

KOL Discussion of STRO-002 Data

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5:00pm ET | 2:00pm PT

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Agenda for Today

Topic	Speaker
Welcome and Introduction Forward Looking Statements Welcome and KOLs Introduction	Ed Albini , Chief Financial Officer Bill Newell , Chief Executive Officer
STRO-002 GM1 Data Discussion STRO-002 MOA Phase 1 Dose-Escalation Data	Lainie P. Martin, M.D.
STRO-002 Development Overview Phase 1 Dose-Expansion Design Regulatory Path Forward	Arturo Molina, M.D. , Chief Medical Officer
Q&A Panel	Lainie P. Martin, M.D. R. Wendel Naumann, M.D. Bill Newell Arturo Molina, M.D. Trevor Hallam, Ph.D. , Chief Scientific Officer Ed Albini
Closing Remarks	Bill Newell

Meet the Investigators and Speakers

Dr. Lainie P. Martin and Dr. R. Wendel Naumann



Lainie P. Martin, M.D.

Leader, Gynecology/Oncology Program and Associate Professor of Medicine at Hospital of the University of Pennsylvania
Sutro Biopharma Clinical Advisory Board

Dr. Martin is a medical oncologist specializing in the treatment of gynecologic cancers. She was recruited to the University of Pennsylvania to serve as the Leader of the Gynecologic Medical Oncology Program. She is an Associate Professor in the department of Hematology/Oncology at the University of Pennsylvania and serves as the Associate Director of the Gynecologic Oncology Clinical Research Unit.

She spent 15 years at the Fox Chase Cancer Center where she led the Gynecologic Research Program and served as the interim Physician Director of the Office of Clinical Research as well as co-chair of the Scientific Review Committee. She has served as the Principal or Site Principal Investigator on over 75 trials and has extensive experience in the design and management of Phase I, II and III clinical trials.



R. Wendel Naumann, M.D.

Professor & Director of Gynecologic Oncology Research and Associate Medical Director of Clinical Trials at Levine Cancer Institute, Atrium Health
Sutro Biopharma Clinical Advisory Board

Dr. Naumann is currently Professor & Director of Gynecologic Oncology Research and Associate Medical Director of Clinical Trials at the Levine Cancer Institute, Atrium Health. He did his residency in Obstetrics and Gynecology and fellowship in Gynecologic Oncology at the University of Alabama School of Medicine in Birmingham. He has served as a board member on the Executive Council of the Society of Gynecologic Oncology (SGO) and the Chair of Education Committee and was a co-director of the SGO Winter meeting.

Dr. Nauman has an interest in chemotherapy development including targeted therapies and immune therapies and runs the phase I trials in gynecologic oncology at the Levine Cancer Institute. He has served as a member of the GOG/NRG corpus committee and the Developmental Therapeutics committee.





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STRO
002



FolR α -Targeting ADC

STRO-002 GM1 Phase 1 Dose
Escalation Data Discussion

Lainie P. Martin, M.D.

Potential Best-in-Class ADC for Ovarian and Endometrial Cancers

STRO-002 is an optimized ADC using precisely positioned non-natural amino acids

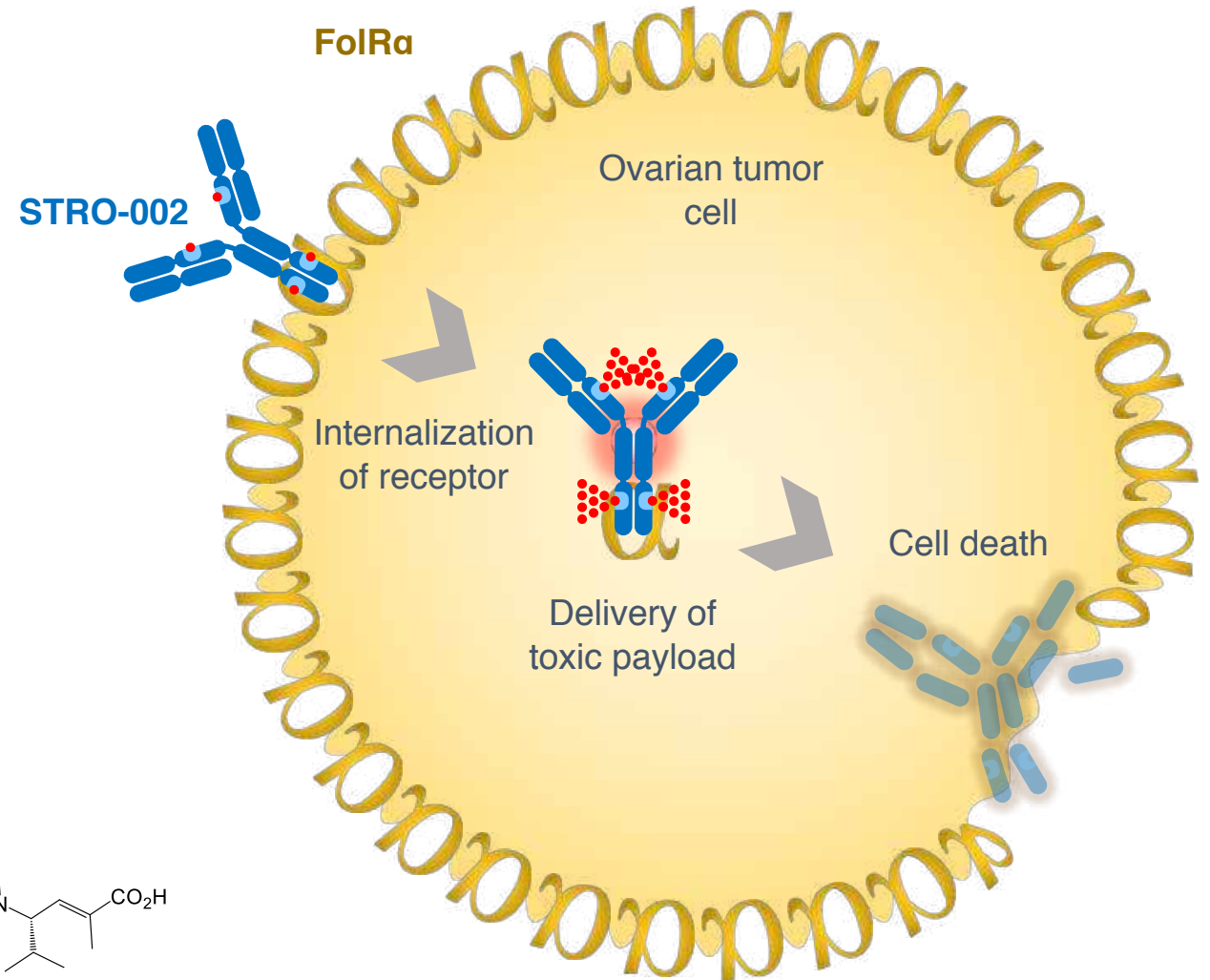
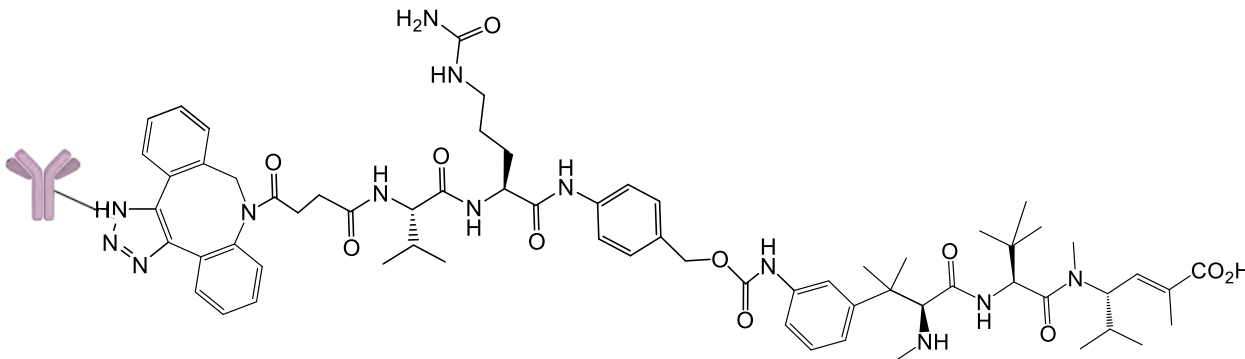
Novel homogeneous antibody drug conjugate (ADC) using **precisely positioned non-natural amino acids**

Targets **FolRα**, which is overexpressed in certain cancers including ovarian cancer

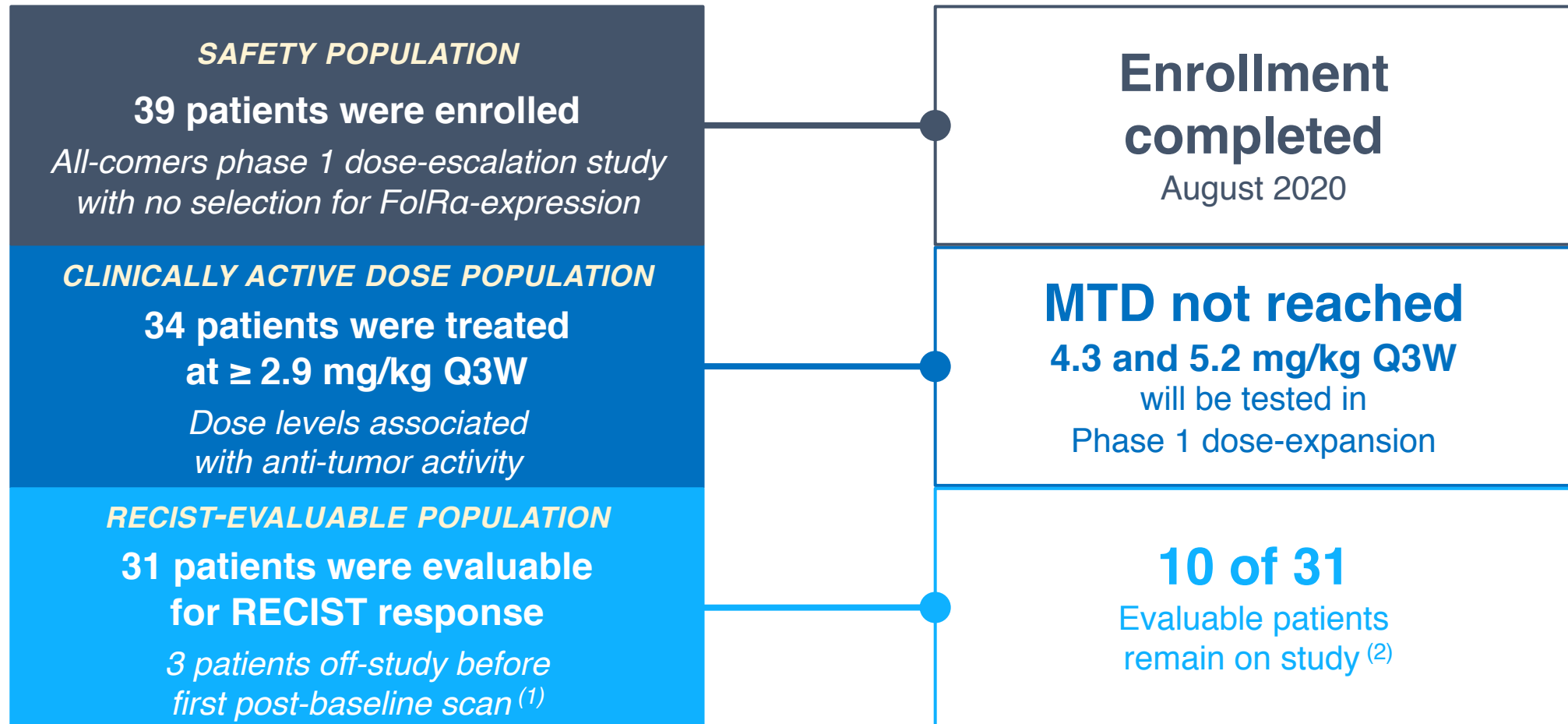
Drug-antibody ratio of 4:1, with a proprietary cleavable hemiasterlin linker-warhead that is **stable in circulation**

Internalization of the ADC releases hemiasterlin in the tumor cell, resulting in **immunogenic cell death of cancer cells**

Structure of hemiasterlin linker-warhead following conjugation as follows:



31 Patients Are Evaluable for Response in Dose-Escalation



(1) 1 patient withdrew consent secondary to AE, 1 patient withdrew consent and went to hospice, 1 patient had grade 5 AE, which was unrelated per investigator

(2) As of October 30, 2020

STRO-002 GM1, Phase 1 Study Has a Two-Part Design

Phase 1 to establish safety and early signs of efficacy to inform registration-directed trial

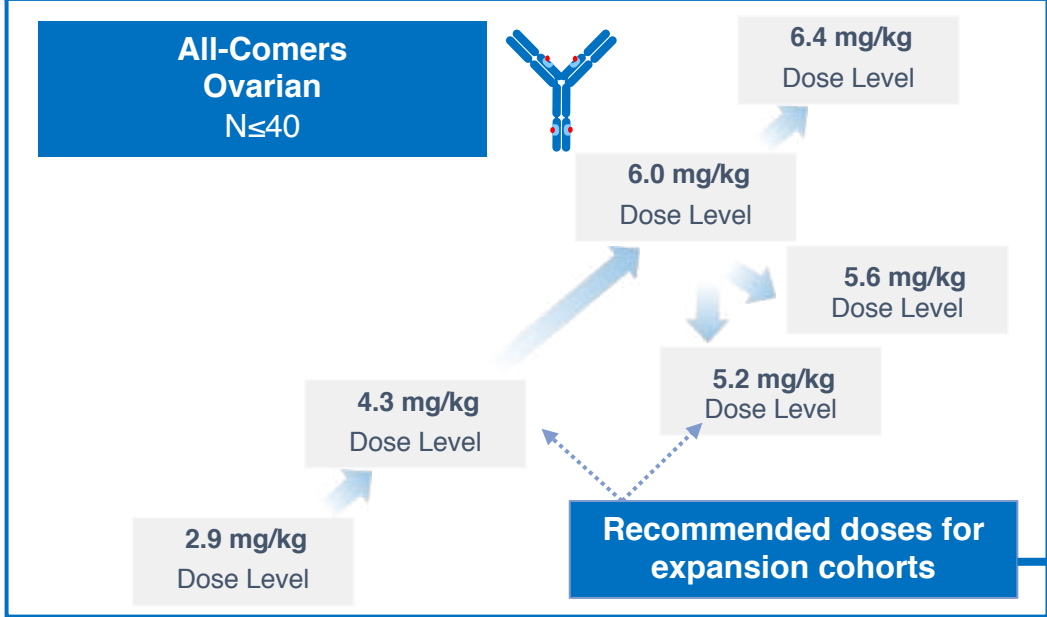
Phase 1
All comers, not selected on basis of FolRα levels

IV infusion on Day 1 of 21-day cycles

First patient dosed March 2019

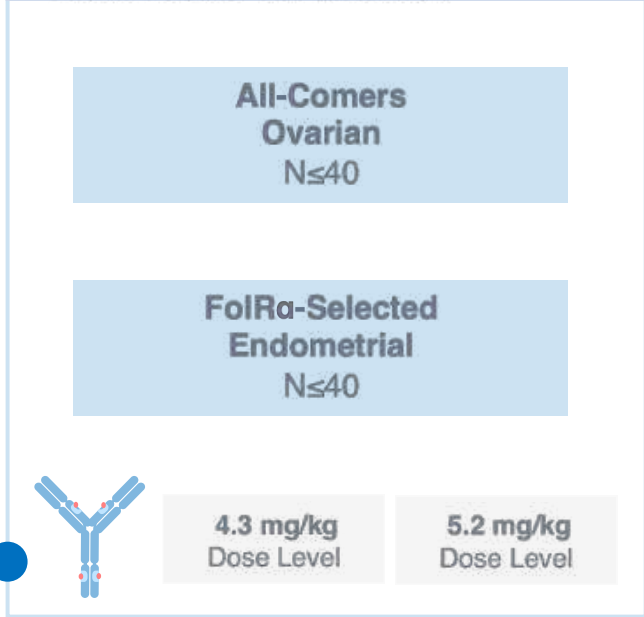
Activated at **10 sites**

Part 1 Dose-Escalation Cohort in Ovarian (1)



Key Objectives:
Safety, Maximum Tolerated Dose, Recommended Phase 2 Dose, Pharmacokinetic Profile, Preliminary Efficacy

Part 2 Dose-Expansion Cohorts in Ovarian and Endometrial



Key Objectives and Endpoints:
ORR, Duration of Response, Progression Free Survival, Safety, Pharmacokinetic Profile

(1) Illustration on dose-escalation excludes initial dose levels of 0.5-1.8mg/kg as they were not clinically active

Ovarian Patients In Dose-Escalation Study Were Heavily Pre-Treated

Median 6 prior lines of therapy, including SOC, bevacizumab, PARPi, CPI, and clinical trials

Characteristic	All Patients (N=39)
Age, median	61 years (range, 48–79)
Tumor type, n	
EOC	31 (80%)
Fallopian tube	6 (15%)
Primary peritoneal	2 (5%)
ECOG PS, n	
0	22 (56%)
1	17 (44%)
▶ Time since diagnosis, median	3.9 years (range, 0.6–17.0)
▶ Number of prior lines of therapy, median	6 (range, 2–11)
Previous therapies, n	
Platinum	39 (100%)
▶ ≥ 3 prior platinum regimens	18 (46%)
Taxanes	38 (97%)
Bevacizumab	32 (82%)
PARP inhibitors	23 (59%)
Checkpoint inhibitors	8 (21%)
Experimental therapy	14 (36%)

STRO-002 Dose Levels (Q3W, n)	All Patients (N=39)
0.5 mg/kg, 1.0 mg/kg, and 1.8 mg/kg	5 (13%)
2.9 mg/kg	3 (8%)
4.3 mg/kg	5 (13%)
5.2 mg/kg	12 (31%)
5.6 mg/kg	3 (8%)
6.0 mg/kg ⁽¹⁾	10 (26%)
6.4 mg/kg ⁽¹⁾	1 (3%)

(1) DLTs occurred in 2 patients:

- Grade 2 neuropathy/grade 3 arthralgia at 6.0 mg/kg Q3W
- Grade 3 bone pain at 6.4 mg/kg Q3W

Data as of October 30, 2020

STRO-002 Was Generally Well Tolerated

86% of TEAEs remain Grade 1-2 and no observed ocular toxicity signal

Common TEAEs > 25% By Grade ⁽¹⁾

<i>All Safety Evaluable Patients</i>	Grade 1 N (%)	Grade 2 N (%)	Grade 3 N (%)	Grade 4 N (%)	Overall (N=39) N (%)
Fatigue	8 (20.5)	17 (43.6)	4 (10.3)	0	29 (74.4)
Nausea	15 (38.5)	10 (25.6)	0	0	25 (64.1)
Constipation	12 (30.8)	12 (30.8)	0	0	24 (61.5)
Neutropenia	0	1 (2.6)	9 (23.1)	13 (33.3)	23 (59.0)
Arthralgia	8 (20.5)	7 (17.9)	6 (15.4)	0	21 (53.8)
Decreased appetite	10 (25.6)	10 (25.6)	0	0	20 (51.3)
Neuropathy	3 (7.7)	12 (30.8)	3 (7.7)	0	18 (46.2)
Abdominal pain	7 (17.9)	5 (12.8)	3 (7.7)	0	15 (38.5)
AST increased	10 (25.6)	2 (5.1)	1 (2.6)	0	13 (33.3)
Dizziness	10 (25.6)	3 (7.7)	0	0	13 (33.3)
Vomiting	8 (20.5)	5 (12.8)	0	0	13 (33.3)
Diarrhea	8 (20.5)	3 (7.7)	1 (2.6)	0	12 (30.8)
Headache	7 (17.9)	3 (7.7)	0	0	10 (25.6)
Insomnia	6 (15.4)	4 (10.3)	0	0	10 (25.6)
Pyrexia	8 (20.5)	2 (5.1)	0	0	10 (25.6)

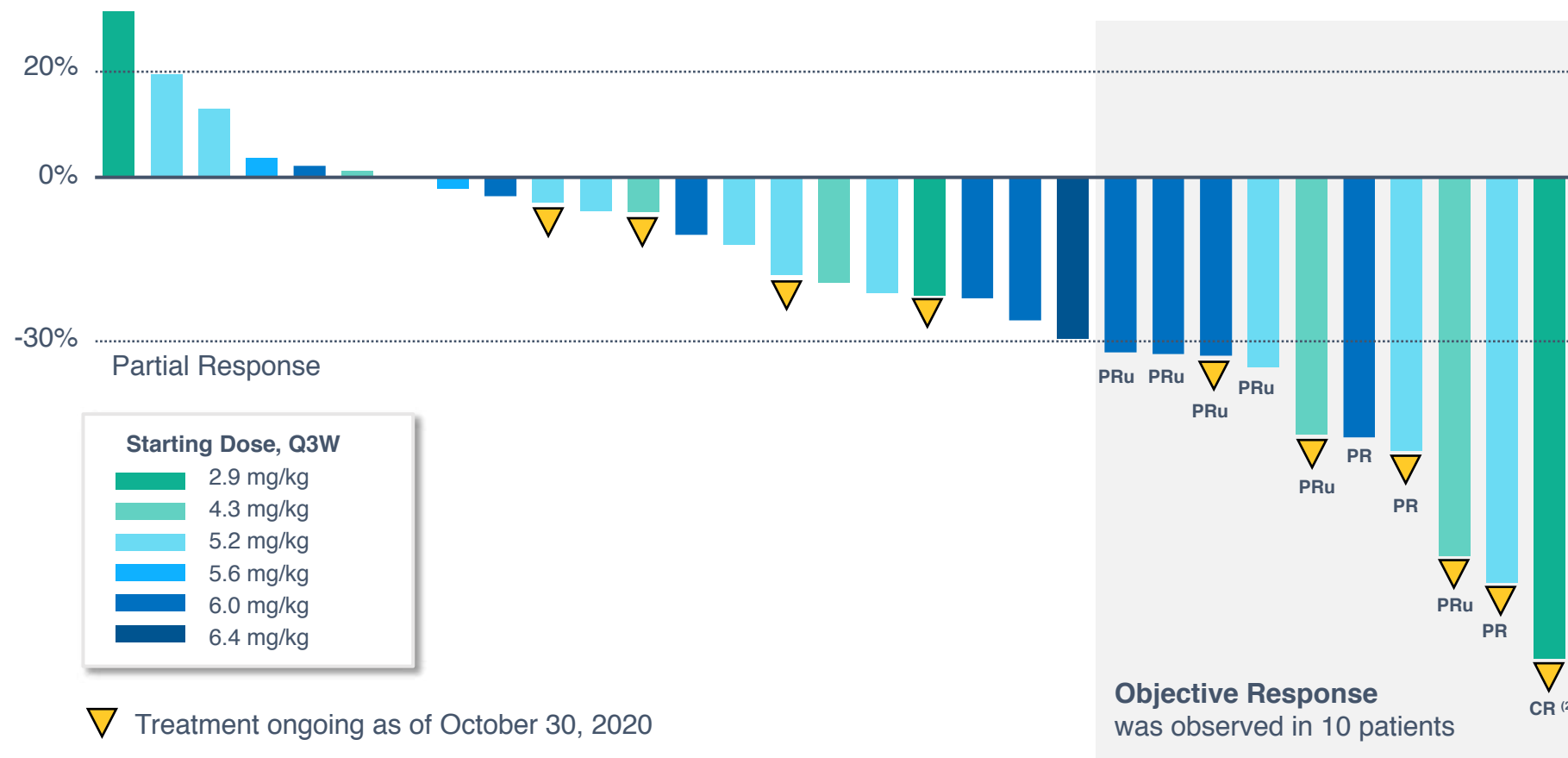
(1) Not included in table are two Grade 5 events, both previously reported and unrelated to study drug by investigator assessment: death not otherwise specified and acute GI bleed

Note: Data as of October 30, 2020

Tumor Reduction Observed in Majority of Patients

10 patients met criteria for response

Maximum Change ⁽¹⁾ in Tumor Target Lesions



Objective Response per RECIST 1.1	RECIST-Evaluable Population (N=31)
Responders	10
CR ⁽²⁾	1
PR	9
<i>Confirmed</i>	<i>3</i>
<i>Unconfirmed</i>	<i>6</i>
SD	18
PD	3

(1) Maximum % change from baseline in sum of longest diameter in evaluable patients treated with STRO-002 at ≥ 2.9 mg/kg Q3W, N=31

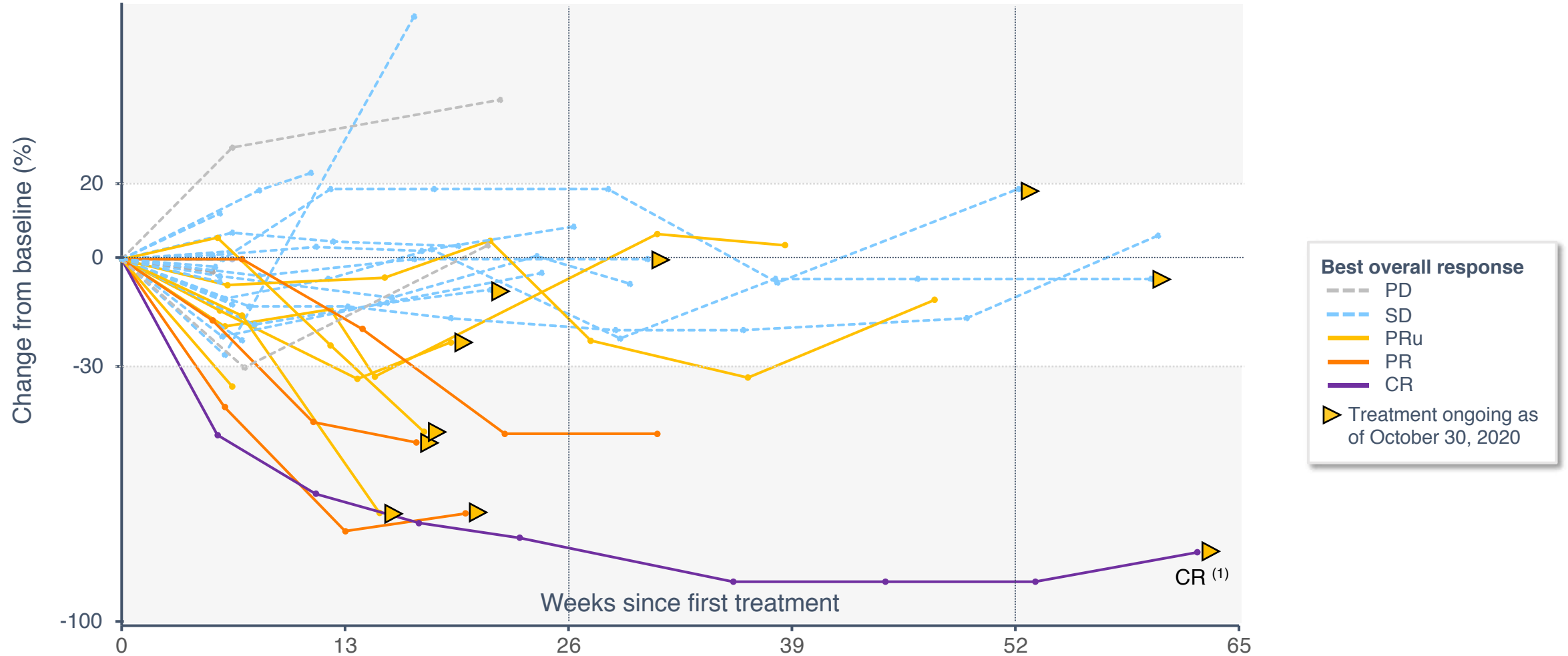
(2) CR in patient treated at 2.9 mg/kg with resolution of peritoneal disease

Note: Data as of October 30, 2020

Tumor Regression and Control Over Time

Deepening of responses over time and others with disease control remaining on study

Change in Sum of Diameters for Target Lesions Over Time (N=31)

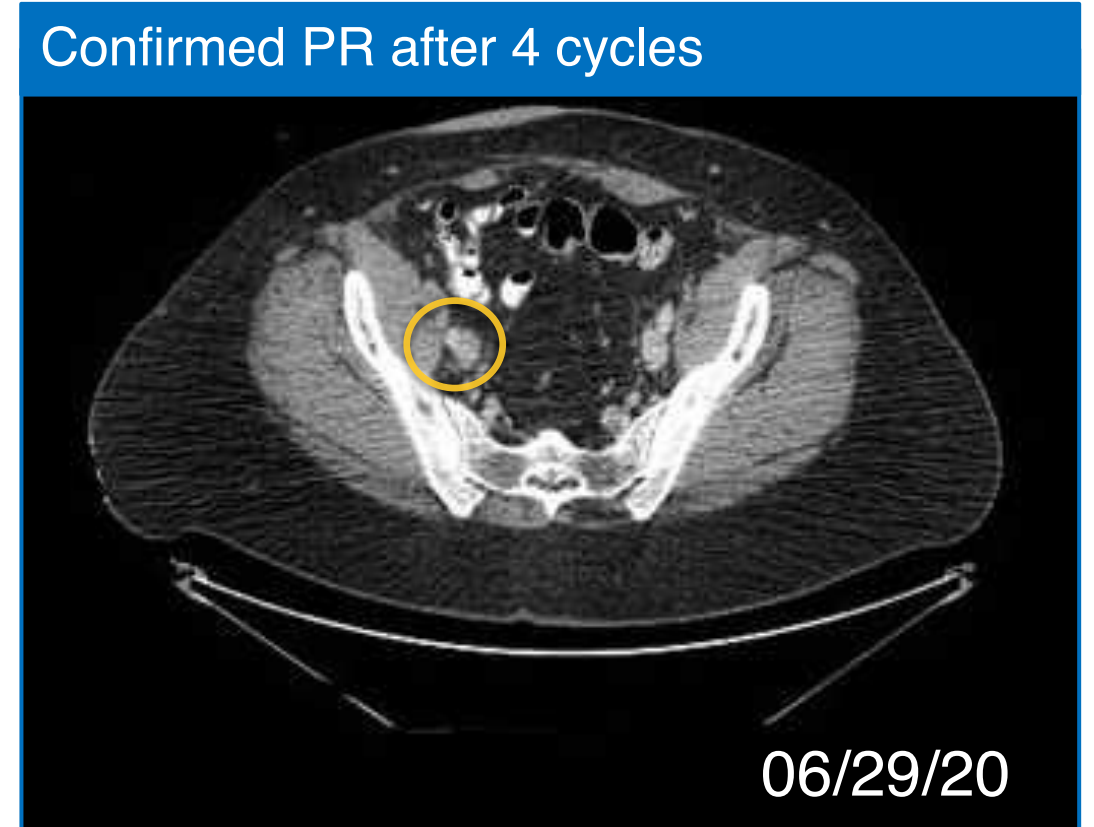
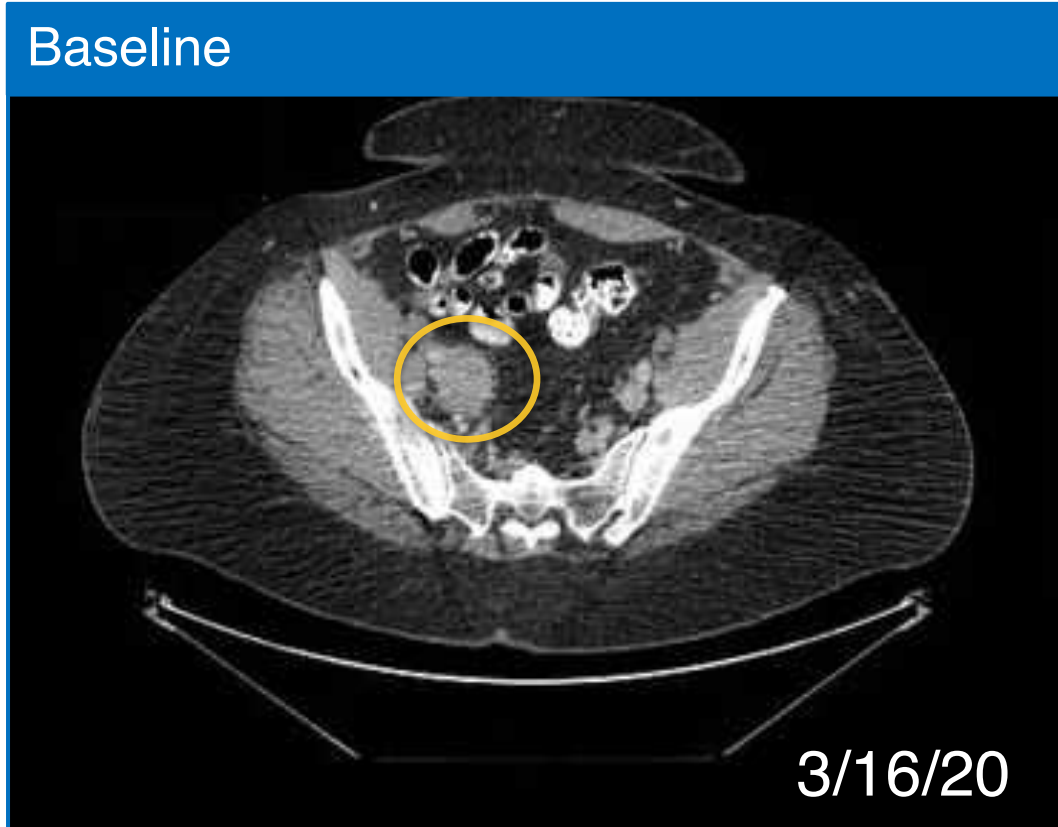


(1) CR in patient treated at 2.9 mg/kg with resolution of peritoneal disease

Note: Data as of October 30, 2020

Patient With Ongoing PR Remains on Study

The patient achieved 74% tumor reduction after 4 cycles and remains on study ⁽¹⁾



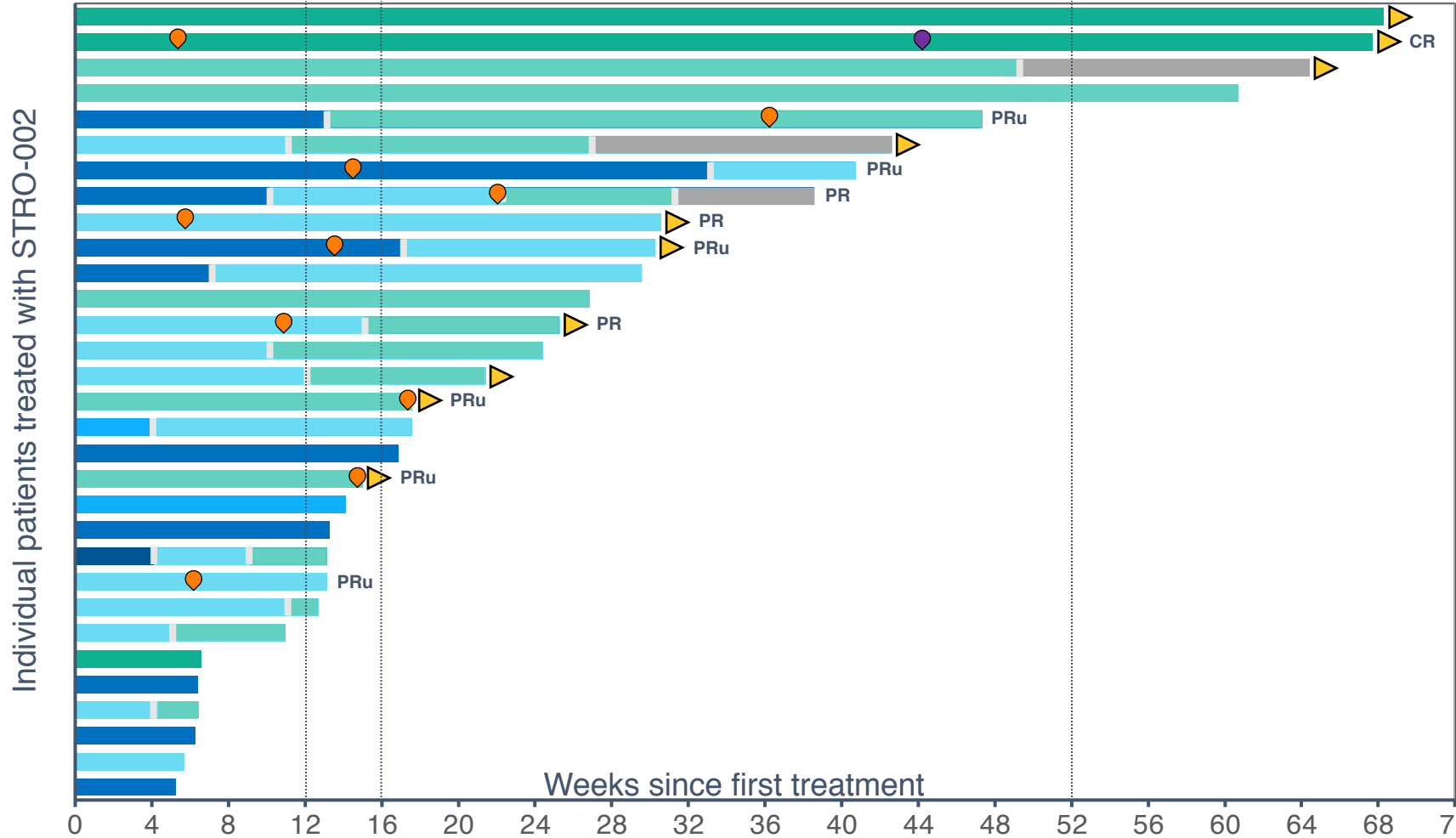
57-year-old woman with platinum resistant ovarian cancer progressing after 4 prior regimens received STRO-002 at 5.2 mg/kg Q3W and remains on study treatment

(1) Patient remains on study as of October 30, 2020

Clinical Benefit Seen in Heavily Pre-Treated Patient Population

Disease control rate of 74% at 12 weeks in RECIST-evaluable population

Treatment Duration ⁽¹⁾ and Response, Based on Evaluable Patients (N=31)



Dose Level

- 2.9 mg/kg
- 3.5 mg/kg
- 4.3 mg/kg
- 5.2 mg/kg
- 5.6 mg/kg
- 6.0 mg/kg
- 6.4 mg/kg

- PR
- CR
- Treatment ongoing as of Oct 30, 2020
- Dose adjustment

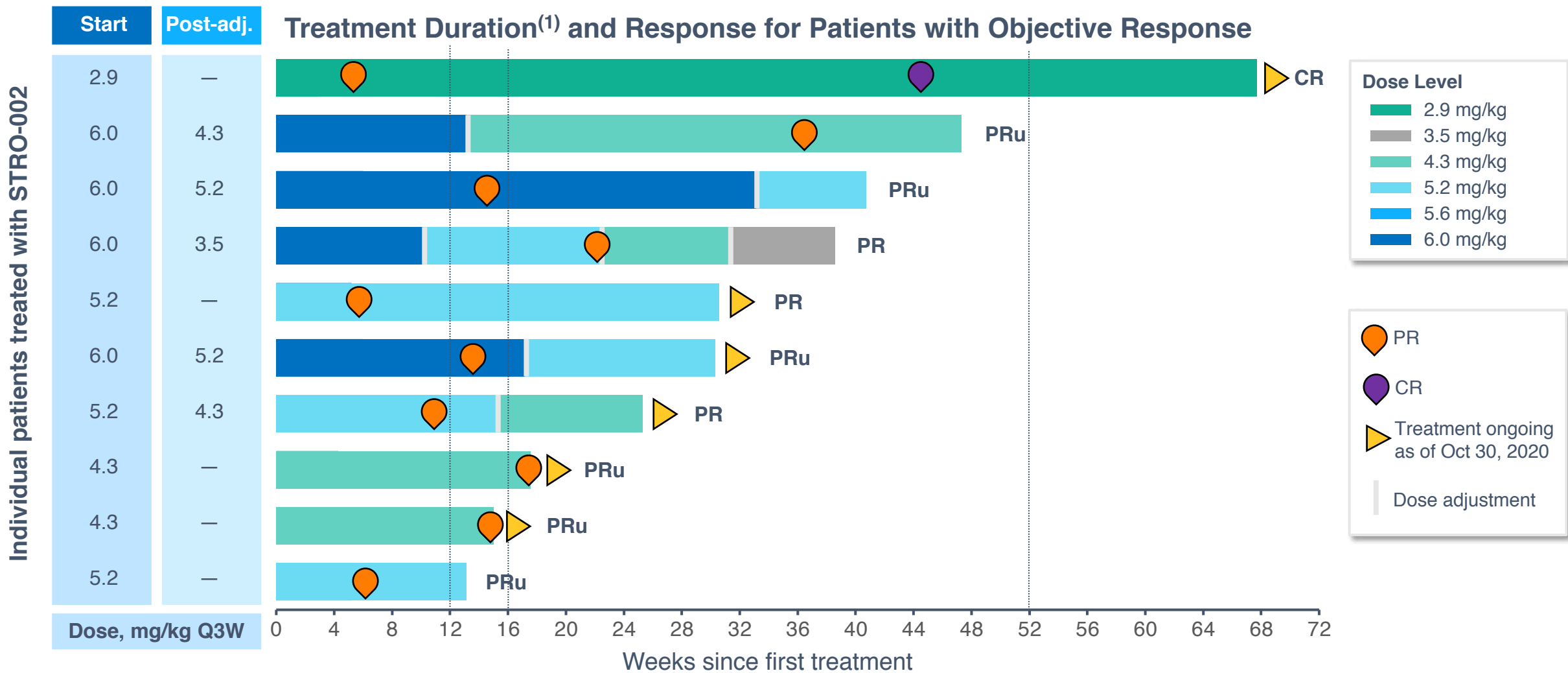
Disease Control Rate	RECIST-Evaluable Population
≥ 52 weeks	4 (13%)
≥ 16 weeks	18 (58%)
≥ 12 weeks	23 (74%)

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

(1) 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)
 Note: Data as of October 30, 2020

Responses Observed Across Heavily Pre-Treated Patients

PRs occurred with fixed dose regimen AND post dose adjustments

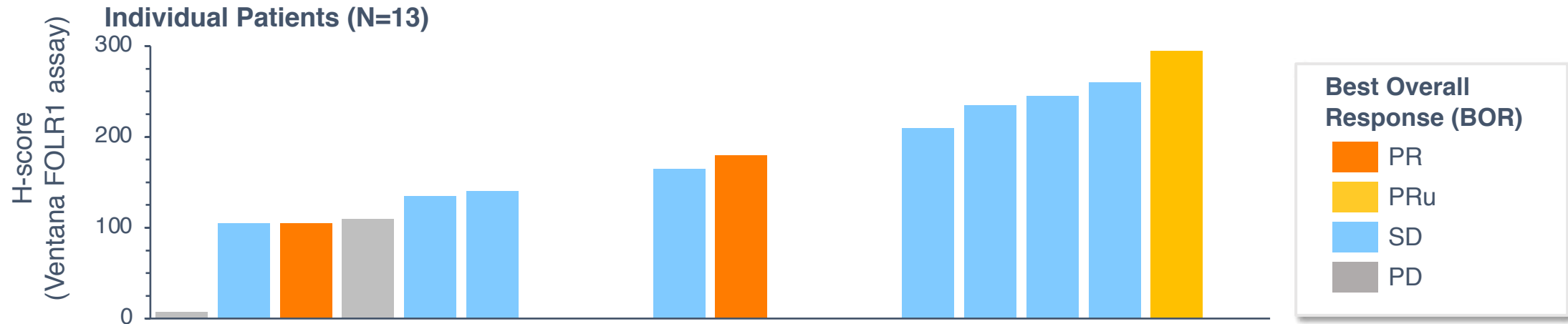


(1) Duration calculated as date of PD or time from first dose to last dose given

Note: Data as of October 30, 2020

FoIRa Expression by Immunohistochemistry ⁽¹⁾

In emerging data, responses and anti-tumor activity observed across various FoIRa expression levels



<i>FOLR1 PS2+ Score:</i>	Weak/Absent Expression	Moderate Expression	High Expression
PR	1	1	0
PRu	0	0	1
SD	3	1	4
PD	2	0	0

(1) Assessed by Ventana FOLR1 expression assay based on available archival tissue from dose-escalation patients
 Note: Data as of October 30, 2020

Key Findings in Dose-Escalation Study

STRO-002 is a potentially important option for patients with limited treatment alternatives

STRO-002 provided clinical benefit in an all-comers, late line patient population

Patients experienced a median of 6 prior lines of therapy, including SOC, bevacizumab, PARPi, CPI, and clinical trials

86% of the AEs were Grade 1-2 and corticosteroid eyedrops were not required

Neutropenia generally reversed within a week, without G-CSF. Peripheral neuropathy/arthralgia managed with dose reduction/delay without evidence of compromised efficacy

Wide therapeutic index allows for long-term dosing

Encouraging product profile with STRO-002 generally well tolerated and MTD was not reached. Antitumor activity and responses were observed in multiple dose levels

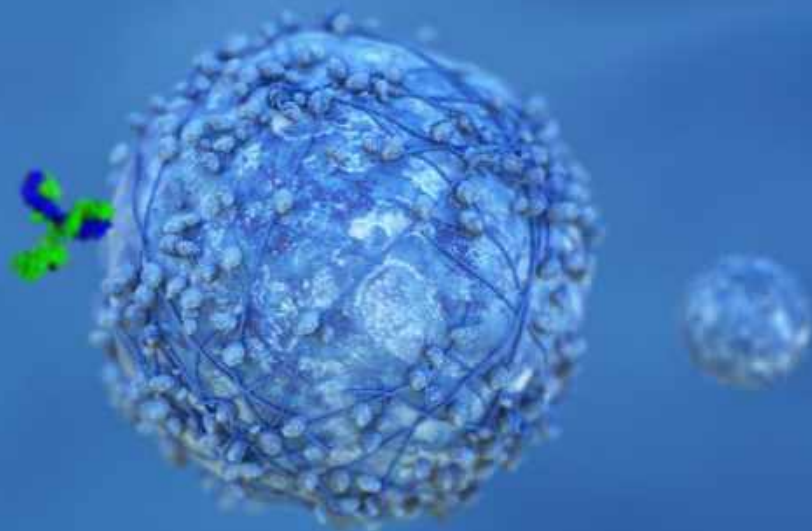
Improved outcomes in responses and DCR as data matures

74% of the patients had disease control ≥ 12 weeks, which is clinically relevant in this population

Heterogeneity of tumor regression and response

Some patients had delayed responses, observed after initial and variable period of stable disease. 10 of 31 patients remain on study ⁽¹⁾

(1) As of October 30, 2020



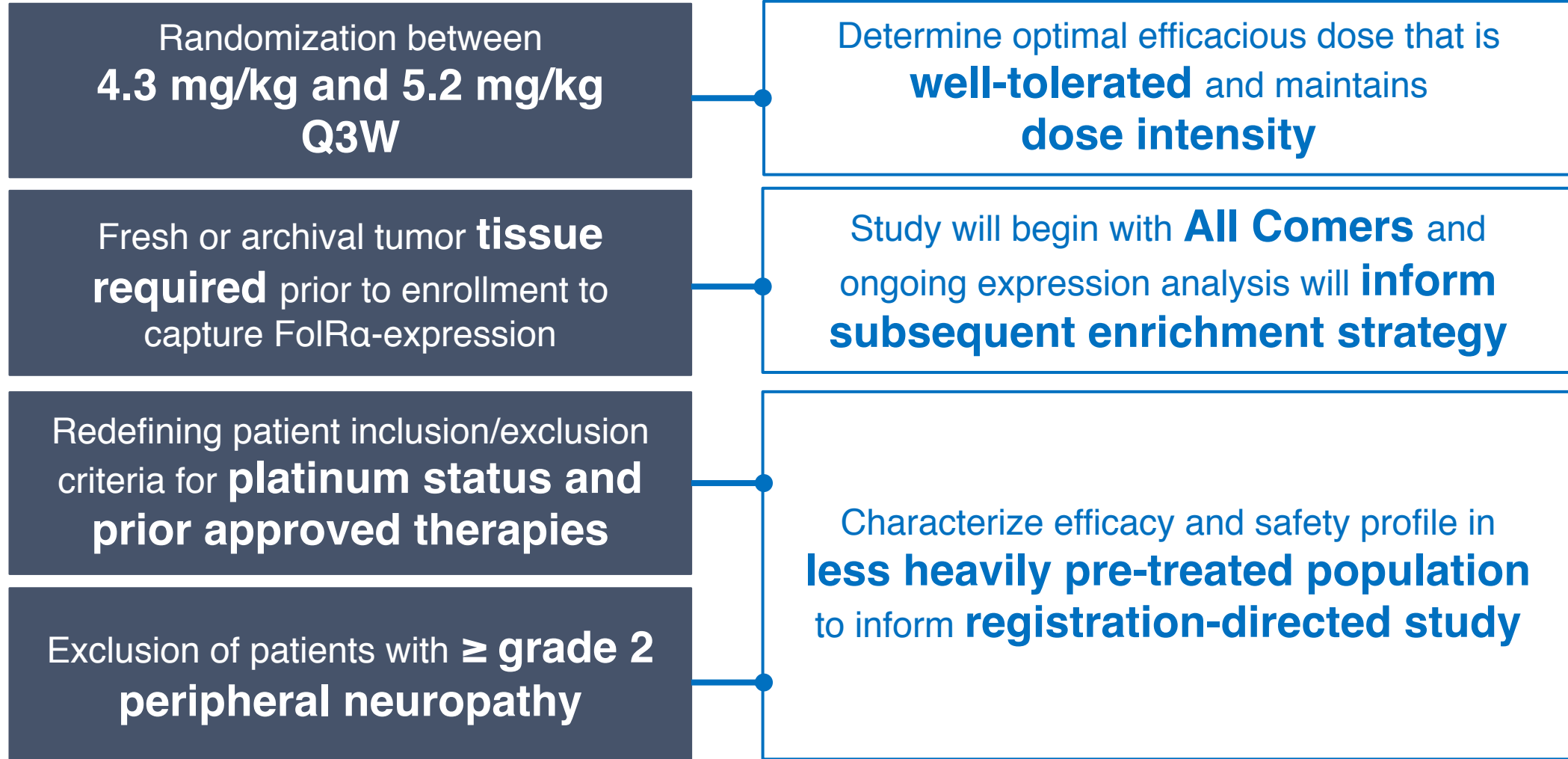
STRO-002 GM-1 Next Steps Expansion Cohort and Development Plan

Arturo Molina, M.D.,
Sutro Biopharma Chief Medical Officer

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Ovarian Cancer Dose-Expansion Trial Design Rationale

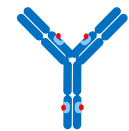
Generate data in less heavily pre-treated population to inform registration study design



Preliminary Dose-Expansion Ovarian Cancer Data in 2021

Inform regulatory discussions and accelerate registration strategy

Part 2 – Dose-Expansion



Ovarian Cancer

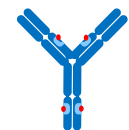
- Platinum-resistant: 1-3 prior regimens
- Platinum-sensitive: 2-3 prior regimens, including two prior platinum regimens
- Platinum-refractory to front line excluded
- Archival or fresh tissue required prior to enrollment
- All comers, not selected on basis of FolRα levels (more data will inform if enrichment is required)
- Patients excluded with sensory or motor neuropathy grade ≥ 2

N≈20

STRO-002
4.3 mg/kg
Q3W

N≈20

STRO-002
5.2 mg/kg
Q3W



Endometrial Cancer

- Relapsed/refractory disease
- No standard of care treatment
- Tissue and FolRα-expression required prior to enrollment (level TBD)

N≈15-40

STRO-002
4.3-5.2
mg/kg Q3W

First patient for ovarian cohort projected for **January 2021**

Plan to target **≈35 sites in US and Europe**

Anticipated preliminary data in ovarian cancer by **2H 2021**

Anticipated **EOP1/2 FDA meeting** in 2H 2021

Primary Endpoint:

Objective Response Rate per RECIST 1.1

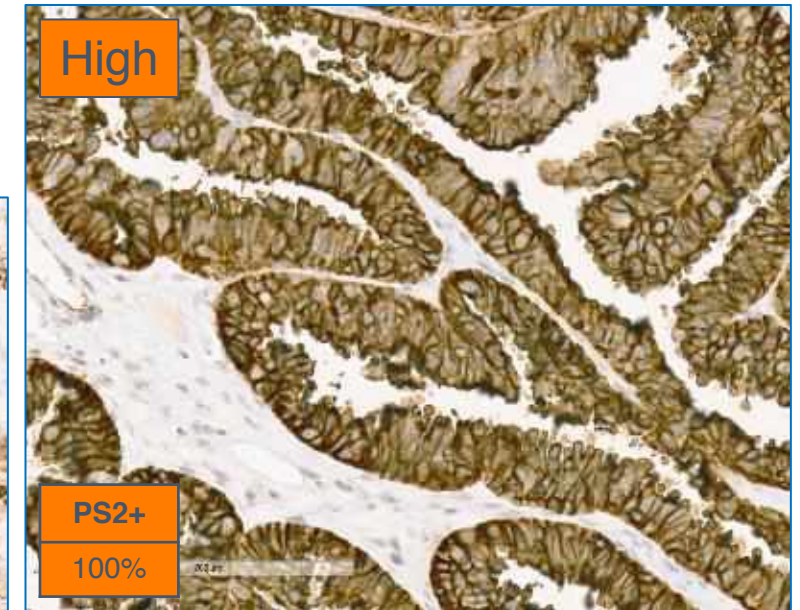
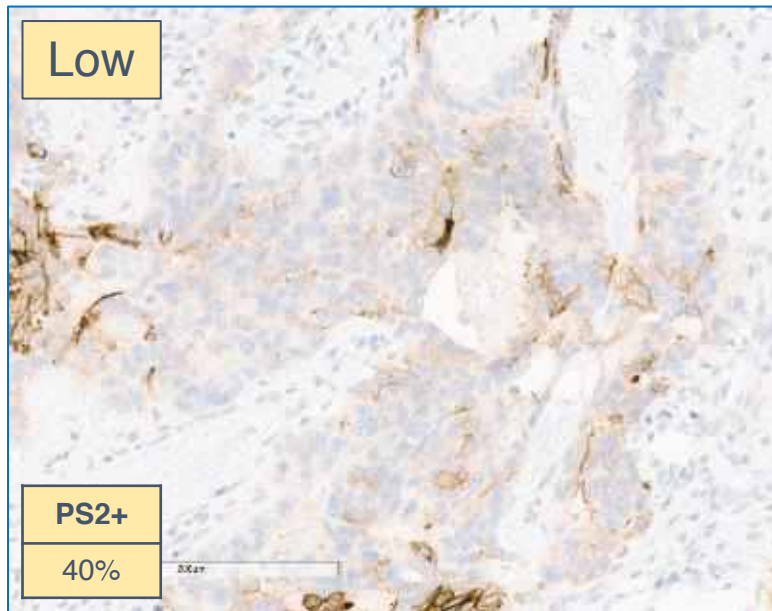
Secondary Endpoints:

- Safety
- Pharmacokinetic Profile
- Duration of Response
- Progression Free Survival
- Overall Survival
- CA-125 Responses

Selected Ventana's Validated FolRd Assay to Further Support STRO-002 Clinical Development Towards Registration

PS2+ Scoring Categories:

Low	< 50% 2/3+
Moderate	50-74% 2/3+
High	≥ 75% 2/3+



- The FOLR1 Assay exhibits:
- A dynamic range of staining
 - Crisp membrane staining
 - Low cytoplasmic staining
 - Low background staining

Path Forward for STRO-002 Clinical Development

Next steps for moving towards registration-directed study

STRO-002 has been clinically efficacious at multiple doses, starting at 2.9 mg/kg Q3W

Dose reductions or delays were not associated with loss of anti-tumor activity

Further dose optimization will be explored during dose-expansion

Exploring randomized doses of 4.3 & 5.2 mg/kg will inform dose for registration-directed studies

Anti-tumor activity was observed across a range of FolRα expression in dose-escalation

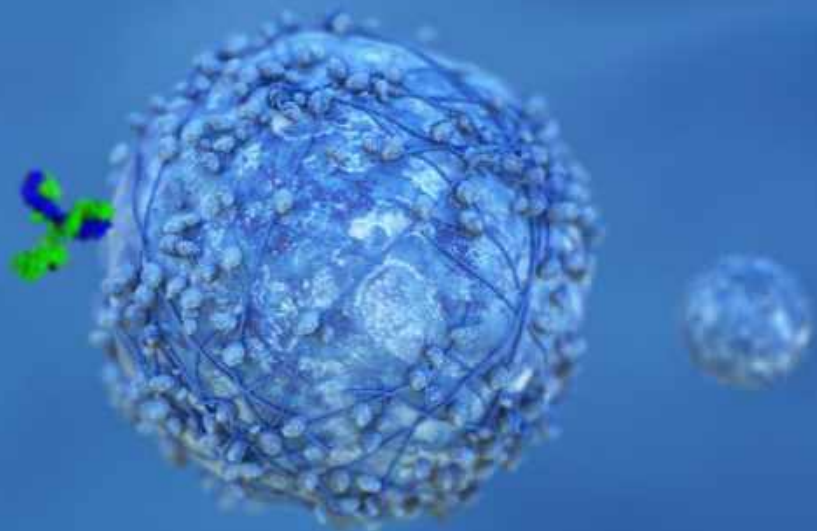
Larger sample size will be needed to determine enrichment strategy

Expansion cohort in ovarian will enroll less heavily pre-treated patients

Monotherapy unenriched ovarian cancer cohort is planned to be initiated in 4Q 2020. Endometrial cohort (FolRα-selected) to follow

EOP1/2 FDA meeting anticipated for 2H 2021

Preliminary dose-expansion data expected 2H2021. Potential for accelerated approval pathway with single arm registration-directed study



Q&A Panel

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Q&A Panel

Principal Investigators



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Trevor Hallam, Ph.D.
Chief Scientific Officer



Ed Albini
Chief Financial Officer

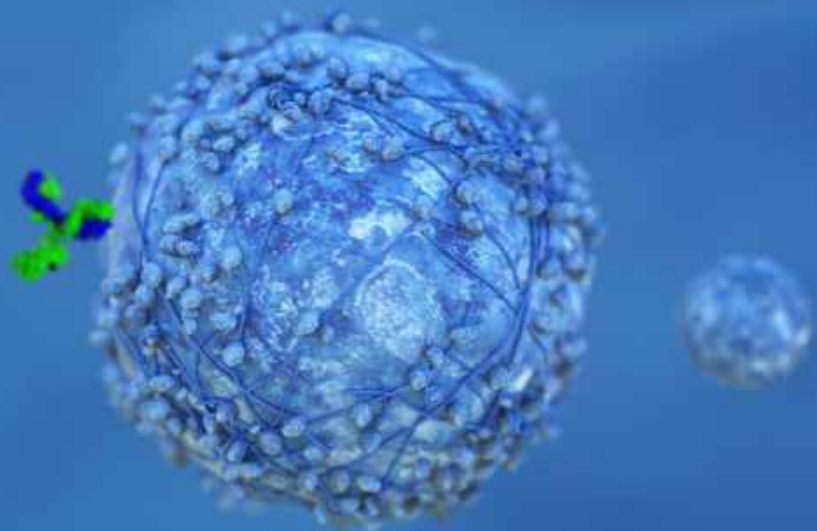


Acknowledgements

Our gratitude to the women who chose to participate in this study and their families

Thank you to the STRO-002-GM1 investigators and study staff for their diligence in caring for these patients





Thank You

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