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): September 9, 2020

SUTRO BIOPHARMA, INC.

(Exact name of registrant as specified in its charter)

001-38662 (Commission File Number) 47-0926186 (IRS Employer Identification No No.]

Delaware (State or other jurisdiction of Incorporation)

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:

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 Common Stock, \$0.001 par value

Trading Symbol(s) STRO

Name of each exchange on which registered 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 \boxtimes

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 Ac

Item 8.01 Other Events.

On September 10, 2020, Sutro Biopharma, Inc. (the "Company") will be presenting an updated corporate presentation at the 2020 Wells Fargo Virtual Healthcare Conference. A copy of this corporate presentation is attached as Exhibit 99.1 to this Current Report on Form 8-K.

Additionally, on September 9, 2020, the Company announced updated data from its ongoing Phase 1 clinical trial of STRO-002 in patients with advanced platinum-resistant/refractory epithelial ovarian cancer, including fallopian or primary peritoneal cancers, and endometrial cancer. A copy of the presentation is attached as Exhibit 99.2 to this Current Report on Form 8-K.

Item 9.01	Financial Statements and Exhibits
Exhibit Number	Description
99.1	Corporate Presentation
99.2	STRO-002 Interim 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 hereunto duly authorized.

Sutro Biopharma, Inc.

By:

/s/ Edward Albini Edward Albini Chief Financial Officer

Date: September 9, 2020

/s/ Edv



Company Overview 2020 Wells Fargo Virtual Healthcare Conference

NASDAQ: STRO Bill Newell, CEO



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.



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The Sutro Vision Novel Platform Delivering on Promise to Change the Future of Oncology



Widening the Therapeutic Index is Key to Achieving Optimized Performance

The Sutro Advantage

- · Rapid iterative design
- Selection of specific sites for conjugation for optimal performance
- Homogenous end-products





XpressCF® – Our Truly Empirical Approach

Proprietary XpressCF® rapid synthesis protein library generation, precision XpressCF+™ conjugation technology and robust medicinal chemistry enables:

- · Optimization of known product concepts
- · Empirical evaluation of unexplored product concepts
- Rapid generation of best-in-class molecules

ADCs, iADCs & Targeted Therapeutics

Precision delivery of active pharmacological entity with optimal attributes

Cytokine Receptor Targets Rapid evolution of optimal attributes to enable systemic administration

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Sutro Clinical Pipeline Owned and Partnered Programs





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Encouraging Progress Across Multiple Programs*



Delivering On Our Collaborations

~ \$384 Million in Payments Received through June 30, 2020 from Collaborators





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FolRα – Targeting ADC Phase 1

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



STRO-002 Structure and Design Optimized molecule provides potential for best-in-class



• STRO-002 is a novel homogeneous antibody drug conjugate using precisely positioned non-natural amino acids

- STRO-002 has a 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





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STRO-002

STRO 002

Heavily Pretreated Ovarian Cancer Patients: Demographics/Dose Levels Data as of August 31, 2020

Characteristic	Total N = 39 (%)	
Age, median (range), years	61 (48-79)	
Tumor type		
EOC	30 (77)	
Fallopian tube	7 (18)	
Primary peritoneal	2 (5)	
ECOG PS		
0	23 (59)	
1	16 (41)	
Median time from diagnosis (range)	3.9 years (0.6-17.1)	
Median lines of prior therapy (range)	5 (2–10)	
Platinum	39 (100)	
≥ 3 prior platinum regimens	14 (36)	
Taxanes	38 (97)	
Bevacizumab	31 (79)	
PARP inhibitors	23 (59)	
Checkpoint inhibitors	8 (21)	
Experimental therapy	13 (34)	

Characteristic	Total N = 39 (%)			
Dose Level of STRO-002				
0.5 mg/kg, 1.0 mg/kg, 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	10 (26)			
6.4 mg/kg	1 (3)			

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Robust Anti-Tumor Activity in Heavily Pre-Treated, Unselected Patients



Partial Response with 74% Tumor Reduction Patient Continues on Treatment



Long Duration on Study and Disease Control Observed in Unenriched, Heavily Pre-Treated Ovarian Cancer Patients



STRO 002

High Rates of CA-125 Responses are Associated with Anti-Tumor Activity



Improved Efficacy Outcomes (Increased ORR and DCR) Observed as Data Matures with Longer Follow-Up



		STRO-002 Clinical Data Reado	out	
		April 20th, 2020 Interim Analysis	August 31 st , 2020 Interim Analysis	
N ≥ 2	9 mg/kg*	25 (20 evaluable)	34 (33 evaluable)	
Media	an Age	61 (47–76)	61 (48–79)	
Media	an Prior Lines	5 (2–10)	5 (2–10)	
5T	Responses	1 PR	8 PRs	
RECIST	ORR	5% (1/20) of evaluable pts	24% (8/33) of evaluable pts	
R	DCR @ ≥12 Wks	40% (8/20) of evaluable pts	60% (20/33) of evaluable pts	
Dur. on Study	Pts on Study @ 16 Wks	32% (8/25)	44% (15/34)	
Sti	Pts on Study @ 52 Wks	n/a	12% (4/34)	
CA-125	Reduction in level of ≥50%	57% (12/21)	72% (18/25)	
*38%		n study with potential to further improve efficacy		
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Summary and Next Steps in Clinical Development



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STRO 002





CD74-Targeting ADC: Phase 1

Potential First and Best-in-Class ADC for B-Cell Malignancies



STRO-001Structure and Design First-in-class Molecule with Potential for Improved Patient Outcomes



- STRO-001 is a novel homogeneous antibody-drug conjugate using precisely positioned non-natural amino acids
- STRO-001 comprises two non-cleavable maytansinoid linker-warheads (DAR=2) that are stable in circulation
- The active warhead derivative efficiently kills tumor cells following internalization of the ADC and was designed to minimize bystander effects



Structure of maytansinoid linker-warhead following conjugation

SUTRO

Patient Demographics First 25 Patients – ASH Abstract November 2019

Characteristics	Cohort A (MM) N =14	Cohort B (NHL) N=11	Total N=25
Age, median (range), years	64.5 (42-80)	64 (21–82)	64 (21-82)
Median time from diagnosis in years (range)	6.4 (1.3–13.6)	3.2 (1.0–29.8)	6.2 (1.0–29.8)
Disease Subtype, N (%)			
Multiple myeloma	14 (100)	N/A	14 (56)
Follicular lymphoma		3 (27)	3 (12)
Marginal zone lymphoma		1 (9)	1 (4)
Mantle cell lymphoma	N/A	1 (9)	1 (4)
DLBCL	N/A	4 (36)	4 (16)
Burkitt's lymphoma		1 (9)	1 (4)
DLBCL/FL		1 (9)	1 (4)
Median lines of prior therapy (range)	6.5 (3–11)	4 (2–12)	6 (2–12)
Prior autologous stem cell transplant, N (%)	6 (43)	2 (18)	8 (32)
Prior related donor allogeneic stem cell transplant, N(%)	1 (7)	0	1 (4)
Prior unrelated donor allogeneic stem cell transplant, N(%)	0	1 (9)	1 (4)
Prior CAR-T therapy, N (%)	2 (14)	1 (9)	3 (12)

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Generally Well Tolerated with Early Signs of Anti-Tumor Activity Presented at EHA June 2019 and Updated in ASH Abstract November 2019





• Next safety & efficacy update anticipated at ASH conference in 4Q 2020



Bristol Myers Squibb

CC–99712 (BCMA-Targeting ADC) Phase 1B/2 Study Potential for Best-In-Class



M1231 (MUC1-EGFR Bispecific ADC) Potential for First-In-Class – 1Q21 First In Human Planned





- Combines next generation technologies; stable site-specific XpressCF+™ conjugation, optimized positioning of a proprietary hemiasterlin payload and SEED antibody structure
- Efficient uptake into tumor cells, leading to improved preclinical efficacy compared to monospecific variants
- Potentially reduced risk for on-target toxicities based on limited target co-expression in normal tissues
- First in human study planned for 1Q2021 with focus on NSCLC
 & esophageal squamous cell carcinoma



Source: Anderl, J. M1231: A first-in-class bispecific antibody-drug conjugate targeting EGFR and MUC1. In: AACR Virtual Meeting II; 2020 June 22-24. Minisymposium MS.ET03.01



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- A single M1231 application was associated with complete remission in a subset of preclinical NSCLS and sqCC esophageal PDX models
- Tumor response seems to be associated with target expression

Source: Anderl, J. M1231: A first-in-class bispecific antibody-drug conjugate targeting EGFR and MUC1. In: AACR Virtual Meeting II; 2020 June 22-24. Minisymposium MS.ET03.01

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Sutro's Next Generation Tumor Targeting Immunostimulatory ADC Off the shelf, systemically administered *in situ* immunization

iADC

- Breakthrough technology for dual conjugated immunostimulatory antibody
 drug conjugate
- Designed and enabled using Sutro's XpressCF+[™] platform
- Enables simultaneous and precise tumor targeting of a cytotoxin and a novel toll-like receptor (TLR) agonist with systemic delivery
- Novel design intended to prime an adaptive anti-tumor response in a monotherapy
- Potential to reprogram the patient's tumor microenvironment and generate protective anti-tumor immunity

Data Presented at the World ADC Meeting in London, 3/2020

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MC38-hFoIR mouse model

Experienced Leadership Team





Company Overview 2020 Wells Fargo Virtual Healthcare Conference

NASDAQ: STRO Bill Newell, CEO







FolRα – Targeting ADC Phase 1

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



Forward Looking Statements

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STRO-002 Structure and Design Optimized molecule provides potential for best-in-class



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STRO-002



Phase 1 Dose-Escalation Data Presented by Dr. Wendel Naumann


Phase 1 Dose-Escalation Study of STRO-002, an anti-Folate Receptor alpha (FRα) Antibody Drug Conjugate (ADC), in Patients with Advanced Platinum-Resistant / Refractory Epithelial Ovarian Cancer (OC)

<u>R. Wendel Naumann¹</u>, Fadi S. Braiteh², John P. Diaz³, Erika Hamilton⁴, Sami Diab⁵, Russell J. Schilder⁶, John W. Moroney⁷, Lainie P. Martin⁸, Denise Uyar⁹, David M. O'Malley¹⁰, Richard Penson¹¹, Clifford DiLea¹², Michael Palumbo¹³, Venita DeAlmeida¹³, Craig J. Berman¹³, Shannon Matheny¹³, Arturo Molina¹³

¹Levine Cancer Institute, Carolinas Medical Center, Charlotte, NC; ²Comprehensive Cancer Centers of Nevada, Las Vegas, NV; ³Miami Cancer Institute at Baptist Health, Miami, FL; ⁴Sarah Cannon Research Institute, Tennessee Oncology PLLC, Nashville, TN; ⁵Rocky Mountain Cancer Center, Aurora, CO; ⁶Sidney Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA; ⁷University of Chicago, Chicago, IL; ⁸University of Pennsylvania, Abramson Cancer Center, Philadelphia, PA; ⁹Medical College of Wisconsin, Milwaukee, WI; ¹⁰Ohio State University, Wexner Medical Center, Columbus, OH; ¹¹ Massachusetts General Hospital, Boston, MA; ¹²Aclairo Pharmaceutical Development Group, Vienna, VA; ¹³Sutro Biopharma, Inc., South San Francisco, CA

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Phase 1 Clinical Trial Design Fast Track FDA Registration Pathway Possible Based on Recent Precedents



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Heavily Pretreated Ovarian Cancer Patients: Demographics/Dose Levels Data as of August 31, 2020

Characteristic	Total N = 39 (%) 61 (48-79)		
Age, median (range), years			
Tumor type			
EOC	30 (77) 7 (18)		
Fallopian tube			
Primary peritoneal	2 (5)		
ECOG PS			
0	23 (59)		
1	16 (41)		
Median time from diagnosis (range)	3.9 years (0.6-17.1)		
Median lines of prior therapy (range)	5 (2–10)		
Platinum	39 (100)		
≥ 3 prior platinum regimens	14 (36)		
Taxanes	38 (97)		
Bevacizumab	31 (79)		
PARP inhibitors	23 (59)		
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Experimental therapy	13 (34)		

Characteristic	Total N = 39 (%)			
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6.0 mg/kg	10 (26)			
6.4 mg/kg	1 (3)			

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The emerging STRO-002 safety profile includes mostly mild adverse events - 87% of all AEs reported are grade 1 or 2

Treatment Emergent Adverse Events (TEAE)						
TEAE >20%	Grade 1	Grade 2	Grade 3	Grade 4*	N= 39 (%)	
Fatigue	7 (18)	16 (41)	4 (10)		27 (69)	
Nausea	15 (38)	9 (23)			24 (62)	
Neutropenia/ Neutrophil count decreased		2 (5)	10 (26)	12 (31)	24 (62)	
Constipation	12 (31)	9 (23)			21 (54)	
Decreased appetite	11 (28)	9 (23)			20 (51)	
Arthralgia	6 (15)	7 (18)	5 (13)		18 (46)	
Abdominal pain	6 (15)	4 (10)	3 (8)		13 (33)	
AST increased	10 (28)	2 (3)	1 (3)		13 (33)	
Diarrhea	8 (21)	3 (8)	1 (3)		12 (31)	
Dizziness	9 (23)	3 (8)			12 (31)	
Peripheral neuropathy	2 (5)	7 (18)	2 (5)		11 (28)	
Vomiting	7 (18)	4 (10)			11 (28)	
Headache	7 (18)	3 (8)			10 (26)	

2 DLTs have been reported: neuropathy (6.0 mg/kg); bone pain (6.4 mg/kg) *Only other Grade 4 events reported include WBC decrease (N=1), febrile neutropenia (N=1), and GI hemorrhage (N=1) 2 Grade 5 events have been observed, both reported as unrelated to study drug: Death NOS (not otherwise specified); Patient above with Grade 4 GI hemorrhage and progressive disease developed

Grade 5 Acute GI bleed Data as of August 31, 2020

* (K.S. 1944)	



Robust Anti-Tumor Activity in Heavily Pre-Treated, Unselected Patients



Partial Response with 74% Tumor Reduction Patient Continues on Treatment



Long Duration on Study and Disease Control Observed in Unenriched, Heavily Pre-Treated Ovarian Cancer Patients



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High Rates of CA-125 Responses are Associated with Anti-Tumor Activity



Promising Efficacy in a Heavily Pre-treated, Resistant/Refractory Unenriched Patient Population



Acknowledgements



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Summary and Next Steps Arturo Molina, MD, MS

Improved Efficacy Outcomes (Increased ORR and DCR) Observed as Data Matures with Longer Follow-Up



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*38%		1 study with potential to further improve efficacy		
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STRO 002





FolRα – Targeting ADC Phase 1

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

