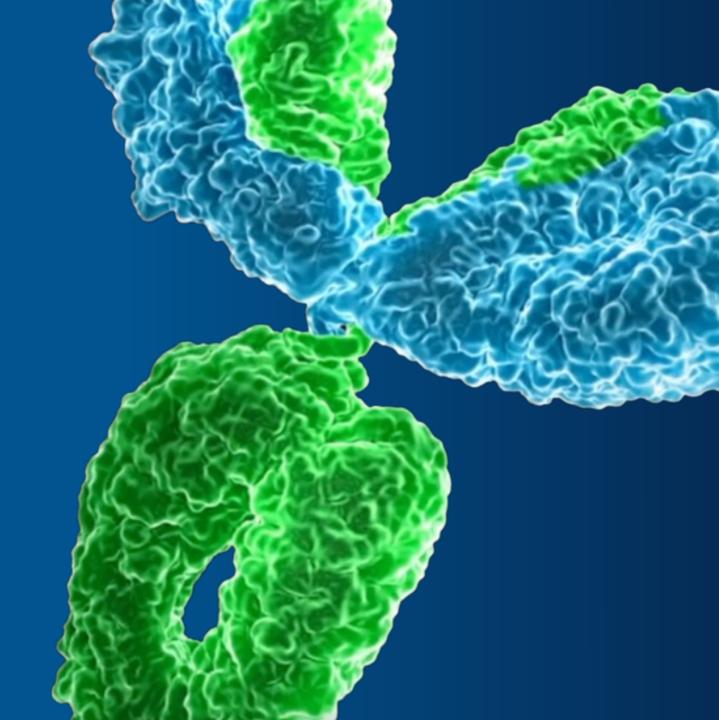


Company Overview

January 9, 2023

Sutro Biopharma NASDAQ: STRO



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 activities, timing, design and success of our ongoing and planned clinical trials and related data, 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, potential future milestone and royalty payments, competitive position, industry environment and potential market opportunities for the Company's product candidates.

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, feedback and timing of potential regulatory submissions, designations, approvals and commercialization of product candidates, the design, 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.



Six Product Candidates in Clinical Development are Enabled by Sutro's Platform Unique engineering prowess in the field of precisely conjugated biologics, including next-gen ADCs

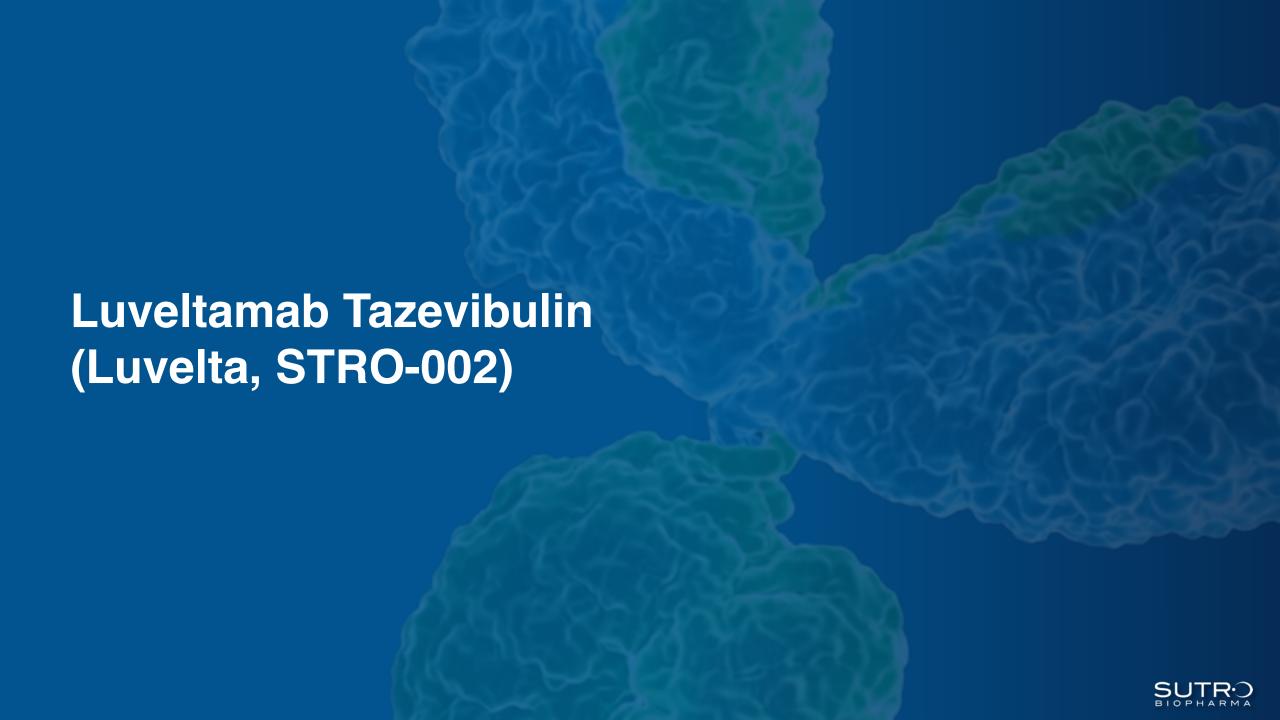
Modality	Program	Target(s)	Indication	Discovery	Preclinical	Phase 1/1b	Phase 2/3	Partner			
			Ovarian Cancer	Fast Track Design	nation						
	Luvelta	FolRa	Ovarian Cancer (bevacizumab combo)				_	▲ エナカナ**			
	(STRO-002)	T OII IQ	Endometrial Cancer					天士力生物 TASULY BIOPHARMA (Greater China)			
			NSCLC/Non-Gyn Cancers								
Antibody-Drug	CTDO 001	CD74	Lymphoma					₽3 BÎONOVA			
Conjugate (ADC)	STRO-001	CD74	Multiple Myeloma	Orphan Drug Des	ignation			BIONOVA Pharma 海海医病 (Greater China)			
	CC-99712	ВСМА	Multiple Myeloma	Orphan Drug Des	ignation		u ^{lli} Bristol Myers Squil				
			Multiple Myeloma (GSI combo)					Bristol Myers Squib			
	STRO-003	ROR1	Cancer								
	Other Early- Stage ADCs	Tissue Factor	Cancer								
Bispecific ADC	M1231	MUC1-EGFR	NSCLC & Esophageal Cancer					EMD (1) SERONO			
Immunostimulatory ADC (iADC)	Undisclosed	3 Undisclosed Targets	Cancer					**astellas			
Cytokine	MK-1484	IL-2	Advanced or Metastatic Solid Tumors					MERCK			
Vaccine	VAX-24	24-Valent Conjugate Vaccine	Invasive Pneumococcal Disease					VAXCYTE grotest humankind			

^{1.} EMD Serono is the biopharmaceutical business of Merck KGaA, Darmstadt Germany in the U.S.

Achievements and Milestones Clinical data readouts and partnerships provide multiple anticipated 2023 value drivers for Sutro

Lu	velta (STRO-002, FolRa ADC)	STF	RO-001, CD74 ADC
V	Data on Phase 1 dose-expansion and regulatory path forward for the development of luvelta		Initiation by BioNova of clinical development of STRO-001 in B-cell NHL in Greater China (2023)
	Initiate registration-directed Phase 2/3 trial, REFRaME, in platinum-resistant ovarian cancer (2Q 2023)	STF	RO-003, ROR1 ADC and Emerging Portfolio
П	Provide regulatory update and clinical development plan for infants and	Ш	IND enabling studies completed for STRO-003 (1Q 2024)
	children with relapsed/refractory CBF/GLIS2 acute myeloid leukemia (1Q 2023)		Advance 4 th proprietary preclinical program towards IND (2023)
	Data on Phase 1 endometrial cancer cohort (2H 2023)	Col	laborations: Research & Manufacturing Revenue
	Data on Phase 1 bevacizumab combination trial for advanced ovarian cancer (2H 2023)		Vaxcyte: Manufacturing agreement for the rights and development of cell-free extract
	Submit IND for non-small cell lung cancer (2023)		Astellas: Advance preclinical research collaboration on immunostimulatory
	Initiation by Tasly of clinical development of luvelta in ovarian cancer in	ш	ADCs
ш	Greater China (2023)		BMS, Merck & EMD Serono: Manufacturing support and materials for clinical supply

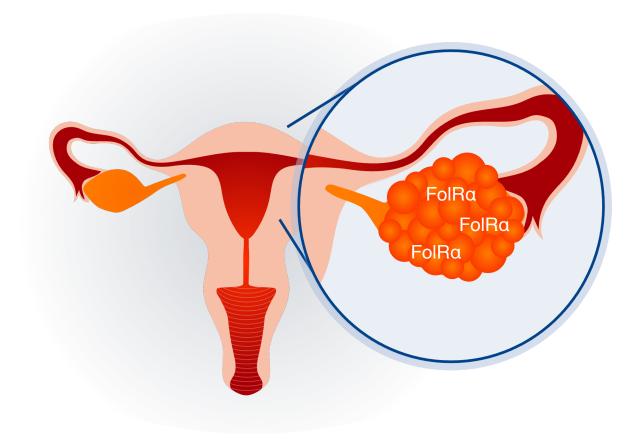




Advanced Ovarian Cancer Has a High Unmet Medical Need

Due to advanced stage of disease at diagnosis and limited progress of available treatments

- Ovarian cancer is the most common cause of death from gynecological cancers
 - Accounts for **2.1%** of all estimated cancer deaths^(1,2)
 - Almost half of affected women live less than **five years** following diagnosis^{1,2}
- In 2022, an estimated **19,880** new ovarian cancer cases were diagnosed in the United States^(1,2)
 - Total estimated death from this disease was 12,810
- Folate receptor alpha, or FolRa is highly expressed in ovarian cancer
 - Associated with disease burden and treatment outcomes^(3,4)



FolRa, folate receptor alpha.



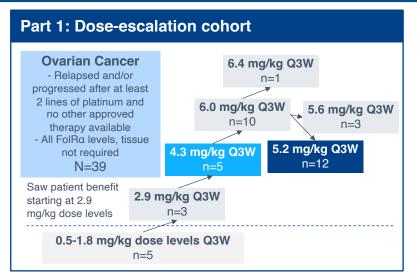
^{1.} Cancer facts and figures 2022. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2022/2022-cancer-facts-and-figures.pdf. Accessed December 14, 2022.

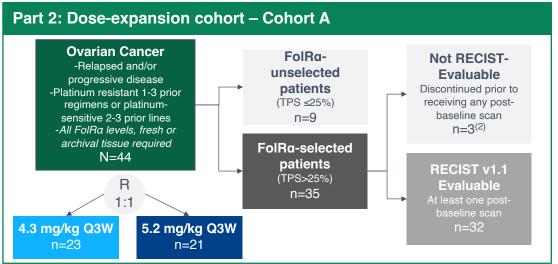
^{2. 2022} Estimates. American Cancer Society. https://cancerstatisticscenter.cancer.org/?_ga=2.9856755.798860474.1671221534-46877757.1671052212#!/. Accessed December 16, 2022.

^{3.} Birrer MJ, et al. Oncologist. 2019;24:425-429. 3. https://www.nature.com/articles/s41416-022-02031-x



Two-Part Phase 1 Study for Patients with Advanced Ovarian Cancer⁽¹⁾ Explored dosing regimen and biomarker levels for which luvelta is optimal





Part 2: Cohort C	
5.2 mg/kg Q3W + prophylactic pegfilgrastim on Day 8 N=15 ⁽³⁾	

Patient Baseline Demographics – Part 2: Dose-	All F	Patients Enrolled (N	l=44)	FolRa	-Selected Patients	N=35) Cohort C	
Expansion – Cohort A	4.3 mg/kg n=23	5.2 mg/kg n=21	Total N=44	4.3 mg/kg n=19	5.2 mg/kg n=16	Total N=35	Total N=10 ⁽³⁾
Median age (range), years	63 (39–91)	56 (40–72)	60 (39–91)	63 (39–91)	55.5 (45–72)	60 (39–91)	67 (36-86)
Median time since diagnosis (range), years	2.8 (0.8–9.3)	3.0 (0.7–7.8)	2.9 (0.7–9.3)	2.8 (0.9–9.3)	3.5 (1.0–7.8)	3.0 (0.9–9.3)	Mean: 3.0
Mean number of prior lines of therapy	2.5	2.3	2.4	2.6	2.3	2.5	2.5
Prior Therapies							
Prior Bevacizumab, n (%)	13 (57)	16 (76)	29 (66)	12 (63)	12 (75)	24 (69)	6 (60)
Prior PARP inhibitor, n (%)	18 (78)	18 (86)	36 (82)	14 (74)	15 (94)	29 (83)	6 (60)

^{1.} Phase 1 for patients with advanced ovarian cancer is named STRO-001-GM1, clinicaltrials.gov NCT identifier: NCT03748186.



^{2.} Three patients were not evaluable for RECIST as they discontinued before receiving any post-baseline scan for the following reasons: clinical disease progression, adverse event, and consent withdrawn.

^{3.} Cohort C enrolled 15 patients and interim data on 10 patients were made available as of December 8, 2022.

Q3W, every 3-week dosing; RECIST v1.1, Response Evaluation Criteria in Solid Tumors v1.1; TPS, tumor proportion score.

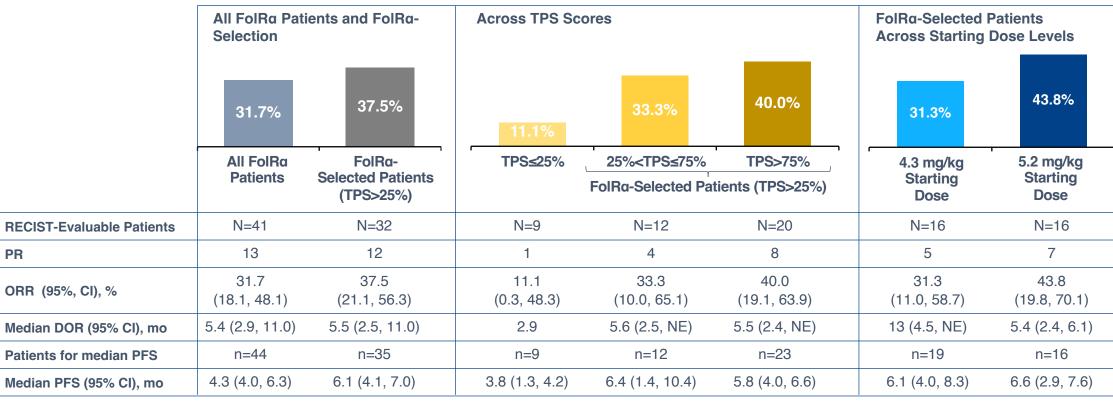
LUVELTA Dose Expansion Cohort A

Luvelta Phase 1 Data Establishes FolRq-Selection Criteria

Patients who started at the higher dose level demonstrated higher ORR and median PFS

Dose-expansion efficacy data establishes TPS>25% as appropriate enrichment cutoff for luvelta Patients who started at 5.2 mg/kg experienced 43.8% ORR, 5.4 months median DOR, and 6.6 months median PFS

RECIST-Evaluable ORR (%), Median DOR (%), and Median PFS



Note: Data are as of November 8, 2022.

FolRα-selected defined as TPS>25%.

ORR, overall response rate; DOR, duration of response; PFS, progression free survival; PR, partial response; CI, confidence interval; mo, months; NE, not estimable.

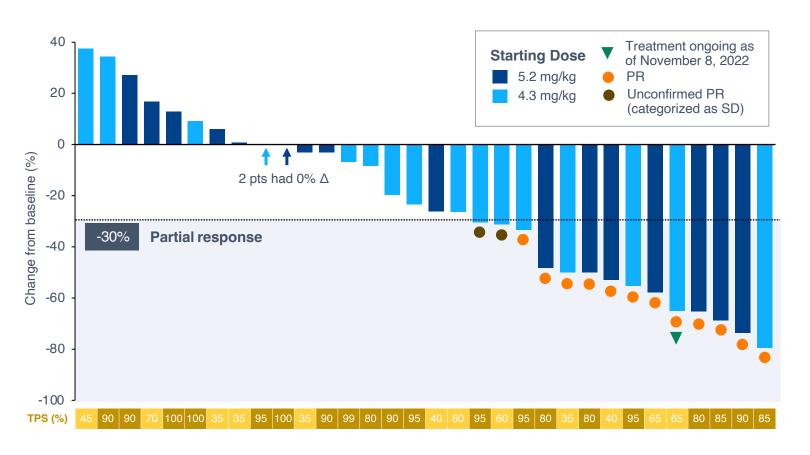


Majority of FolRα-Selected Patients Experienced Disease Control

12 FolRa-selected patients demonstrated confirmed partial response



BOR: Maximum Reduction in Tumor Target Lesions in FolRa-Selected Patients (N=32)⁽¹⁾



BOR in FolRa-Selected Patients (N=32)

	Both Doses N=32	5.2 mg/kg n=16	4.3 mg/kg n=16
PR	12	7	5
ORR %	37.5	43.8	31.3
SD, n (%)	14 (43.8)	6 (37.5)	8 (50.0)
DCR (2) %	81.3%	81.3%	81.3%
PD, n (%)	6 (18.8)	3 (18.8)	3 (18.8)

FolRa Stratification (N=32)

Number of patients (%)	5.2 mg/kg n=16	4.3 mg/kg n=16
25% <tps≤75%< th=""><th>7 (43.8%)</th><th>5 (31.3%)</th></tps≤75%<>	7 (43.8%)	5 (31.3%)
TPS>75%	9 (56.3%)	11 (68.8%)

Note: Data are as of November 8, 2022.

BOR, best overall response; SD, stable disease; DCR, disease control rate; PD, progressive disease.

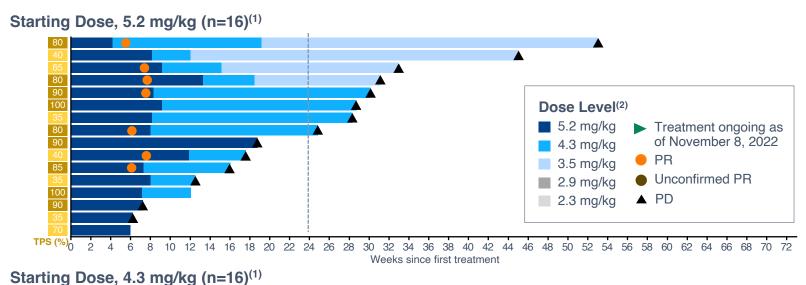
^{1.} Data on FolRα-selected patients who are evaluable for RECIST v1.1.

^{2.} Disease control includes SD ≥ 6 weeks.

Patients Had Durable Responses even with Dose Modifications

Patients who started at the higher dose experienced rapid time to response





Dose Intensity by Starting Dose (N=44)⁽³⁾

	5.2 mg/kg n=21	4.3 mg/kg n=23
Dose intensity (mg/	kg per week)	
Mean	1.2	1.0
Min, max	0.8, 1.6	0.7, 1.5
Relative dose inten	sity (%)	
Mean	66.8	72.4
Min, max	48.5, 90.7	46.3, 105.1

Summary of Dose Modification (N=44)⁽³⁾

Patients (%)	5.2 mg/kg n=21	4.3 mg/kg n=23
Dose delay	20 (95.2%)	15 (65.2%)
Dose interruption	2 (9.5%)	0
Dose Reduction	16 (76.2%)	11 (47.8%)

Note: Data are as of November 8, 2022.

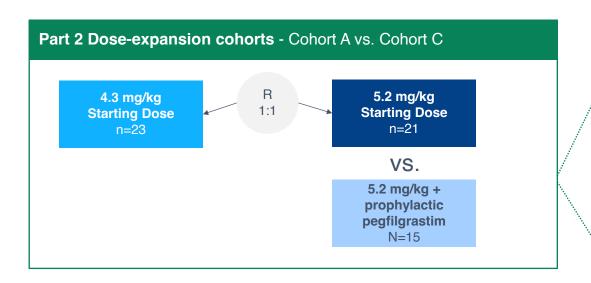
- 1. Data are from Cohort A of Phase 1 dose expansion on FolRα-selected patients who are evaluable for RECIST v1.1.
- 2. Patients are dosed Q3W, and patient scans generally coincide with every other cycle.
- 3. Data on all 44 patients in Cohort A of Phase 1 dose expansion, including patients who are FolRa-unselected and patients who are not RECIST v1.1 evaluable; PD, progressive disease; PR, partial response.



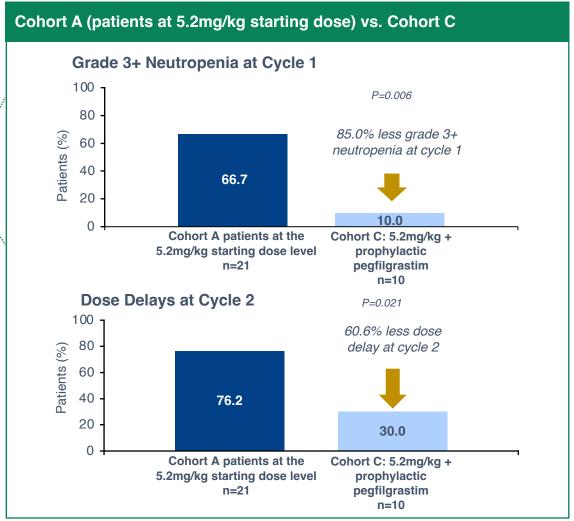
LUVELTA Dose Expansion Cohort A & C

Cohort C as a Deep Dive Into Managing Neutropenia

Prophylactic use of pegfilgrastim reduced Grade 3+ neutropenia and dose delays



- Use of prophylactic pegfilgrastim on day 8 per protocol in Cohort C reduced Grade 3+ neutropenia at Cycle 1 by 85%, when compared to Cohort A
- On average, patients in Cohort A at the 5.2 mg/kg dose level were delayed in their dose for ~10 days
- Dose delays were decreased by 60.6% in Cohort C, when compared to Cohort A



Note: Cohort A data are as of November 8, 2022. Cohort C data are as of December 8, 2022.



LUVELTA Dose Expansion Cohort A

Most Common Treatment-Emergent Adverse Event was Neutropenia

No new safety signals were observed, including the absence of meaningful drug-related ocular and lung AEs

Most Common Grade 3+ TEAEs (≥2 Subjects) by Dose and General Category

	4.3	mg/kg (n:	=23)	5.2	mg/kg (n:	=21)	Т	otal (N=4	4)
n (%)	Grade 3	Grade 4	Grade 5	Grade 3	Grade 4	Grade 5	Grade 3	Grade 4	Grade 5
Subjects reporting at least 1 event	12 (52)	6 (26)	0	8 (38)	11 (52)	1 (5)	20 (45)	17 (39)	1 (2)
Hematological									
Neutropenia ⁽¹⁾	10 (43)	5 (22)	0	4 (19)	11 (52)	1 (5)	14 (32)	16 (36)	1 (2)
Febrile neutropenia	1 (4)	0	0	0	0	1 (5)	1 (2)	0	1 (2)
White blood cell count decreased	5 (22)	1 (4)	0	2 (10)	2 (10)	0	7 (16)	3 (7)	0
Platelet count decreased	2 (9)	0	0	2 (10)	0	0	4 (9)	0	0
Thrombocytopenia	0	0	0	2 (10)	0	0	2 (5)	0	0
Anemia	1 (4)	0	0	5 (24)	0	0	6 (14)	0	0
Pain-related									
Neuralgia	2 (9)	0	0	1 (5)	0	0	3 (7)	0	0
Arthralgia	6 (26)	0	0	2 (10)	0	0	8 (18)	0	0
Bone pain	1 (4)	0	0	1 (5)	0	0	2 (5)	0	0
Gastrointestinal									
Small intestinal obstruction	2 (9)	0	0	1 (5)	0	0	3 (7)	0	0
Large intestinal obstruction	0	0	0	2 (10)	0	0	2 (5)	0	0
Diarrhea	2 (9)	0	0	0	1 (5)	0	2 (5)	1 (2)	0
Vomiting	0	0	0	2 (10)	0	0	2 (5)	0	0
Other									
Fatigue	3 (13)	0	0	1 (5)	0	0	4 (9)	0	0
Hyponatremia	3 (13)	0	0	0	0	0	3 (7)	0	0
Cataract	2 (9)	0	0	0	0	0	2 (5)	0	0
Activated partial thromboplastin time prolonged	2 (9)	0	0	0	0	0	2 (5)	0	0
Dehydration	1 (4)	0	0	1 (5)	0	0	2 (5)	0	0
Acute kidney injury	0	0	0	2 (10)	0	0	2 (5)	0	0
Pulmonary embolism	2 (9)	0	0	0	0	0	2 (5)	0	0

- Neutropenia was the most common G3+ AE and the most common reason for dose reduction
 - Higher incidence at 5.2 mg/kg
 - Other G3+ hematological TEAEs infrequently required dose modifications
- Arthralgia was the second most common G3+ and second most common TEAE leading to dose reduction
- Other G3+ TEAE which were unrelated to study drug
 - G3+ large and small intestinal obstructions as complications of metastatic cancer
 - G3+ acute kidney injury attributed to concomitant AEs (sepsis and dehydration) and not direct drug injury
 - G3+ pulmonary embolism in 2 patients

Note: Data are as of November 8, 2022 on all patients enrolled in Phase 1 dose expansion Cohort A.

^{1.} Neutropenia included the following preferred terms: neutropenia, febrile neutropenia, and neutrophil count decreased.

AE, adverse events; TEAE, treatment-emergent adverse event

Luvelta (STRO-002) Has a Favorable Product Target Profile

Confidence to move forward into registrational-enabling study



Potential to treat ~80% of patients with platinumresistant ovarian cancer





Efficacy demonstrated by ORR in the 31-44% range in FolRα-selected patients





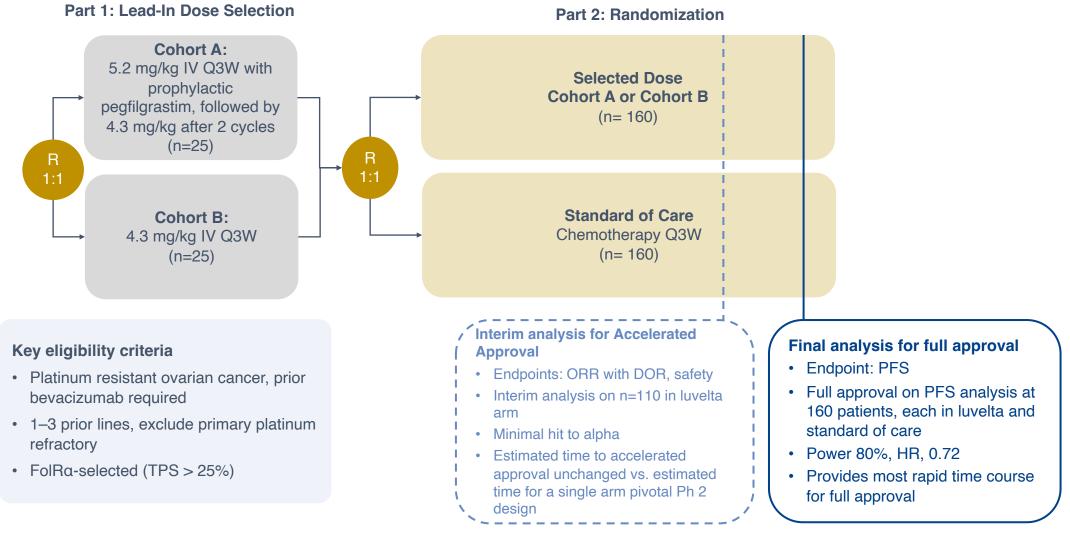
Manageable safety profile, even at the higher dose levels when given prophylactic pegfilgrastim



Note: Cohort A data are as of November 8, 2022. Cohort C data are as of December 8, 2022.

Luvelta Clinical Integrated Strategy for Phase 2/3 Study, REFRaME

Integrated design to potentially support accelerated and full approvals in platinum-resistant ovarian cancer



HR, hazard ratio; IV, intravenous; Q3W, every 3 weeks.

TPS, tumor proportion score; ORR, overall response rate; DOR, duration of response; PFS, progression free survival; HR, hazard ratio.

Luvelta Provides Opportunities for Pipeline-in-a-Drug Multiple shots on goal for commercial opportunities, beyond gynecological cancers

reatment	Indication		Estimated Market Size/Incidence	
Monotherapy	Platinum-resistant ovarian cancer Phase 2/3		Market size: ~4K patients per year in the U.S. (FolRα-selected)	Registrational-enabling, Fast-track designation Optimized dose of 4.3 mg/kg or 5.2 mg/kg + pegfilgrastim \times 2 \rightarrow 4.3 mg/kg
	Endometrial cancer Phase 1 expansion		Incidence: Across all stages, not FolRα-selected, ~66K newly diagnosed/year	Requires baseline FolRα-expression level N=40, enrolling
	Pediatric RAM phenoty AML with CBF/GLIS2 mutation Compassionate use	ре	Market size: ~20 newly diagnosed patients per year	N=17+ Orphan drug designation Rare pediatric disease designation To discuss with FDA registrational path
	NSCLC Preclinical		Incidence: Across all stages, squamous and non-squamous, not FolRα-selected. ~196K newly diagnosed patients/year	Translational research to define strategies for patient stratification based on FolRα
Combination therapy	Platinum-sensitive ovar cancer combined with bevacizumab MT Phase 1 dose escalation/expansion	ian T	Market size: ~2-3K patients per year in the U.S. (FolRα-selected)	Bevacizumab 15 mg/kg combined with STRO-002 starting at 3.5 mg/kg N=40, enrolling

AML, acute myeloid leukemia; NSCLC, non-small cell lung cancer.

Platinum-resistant ovarian cancer source: Sutro internal estimate, based on overall ovarian cancer incidence from SEER data, 2022 (accessed Jan. 2023) Endometrial cancer source: SEER data, 2022 (accessed Jan. 2023)

RAM-AML source: 1. SEER data explorer, 2022 (accessed Jan. 2023). 2. Eidenschink Brodersen L, et al. A recurrent immunophenotype... Leukemia. 2016;30(10):2077-2080. 3. Smith, JL et al. Comprehensive Transcriptome Profiling of Cryptic CBFA2T3-GLIS2 Fusion-Positive AML... Clinical Cancer Research, vol. 26.3 (2020): 726-737.

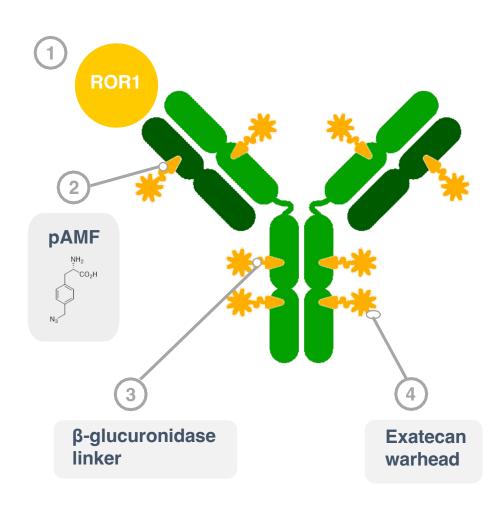
NSCLC source: 1. SEER data, 2022 (accessed Jan. 2023). 2. ASCO Cancer.net report, 2022. 3. American Cancer Society Key Statistics for Lung Cancer, 2022.

Platinum-sensitive ovarian cancer source: Sutro internal estimate, based on overall ovarian cancer incidence from SEER data, 2022 (accessed Jan. 2023)





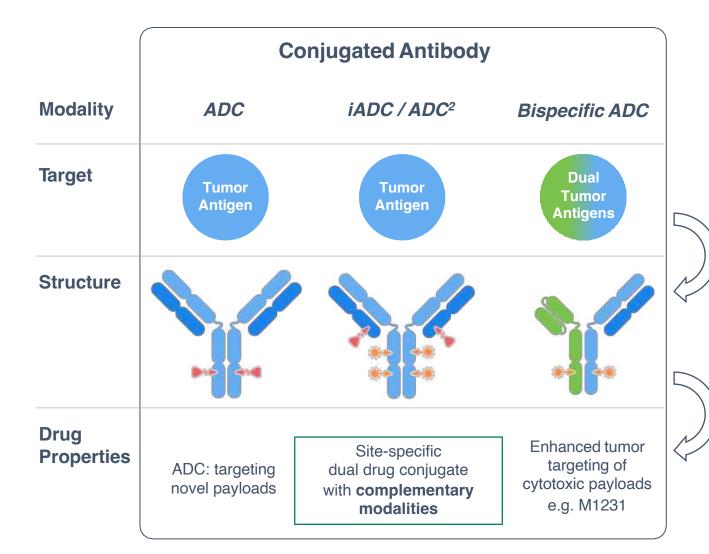
Our Innovative Design: STRO-003 is a Novel Optimized ROR1 ADC, Featuring TOPO-1 Inhibitors Linked with β-Glucuronidase Cleavable Linkers, DAR 8



STRO-003 is a single homogeneous antibody drug conjugate (ADC) with a drug-antibody ratio (DAR) of 8, targeting ROR1 tumor antigen

- Targeted ROR1 epitope is overexpressed in diverse cancers including hematological and solid tumor indications
- Precisely positioned non-natural amino acids, p-azidomethyl-L-phenylalanine (pAMF), to enable DAR8 and optimal conjugation sites for enhanced performance and stability
- Stable β-glucuronidase cleavable linkers demonstrate tumor specificity and encouraging preclinical tolerability. Preclinical data has shown marked improvement over CatB linkers regarding neutropenia and lung tolerability issues seen with tubulin and TOPO-1 inhibitors in the clinic
- Exatecan warhead inhibits TOPO-1 causing DNA disruption. It elicits potent tumor cell killing, bystander activity and immunogenic cell death

Drug Discovery Platform Enables the Opportunity for Best-in-Class or First-in-Class Molecules Precise novel design to enhance efficacy and safety across multiple modalities and targets





1. Mono- or Bispecific TAA Targeting

Toolbox of Best-in-Class Linker-Payloads

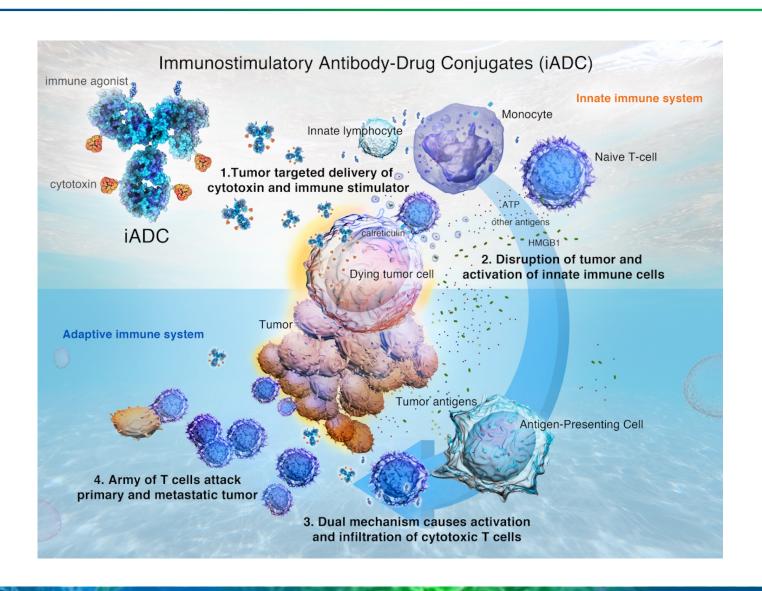
- DNA targeting / tubulin targeting cytotoxins
- Immune modulators
- Other mechanistically synergistic payloads
- Proprietary cleavable / non-cleavable linkers
- 2. Single or Dual Conjugations of Different Mechanisms

New Modality for Cold Tumors: Immunostimulatory Antibody Drug Conjugate (iADC) Featuring dual drug conjugation technology with both cytotoxin and immune modulator

Strategic iADC Collaboration June 27, 2022



- \$90M upfront to develop iADCs for up to three targets
- \$422.5M in development, regulatory and commercial milestones for each product candidate, plus tiered royalties ranging from low-double digit to mid-teen percentages
- Builds on success of Sutro's ADC platform and engineering expertise
- Leverages Astellas' primary focus on immuno-oncology
- Sutro has the option to share costs/profits for U.S. product development
- Sutro can develop iADCs outside of this collaboration in other targets





Financial Overview

Well-capitalized through multiple funding sources

\$287.3M⁽¹⁾

in cash, cash equivalents & marketable securities as of September 30, 2022

Projected cash runway into 1H 2024(1),

based on current business plans and assumptions

~1.5M shares of Vaxcyte

(Nasdaq: PCVX) not included in the above reported cash, as of September 30, 2022⁽²⁾

Funding generated from our collaborators of ~\$600M(3)

through September 30, 2022

^{1.} Does not include the impact from the value of Sutro's holdings of Vaxcyte common stock (Nasdaq: PCVX).

^{2.} The Company sold approximately 1 million shares of Vaxcyte common stock at fair market value during the period from October 1, 2022 through November 7, 2022.

^{3.} Includes payments and equity investments received through September 30, 2022.

Experienced Leadership Team



William Newell, JD
Chief Executive Officer and
Member of the Board of
Directors



Trevor Hallam, PhDPresident of Research and Chief Scientific Officer



Ed Albini, MBAChief Financial Officer



Linda FitzpatrickChief People and
Communications Officer



Jane Chung, RPh Chief Commercial Officer



Shabbir Anik, PhDChief Technical Operations Officer



Nicki Vasquez, PhDChief Portfolio Strategy and Alliance Officer



















































