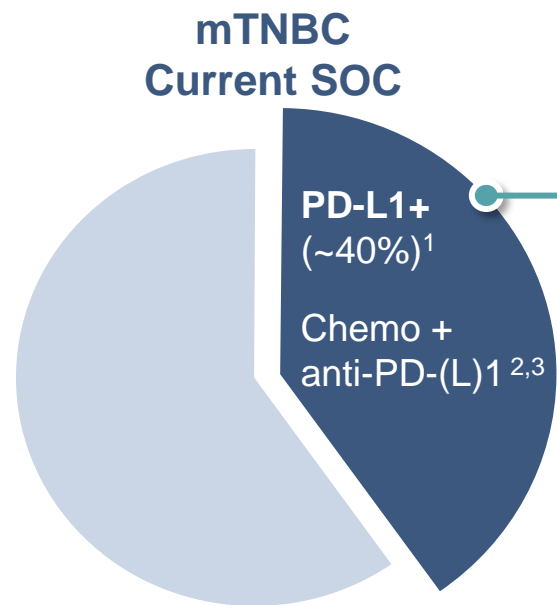
Phase 3 Study

There is an unmet need for better treatments in the first-line setting for patients with PD-L1+ mTNBC

SG + pembro led to a statistically significant and clinically meaningful improvement in PFS vs chemo + pembro

These results support SG + pembro as a potential new first-line standard of care

Unmet Need in Previously Untreated, PD-L1+, Locally Advanced Unresectable or Metastatic TNBC



Remaining unmet need

- Median PFS observed in prior studies of chemotherapy in combination with immune checkpoint inhibitors was 7.5-9.7 months^{1, 4}; most patients still experience disease progression⁵⁻⁷
- About half of the patients treated for 1L mTNBC do not receive 2L treatment⁵

Rationale for this study

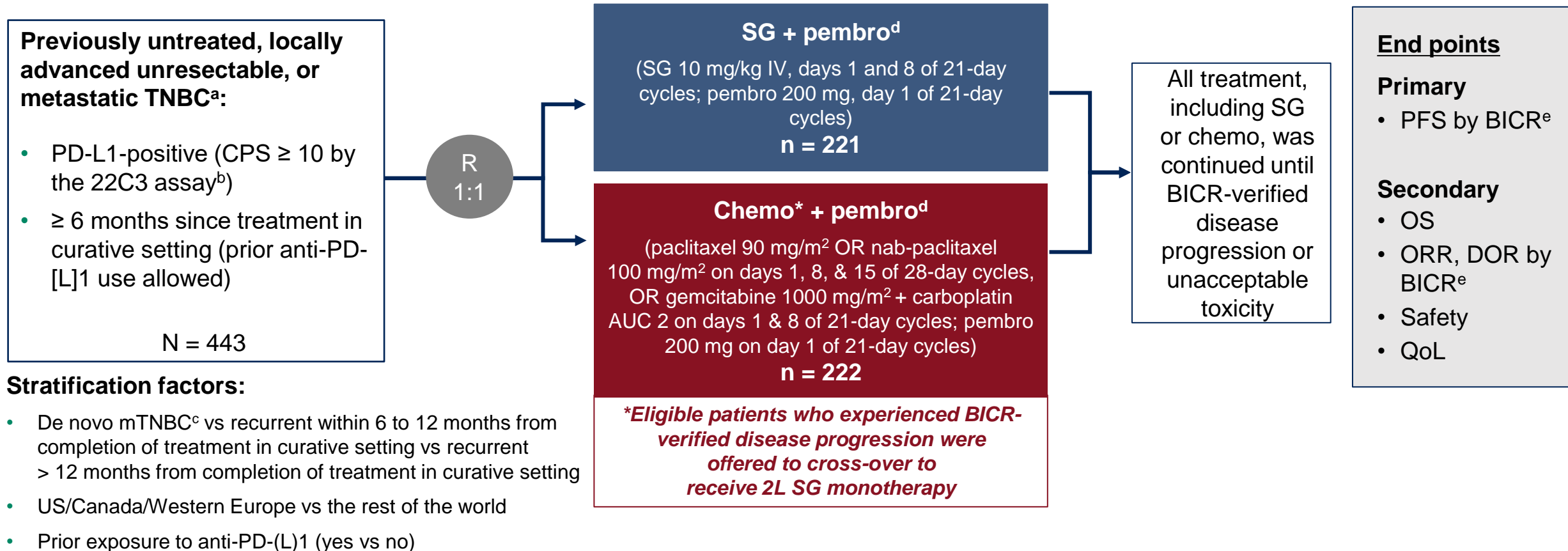
- SG is the only Trop-2–directed ADC with demonstrated OS benefit in multiple phase 3 studies; it is approved for 2L+ mTNBC and pre-treated HR+/HER2-mBC in multiple countries^{8,9}
- Early studies have observed improved anti-tumor effects when immunotherapy is combined with ADCs¹⁰

We present the primary results from the global, randomized, phase 3 ASCENT-04/KEYNOTE-D19 study of SG + pembro vs chemo + pembro in previously untreated, PD-L1+, locally advanced unresectable or metastatic TNBC

1L, first line; 2L(+), second line (and further); ADC, antibody drug conjugate; chemo, chemotherapy; HER2-, human epidermal growth factor receptor 2 negative; HR+, hormone receptor positive; mBC, metastatic breast cancer; mTNBC, metastatic triple-negative breast cancer; PFS, progression-free survival; OS, overall survival; PD-L1, programmed cell death ligand 1; pembro, pembrolizumab; SG, sacituzumab govitecan SOC, standard of care.

1. Cortes J, et al. *N Engl J Med*. 2022;387(3):217-226. 2. Gennari A, et al. *Ann Oncol*. 2021;32(12):1475-1495. 3. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Breast Cancer V4.2025. © National Comprehensive Cancer Network, Inc. 2025. All rights reserved. Accessed April 22, 2025. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way. 4. Schmid P, et al. *N Engl J Med*. 2018;379(22):2108-2121. 5. Punie K, et al. *Oncologist*. 2025;30(3).ePublished. 6. Skinner KE, et al. *Future Oncol*. 2021;18(8):931-941. 7. Geurts V, Kok M. *Curr Treat Options Oncol*. 2023;24(6):628-643. 8. TRODELVY® (sacituzumab govitecan-hziy) [prescribing information]. Foster City, CA: Gilead Sciences, Inc.; March 2025. 9. TRODELVY® (sacituzumab govitecan-hziy) [summary of product characteristics]. County Cork, Ireland: Gilead Sciences Ireland UC; August 2023. 10. Nicolo E, et al. *Cancer Treat Rev*. 2022;106:102395.

ASCENT-04/KEYNOTE-D19 Study Design



ClinicalTrials.gov identifier: NCT05382286.

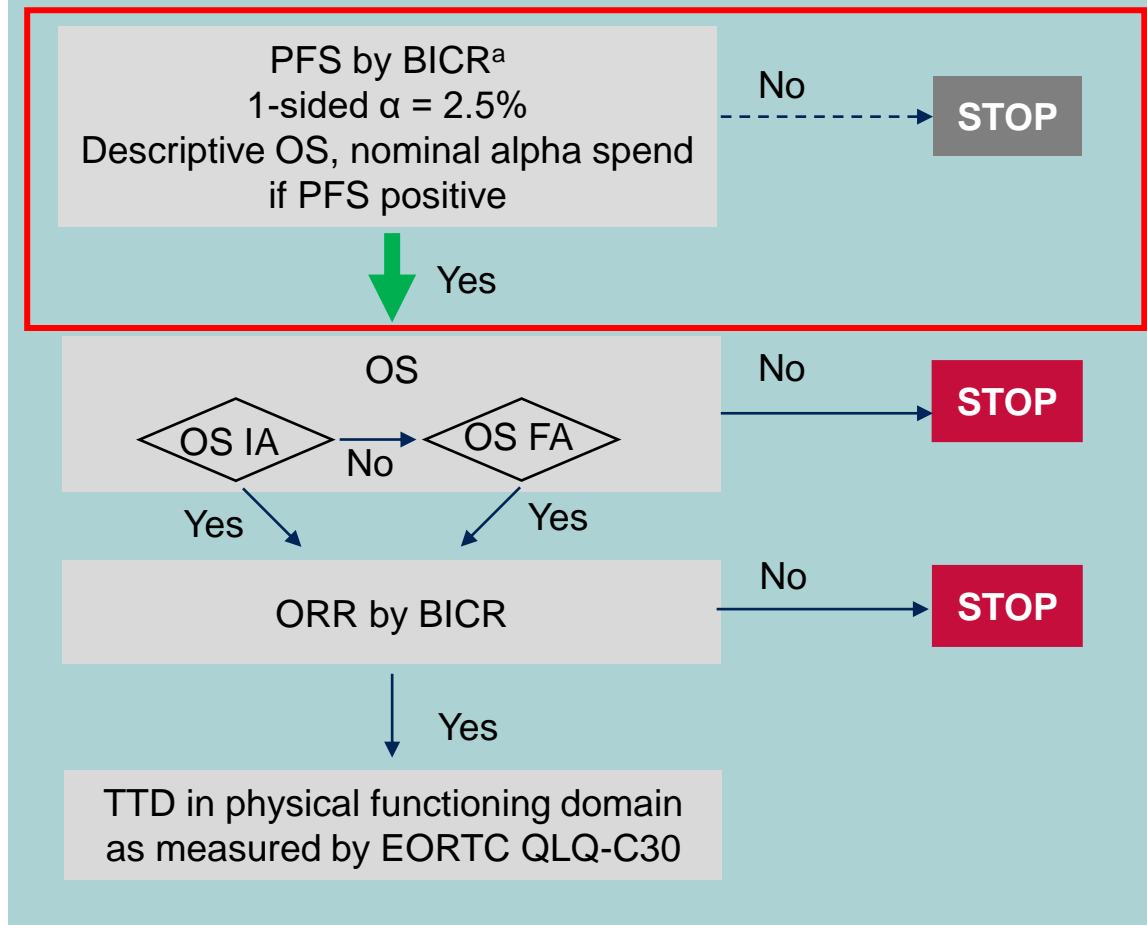
^aTNBC status determined according to standard American Society of Clinical Oncology-College of American Pathologists criteria. ^bDako, Agilent Technologies. ^cUp to 35% de novo mTNBC. ^dPembro was administered for a maximum of 35 cycles. ^ePer RECIST v1.1. AUC, area under the curve; BICR, blinded independent central review; chemo, chemotherapy; CPS, combined positive score; DOR, duration of response; IV, intravenously; ORR, objective response rate; OS, overall survival; PD-L1, programmed cell death ligand 1; pembro, pembrolizumab; PFS, progression-free survival; QoL, quality of life; R, randomized; RECIST v1.1; Response Evaluation Criteria in Solid Tumors, version 1.1; SG, sacituzumab govitecan; TNBC, triple-negative breast cancer; TTR, time-to-response.

Statistical Analysis

- Enrollment was planned for ~440 eligible patients
- To control for overall type I error, a hierarchical testing procedure was implemented
 - At primary analysis, PFS will be tested at 1-sided alpha of 2.5%
 - OS will be summarized descriptively at the time of primary PFS analysis; if PFS is positive, a nominal alpha will be spent
 - If PFS is significant at primary analysis, at the time of OS analysis, formal sequential testing of OS, ORR, and then TTD of physical functioning will be performed

- Data cutoff date for Primary PFS: March 3, 2025
 - There were 249 observed PFS events by BICR
 - Median follow-up was 14.0 months (range, 0.1-28.6)
 - At the data cutoff date, 95 patients (43%) in the SG + pembro group and 52 patients (23%) in the chemo + pembro group continued to receive study treatment

Hierarchical Testing Procedures: ITT Population



^aPFS by investigator was a sensitivity analysis.

BICR, blinded independent central review; chemo, chemotherapy; EORTC QLQ-C30, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire C30; FA, final analysis; IA, interim analysis; ITT, intent-to-treat; ORR, objective response rate; OS, overall survival; pembro, pembrolizumab; PFS, progression-free survival; SG, sacituzumab govitecan; TTD, time-to-deterioration.

Demographics and Baseline Characteristics

ITT Population	SG + Pembro (n = 221)	Chemo + Pembro (n = 222)
Female sex, n (%)	221 (100)	222 (100)
Median age, (range) yr	54 (23-88)	55 (27-82)
≥ 65 yr, n (%)	58 (26)	57 (26)
Race or ethnic group,^a n (%)		
White	139 (63)	118 (53)
Asian	43 (19)	63 (28)
Black	13 (6)	11 (5)
Other/not specified	26 (12)	30 (14)
Geographic region, n (%)		
US/Canada/Western Europe	85 (38)	85 (38)
Rest of the world ^b	136 (62)	137 (62)
ECOG PS at baseline,^c n (%)		
0	156 (71)	154 (69)
1	65 (29)	67 (30)
Curative treatment-free interval, n (%)		
De novo	75 (34)	75 (34)
Recurrent within 6-12 mo	40 (18)	40 (18)
Recurrent > 12 mo	106 (48)	107 (48)

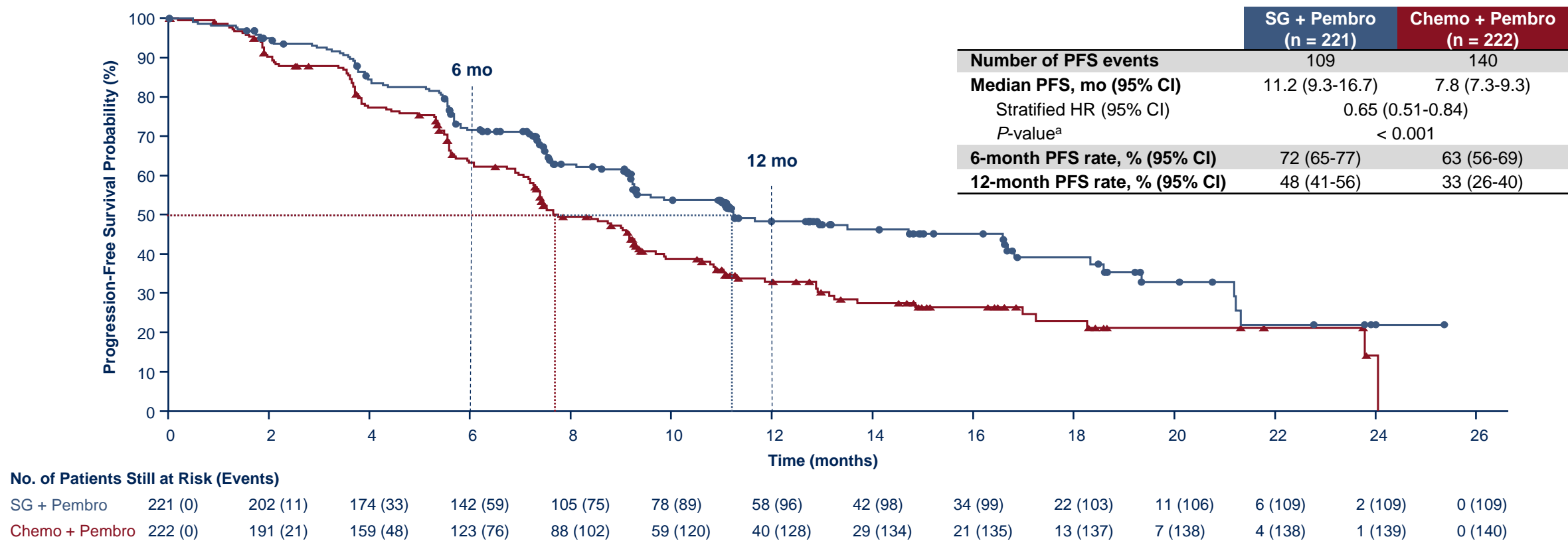
ITT Population	SG + Pembro (n = 221)	Chemo + Pembro (n = 222)
PD-L1 CPS ≥ 10,^d n (%)	221 (100)	222 (100)
Metastatic sites, n (%)		
Lymph node	159 (72)	154 (69)
Lung	111 (50)	95 (43)
Bone	61 (28)	45 (20)
Liver	55 (25)	57 (26)
Brain	8 (4)	6 (3)
Other ^e	81 (37)	71 (32)
Chemo selected prior to randomization,^f n (%)		
Taxane	116 (52)	114 (51)
Gemcitabine/carboplatin	105 (48)	108 (49)
Prior anti-PD-(L)1 therapy,^g n (%)	9 (4)	11 (5)

Data cutoff date: March 3, 2025.

^aAs reported by the patients; "other" includes American Indian or Alaska Native, other, and not permitted. ^bRest of the world includes Argentina, Australia, Brazil, Chile, Czech Republic, Hong Kong, Hungary, Israel, Japan, Malaysia, Mexico, Poland, Singapore, South Africa, South Korea, Taiwan, and Turkey. ^cOne patient in the chemo + pembro group had an ECOG PS ≥ 2. ^dPD-L1 status assessed using the PD-L1 IHC 22C3 assay (Dako, Agilent Technologies) at the time of enrollment. ^eOther metastatic sites includes pleura, pleural effusion, skin, soft tissue, chest wall, and muscle. ^fActual chemo received was consistent with what was selected prior to randomization; however, two patients were randomized but did not receive treatment. ^gWhile 20 patients were included in the stratified subgroup of prior exposure to anti-PD-(L)1 therapy (yes) per the IRT system, only 6 patients received prior treatment with anti-PD-(L)1 agents per the clinical database.

Chemo, chemotherapy; CPS, combined positive score; ECOG PS, Eastern Cooperative Oncology Group performance status; IHC, immunohistochemistry; IRT, interactive response technology; ITT, intent-to-treat; PARPi, poly ADP-ribose polymerase inhibitor; PD-L1, programmed cell death ligand 1; pembro, pembrolizumab; SG, sacituzumab govitecan.

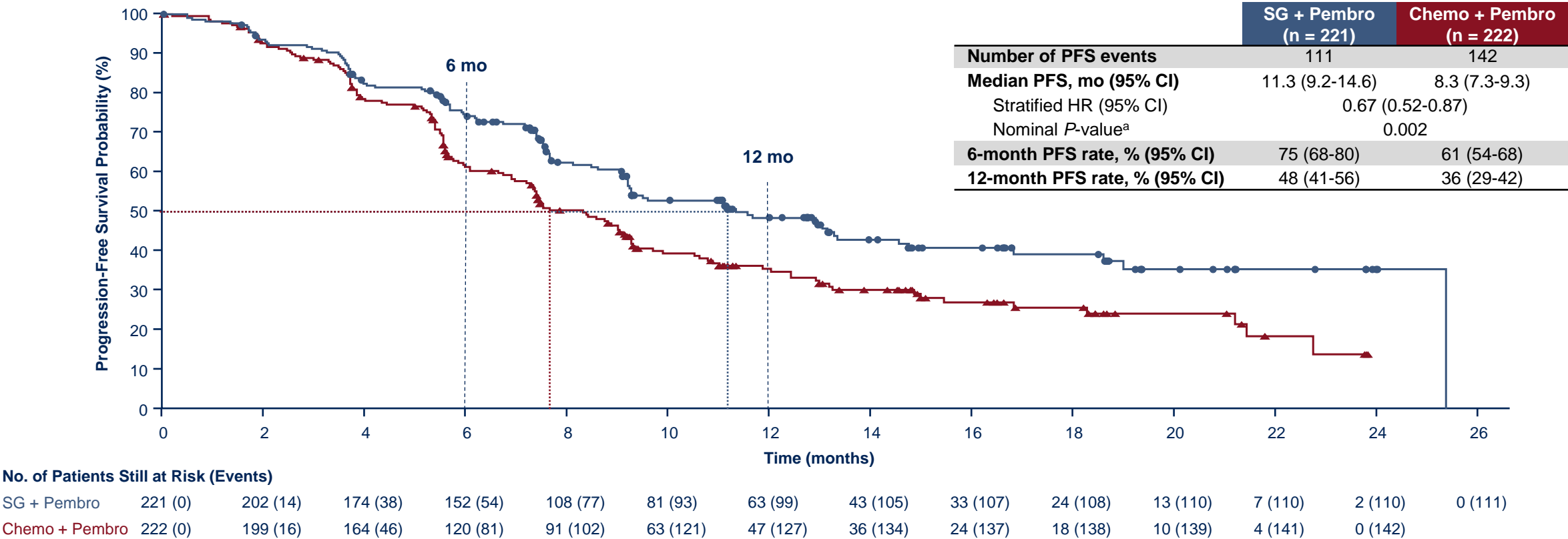
Progression-Free Survival by BICR



SG + pembro demonstrated statistically significant and clinically meaningful improvement in PFS vs chemo + pembro by BICR analysis, with a 35% reduction in risk of disease progression or death

Data cutoff date: March 3, 2025.
^aTwo-sided *P*-value from stratified log-rank test.
BICR, blinded independent central review; chemo, chemotherapy; HR, hazard ratio; PFS, progression-free survival; pembro, pembrolizumab; SG, sacituzumab govitecan.

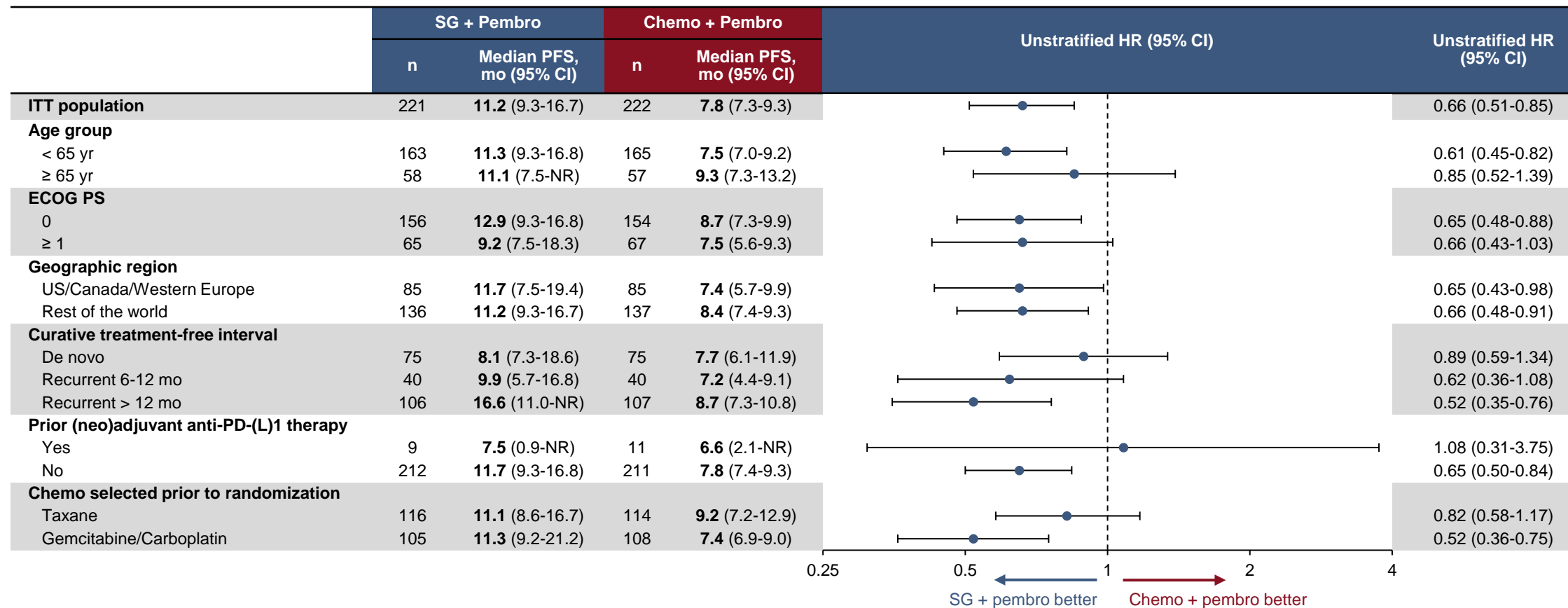
Progression-Free Survival by Investigator Assessment



PFS by investigator assessment was consistent with the BICR analysis, demonstrating PFS benefit with SG + pembro vs chemo + pembro

Data cutoff date: March 3, 2025.
^aTwo-sided *P*-value from stratified log-rank test.
Chemo, chemotherapy; HR, hazard ratio; PFS, progression-free survival; pembro, pembrolizumab; SG, sacituzumab govitecan.

Subgroup Analysis of Progression-Free Survival by BICR

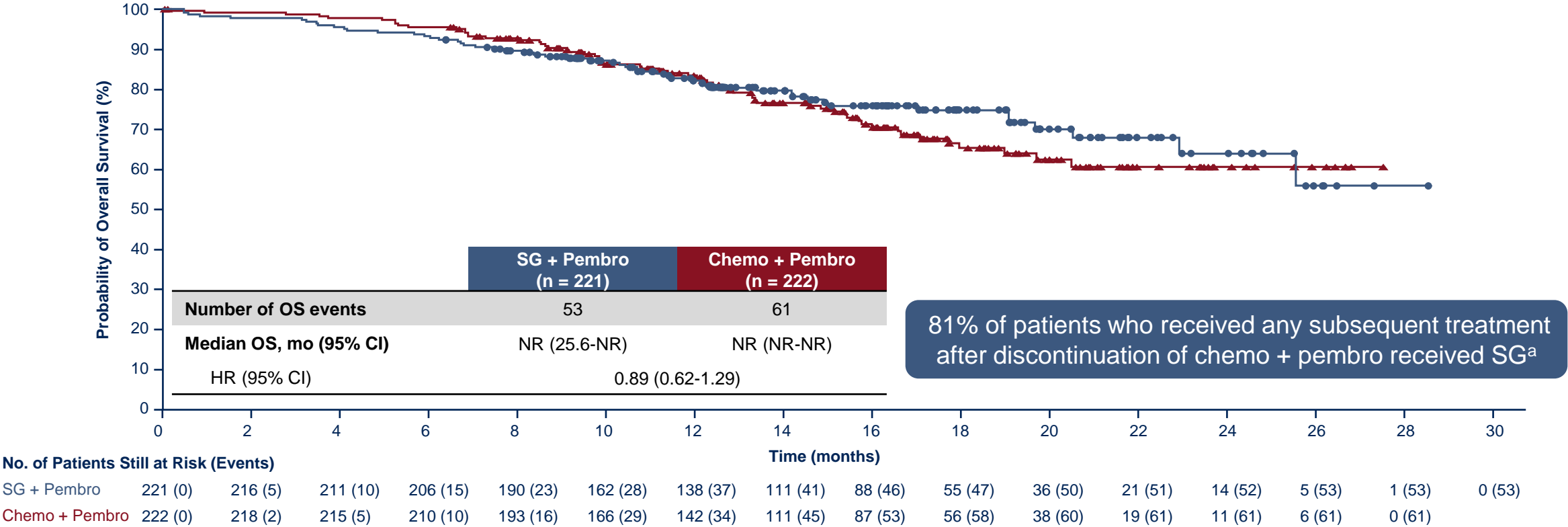


PFS benefit was observed for SG + pembro vs chemo + pembro across prespecified subgroups

Data cutoff date: March 3, 2025.

BICR, blinded independent central review; chemo, chemotherapy; ECOG PS, Eastern Cooperative Oncology Group performance status; HR, hazard ratio; mo, months; NR, not reached; PARPi, poly ADP-ribose polymerase inhibitor; PD-(L)1, programmed death (ligand) 1; pembro, pembrolizumab; PFS, progression-free survival; SG, sacituzumab govitecan.

Descriptive Overall Survival at Primary Analysis

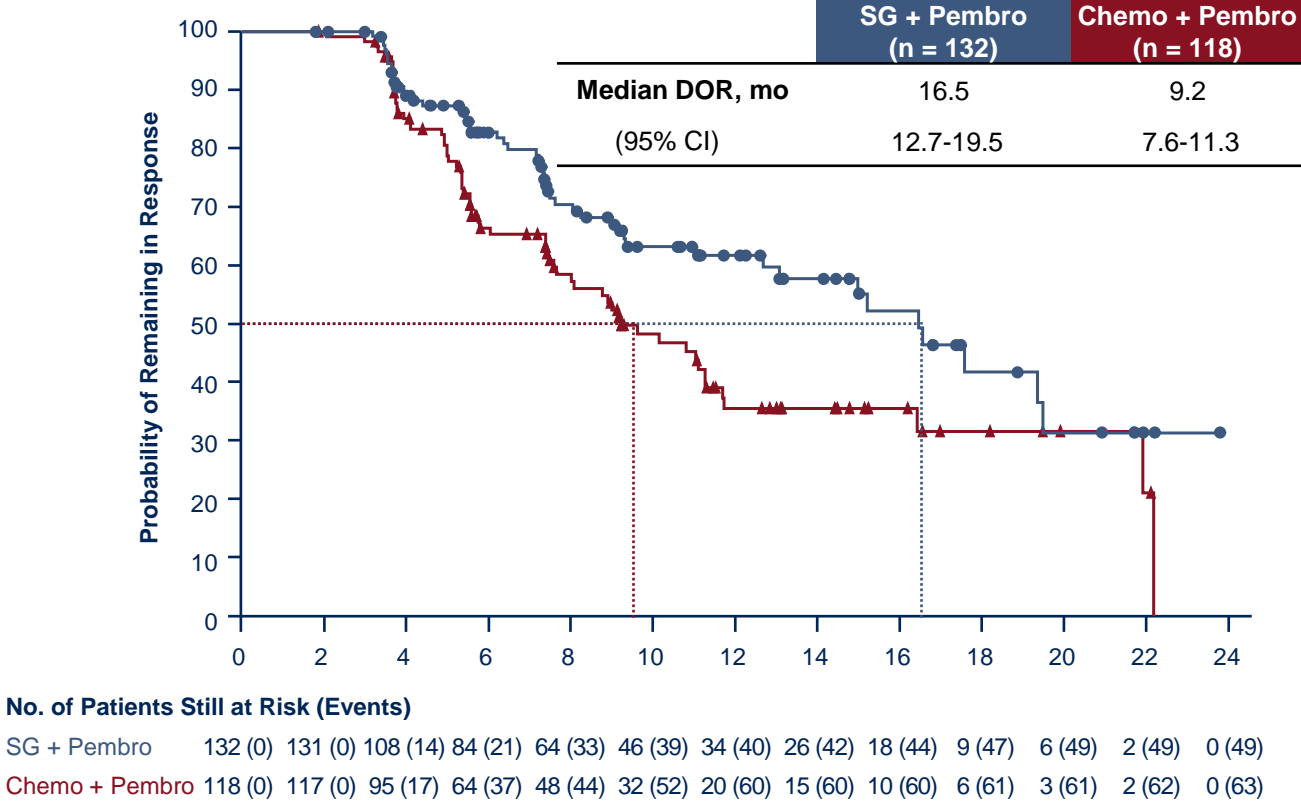


OS data were immature (maturity rate, 26%), however, a positive trend in improvement was observed for SG + pembro vs chemo + pembro

Data cutoff date: March 3, 2025. Median follow-up was 14.0 months (range, 0.1-28.6).
^aOf the 96 patients who received SG monotherapy as subsequent anticancer therapy, 77 received it as part of the protocol-specified crossover after meeting all crossover eligibility criteria, including BICR-verification of disease progression; the remaining 19 patients received subsequent SG monotherapy as commercial supply.
2L, second line; chemo, chemotherapy; HR, hazard ratio; pembro, pembrolizumab; NR, not reached; OS, overall survival; SG, sacituzumab govitecan.

Tumor Responses and Duration of Response by BICR

Variable	SG + Pembro (n = 221)	Chemo + Pembro (n = 222)
Objective response rate ^a (95% CI), %	60 (52.9-66.3)	53 (46.4-59.9)
Stratified odds ratio (95% CI)	1.3 (0.9-1.9)	
Best overall response, n (%)		
Complete response	28 (13)	18 (8)
Partial response	104 (47)	100 (45)
Stable disease	70 (32)	70 (32)
Stable disease ≥ 6 months	23 (10)	29 (13)
Progressive disease	9 (4)	26 (12)
Not evaluable	10 (5)	8 (4)
Time to response, ^b median (range), months	1.9 (1.0-9.3)	1.9 (1.1-11.4)



A substantially longer duration of response and a higher overall response rate (including an increased complete response rate) was observed for SG + pembro vs chemo + pembro

Data cutoff date: March 3, 2025.
^aObjective response rate is defined as the proportion of patients who achieved a best overall response of complete response/partial response; ^bTime to response (months) = (date of first documented complete or partial response - date of randomization + 1)/30.4375.
BICR, blinded independent central review; DOR, duration of response; mo, months; pembro, pembrolizumab; SG, sacituzumab govitecan.

Exposure and Safety Summary

ITT population	SG + Pembro (n = 221)		Chemo + Pembro (n = 222)	
	SG	Pembro	Chemo	Pembro
All treated patients, n	221	221	220	220
Median duration of treatment, mo (range)	8.9 (0.0-27.1)	8.5 (0.0-26.8)	6.2 (0.0-26.3)	6.4 (0.0-25.6)

n (%)	SG + Pembro (n = 221)	Chemo + Pembro (n = 220)
Any TEAE	220 (> 99)	219 (> 99)
Grade ≥ 3	158 (71)	154 (70)
Treatment-emergent SAE	84 (38)	68 (31)
Treatment-related	61 (28)	42 (19)
TEAEs leading to treatment discontinuation ^a	26 (12)	68 (31)
TEAEs leading to dose interruption	171 (77)	162 (74)
TEAEs leading to dose reduction ^b	78 (35)	96 (44)
TEAEs leading to death ^c	7 (3)	6 (3)
Treatment-related	3 (1)	1 (< 1)

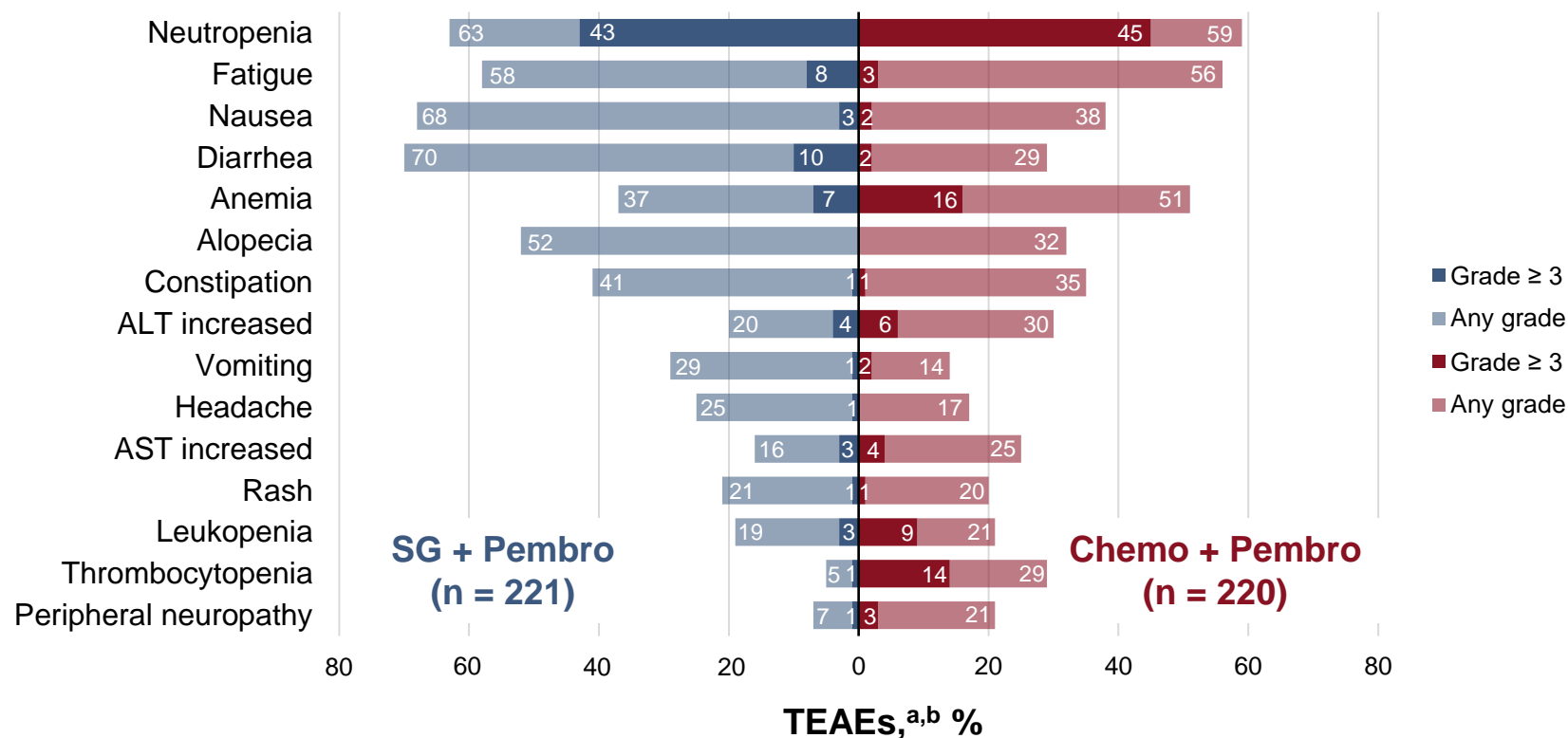
Despite longer duration of treatment with SG + pembro, rates of grade ≥ 3 AEs were similar for both groups. TEAEs leading to dose reduction or treatment discontinuation were lower with SG + pembro

TEAEs were defined as any adverse events that began or worsened on or after the first dose date of study drug up to 30 days (or up to 90 days for SAEs) after the last dose date of study drug or the initiation of subsequent anticancer therapy (including crossover treatment), whichever occurred first. Data cutoff date: March 3, 2025.

^aThe most common any-grade TEAEs that led to treatment discontinuation were pneumonitis (1%) for the SG + pembro group and neuropathy peripheral (5%), pneumonitis (3%), and thrombocytopenia (3%) for the chemo + pembro group. ^bThere was no dose reduction for pembrolizumab per the protocol. ^cTEAEs leading to death were pneumonia, sepsis, neutropenic sepsis, pulmonary embolism, and suicide (1 each), as well as 2 deaths of unknown cause in the SG + pembro group, and cardiac arrest, large intestine perforation, pneumonia, sepsis, post-procedural complication, and death of unknown cause (1 each) in the chemo + pembro group.

Chemo, chemotherapy; pembro, pembrolizumab; SAE, serious adverse event; SG, sacituzumab govitecan; TEAE, treatment-emergent adverse event.

Most Common Adverse Events (≥20% in any group)



The AEs observed are consistent with the known profiles of both SG and pembro

TEAEs were defined as any adverse events that began or worsened on or after the first dose date of study drug up to 30 days (or up to 90 days for SAEs) after the last dose date of study drug or the initiation of subsequent anticancer therapy (including crossover treatment), whichever occurred first. Data cutoff date: March 3, 2025.

^aTEAEs were included if they occurred in ≥ 20% of patients in either arm. ^bCombined preferred terms of Neutropenia includes neutrophil count decreased, Leukopenia includes white blood cell count decreased, Anemia includes hemoglobin decreased and red blood cell count decreased, Thrombocytopenia includes platelet count decreased, Fatigue includes asthenia.

ALT, alanine aminotransferase; AST, aspartate aminotransferase; chemo, chemotherapy; pembro, pembrolizumab; SG, sacituzumab govitecan; TEAE, treatment-emergent adverse event.

Adverse Events of Special Interest

AESI, ^a n (%)		SG + Pembro (n = 221)		Chemo + Pembro (n = 220)	
		Any Grade	Grade ≥ 3	Any Grade	Grade ≥ 3
SG AESIs	Neutropenia ^b	143 (65)	104 (47)	132 (60)	100 (45)
	Hypersensitivity ^b	43 (19)	4 (2)	51 (23)	5 (2)
	Serious infections secondary to neutropenia ^b	6 (3)	5 (2)	3 (1)	3 (1)
	Diarrhea (Grade 3 or higher)	N/A	22 (10)	N/A	5 (2)
Pembro AESIs	Overall	30 (14)	9 (4)	56 (26)	16 (7)
	Infusion reactions (not immune-mediated) ^a	11 (5)	3 (1)	19 (9)	5 (2)
	Pneumonitis ^b	5 (2)	3 (1)	10 (5)	2 (1)
	Colitis ^b	4 (2)	1 (< 1)	1 (< 1)	1 (< 1)
	Hypothyroidism ^b	4 (2)	0	19 (9)	0
	Hypophysitis ^b	2 (1)	0	2 (1)	0
	Hyperthyroidism ^b	2 (1)	0	5 (2)	0
	Severe skin reactions, ^b including Stevens-Johnson syndrome and toxic epidermal necrolysis	2 (1)	2 (1)	2 (1)	2 (1)
	Hepatitis ^b	1 (< 1)	0	2 (1)	2 (1)
	Adrenal insufficiency ^b	1 (< 1)	0	2 (1)	1 (< 1)
	Pancreatitis ^b	0	0	2 (1)	2 (1)

AESIs were consistent with the known safety profiles of each agent; no new safety concerns were observed and no increased rates of AESIs were observed when combining SG with pembro

AESIs were adverse events determined based on a prespecified list of Medical Dictionary for Regulatory Activities (MedDRA) terms, which was updated with each new version of MedDRA. Immune-mediated adverse events were determined based on a prespecified list of Medical Dictionary for Regulatory Activities (MedDRA) terms, which was updated with each new version of MedDRA and specified as immune-mediated by the investigator. Data cutoff date: March 3, 2025.

^aAESIs observed in ≥1% of patients in either group are presented; ^bGrouped term.

AESI, adverse event of special interest; chemo, chemotherapy; pembro, pembrolizumab; SG, sacituzumab govitecan.

Conclusions

- ASCENT-04/KEYNOTE-D19 is the first randomized, phase 3 study to evaluate the efficacy and safety of an ADC/checkpoint inhibitor combination for first-line treatment of patients with PD-L1+^a mTNBC
- SG + pembro led to a statistically significant and clinically meaningful improvement in PFS vs chemo + pembro (median 11.2 vs 7.8 months; HR, 0.65; 95% CI, 0.51-0.84; $P < 0.001$)
 - PFS benefit was observed across prespecified subgroups
- OS data are immature, but an early trend in improvement was observed
- ORR was higher (including an increased complete response rate), and responses were more durable with SG + pembro vs chemo + pembro
- The safety profile of SG + pembro was consistent with the established profiles of either agent; no additive toxicity was observed

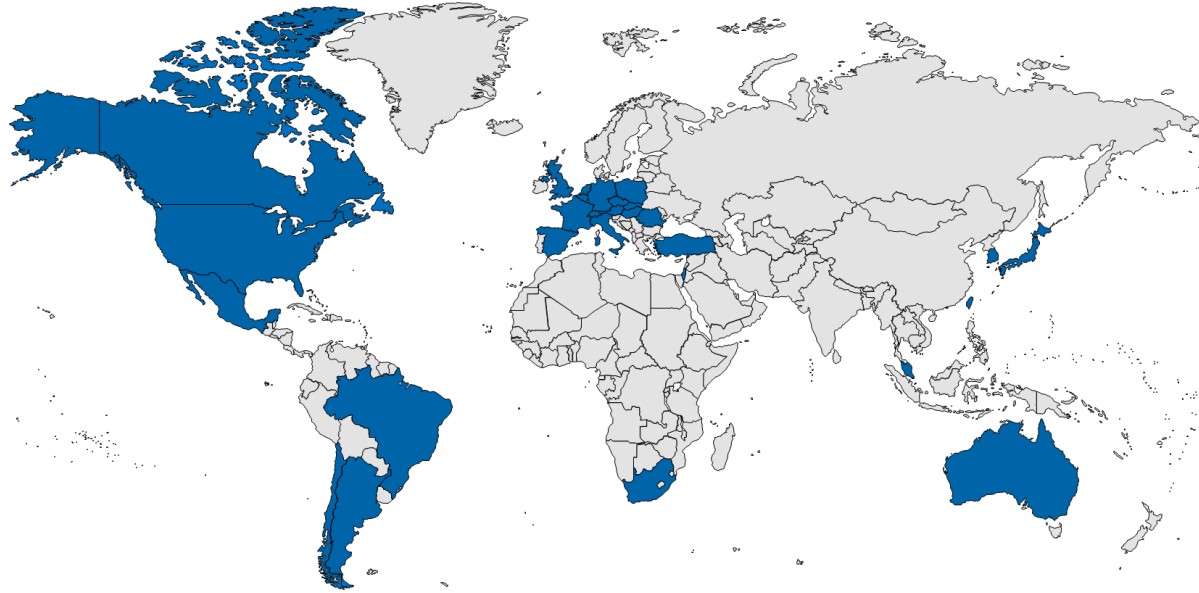
Results from ASCENT-04/KEYNOTE-D19 support the use of SG + pembro as a potential new standard of care for patients with previously untreated, PD-L1+, locally advanced unresectable or metastatic TNBC

Data cutoff date: March 3, 2025

^aCPS ≥ 10 per IHC 22C3 assay (Dako, Agilent Technologies).

ADC, antibody drug conjugate; chemo, chemotherapy; CPS, combined positive score; DOR, duration of response; HR, hazard ratio; IHC, immunohistochemistry; mTNBC; metastatic triple-negative breast cancer; ORR, objective response rate; OS, overall survival; PD-L1, programmed cell death ligand 1; pembro, pembrolizumab; PFS, progression-free survival; SG, sacituzumab govitecan; TNBC, triple-negative breast cancer.

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