PHASE 1 DOSE-ESCALATION STUDY OF STRO-002, AN ANTI–FOLATE-RECEPTOR ALPHA ANTIBODY DRUG CONJUGATE, IN PATIENTS WITH ADVANCED, PROGRESSIVE, PLATINUM-RESISTANT/-REFRACTORY EPITHELIAL OVARIAN CANCER

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Disclosures

Dr. Naumann has received

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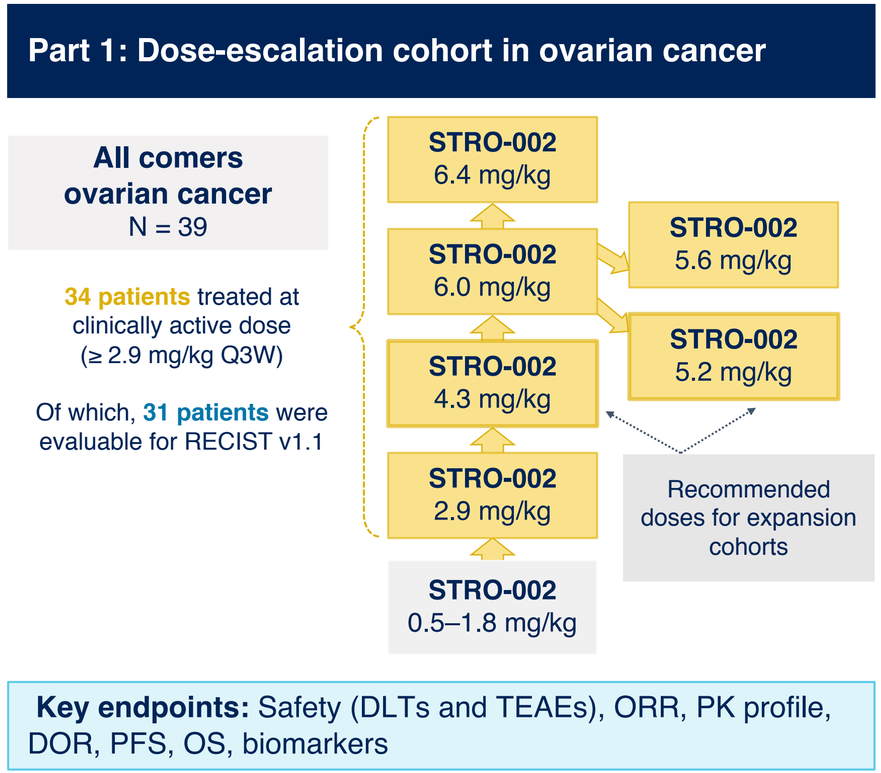
Introduction

- FRα is a cell surface glycoprotein overexpressed in ovarian cancer and endometrial adenocarcinoma[1,2]
- STRO-002 is a novel FRα-targeting ADC with a precise drug-antibody ratio of 4 using site-specific conjugation technology circumventing limitations of current ADCs[3,4]
- Potential dual MOA: 1) potent cytotoxin tubulin-targeting hemiasterlin payload (SC209) which is weak substrate for P-glycoprotein and 2) immunogenic response upon cell death
- STRO-002-GM1 (NCT03748186) is an ongoing phase 1, open-label study in patients with advanced platinum-resistant or -refractory epithelial ovarian cancer (EOC)



1. Kalli KR et al. *Gynecol Oncol*. 2008;108:619-626. 2. O'Shannessy DJ et al. *Int J Gynecol Pathol*. 2013;32:258-268. 3. Li X et al. *Cancer Res.* 2018;78(13 suppl):abstract 1782. 4. Zimmerman ES et al. *Bioconjug Chem.* 2014;255:351-361. ADC, antibody drug conjugate; DLT, dose-limiting toxicity; DOR, duration of response; FRα, folate-receptor alpha; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; PK, pharmacokinetic; RECIST, Response Evaluation Criteria in Solid Tumors; Q3W, every 3 weeks; TEAE, treatment-emergent adverse event.

Results (1)

Baseline characteristics

Baseline characteristic	All patients (N = 39)
Age, median (range), years	61 (48–79)
Time since diagnosis, median (range), years	3.9 (0.7–17.0)
No. of prior lines of therapy, median (range)	6 (1–11)
Previous therapies, n (%)	
Platinum	39 (100)
≥ 3 prior platinum regimens	18 (46)
Taxanes	38 (97)
Bevacizumab	32 (82)
Poly (ADP-ribose) polymerase inhibitors	23 (59)
Checkpoint inhibitors	8 (21)
Experimental therapy	14 (36)

- The novel FRα-targeting ADC STRO-002 exhibited a generally well-tolerated safety profile in heavily pretreated patients with progressive EOC

Most frequent TEAEs > 25% by grade[a]

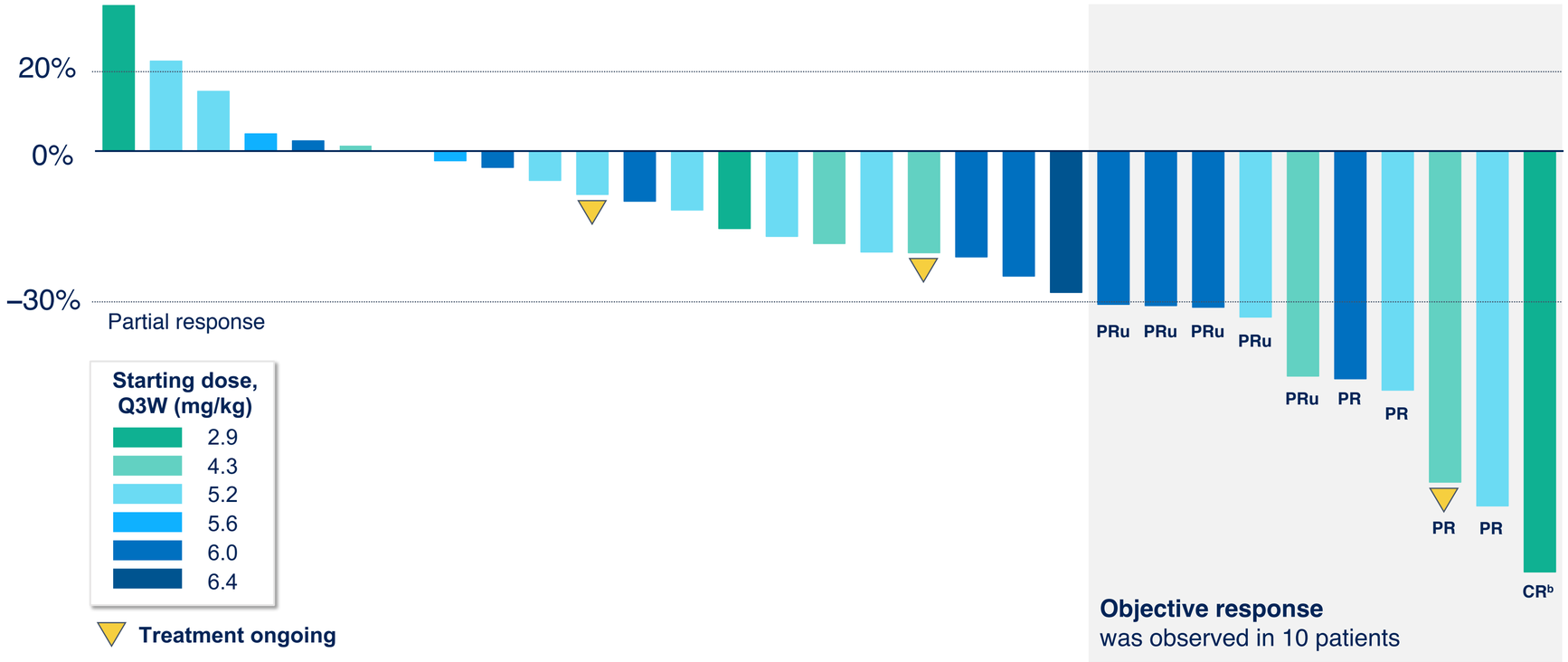
All safety-evaluable patients, n (%)	Grade 1	Grade 2	Grade 3	Grade 4	Overall (N = 39)
Fatigue	7 (18)	19 (49)	4 (10)	0	30 (77)
Nausea	15 (39)	11 (28)	0	0	26 (67)
Constipation	12 (31)	13 (33)	0	0	25 (64)
Neutropenia[b]	0	0	8 (21)	17 (44)	25 (64)
Decreased appetite	10 (26)	10 (26)	0	0	20 (51)
Arthralgia	7 (18)	7 (18)	5 (13)	0	19 (49)
Neuropathy[c]	3 (8)	13 (33)	3 (8)	0	19 (49)
Abdominal pain	7 (18)	6 (15)	3 (8)	0	16 (41)
Vomiting	8 (21)	7 (18)	0	0	15 (39)
AST increased	10 (26)	3 (8)	2 (5)	0	15 (39)
Diarrhea	8 (21)	3 (8)	1 (3)	0	12 (31)
Dizziness	9 (23)	3 (8)	0	0	12 (31)
Dry eye	4 (10)	8 (21)	0	0	12 (31)
Anemia	3 (8)	6 (15)	2 (5)	0	11 (28)
Pyrexia	8 (21)	3 (8)	0	0	11 (28)
Headache	7 (18)	3 (8)	0	0	10 (26)
Insomnia	6 (15)	4 (10)	0	0	10 (26)

[a]Two grade 5 events were reported as unrelated to study drug by investigator assessment, 1 death not otherwise specified and 1 acute gastrointestinal bleed. [b]Neutropenia included the following preferred terms: neutropenia, febrile neutropenia, and neutrophil count decreased. [c]Neuropathy included the following preferred terms: neuropathy peripheral and peripheral sensory neuropathy.
ADP, adenosine diphosphate; AST, aspartate aminotransferase.

Results (2)

- STRO-002 exhibited clinical efficacy as demonstrated by objective responses: 1 CR, 4 PR, and 5 PRu

Maximum change[a] in tumor target lesions in RECIST-evaluable patients treated with STRO-002 ≥ 2.9 mg/kg Q3W (N = 31)



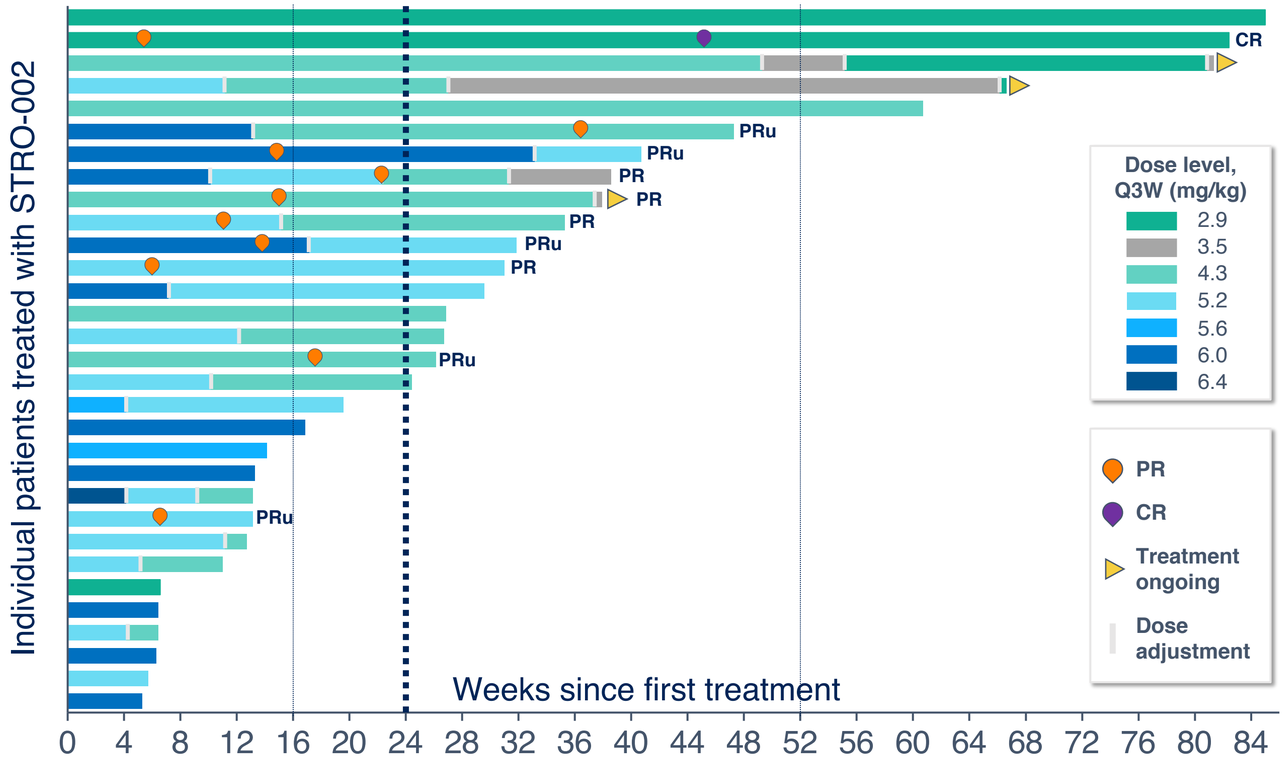
Objective response per RECIST v1.1	RECIST-evaluable population (N = 31)
Responders	10
CR[b]	1
PR	9
Confirmed	4
Unconfirmed	5
SD	18
PD	3

[a]Maximum percentage change from baseline in sum of longest diameter in evaluable patients treated with STRO-002 at ≥ 2.9 mg/kg Q3W (N = 31). [b]CR in patient treated at 2.9 mg/kg with resolution of peritoneal disease. CR, complete response; PD, progressive disease; PR, partial response; PRu, unconfirmed partial response; SD, stable disease. Data cutoff was April 23, 2021.

Results (3)

- Disease control rate was 61% and 55% at ≥ 16 and 24 weeks, respectively
- Median PFS was 7.2 months (95% CI, 4.5–10.8)

Treatment duration[a] and response in RECIST-evaluable patients treated with STRO-002 ≥ 2.9 mg/kg Q3W (N = 31)



Disease control rate (DCR, weeks)	RECIST-evaluable population, n (%)
≥ 52 weeks	5 (16)
≥ 24 weeks	17 (55)
≥ 16 weeks	19 (61)

Most patients on treatment **beyond 12 weeks** were treated at the **2.9 to 5.2 mg/kg dose levels**

[a]Duration calculated as date of PD or time from first dose to last dose given (including 4 patients deriving clinical benefit post progression per investigator assessment). Data cutoff was April 23, 2021.

Conclusions

- STRO-002 is a novel FRα-targeting ADC that showed preliminary clinical efficacy in patients with heavily pretreated relapsed/refractory EOC demonstrated by objective responses: 1 CR, 4 PRs, and 5 PRus
- STRO-002 treatment was well tolerated, including in 3 patients with long-term responses (≥ 74 weeks); the majority of TEAEs (86%) were grade 1 or 2
- Disease control rate was 61% and 55% at ≥ 16 and 24 weeks, respectively, and median PFS was 7.2 months (95% CI, 4.5–10.8)
- Dose reductions were not associated with loss of antitumor activity
- Antitumor activity was observed across a broad range of FRα expression levels based on PS2+ scoring and H-score (*see full poster*)
- STRO-002-GM1 Part 2 dose-expansion cohort is currently enrolling less heavily pretreated patients with ovarian cancer

Part 2: Dose-expansion cohort in ovarian cancer

All comers ovarian cancer

- Not selected for FRα expression levels
- Tissue required prior to enrollment
- 1 to 3 prior regimens for platinum-resistant patients
- 2 to 3 prior regimens for platinum-sensitive patients
- Baseline peripheral neuropathy grade ≥ 2 excluded

N ≈ 20 **STRO-002** 4.3 mg/kg

N ≈ 20 **STRO-002** 5.2 mg/kg

Key endpoints: Safety (DLTs and TEAEs), ORR, PK profile, DOR, PFS, OS, biomarkers