UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 3, 2020

SUTRO BIOPHARMA, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-38662**	**47-0926186**
(State or other jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

310 Utah Avenue, Suite 150,
South San Francisco, California, 94080
(Address of principal executive offices) (Zip Code)

(650) 392-8412
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, $0.001 par value	STRO	Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

On December 3, 2020, the Company issued a press release announcing updated data from its ongoing Phase 1 study of STRO-002 in patients with ovarian cancer. The Company also hosted a live webcast KOL discussion regarding the interim data on December 3, 2020 at 5:00 p.m. Eastern Time. An archived webcast of the event will be available on the Investor section of the company's website at ir.sutrobio.com for approximately 30 days.

A copy of the press release and clinical data presentation presented during the webcast event are attached as Exhibits 99.1 and 99.2, respectively to this Current Report on Form 8-K. The clinical data presentation will also be available on the Company's website in the Events & Presentations section at www.sutrobio.com.

The information furnished in this Item 7.01, including Exhibits 99.1 and 99.2, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any other filing under the Exchange Act or the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such a filing.

Item 8.01 Other Events.

On December 3, 2020, the Company announced updated data from its ongoing Phase 1 clinical trial of STRO-002 in patients with ovarian cancer.

The dose-escalation portion of the trial was fully enrolled with 39 patients in August 2020. Patients were heavily pre-treated and had a median of 6 prior lines of therapy, including standard of care platinum-based regimens, bevacizumab, PARP inhibitors, and checkpoint inhibitors.

The dose-escalation phase included 34 patients treated with clinically active dose levels, 2.9 mg/kg or higher, of which 31 patients had post-baseline scans and were evaluable for RECIST response. At the data cutoff of October 30, 2020, median time on treatment was 19 weeks and 10 patients remained on treatment. Results out of 31 evaluable patients included:

- 10 patients met RECIST criteria for response, of which, 1 patient achieved a complete response and 9 patients achieved a partial response (3 confirmed partial responses and 6 unconfirmed partial responses);
- 23 patients (74%) achieved disease control at 12 weeks;
- 18 patients (58%) achieved disease control at 16 weeks; and
- 4 patients (13%) were on treatment for 52 weeks, of which, 3 patients remain on treatment beyond 64 weeks.

STRO-002 continues to be well-tolerated and 86% of all treatment-emergent adverse events (AEs) were Grade 1 or 2. Of note, prophylactic corticosteroid eye drops have not been required and no ocular toxicity signals have been observed. The most common Grade 3 and 4 AEs were reversible neutropenia. Grade 3 arthralgia (15.4%) and neuropathy (7.7%) were observed and managed with standard medical treatment, including dose reductions or delays without evidence of compromised efficacy.

Although a maximum tolerated dose was not reached, the Company has identified dose levels of 4.3 and 5.2 mg/kg that it plans to randomize in the dose-expansion phase. The Company intends to dose the first patient in January 2021 and will be treating less heavily pre-treated ovarian cancer patients. Additionally, an expansion cohort for FolRα-selected endometrial cancer is planned for 2021.

This current report contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to, anticipated preclinical and clinical development activities, timing of announcements of clinical results, potential benefits of the company's product candidates and platform and potential market opportunities for the company's product candidates. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. Although the company believes that the expectations reflected in such forward-looking statements are reasonable, the company cannot guarantee future events, results, actions, levels of activity, performance or achievements, and the timing and results of biotechnology development and potential regulatory approval is inherently uncertain. Forward-looking statements are subject to risks and uncertainties that may cause the company's actual activities or results to differ significantly from those expressed in any forward-looking statement, including risks and uncertainties related to the company's ability to advance its product candidates, the receipt and timing of potential regulatory designations, approvals and commercialization of product candidates, the impact of the COVID-19 pandemic on the Company's business, clinical trial sites, supply chain and manufacturing facilities, the Company's ability to maintain and recognize the benefits of certain designations received by product candidates, the timing and results of preclinical and clinical trials, the company's ability to fund development activities and achieve development goals, the company's ability to protect intellectual property, and the Company's commercial collaborations with third

parties and other risks and uncertainties described under the heading "Risk Factors" in the Company's most recent Quarterly Report on Form 10-Q for the period ended September 30, 2020 filed with the Securities and Exchange Commission (SEC), and other reports as filed with the SEC. The Company undertakes no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press release by Sutro Biopharma, Inc.
99.2	Clinical Data Presentation
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Sutro Biopharma, Inc.

Date: December 3, 2020

By: /s/ Edward Albini

Edward Albini
Chief Financial Officer

Exhibit 99.1

Sutro Biopharma Announces Encouraging Interim Data on STRO-002 Phase 1 Dose-Escalation Study for Patients with Ovarian Cancer

- *Responses observed in 32% (10/31) of evaluable patients treated at clinically active dose levels-including 1 CR, 3 cPRs and 6 uPRs*
- *Disease control rate at 12 weeks is 74% (23/31) and 10 patients remained on treatment*
- *Dose-expansion has been initiated to explore 4.3 & 5.2 mg/kg in less heavily pre-treated patient population*
- *STRO-002 investigators to present clinical data at KOL event today at 5pm Eastern Time*

SOUTH SAN FRANCISCO, Calif., Dec. 3, 2020 /PRNewswire/ -- Sutro Biopharma, Inc. (NASDAQ: STRO), a clinical-stage drug discovery, development and manufacturing company focused on the application of precise protein engineering and rational design to create next-generation cancer and autoimmune therapeutics, today provided a clinical update from the company's ongoing dose-escalation Phase 1 study of STRO-002, a folate receptor alpha (FolRα) targeting antibody-drug conjugate (ADC), for patients with ovarian cancer.

STRO-002-GM1 is a single-arm monotherapy dose-escalation study for patients with ovarian cancer not selected based on their FolRα-expression levels. The dose-escalation portion of the study was fully enrolled with 39 patients in August 2020. Patients were heavily pre-treated and had a median of 6 prior lines of therapy, including standard of care platinum-based regimens, bevacizumab, PARP inhibitors, and checkpoint inhibitors.

The dose-escalation study included 34 patients treated with clinically active dose levels, 2.9 mg/kg or higher, of which 31 patients had post-baseline scans and were evaluable for RECIST responses. At the data cutoff of October 30, 2020, median time on treatment was 19 weeks and 10 patients remained on treatment. Results out of 31 evaluable patients included:

- 10 patients met RECIST criteria for response. Of which, 1 patient achieved a complete response (CR) and 9 patients achieved a partial response (PR). Of the PRs, 3 were confirmed PRs (cPRs) and 6 unconfirmed PRs (uPRs)
- 23 patients (74%) achieved disease control at 12 weeks
- 18 patients (58%) achieved disease control at 16 weeks
- 4 patients (13%) were on treatment for 52 weeks. 3 patients remained on treatment beyond 64 weeks

STRO-002 continues to be well-tolerated and 86% of all treatment-emergent adverse events (AEs) were Grade 1 or 2. Of note, prophylactic corticosteroid eye drops have not been required and no ocular toxicity signals have been observed. The most common Grade 3 and 4 AEs were

reversible neutropenia. Grade 3 arthralgia (15.4%) and neuropathy (7.7%) were observed and managed with standard medical treatment, including dose reductions or delays without evidence of compromised efficacy.

"We are encouraged to see meaningful clinical benefit from STRO-002 for patients with advanced platinum-resistant and refractory ovarian cancer. The women on the study are heavily pretreated and have limited treatment options as many have received experimental agents and participated in other clinical trials," said Dr. Lainie P. Martin, Leader of Gynecology/Oncology Program at Hospital of the University of Pennsylvania and an investigator on the STRO-002 study. "The deepening of responses in patients as well as disease control over time demonstrates STRO-002 to be an important potential treatment option for patients with ovarian cancer."

"We are seeing improved outcomes in disease control and RECIST responses as the data matures and will continue to follow the patients who remain on study for further deepening of responses or clinical benefit," said Dr. Arturo Molina, Chief Medical Officer of Sutro Biopharma. "The broad therapeutic index of STRO-002 should allow for long-term dosing and dose intensity. Although a maximum tolerated dose was not reached, we have identified dose levels of 4.3 and 5.2 mg/kg that we plan to randomize in the dose-expansion. We plan to dose the first patient January 2021 and will be treating less heavily pre-treated ovarian cancer patients. An expansion cohort for FolRα-selected endometrial cancer is planned for next year."

"We are rapidly moving forward with further development of STRO-002, the FolRα-targeted ADC program. Based on emerging IHC data from our dose-escalation, we have seen responses and stable disease at various FolRα-expression levels. For dose-expansion, we will be collecting required tissue samples at enrollment and using an established assay to determine if a FolRα-selection enrichment strategy is needed," said Bill Newell, Chief Executive Officer of Sutro Biopharma. "Additional data from the dose-expansion will inform regulatory discussions, accelerate registration strategy, and identify the broadest population that may benefit from STRO-002."

STRO-002 Virtual Event Information

The data will be presented and discussed by investigators from two STRO-002 clinical trial sites:

- Lainie P. Martin, M.D. – Leader, Gynecology/Oncology Program and Associate Professor of Medicine at Hospital of the University of Pennsylvania; Dr. Martin is also a member of Sutro's Clinical Advisory Board
- R. Wendel Naumann, M.D. – Professor & Director of Gynecologic Oncology Research and Associate Medical Director of Clinical Trials at Levine Cancer Institute – Atrium Health in Charlotte, North Carolina; Dr. Naumann is also a member of Sutro's Clinical Advisory Board

To access the live virtual event on Thursday, Dec. 3, at 2pm PT (5pm ET), please clickhere. An archived webcast of the event will be available on the Investor section of the company's website at ir.sutrobio.com for approximately 30 days.

About the Phase 1 Trial of STRO-002 in Ovarian Cancer

STRO-002-GM1, the Phase 1 open-label, multicenter, dose escalation trial with dose expansion of STRO–002, has completed enrollment. Follow-up is ongoing and will continue to evaluate the safety, tolerability, and preliminary anti-tumor activity of STRO-002 in adults with advanced epithelial ovarian cancer, including fallopian and primary peritoneal cancer. The trial is

registered with clinicaltrials.gov identifier NCT03748186. Sutro discovered, developed and manufactures STRO-002 using its proprietary XpressCF® cell-free protein synthesis and XpressCF+™ site-specific conjugation technologies.

About Sutro Biopharma

Sutro Biopharma, Inc., located in South San Francisco, is a clinical-stage drug discovery, development and manufacturing company. Using precise protein engineering and rational design, Sutro is advancing next-generation oncology therapeutics.

Sutro's proprietary and integrated cell-free protein synthesis platform XpressCF® and site-specific conjugation platform XpressCF+™ led to the discovery of STRO-001 and STRO-002, Sutro's first two internally-developed ADCs. STRO-001 is a CD74-targeting ADC currently being investigated in a Phase 1 clinical trial of patients with advanced B-cell malignancies, including multiple myeloma and non-Hodgkin lymphoma. STRO-001 was granted Orphan Drug Designation by the FDA for multiple myeloma in October 2018. STRO-002 is a folate receptor alpha (FolRα)-targeting ADC, currently being investigated in a Phase 1 clinical trial of patients with ovarian and endometrial cancers. This is the second product candidate to be evaluated in clinical trials resulting from Sutro's XpressCF® and XpressCF+™ technology platforms. A third program, CC-99712 (BCMA-targeting ADC), which is part of Sutro's collaboration with Bristol Myers Squibb (formerly Celgene Corporation), is enrolling patients for its Phase 1 clinical trial of patients with multiple myeloma. Sutro's proprietary technology was responsible for the discovery and manufacturing of CC-99712, for which Bristol Myers Squibb has worldwide development and commercialization rights. Sutro is entitled to development and regulatory milestone payments and tiered royalties from Bristol Myers Squibb for this BCMA ADC. Sutro is dedicated to transforming the lives of cancer patients by creating medicines with improved therapeutic profiles for areas of unmet need.

To date, Sutro's platform has led to cytokine-based immuno-oncology therapies, ADCs, vaccines and bispecific antibodies directed at precedented targets in clinical indications where the current standard of care is suboptimal. The platform allows it to accelerate discovery and development of potential first-in-class and best-in-class molecules through rapid and systematic evaluation of protein structure-activity relationships to create optimized homogeneous product candidates.

In addition to developing its own oncology pipeline, Sutro is collaborating with select pharmaceutical and biotech companies to discover and develop novel, next-generation therapeutics. As the pace of clinical development accelerates, Sutro and its partners are developing therapeutics designed to more efficiently kill tumors without harming healthy cells.

Additional multimedia content from Sutro regarding STRO-001 and STRO-002 can be found here and here.

Follow Sutro on Twitter, @Sutrobio, and at www.sutrobio.com to learn more about our passion for changing the future of oncology.

Forward-Looking Statements

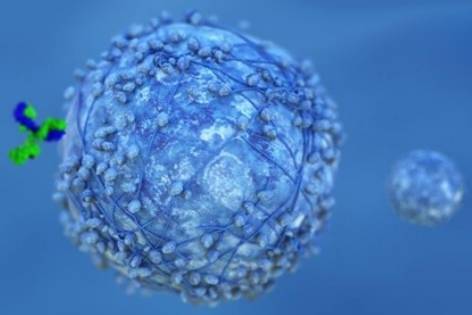
This press release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to, anticipated preclinical and clinical development activities, timing of clinical trials and announcements of clinical results, potential benefits of the company's product candidates and platform and potential market opportunities for the company's product candidates. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. Although the company believes that the expectations reflected in such forward-looking statements are reasonable, the company cannot guarantee future events,

results, actions, levels of activity, performance or achievements, and the timing and results of biotechnology development and potential regulatory approval is inherently uncertain. Forward-looking statements are subject to risks and uncertainties that may cause the company's actual activities or results to differ significantly from those expressed in any forward-looking statement, including risks and uncertainties related to the company's ability to advance its product candidates, the receipt and timing of potential regulatory designations, approvals and commercialization of product candidates, the impact of the COVID-19 pandemic on the Company's business, clinical trial sites, supply chain and manufacturing facilities, the Company's ability to maintain and recognize the benefits of certain designations received by product candidates, the timing and results of preclinical studies and clinical trials, the company's ability to fund development activities and achieve development goals, the company's ability to protect intellectual property, and the Company's commercial collaborations with third parties and other risks and uncertainties described under the heading "Risk Factors" in documents the company files from time to time with the Securities and Exchange Commission. These forward-looking statements speak only as of the date of this press release, and the company undertakes no obligation to revise or update any forward-looking statements to reflect events or circumstances after the date hereof.

Investor Contact
Annie J. Chang
Sutro Biopharma
+1 650-255-8806
ajchang@sutrobio.com

Media Contacts
David Schull
Russo Partners
(212) 845-4271
david.schull@russopartnersllc.com

Exhibit 99.2



KOL Discussion of STRO-002 Data

December 3, 2020

5:00pm ET | 2:00pm PT

Lainie P. Martin, M.D.
Leader, Gynecology/Oncology Program and Associate Professor of Medicine at Hospital of the University of Pennsylvania

R. Wendel Naumann, M.D.
Professor & Director of Gynecologic Oncology Research and Associate Medical Director of Clinical Trials at Levine Cancer Institute, Atrium Health

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Forward Looking Statements

This presentation and the accompanying oral presentation contain "forward-looking" statements that are based on our management's beliefs and assumptions and on information currently available to management. Forward-looking statements include all statements other than statements of historical fact contained in this presentation, including information concerning our future financial performance, business plans and objectives, current and future clinical and preclinical activities, timing and success of our ongoing and planned clinical trials and related data, the timing of announcements, updates and results of our clinical trials and related data, timing and success of our planned development activities, our ability to obtain and maintain regulatory approval, the potential therapeutic benefits and economic value of our product candidates, potential growth opportunities, financing plans, competitive position, industry environment and potential market opportunities.

Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors, including risks and uncertainties related to our cash forecasts, our and our collaborators' ability to advance our product candidates, the receipt and timing of potential regulatory submissions, designations, approvals and commercialization of product candidates, the timing and results of preclinical and clinical trials, and the expected impact of the COVID-19 pandemic on our operations. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. These factors, together with those that may be described in greater detail under the heading "Risk Factors" contained in our most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q and other reports the company files from time to time with the Securities and Exchange Commission, may cause our actual results, performance or achievements to differ materially and adversely from those anticipated or implied by our forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although our management believes that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we nor our management assume responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to publicly update any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations, except as required by law.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

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.


SUTRO
BIOPHARMA
STRO
002
FolRα-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

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

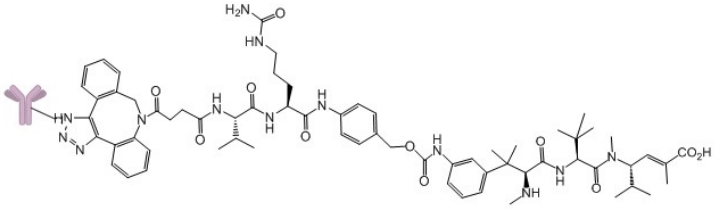
Novel homogeneous antibody drug conjugate (ADC) using **precisely positioned non-natural amino acids**

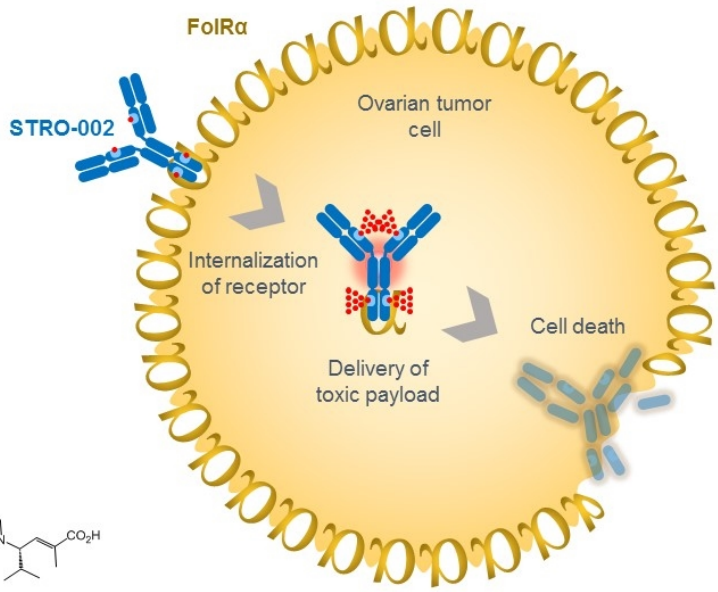
Targets **FolRα**, which is overexpressed in certain cancers including ovarian cancer

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:





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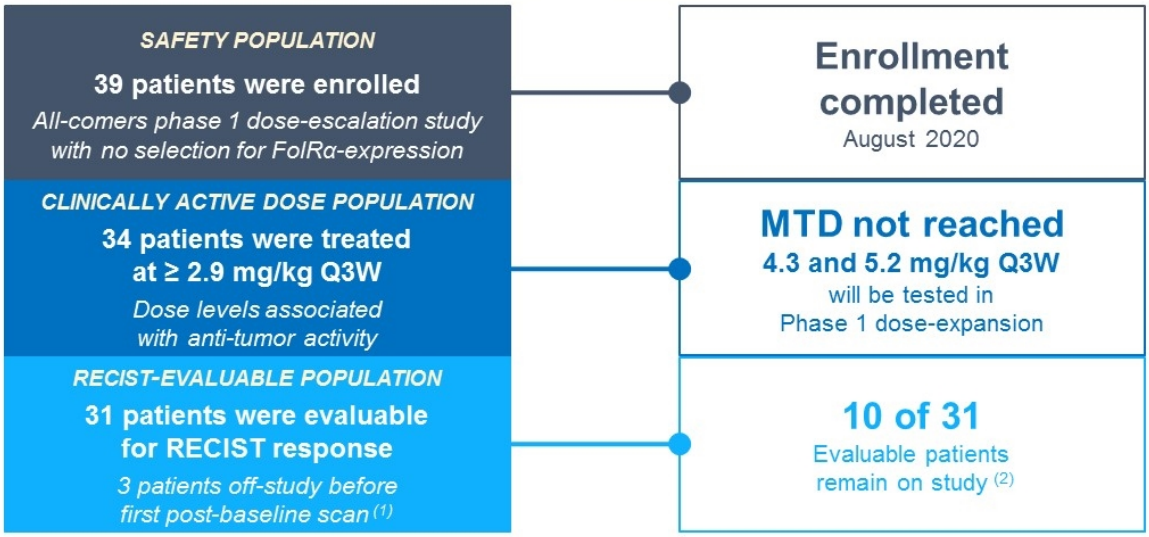
31 Patients Are Evaluable for Response in Dose-Escalation



(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

STRO 002

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

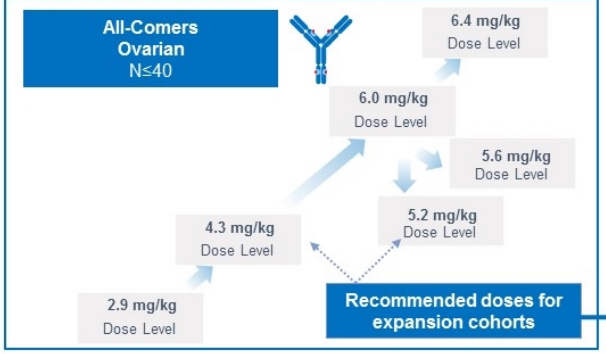
Phase 1
All comers, not selected on basis of FolRα levels

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

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

STRO 002

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

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STRO-002 Was Generally Well Tolerated

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

STRO 002

Common TEAEs > 25% By Grade[1]

All Safety Evaluable Patients	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

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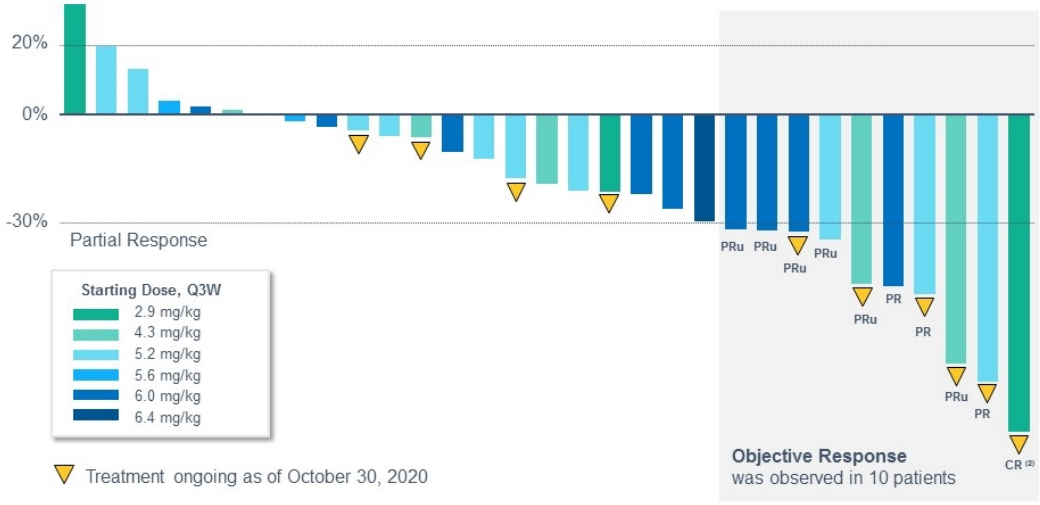
Tumor Reduction Observed in Majority of Patients

10 patients met criteria for response

STRO 002

Maximum Change (1) in Tumor Target Lesions



▽ Treatment ongoing as of October 30, 2020

Objective Response per RECIST 1.1	RECIST-Evaluable Population (N=31)
Responders	10
CR (2)	1
PR	9
Confirmed	*3*
Unconfirmed	*6*
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

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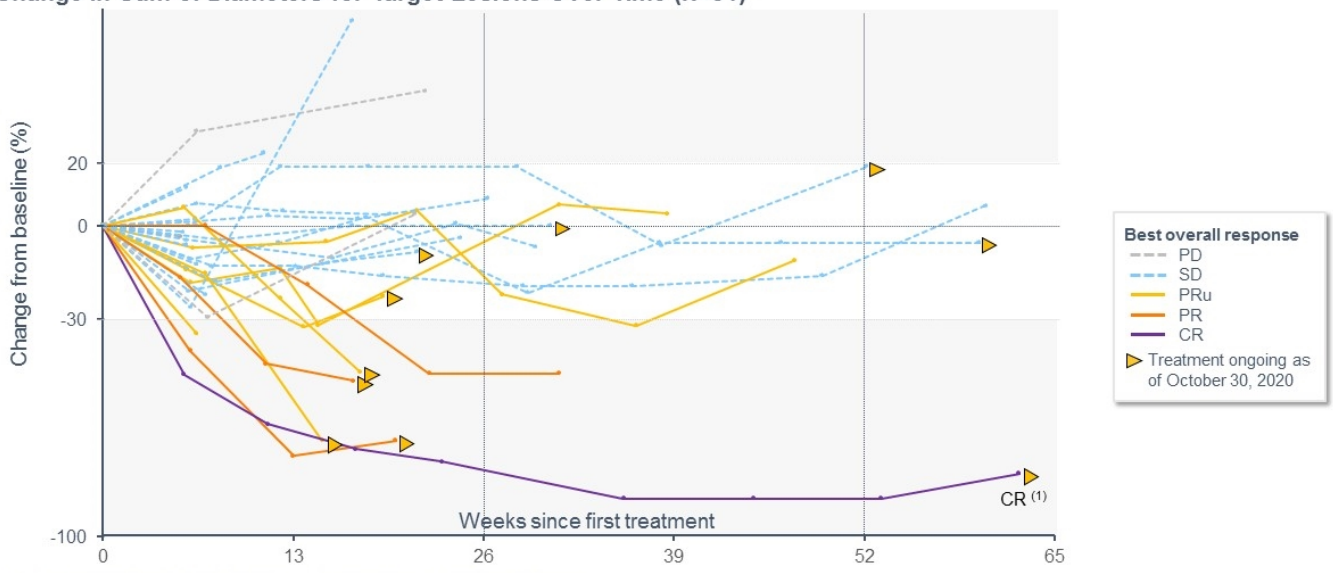
Tumor Regression and Control Over Time

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

STRO 002

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

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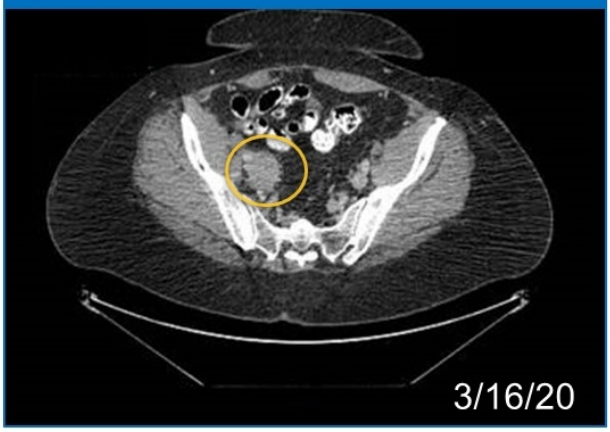
Patient With Ongoing PR Remains on Study

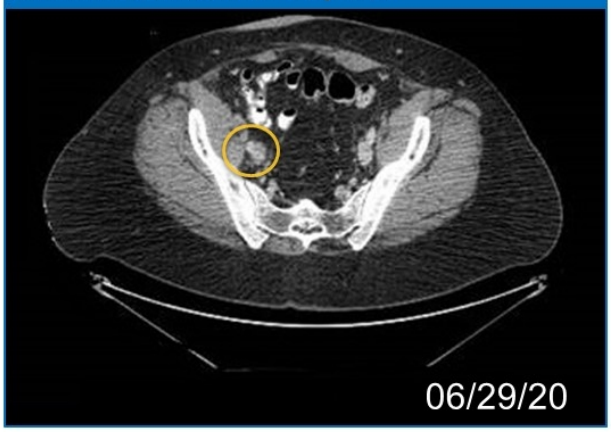
STRO 002

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

Baseline



Confirmed PR after 4 cycles



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

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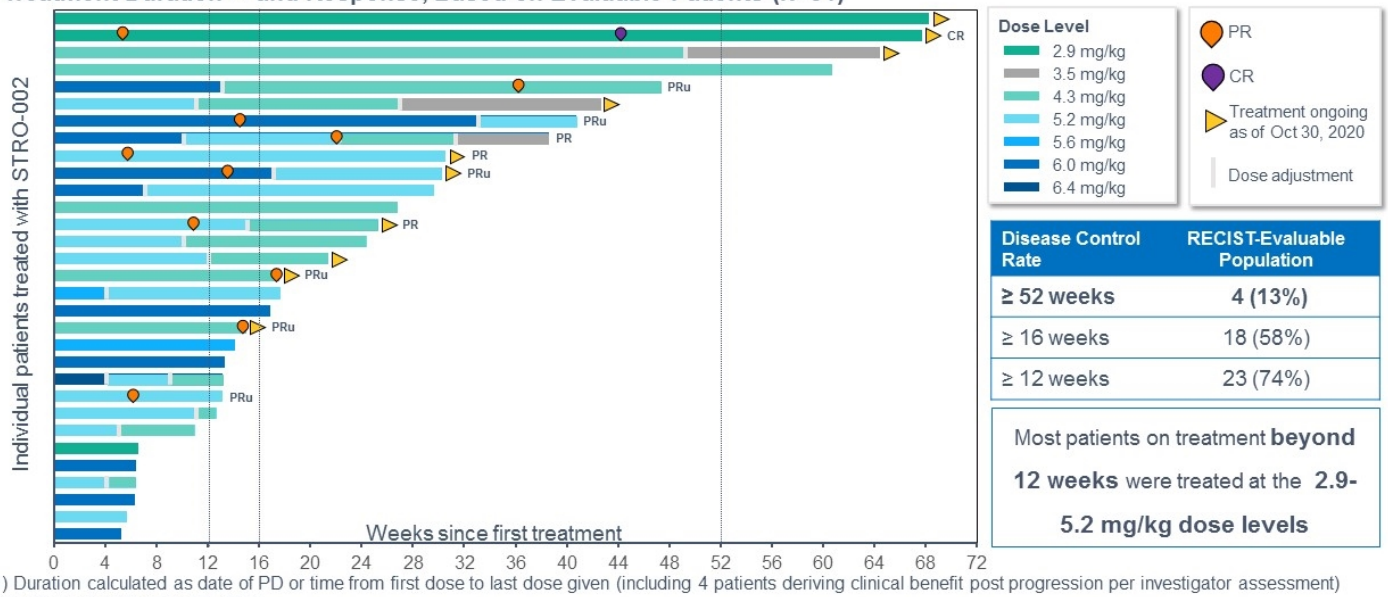
Clinical Benefit Seen in Heavily Pre-Treated Patient Population

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

STRO 002

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



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

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Responses Observed Across Heavily Pre-Treated Patients

PRs occurred with fixed dose regimen AND post dose adjustments

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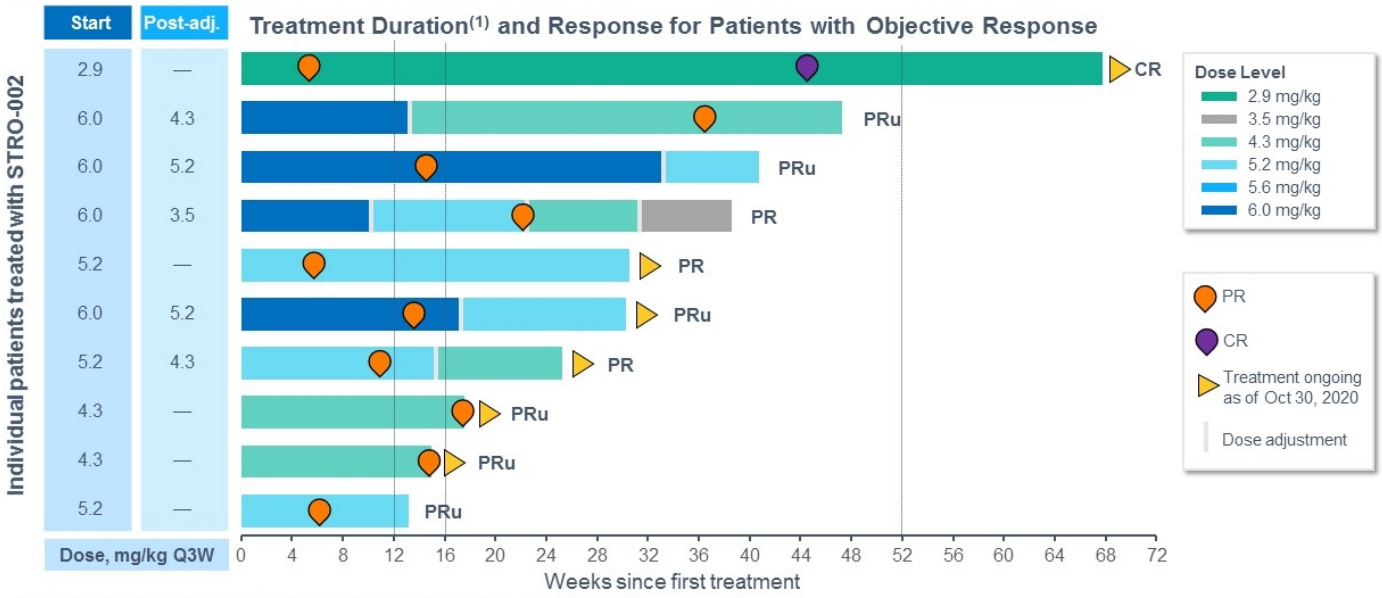

(1) Duration calculated as date of PD or time from first dose to last dose given

Note: Data as of October 30, 2020

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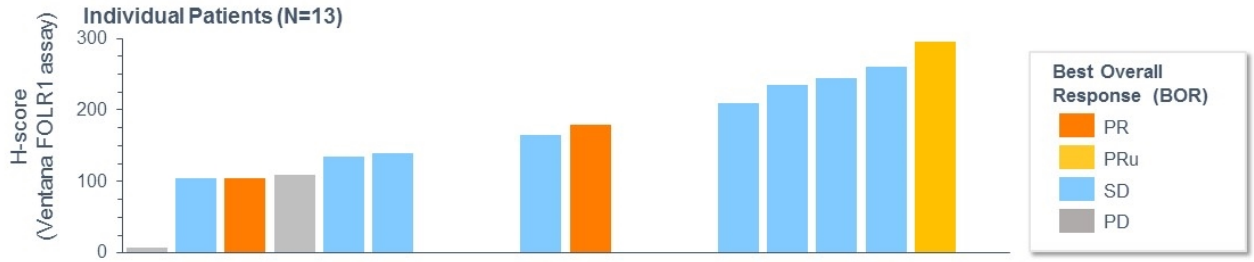
FolRα Expression by Immunohistochemistry (1)

STRO 002

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



FOLR1 PS2+ Score:	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

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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	86% of the AEs were Grade 1-2 and corticosteroid eyedrops were not required	Wide therapeutic index allows for for long-term dosing	Improved outcomes in responses and DCR as data matures	Heterogeneity of tumor regression and response
Patients experienced a median of 6 prior lines of therapy, including SOC, bevacizumab, PARPi, CPI, and clinical trials	Neutropenia generally reversed within a week, without G-CSF. Peripheral neuropathy/arthralgia managed with dose reduction/delay without evidence of compromised efficacy	Encouraging product profile with STRO-002 generally well tolerated and MTD was not reached. Antitumor activity and responses were observed in multiple dose levels	74% of the patients had disease control ≥12 weeks, which is clinically relevant in this population	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

STRO 002

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

Randomization between **4.3 mg/kg and 5.2 mg/kg Q3W**

Fresh or archival tumor **tissue required** prior to enrollment to capture FolRα-expression

Redefining patient inclusion/exclusion criteria for **platinum status and prior approved therapies**

Exclusion of patients with **≥ grade 2 peripheral neuropathy**

Determine optimal efficacious dose that is **well-tolerated** and maintains **dose intensity**

Study will begin with **All Comers** and ongoing expression analysis will **inform subsequent enrichment strategy**

Characterize efficacy and safety profile in **less heavily pre-treated population** to inform **registration-directed study**

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Preliminary Dose-Expansion Ovarian Cancer Data in 2021

Inform regulatory discussions and accelerate registration strategy

STRO 002

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

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

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

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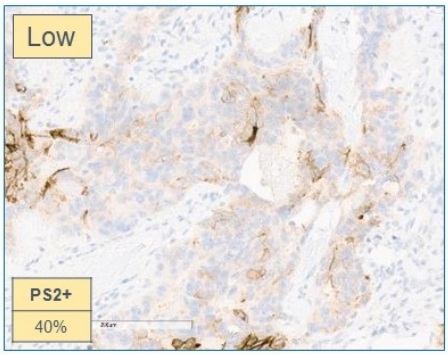
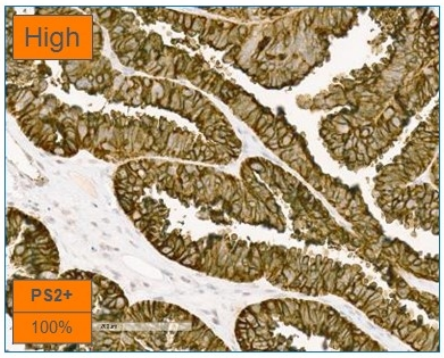
Selected Ventana's Validated FolRα Assay to Further Support STRO-002 Clinical Development Towards Registration

STRO 002

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

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Path Forward for STRO-002 Clinical Development

Next steps for moving towards registration-directed study

STRO 002

STRO-002 has been clinically efficacious at multiple doses, starting at 2.9 mg/kg Q3W	Further dose optimization will be explored during dose-expansion	Anti-tumor activity was observed across a range of FolRα expression in dose-escalation	Expansion cohort in ovarian will enroll less heavily pre-treated patients	EOP1/2 FDA meeting anticipated for 2H 2021
Dose reductions or delays were not associated with loss of anti-tumor activity	Exploring randomized doses of 4.3 & 5.2 mg/kg will inform dose for registration-directed studies	Larger sample size will be needed to determine enrichment strategy	Monotherapy unenriched ovarian cancer cohort is planned to be initiated in 4Q 2020. Endometrial cohort (FolRα-selected) to follow	Preliminary dose-expansion data expected 2H2021. Potential for accelerated approval pathway with single arm registration-directed study

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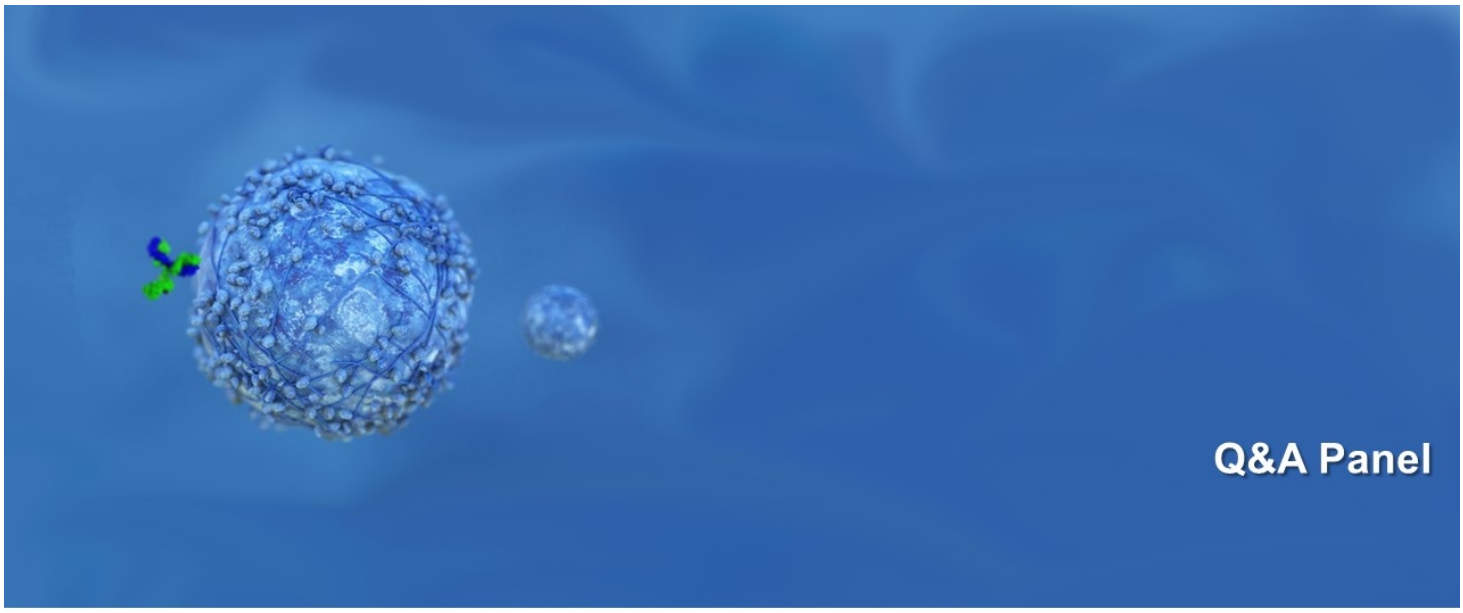

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Q&A Panel

Principal Investigators

Lainie P. Martin, M.D.
Medicine at Hospital of the University of Pennsylvania

R. Wendel Naumann, M.D.
Levine Cancer Institute, Atrium Health

Sutro Biopharma Team

Bill Newell,
Chief Executive Officer

Arturo Molina, M.D.
Chief Medical Officer

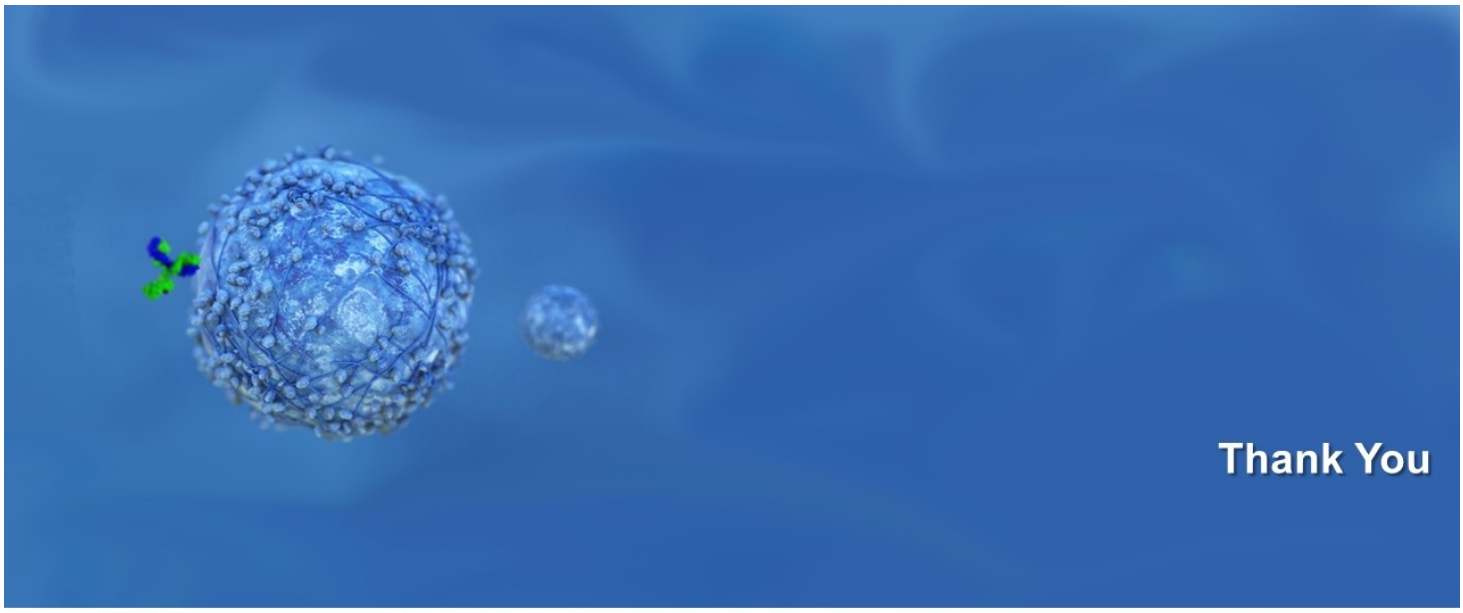
Trevor Hallam, Ph.D.
Chief Scientific Officer

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



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