Real-World Use Patterns, Effectiveness, and Tolerability of Sacituzumab Govitecan for Second-Line or Later Treatment of Metastatic Triple-Negative Breast Cancer

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Key Findings

- In this real-world analysis, patients with mTNBC treated with SG in routine clinical care settings in the United States had a median age of 60 years, were racially diverse, and ~1 out of 5 presented with poor ECOG performance status at baseline
- Patients with mTNBC who received SG as 2L or later showed median rwOS of 10.0 months; patients who received SG as 2L had median rwOS of 13.9 months
- **Dose reductions and interruptions due to toxicity** were observed in 26% and 39% of all patients, respectively; 7% discontinued SG treatment due to toxicities
- **Concomitant administration of G-CSF was observed** in 58% of all patients, with most patients having received G-CSF with prior anticancer treatment

Conclusions



SG treatment in the 2L or later setting showed a survival benefit in a broad and racially diverse patient population with mTNBC treated in routine clinical settings in the United States



SG effectiveness and tolerability profile in this diverse population with poorer prognostic factors was consistent with findings from the phase 3 ASCENT study



Additional follow-up will provide more insight into the real-world effectiveness of SG

References: 1. TRODELVY[®] (sacituzumab govitecan-hziy) [prescribing information]. Gilead Sciences, Inc., Foster City, CA, USA; February 2023. 2. TRODELVY[®] (sacituzumab govitecan) [summary of product characteristics]. County Cork, Ireland; Gilead Sciences Ireland UC; August 2023. **3.** Bardia A, et al. N Engl J Med. 2021;22(384):1529-1541. **4.** Kish JK, et al. *Breast Cancer Res*. 2018;20(1):37. **5.** Chen L, et al. *J Thorac Dis*. 2019;11(11):4474-4483. 6. Price GL, et al. Curr Med Res Opin. 2022;38(8):1319-1331.

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Introduction

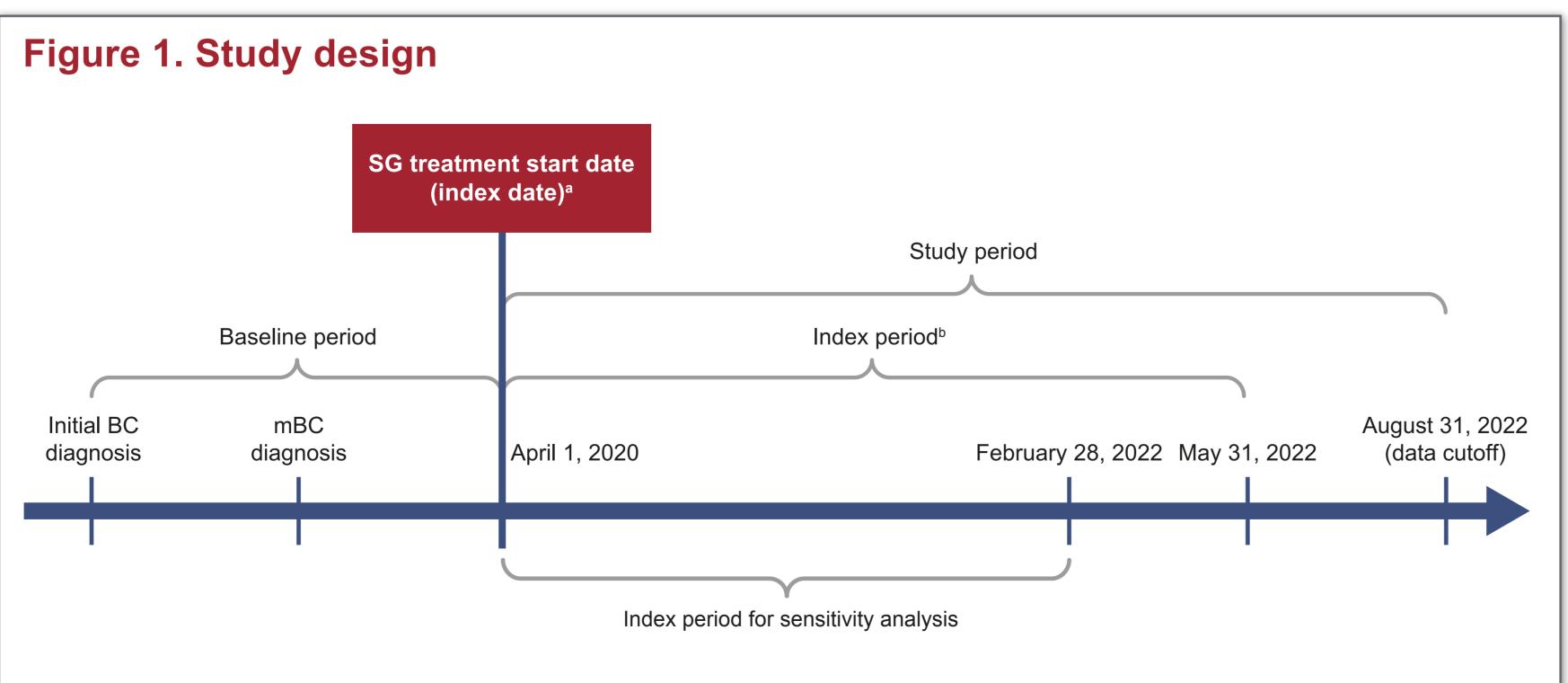
- Sacituzumab govitecan (SG) is a Trop-2–directed antibody-drug conjugate approved for unresectable, locally advanced or metastatic triple-negative breast cancer (mTNBC) following ≥ 2 prior systemic therapies (≥ 1 for metastatic disease) and for pretreated hormone receptor-positive/human epidermal growth factor receptor 2-negative (HR+/HER2-; immunohistochemistry [IHC] 0, IHC 1+, or IHC 2+/in situ hybridization-negative [ISH-]) metastatic breast cancer (mBC) following endocrine-based therapy and ≥ 2 additional systemic therapies in the metastatic setting^{1,2}
- In the ASCENT study (NCT02574455), SG demonstrated superior efficacy vs single-agent chemotherapy (CT) and a manageable safety profile in patients with previously treated mTNBC
- Patients had a median age of 54 years, 12% were Black, and all had an Eastern Cooperative Oncology Group (ECOG) performance status ≤ 1
- For SG vs CT, the median progression-free survival (PFS) was 4.8 vs 1.7 months (hazard ratio [HR], 0.4; P < .001) and the median overall survival (OS) was 11.8 vs 6.9 months (HR, 0.5)
- The most common treatment-emergent adverse events (AEs) were neutropenia, diarrhea, nausea, alopecia, fatigue, and anemia; neutropenia was managed with dose reduction/ delay, and with growth-factor support

Objective

• This study describes real-world use patterns, effectiveness, and tolerability of SG for second-line (2L) or later (3L+) treatment of mTNBC in the United States

Methods

- This retrospective, observational cohort study used de-identified electronic health record (EHR)-derived data in the ConcertAI Patient 360[™] database. Further data abstraction from physicians' notes was used to identify patients with dose modifications (reductions and interruptions), treatment discontinuations, and real-world AEs (rwAEs) of interest
- Patients diagnosed with mTNBC and treated with SG in the 2L and 3L+ setting from April 2020 to May 2022 were included. Data cutoff was August 2022 to allow for \geq 3-month data accrual. Sensitivity analysis was performed using \geq 6-month data accrual (Figure 1)
- Real-world OS (rwOS), time to next treatment or death (TTNTD), and real-world PFS (rwPFS) were assessed using Kaplan-Meier analyses
- SG dose modifications and treatment discontinuations were described using abstracted data. Concomitant granulocyte colony-stimulating factor (G-CSF) use was described
- Real-world AEs (any grade) that occurred during SG treatment were described using abstracted data. Laboratory data and diagnosis were also used to identify patients with neutropenia



BC, breast cancer; mBC, metastatic breast cancer; mTNBC, metastatic triple-negative breast cancer; SG, sacituzumab govitecan.

^aThe index date was defined as the start of SG occurring in any treatment line after diagnosis of mBC. ^bApril 1. 2020 was chosen as the earliest index date because this was the date on which SG received US Food and Drug Administration accelerated approval for the treatment of mTNBC after \geq 2 prior systemic therapies.

Results

Patient baseline characteristics

• Overall, 230 patients met the inclusion criteria; median age was 60 years, 26% were Black, and 17% had an ECOG performance status ≥ 2 (Table 1)

	All patients
Characteristics	N = 230
Female, n (%)	230 (100)
Median age (IQR), years	60 (49-69)
Race/ethnic groups, n (%)	
White	146 (63)
Black	59 (26)
Asian	9 (4)
Other/Unknown	16 (7)
Treatment provider type, n (%)	
Community	152 (66)
Academic	63 (27)
Unknown	15 (7)
ECOG performance status, n (%)	
0-1	162 (70)
≥ 2	40 (17)
Unknown	28 (12)
De novo mBC, n (%)	41 (18)
Median time from mBC diagnosis to SG treatment start (IQR), months	11.8 (7.6-19.2)
Brain metastasis, n (%)	17 (7)
Visceral metastasis, n (%)	167 (73)
PD-L1 expression status, n (%)	
PD-L1 positive	22 (10)
PD-L1 negative	48 (21)
Unknown	160 (70)
BRCA1/2 mutation status, n (%)	
Mutant	31 (13)
Wildtype	108 (47)
Unknown	91 (40)
Prior therapies in the metastatic setting	
Anticancer regimens, median (IQR) ^a	2 (1-3)
Chemotherapy drugs, n (%)	
Taxanes	149 (65)
Carboplatin	96 (42)
Capecitabine	94 (41)
Anthracyclines	26 (11)
Cyclophosphamide	16 (7)
PARPi, n (%)	15 (7)
PD-(L)1 inhibitors, n (%)	111 (48)

SG real-world use patterns

- 33% and 67% of patients received SG in 2L and in 3L+, respectively
- Median (interquartile range [IQR]) SG starting dose was 10.0 (9.8-10.1) mg/kg, and median (IQR) number of doses was 9 (5-16)
- Median (IQR) treatment duration was 3.8 (2.1-7.0) months with a maximum treatment duration of 25.8 months, among all patients. Among 2L patients it was 4.2 (2.1-8.0) months
- At the end of the study period, 21 (9%) patients were still receiving SG

SG real-world clinical outcomes

- At a median follow-up of 7.2 months, median rwOS was 10.0 months for patients treated with SG in 2L or later line (Figure 2). Median rwOS among patients receiving SG in 2L was 13.9 months (Figure 3)
- Median (95% confidence interval [CI]) rwOS was similar among patients included in the sensitivity analysis: all patients (n = 209), 9.8 (8.2-10.9) months; 2L (n = 69), 13.9 (9.8-not estimable) months; 3L + (n = 140), 8.4 (7.3-10.1) months
- Median (95% CI) TTNTD was 4.6 (3.9-5.3) months among all patients; in 2L and 3L+ patients it was 4.8 (3.2-6.9) months and 4.4 (3.8-5.5) months, respectively
- Median (95% CI) rwPFS was 3.8 (3.1-4.3) months among all patients; in 2L and 3L+ patients it was 4.9 (2.9-6.0) months and 3.5 (2.7-4.2) months, respectively
- Outcomes were similar to the overall population when stratifying patients by race, concomitant G-CSF use, and treatment-free interval (Table 2)

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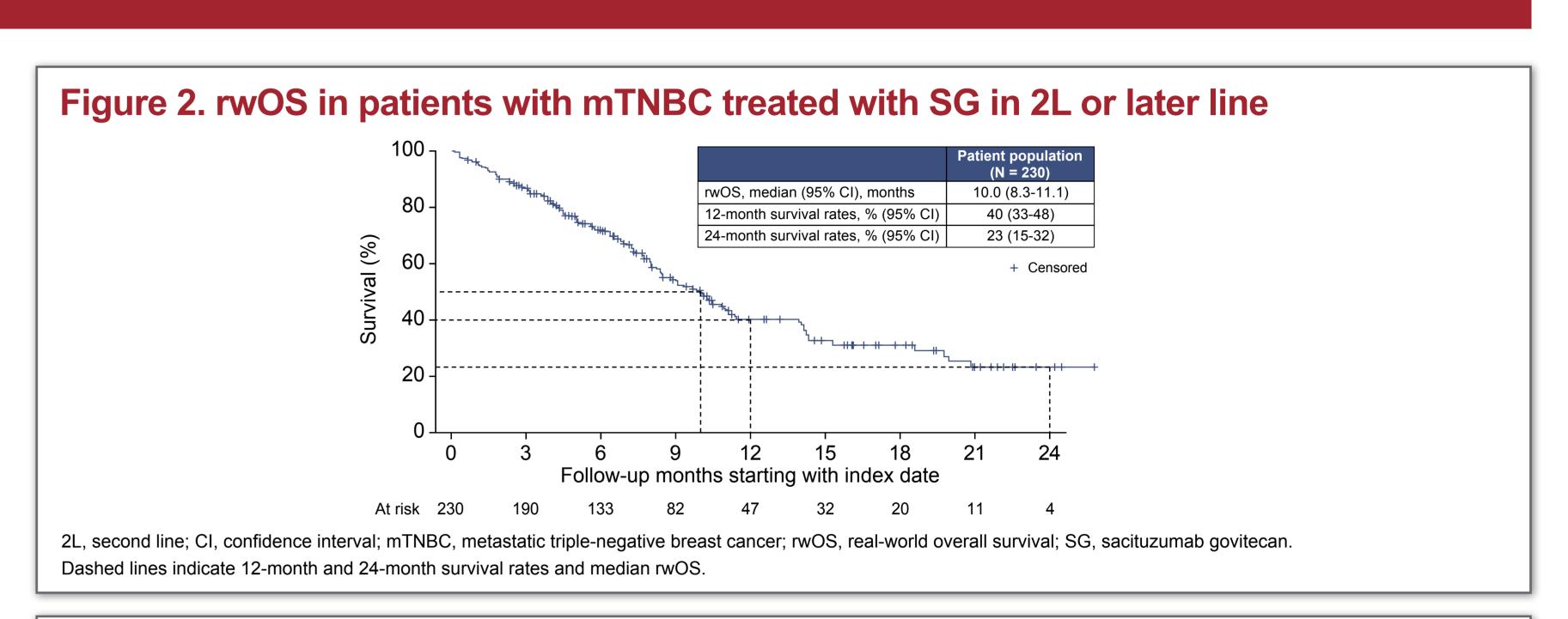


Figure 3. rwOS^a in patients with mTNBC treated with SG in 2L (A) and 3L+ (B) Patient populat (N = 153) wOS, median (95% CI), months 8.4 (7.7-10.3) month survival rates, % (95% CI) SG. sacituzumab goviteca aFrom index date

hed lines indicate 12-month and 24-month survival rates and median rwO

Table 2. rwOS outcomes in stratified analyses

	Ν	Median rwOS, months (95% CI)
Concomitant G-CSF use with SG		
Yes	134	9.1 (7.7-11.4)
No	96	10.2 (8.3-14.2)
Race		
White	146	9.1 (8.0-11.1)
Black	59	10.1 (7.7-18.6)
TFI ^a		
< 12 months	18	11.1 (8.0-NE)
≥ 12 months	16	10.9 (5.0-NE)

^aTFI was defined as time (months) from end date of last systemic anticancer therapy in the (neo)adjuvant setting to date of mTNBC diagnosis. Stratified analyses by TFI were performed among patients with recurrent disease treated with SG in 2L from April 1, 2020, until February 28, 2022, and for whom TFI could be calculated (n = 34).

Toxicities

- SG treatment discontinuation, dose modifications, and concomitant G-CSF results are reported in Table 3
- Fatigue was reported in 104 (45%), neutropenia in 77 (33%), and diarrhea in 70 (30%) patients
- Underreporting of AEs and dose modifications in physicians' notes may have occurred with an unknown impact on the results; a limitation commonly described in studies using EHR data⁴⁻⁶

	All patients N = 230
Patients with SG discontinuation, n (%)	209 (91)
Due to toxicity ^{a,b}	17 (7)
Patients with SG dose reduction, n (%)	79 (34)
Due to toxicity ^{a,b}	59 (26)
Patients with SG dose interruption, n (%)	133 (58)
Due to toxicity ^{a,b}	89 (39)
G-CSF usage during SG treatment, n (%)	134 (58)
G-CSF usage prior to SG treatment	99 (43)
G-CSF usage first time during SG treatment	35 (15)
Median time from SG start date to G-CSF usage (IQR), ^c days	8.5 (8.0-29.0)

G-CSF, granulocyte-colony stimulating factor; IQR, interguartile range; SG, sacituzumab govitecan.

^aPercentages are based on total number of patients. ^bBased on data abstracted from physicians' notes. ^cAmong patients initiating G-CSF for the first time during SG treatment.