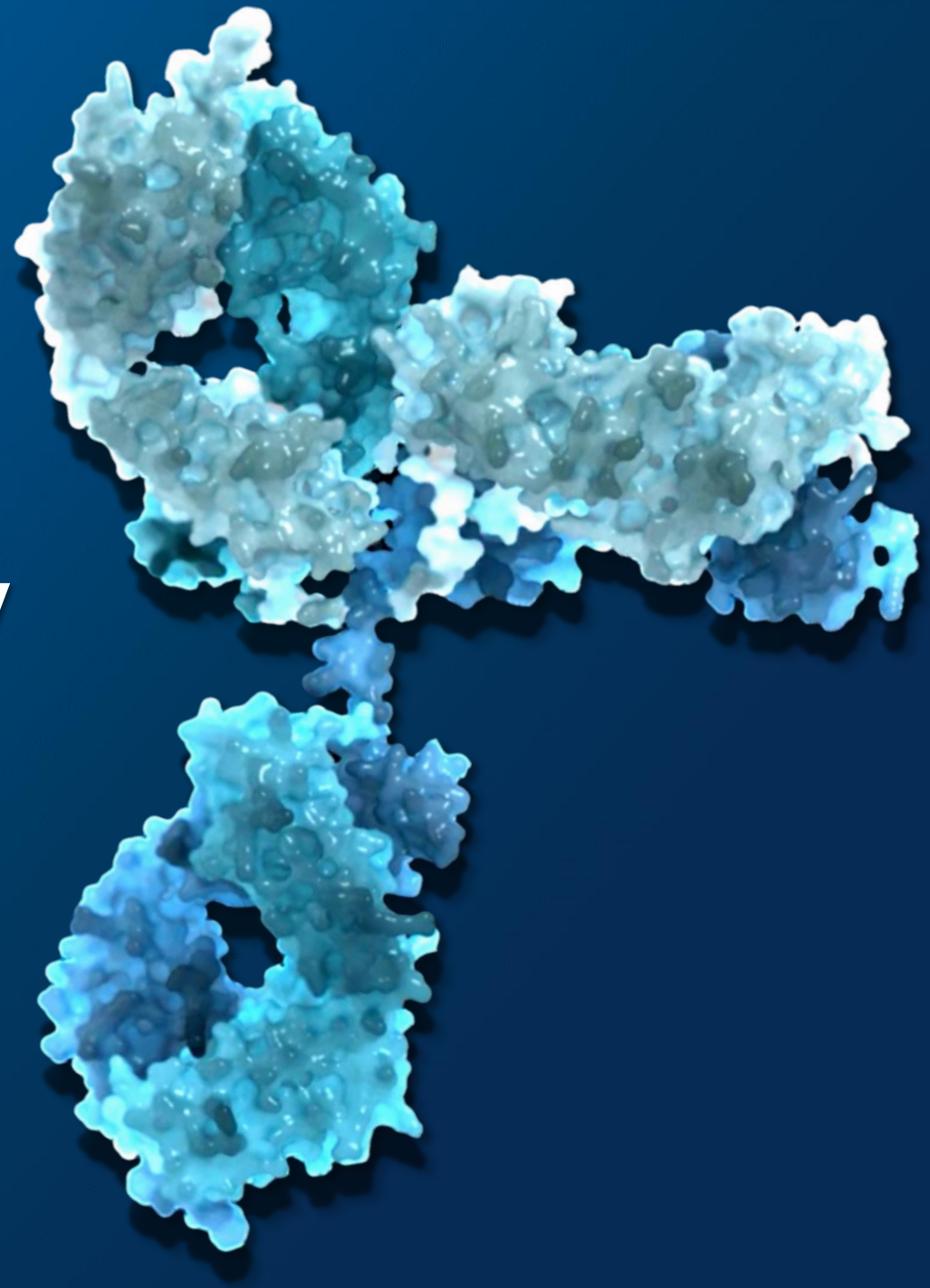
SUTRO BIOPHARMA

Science Designed to Provide Endless Possibility



November 2024

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; anticipated preclinical and clinical development activities, including enrollment and site activation; timing of announcements of clinical results, trial initiation, and regulatory filings; outcome of regulatory decisions; our expectations about our cash runway; potential benefits of luvelta and our other product candidates and platform; potential expansion into other indications and combinations, including the timing and development activities related to such expansion; potential growth opportunities, financing plans, potential future milestone and royalty payments, competitive position, industry environment and potential market opportunities for our 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 and the design, timing and results of preclinical and clinical trials and our ability to fund development activities and achieve development goals. 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.

Next-Generation ADCs and Biologics, Transforming Science for Patients

Proven Cell Free Discovery and Manufacturing Platform Driving Three Significant Opportunities

Luvelta

Luvelta pipeline-in-a-drug potential with two registrational trials ongoing and multiple follow-on opportunities

Pipeline

Emerging pipeline of **next-generation ADCs**

Partnerships

Partnerships across multiple modalities have generated ~$975 million in funding, with over $2 billion in potential future milestones plus royalties

Sutro Pipeline Drives Broad Potential with Significant Near- and Long-term Opportunities

Luvelta Lead Opportunity:
Ovarian Cancer (Fast Track Designation)

Registrational study underway

- REFRαME Part 1 – Enrollment Complete
- REFRαME Part 2 – Ongoing

Bevacizumab-luvelta combo

- Data from dose escalation cohort presented at ESMO 2024
- Data from expansion cohort expected 1H 2025

Additional Luvelta Opportunities

CBF/GLIS2 Pediatric AML (Orphan Drug & Rare Pediatric Disease Designation)

- Registrational study ongoing

Luvelta for Non-Small Cell Lung Cancer

- Phase 2 ongoing
- Initial data expected 1H 2025

Luvelta Additional Indications

- Endometrial cancer – evaluating patient expansion through IST

Next-Generation ADCs:
Features Not Possible with Other Platforms

Precisely designed to mitigate toxicity risk and increase dose to improve efficacy and broaden addressable patient population

Delivering three INDs over next three years

STRO-004 (Tissue Factor-targeting ADC)

- IND targeted 2H 2025

Well Capitalized with Strong Business Development Track Record

~$388M [1] in cash, cash equivalents & marketable securities

~$975M [2] Funding generated from our collaborators

Partnerships Provide over $2 Billion Potential Future Milestones plus Royalties

VAXCYTE	Blackstone	IPSEN	astellas	TASLY
Phase 2/3 vaccines for invasive pneumococcal disease	Blackstone purchase of 4% royalties on potential future net sales of Vaxcyte PCV products	STRO-003 (ROR1 ADC) preclinical program for solid tumors and hematological malignancies	Preclinical immunostimulatory ADCs	Exclusive license to luvelta in Greater China
Up to $60M in milestones + WW royalties on potential non-PCV future product candidates	Up to $250M in potential payments tied to various return thresholds	Up to ~$824M in milestones + WW royalties	Up to ~$423M in milestones per product candidate + WW royalties + U.S. profit sharing option	Up to ~$355M in milestones + 10-year royalties on sales in Greater China

1. Based on cash, cash equivalents and marketable securities held by Sutro as of September 30, 2024.
2. Includes payments and equity investments received through September 30, 2024.

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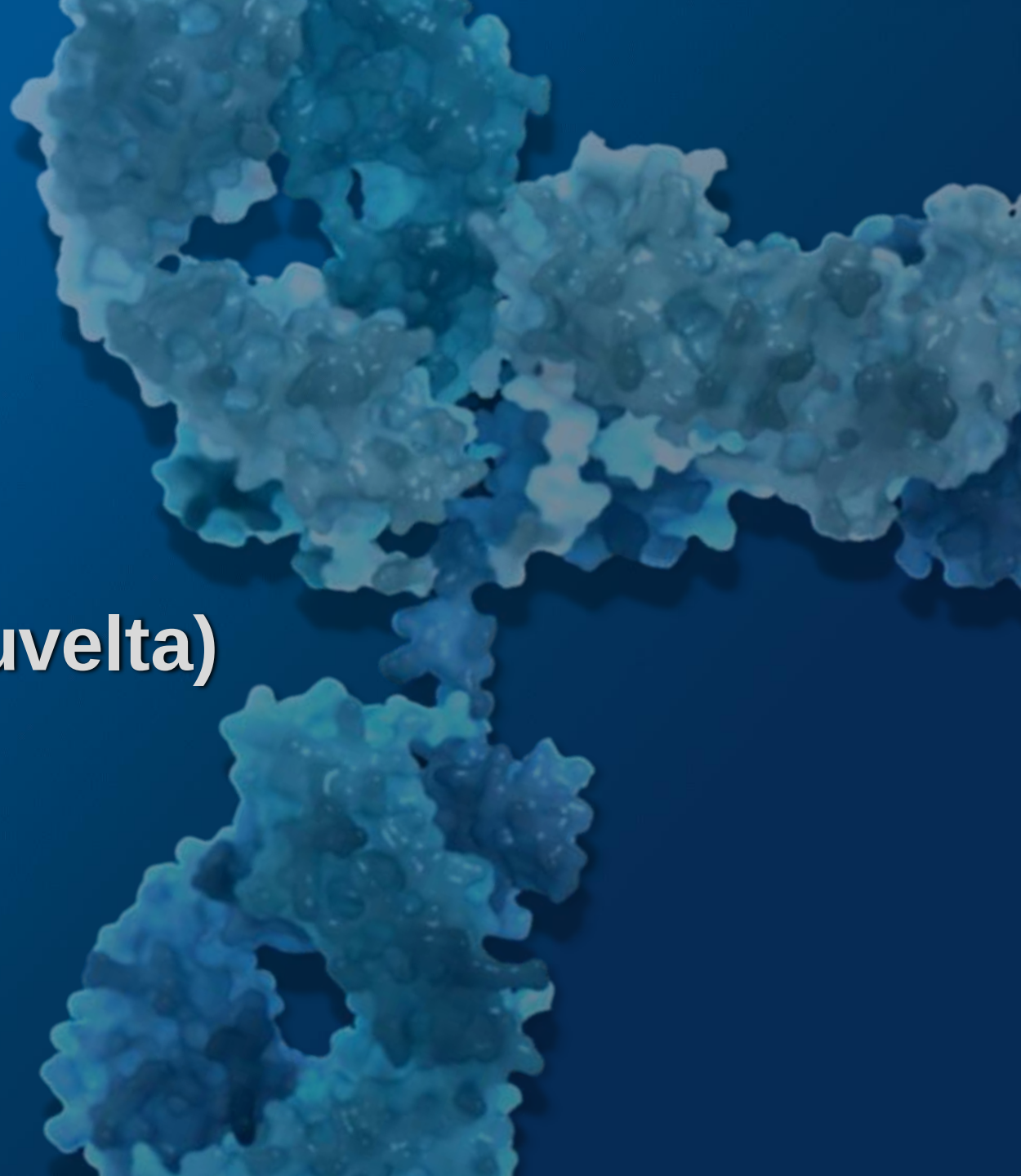
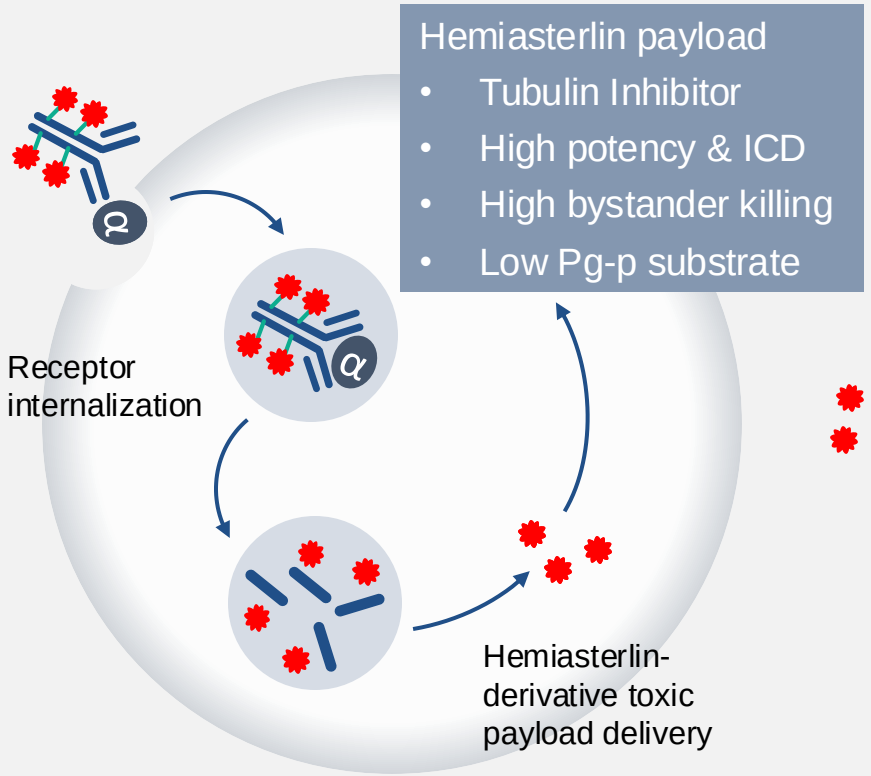
STRO-002
Luveltamab Tazevibulin (Luvelta)



Luvelta: Deliberate Design + Development Enables Pipeline-in-a-Drug Opportunity

Precisely Designed ADC to Expand Patient Access



Potential to Address Multiple FRα Expressing Cancers, Including those with Low Expression Levels

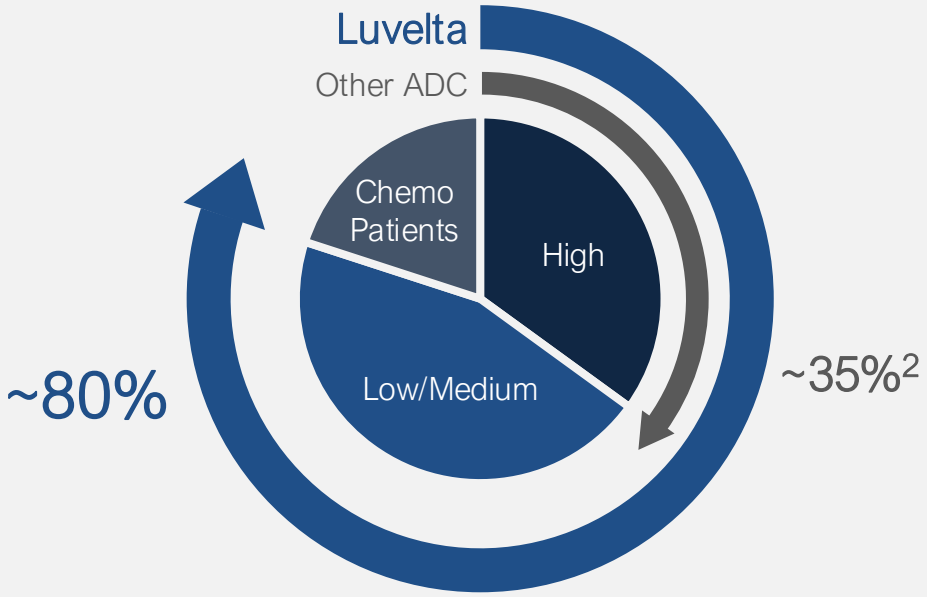
- Promising clinical activity in all indications evaluated, potentially addressing tumors with low-medium FRα expression
- Enrolling REFRαME registrational trial for ovarian cancer; potential to be 1st therapy for low-medium expressing patients
- Complementary registrational trial for pediatric AML
- Multiple follow-on opportunities for clinical development

Source: Modified from Dumontet, C et al., Nat Rev Drug Discov 2023; 22, 641–661.

Significant Opportunities, Initially in Ovarian and Expanding to Additional FRα Expressing Cancers

Luvelta Potentially Doubles the Addressable PROC Patients

Percent of Ovarian Cancer Patients Eligible for Therapy[1]



Estimated Annual Incidence in FRα-Expressing Patient Populations
(U.S., Europe and Japan)

Ovarian ~69K	Endometrial ~71K
NSCLC, Adenocarcinoma ~108K	Pediatric AML with CBF/GLIS2 AML mutation ~100 per market

PROC: Platinum Resistant Ovarian Cancer
1 – Luvelta eligibility based on TPS level in REFRaME trial; FDA Approved ADC eligibility based on TPS level in Elahere approved label
2 – AbbVie ImmunoGen Acquisition - Slides on the AbbVie IR website, November 30, 2023

FRα expression assumptions for ovarian: ≥25% TPS (80% of pts, internal data); endo: ≥25% TPS (41% of pts[8]); NSCLC: ≥1% TPS (30% of pts, internal data). **Sources**: 1. Sutro internal estimates, data on file. 2. DRG reports. 3. Cancer Statistics in Japan 2023 ganjoho.jp. 4. SEER data and data explorer. 5. American Cancer Society Cancer Facts and Figures, 2023. 6.Deloitte Consulting & IQVIA custom projects for Sutro, 2022. 7. European Cancer Information System (ECIS), accessed Dec 2023. 8. Brown Jones M, et al., Int J Cancer. 2008 Oct 1;123(7):1699-703. 9. Eidenschink Brodersen L, et al. Leukemia. 2016;30(10):2077-2080. 10. Smith, JL et al. Clinical Cancer Research. vol. 26,3 (2020): 726-737.

Opportunity to be First Therapy for Broad PROC Patient Population

Treatment Eligibility is Driven by FRα Biomarker Test

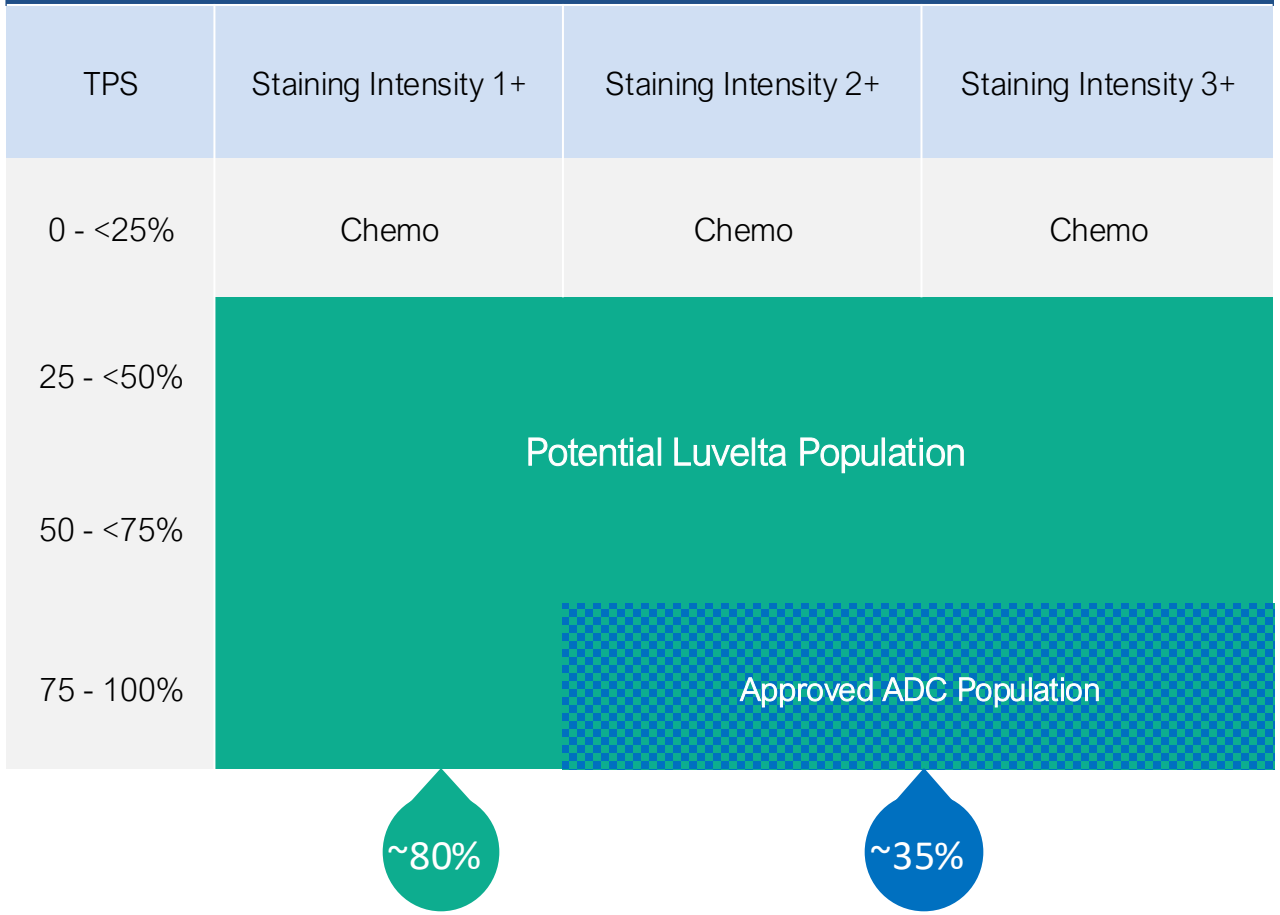
Luvelta has demonstrated clinical activity in PROC patients with FRα ≥25%

Both Luvelta and FDA-approved ADC test patient FRα levels via Ventana validated assay

Due to high frequency of testing of FRα in OC, patient expression level may be known prior to developing platinum resistance

Luvelta addresses low and medium FRα expression (≥25% TPS with any intensity) that currently receive chemotherapy, while approved ADC is limited to high expressing FRα (≥75% TPS with PS 2+, 3+)

Comparison of Potential Luvelta Population with Approved ADC Population



Sources: 1. ImmunoGen Third Quarter 2023 Financial Results, Nov 2023. 2. Jun 2023 ASCO oral presentation "Luveltamab tazevibulin (STRO-002), an anti-folate receptor alpha (FolRα) antibody drug conjugate (ADC), safety and efficacy in a broad distribution of FRα expression in patients with recurrent epithelial ovarian cancer (OC): Update of STRO-002-GM1 phase 1 dose expansion cohort.".

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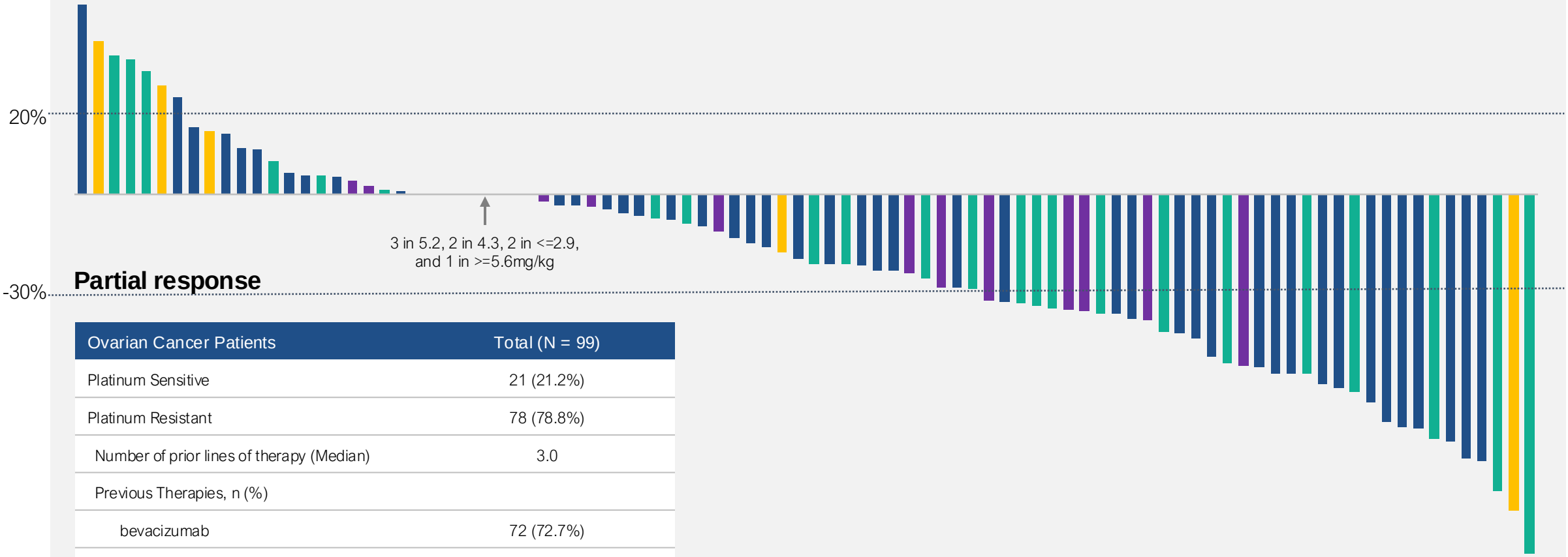
Registrational Strategy Supported by Clinical Data from ~100 Patients

Maximum Reduction in Tumor Target Lesions in RECIST-Evaluable Patients (N=92 Evaluable)



Ovarian Cancer Patients	Total (N = 99)
Platinum Sensitive	21 (21.2%)
Platinum Resistant	78 (78.8%)
Number of prior lines of therapy (Median)	3.0
Previous Therapies, n (%)	
bevacizumab	72 (72.7%)
PARP Inhibitor	70 (70.7%)

Data as of Nov 8, 2023.

Starting dose, Q3W ≤ 2.9 mg/kg 4.3 mg/kg 5.2 mg/kg ≥ 5.6 mg/kg

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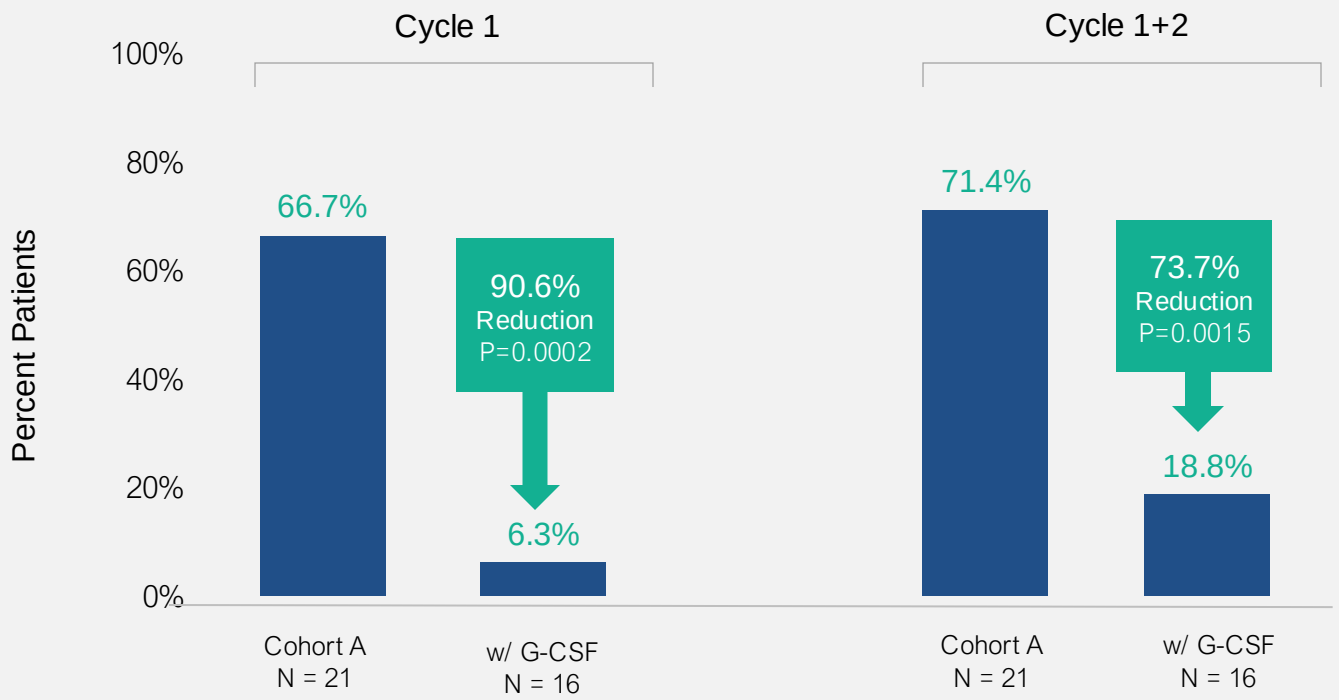
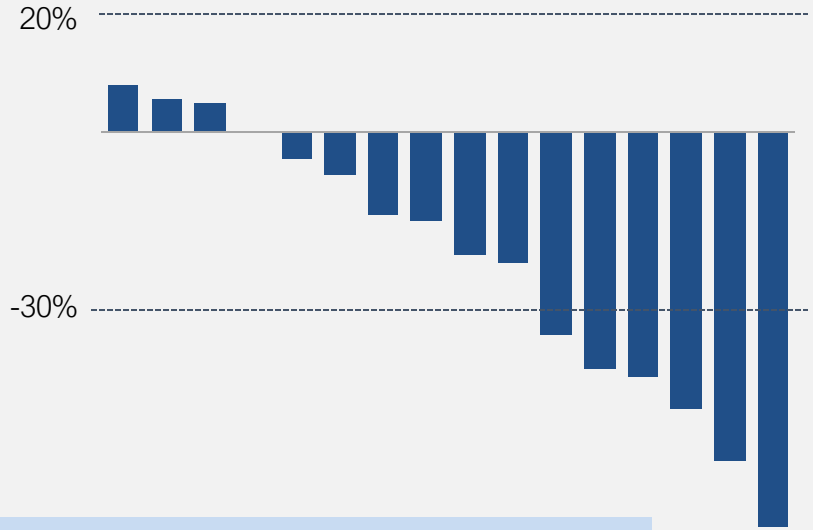
Use of Prophylactic G-CSF on Day 8 with Higher 5.2mg/kg Dose Demonstrated Effective Reduction of Neutropenia

Grade 3+ Neutropenia Cohort A[1] vs. Cohort with G-CSF[2]



Maximum Reduction in Tumor Target Lesions (N=16)



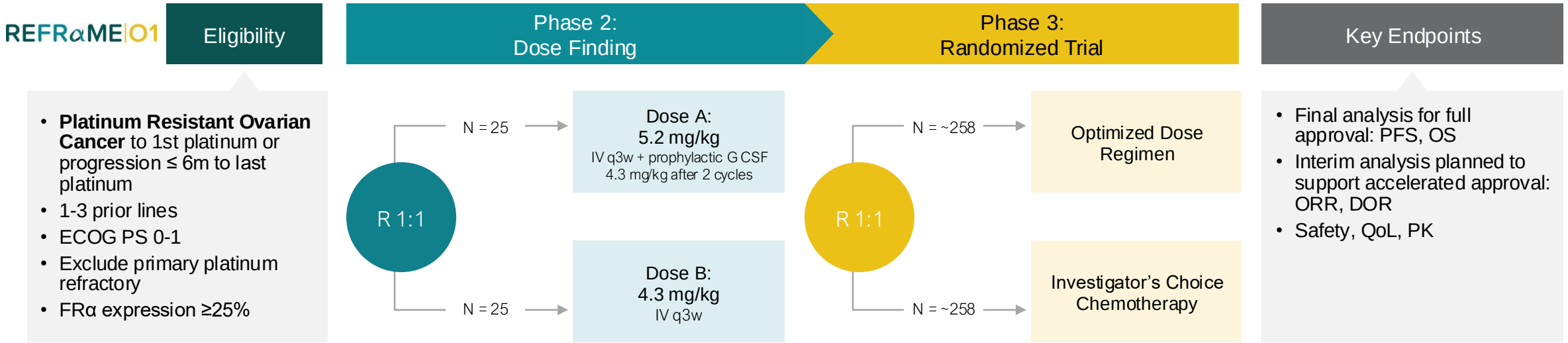
Disease control rate = 100%
(best response)

Preferred Term: G3+ TEAE	Cohort A 5.2 mg/kg (N=21)	Cohort + GCSF 5.2 mg/kg (N=16)
Neutropenia	76.2%	37.5%

1 - Cohort A patients dosed with Luvelta 5.2mg/kg.
2 - Cohort with G-CSF patients started at Luvelta 5.2mg/kg + prophylactic pegfilgrastim on Day 8.
Data as of Nov 08, 2023 Sources:.Internal Sutro data on file.
Treatment emergent adverse events of note were predictable and manageable in neutropenia, arthralgia, and peripheral neuropathy.

REFRαME-O1: Registration-directed Study for patients with PROC

- **Part 1** – Fully enrolled (50 patients) in April 2024; patients now in follow up
- **Part 2** – Enrolling patients



Sources: clinicaltrials.gov NCT05870748. Internal Sutro data on file.

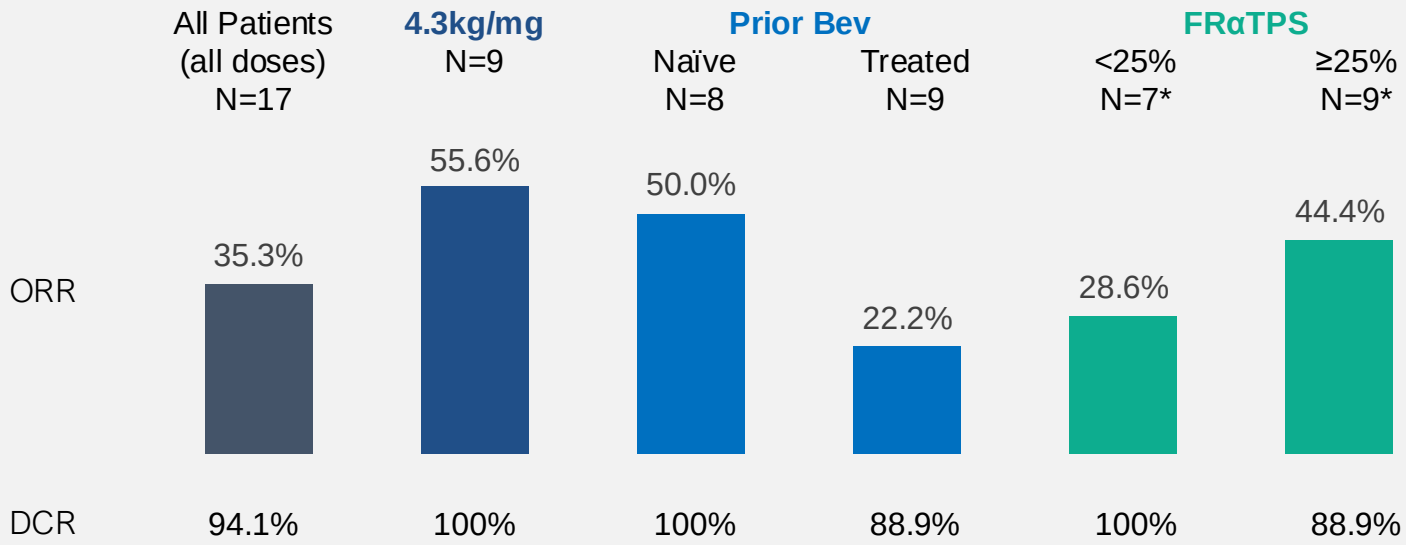
REFRαME-P1: Addressing Unmet Patient Need + Accelerating PROC

- Pediatric RAM AML – devastating disease impacting infants and toddlers: overall survival of 15-30%
- Regulatory submission requirements in U.S. and Europe may be applicable for PROC submissions
- Potential to receive priority review voucher upon FDA approval and increase commercial readiness for PROC
- May extend luvelta exclusivity
- Additional proof-of-concept for luvelta's ability to address low FRα expressing disease
- Registrational study underway

Sources: clinicaltrials.gov NCT05870748. Internal Sutro data on file.

Luvelta Plus Bevacizumab Combination Potentially Supports All-Comers Approach

Phase 1b Response Data (Presented at ESMO 2024)[1]



Phase 2 Expansion Cohort

- 23 patients enrolled to-date, including PSOC & PROC
- All-comers trial – no FRα cut-off requirements
- 4.3 mg/kg dose
- Data anticipated in 1H25

Median PFS 8.3 months

Anti-tumor activity irrespective of prior bev therapy or FRα expression

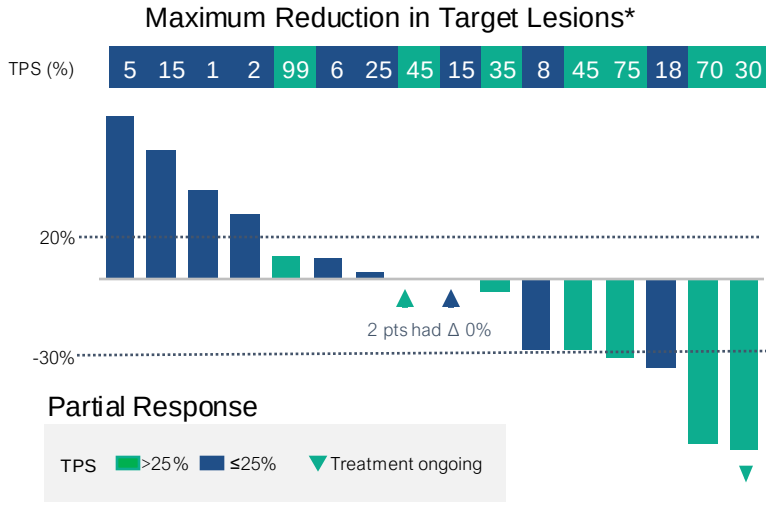
No New Safety Signals Observed in Luvelta Plus Bevacizumab Combination

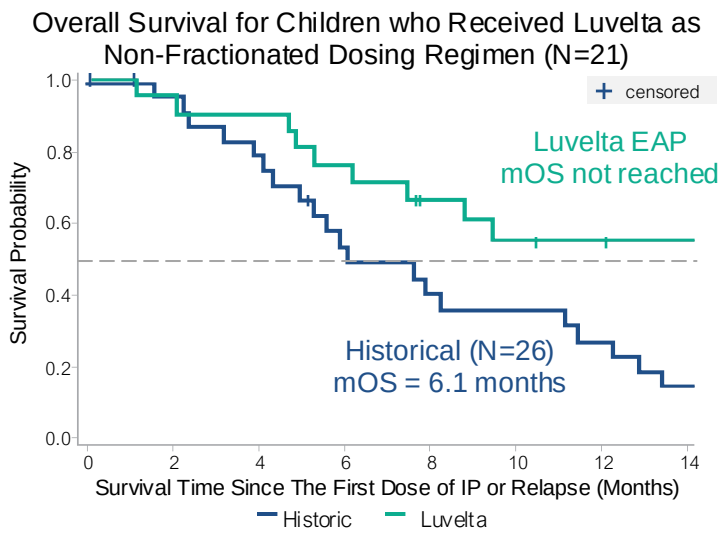
- At the 5.2 mg/kg dose, 1 out of 3 patients enrolled experienced a DLT of grade 3 nausea and a DLT of grade 4 decreased appetite on C1D11
- 9 (50%) patients experienced a TEAE leading to luvelta dose reduction; the most frequent TEAE leading to dose reduction was neutropenia
- 8 (44%) patients experienced treatment-related AEs leading to luvelta discontinuation
- Two deaths occurred in the dose-escalation phase:
  - Grade 5 non-neutropenic sepsis (C2): assessed as doubtfully related to luvelta and possibly related to bev; the probable cause of sepsis was malignant bowel perforation caused by progressive disease
  - Grade 5 sepsis (C12): occurred after the patient underwent a diabetic foot ulcer drainage procedure; considered not drug-related by the investigator (related to skin infection), but the sponsor upgraded attribution to possibly related
    - Safety guidelines were updated to advise that patients be evaluated by their oncologist prior to undergoing any surgical procedure

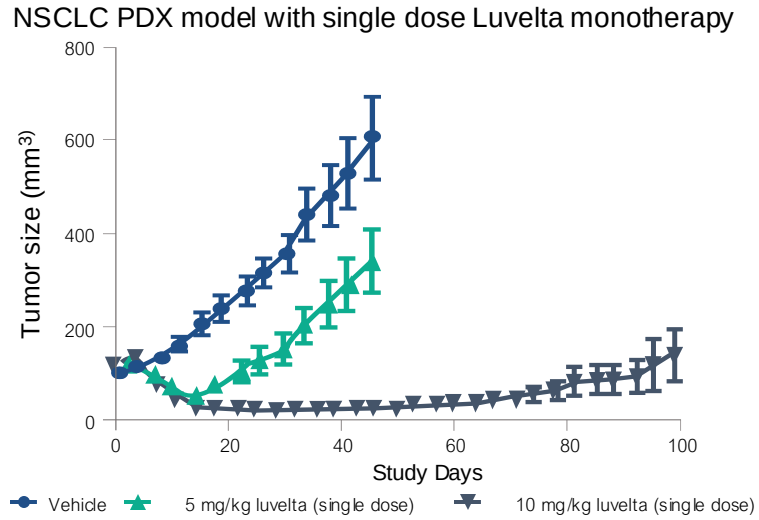
1 – ESMO 2024 Poster 749P: Luveltamab tazevibulin, an anti-folate receptor alpha antibody-drug conjugate, in combination with bevacizumab in patients with recurrent high-grade epithelial ovarian cancer: STRO-002-GM2 phase 1 study
* - FRα missing for one patient

Luvelta Demonstrated Compelling Anti-Tumor Activity and Manageable Safety Profile In Lower and/or Variable FRα Expression Tumors

Endometrial	RAM AML[1]	NSCLC
N = 17	N = 25	Preclinical
✓ Evidence of anti-tumor activity ✓ No new safety signals observed ✓ Continuing clinical development	✓ Meaningful clinical responses, including complete remission and prolonged overall survival ✓ Well tolerated and can be given as out-patient ✓ Registrational trial ongoing	✓ Single dose and combination with PD-1 blockade demonstrated anti-tumor activity ✓ Phase 2 trial ongoing

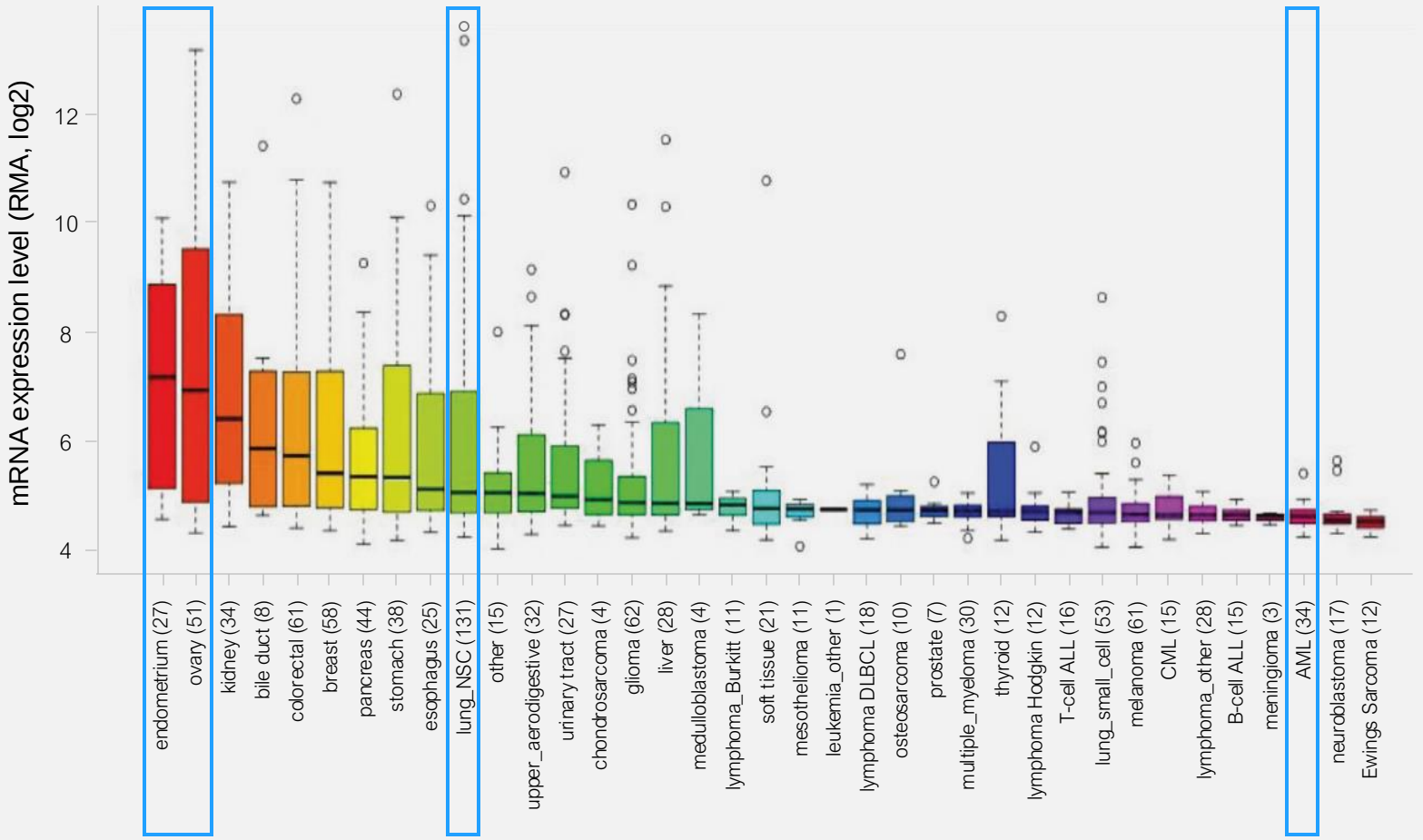






Data cutoff: 04 August 2023. *n=16 response evaluable patients. PR, partial response; TPS, tumor proportion score. 1 - These data were generated by the treating physicians and collected and enabled for presentation by Sutro.
Endometrial source: Oct 2023 ESMO mini-oral presentation "741MO - Luveltamab tazevibulin (STRO-002), an anti-folate receptor alpha (FolRα) antibody drug conjugate (ADC), demonstrates clinical activity in recurrent/progressive epithelial endometrial cancer (EEC): STRO-002-GM1 phase I dose expansion." **RAM AML source:** Dec 2023 ASH poster "Anti-leukemic Activity of Luveltamab Tazevibulin (LT, STRO-002), a Novel Folate Receptor-α (FR-α)-targeting Antibody Drug Conjugate (ADC) in Relapsed/Refractory CBFA2T3::GLIS2 AML." NSCLC source: Internal Sutro preclinical data on file.

FRα is Broadly Expressed Across Multiple Indications



Key Opportunities for Luvelta

Demonstrated clinical activity across multiple indications

Potential to show activity in tumors with varying levels of FRα expression, covering a broad range of opportunities

Pipeline-in-a-product potential: FRα is expressed in solid and hematological tumors

Source: Cheung et al. "Targeting folate receptor alpha for cancer treatment." Oncotarget. 2016; 7: 52553-52574.

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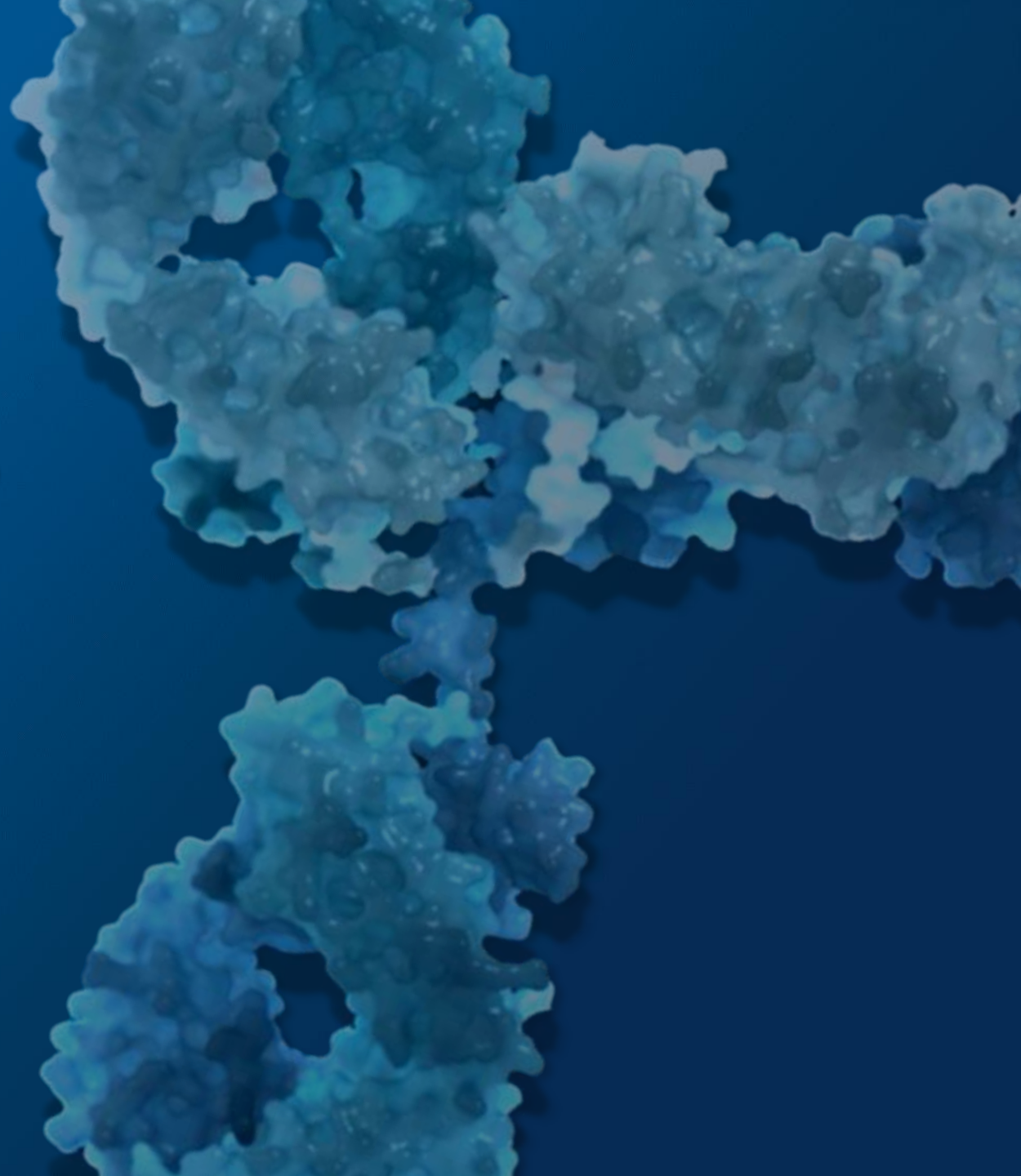
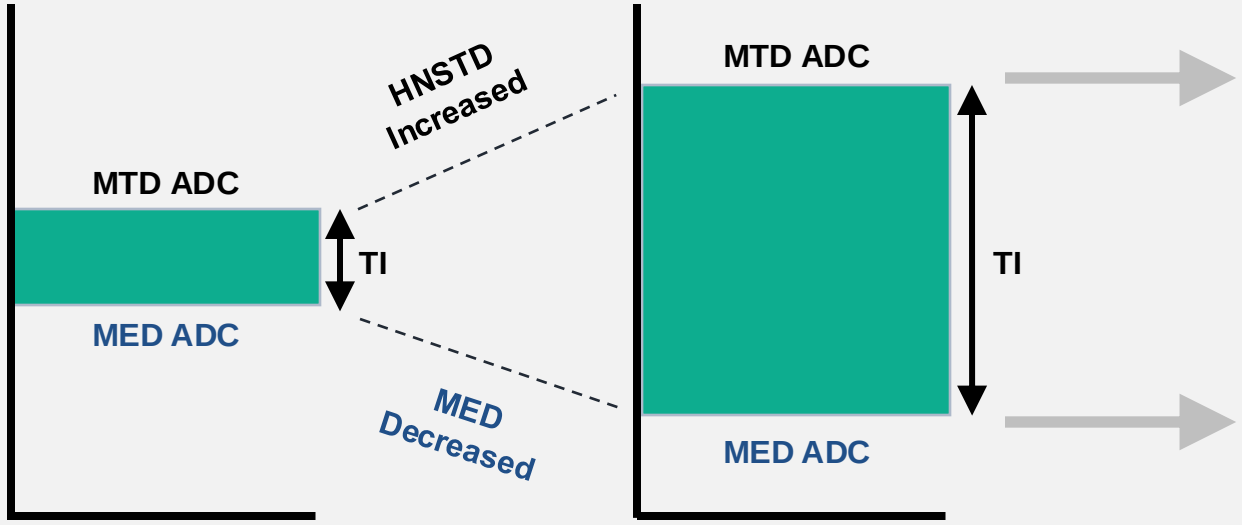
Sutro's Cell Free Design to Deliver Three INDs Over Next Three Years



Enhancing ADCs Inside and Outside the Tumor With Sutro's Platform Technologies Leads to a Higher Therapeutic Index



Key Sutro Technologies to Improve ADCs Outside the Tumor

Linker & payload design

Click chemistry

Site specific conjugation

Antibody engineering

Focused R&D Strategy – Make ADCs Better Inside the Tumor

1. Increasing ADC **Potency** Safely with **Higher DAR** of Exatecan ADCs (DAR 8, 12, 16)
2. Combining Payloads to Overcome **Resistance** with **Dual-Payload: ADC²**
3. Next Generation **Immuno-Oncology** with Immune Activation & Cytotoxins: **iADCs**

Adapted from Gerber et al, mAbs, 2023

Comparison of Topo1i ADC Platforms (Selected)

	DAR>8	Beta-Glu Linker	ADC^2/ Dual LPs	iADC/ iSAC	Site Specific	Fc Silent	Bispecific	HT Screening
SUTRO BIOPHARMA	✓	✓	✓	✓	✓	✓	✓	✓
Abbvie				✓		✓	✓	
AstraZeneca					✓	✓	✓	
Daiichi Sankyo								
Dualitybio				✓		✓	✓	
Genequantum			✓	✓	✓			
Genmab							✓	
Gilead								
Hansoh							✓	
Hengrui				✓				
Kelun							✓	
Lilly		✓				✓		
Medilink								
Merck KGaA		✓					✓	
Pfizer		✓		✓				

LP – linker payloads; iSAC – immune stimulating antibody conjugate; HT – high throughput

STRO-004 is a Next Generation ADC with Enhanced Therapeutic Potential

Tissue Factor-targeting ADC, featuring a DAR8 exatecan payload and site-specific linker design

TF presents an opportunity for pan-tumor targeting

- Clinical validation of TF in cervical cancer, along with early signs of activity in HNSCC, pancreatic cancer, and multiple other solid tumors with significant unmet needs

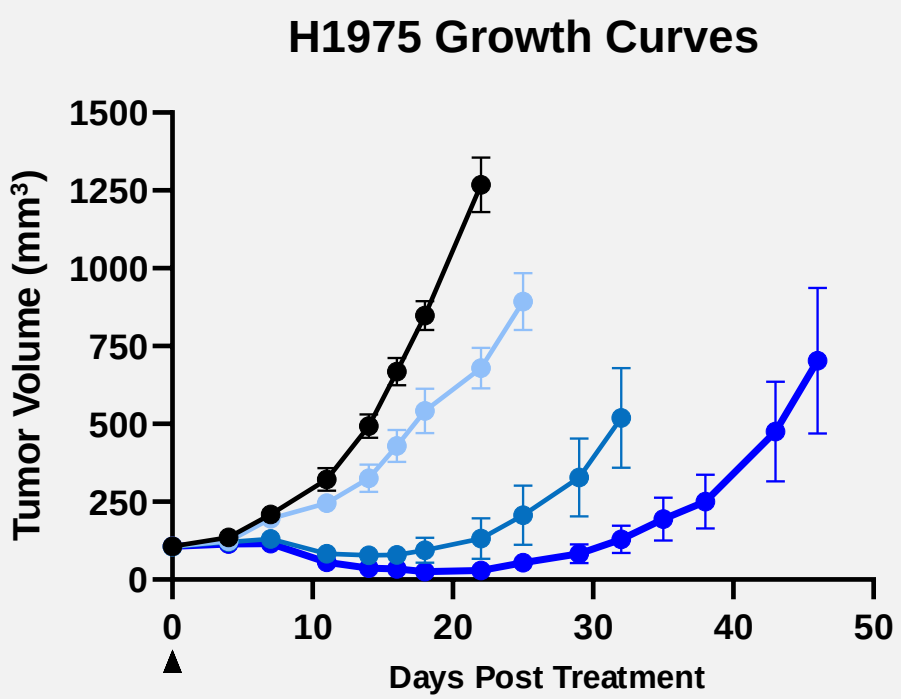
STRO-004 is optimally designed for broad therapeutic benefit

- Exatecan payload: Clinically validated payload with potent activity, bystander and reduced susceptibility to resistance
- β-glucuronidase linker: Optimized linker design with enhanced tumor selectivity and hydrophilicity
- Maximized drug performance with high DAR8 and optimized conjugation positioning
- Significant safety window, driving drug exposure and efficacy

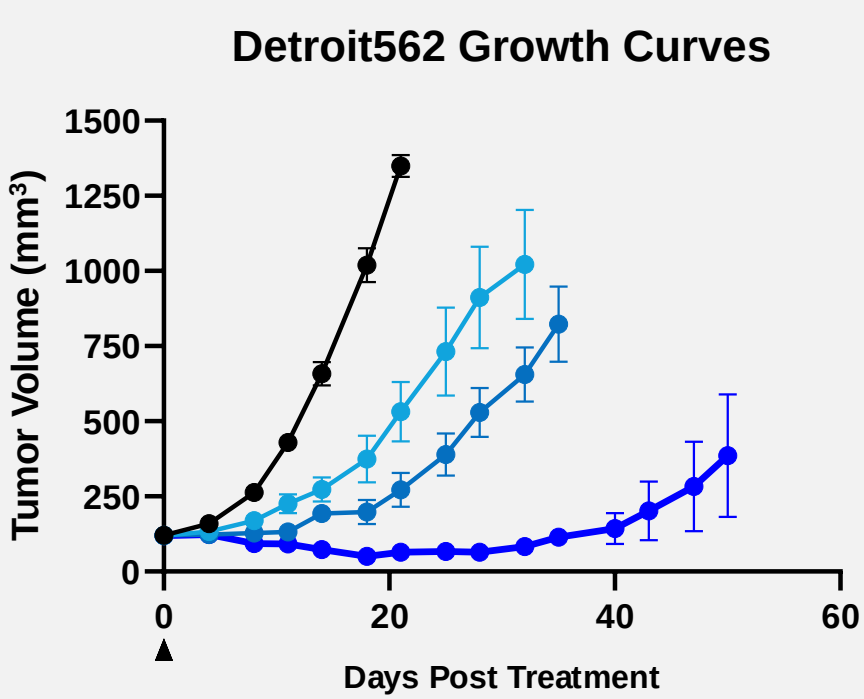
IND filing and First-in-Human studies planned for 2H 2025

STRO-004 DAR8 Exatecan Achieves Sustained Tumor Regressions in Xenograft Models of NSCLC and HNSCC at Low Doses

Lung (TF+++)



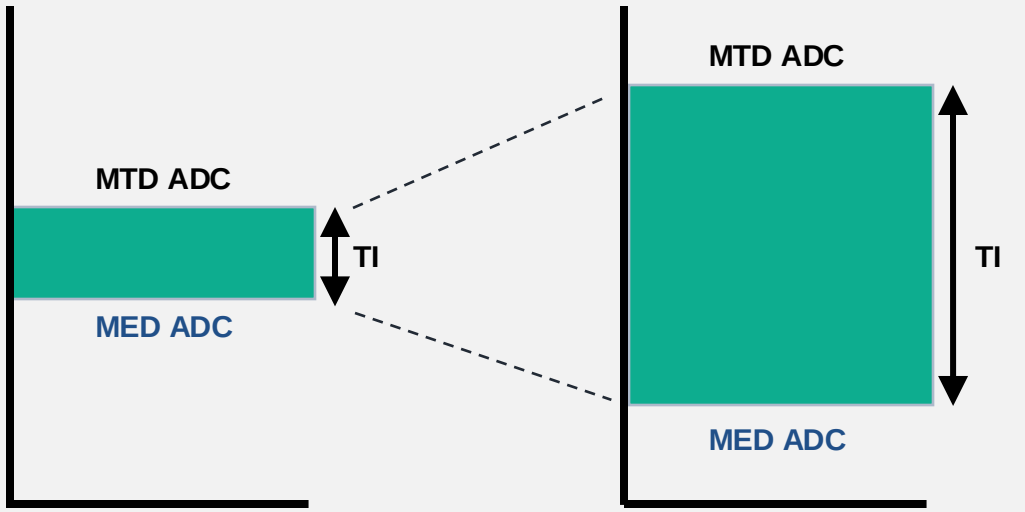
Head and Neck (TF++)



Vehicle
STRO-004 DAR8, 0.125 mg/kg
STRO-004 DAR8, 0.25 mg/kg
STRO-004 DAR8, 0.5 mg/kg
STRO-004 DAR8, 1 mg/kg

NSCLC – non-small cell lung cancer

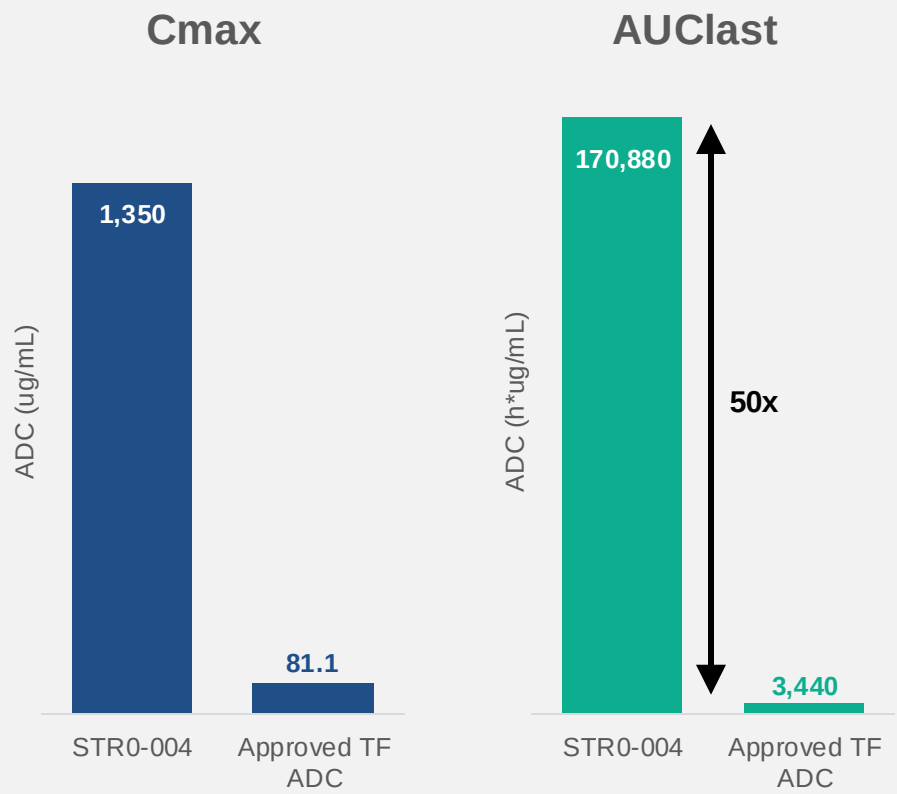
STRO-004 Widens the Therapeutic Window Compared to First Generation TF ADCs



TF-MMAE
HNSTD ~ 5 mg/kg*

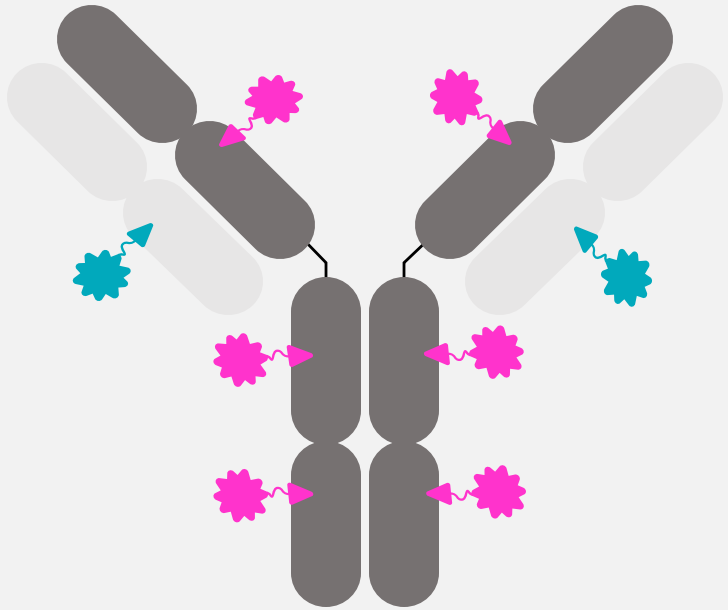
STRO-004
HNSTD ~ 50 mg/kg#

Increased Tolerability Leads to Enhanced Drug Exposure



*Breij & Parren, Can Res, 2014 # Sutro. 2024 interim data
Cmax – maximum concentration; AUClast - drug exposure over the specified time period; h – hour

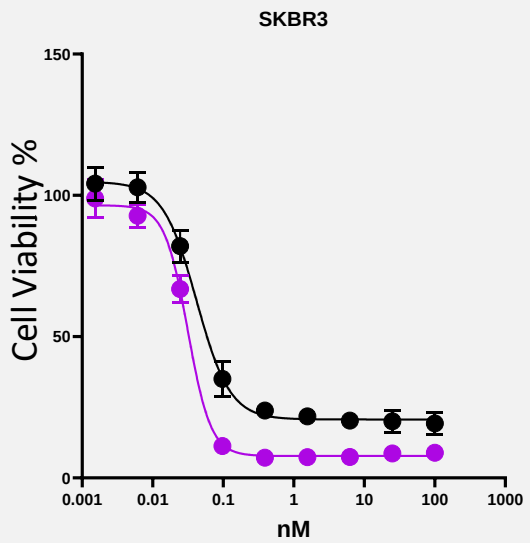
Our Focused R&D Strategy: Make ADCs Better Inside the Tumor with Dual-Payloads



- Multiple different dual-payload ADCs
- Best-in-class platform potential to optimize dual-payload ADCs
- Overcome resistance in clinic

Improved *In Vitro* Activity of Dual-Payload ADC (Topo1i + anti-Tubulin)

SKBR3



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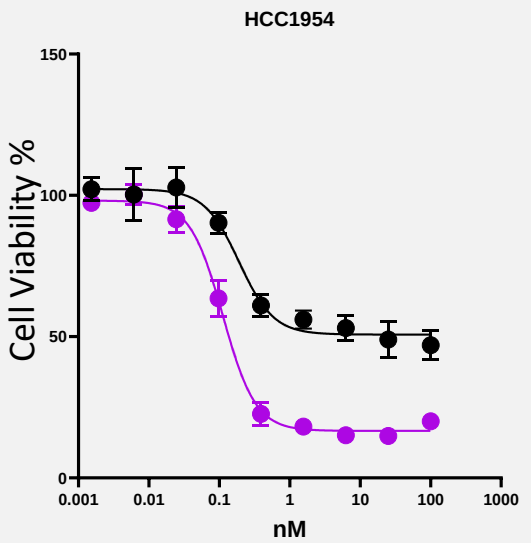
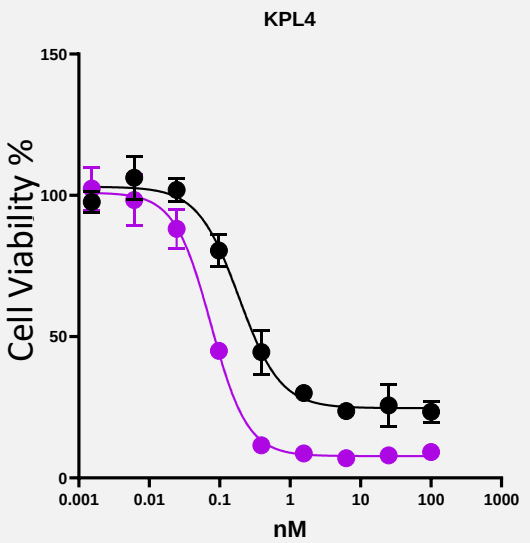


KPL4



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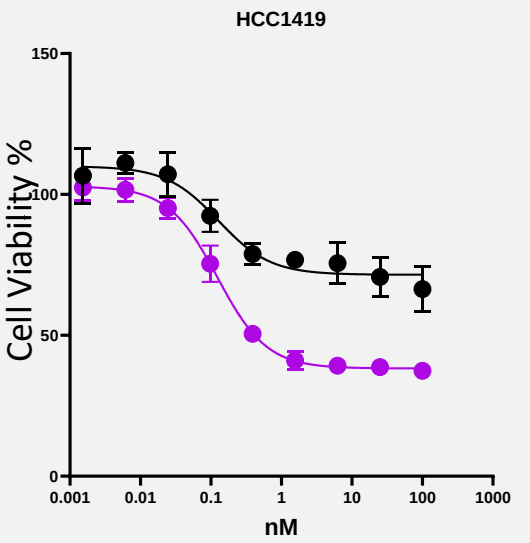


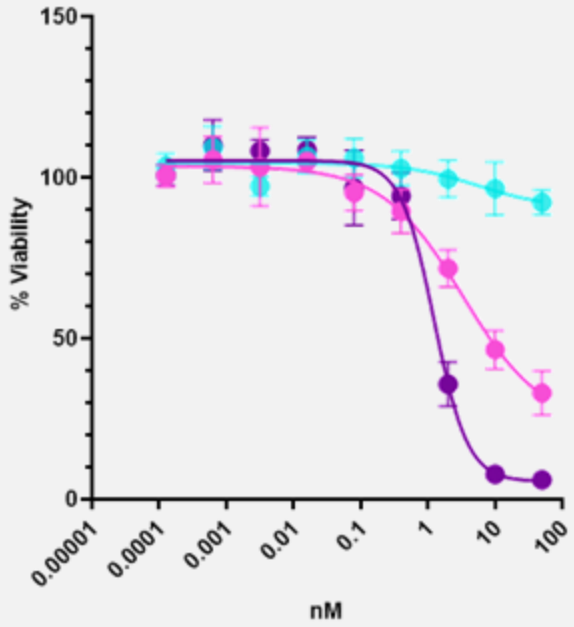
Enhertu

Trastuzumab DAR8 Topo1i + DAR2 MMAE

SUTRO BIOPHARMA

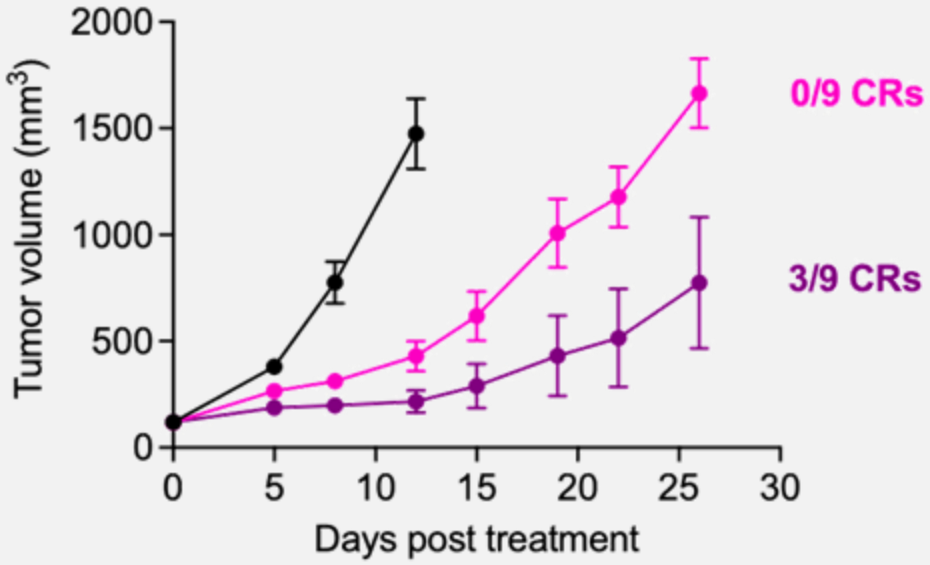
Dual-Payload Topo1i + PARPi ADC Shows Increased Activity Compared to Topo1i ADC

MC38-hTF
in vitro potency



DAR2 PARPi ADC
DAR4 Topo1i ADC
DAR4 Topo1i + DAR2 PARPi ADC[2]

MC38-hTF
in vivo anti-tumor activity



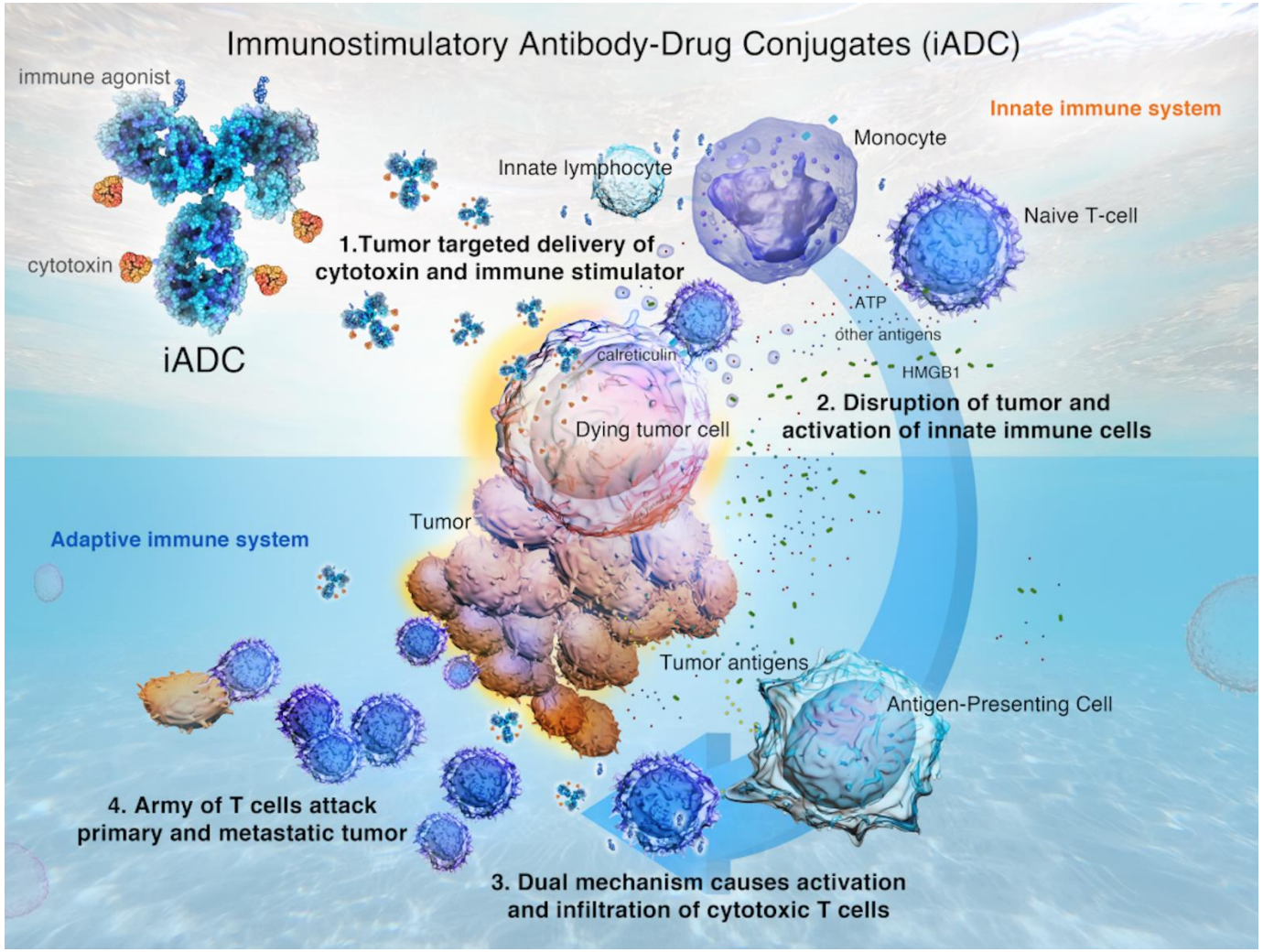
Vehicle (PBS)
5 mg/kg DAR4 Topo1i ADC
5 mg/kg DAR4 Topo1i + DAR2 PARPi ADC[2]

PBS – phosphate buffered saline

New Modality for Cold Tumors: Immunostimulatory Antibody Drug Conjugate (iADC)

Strategic iADC Collaboration

- Combining a cytotoxin and immune modulator gives potential to:
  - **Work alone** by pushing on the gas of the immune system and priming new populations of immune cells
  - **Synergize with other immune therapies** that release the brake off the immune system (i.e. checkpoint inhibitors)
- Sutro has **option** to share **costs/profits** for U.S. product development
- Sutro retained option to **develop iADCs outside of/beyond this collaboration** in other targets
- Two collaboration programs have been initiated to date



Novel Mechanism of Action Differentiates iADC from Other Immunotherapies

Sutro iADCs bridge innate and adaptive immunity to provide broad protection in a single molecule

	Sutro iADC	STING / TLR	ISAC	PD-1 / PDL-1	CAR-T Cells	Vaccine
Molecule	Targeted and homogeneous	Chemo	Mixed ADC	Ab	Biologic	Biologic
Opportunity: Risk	Combine ICD with innate agonists (TLR, STING, etc.)	Non-targeted, issues with TI	Requires Fc effector	Limited tumor types, small tumors	Safety concerns	Ag selection challenge
FcγR meditated uptake into myeloid			■			
Mechanisms to achieve anti-tumor immunity: Direct tumor cell killing	■				■	
Tumor antigen presentation	■		■			■
Priming and activation of Antigen Presenting Cells	■	■	■			■
T-cell recruitment to tumor	■	■	■	■	■	

STING – stimulator of interferon genes; TLR- toll-like receptor; immunogenic cell death

Express Cell-free Platform - Commercial GMP Scale Enabled in 2024

Approach / Feature	Advantages
Cell-free extract and platform elements **produced separately from proteins**	• Stockpiled cell-free extract used to create a wide variety of proteins • Eliminates cell line development and cell banking for each product
Cell-free production readily scalable from research through commercial	• Predictable and rapid scalability • Fast production minimizes time-in-plant
Non-natural amino acids enable **simple conjugation chemistry**	• High-yield, high-fidelity conversion of mAb to site-specific ADC (or iADC, ADC^2, etc.)
Faster discovery cycle times	• Express, test, assess and characterize many variants during discovery to optimize for the clinic

Results

- Fully folded, active mAbs with optimally located non-natural amino acid sites to enable highly site-specific conjugation and desirable pharmacological profile
- External CDMO network established for our platform technology, Luvelta and the production of future products

Over 3,000 patients have been treated to-date with biologics made using our cell-free technology

Potential for Broad Patients Benefits with Significant Upcoming Milestones

PROGRAM	MODALITY/TARGET	INDICATION	DISCOVERY	PRECLINICAL	PHASE 1/1B	PHASE 2	PHASE 3/ REGISTRATIONAL	WORLDWIDE OR GEOGRAPHIC PARTNER
SUTRO-LED PROGRAMS								
Luveltamab tazevibulin (Luvelta, STRO-002)	FRα Antibody-Drug Conjugate (ADC)	Ovarian Cancer						天士力生物 TASLY BIOPHARMA (Greater China Rights)
		Ovarian Cancer (bevacizumab combo)						
		Endometrial Cancer						
		CBF/GLIS2 Pediatric AML						
		NSCLC						
STRO-004	Tissue Factor ADC	Solid Tumors						
Next Generation ADCs	ADC^2 +	Solid Tumors						
PARTNER PROGRAMS								
VAX-24	24-Valent Conjugate Vaccine	Invasive Pneumococcal Disease						VAXCYTE protect humankind
VAX-31	31-Valent Conjugate Vaccine	Invasive Pneumococcal Disease						
STRO-003	ROR1 ADC	Solid Tumors & Hematological Cancers						IPSEN
Undisclosed Programs	Immunostimulatory ADCs (iADCs)	Cancers						astellas

Experienced Leadership Team

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Member of the Board of Directors

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Barbara Leyman, PhD
Chief Business Development Officer

Ed Albini, MBA
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Chief Operating Officer

Linda Fitzpatrick
Chief People and
Communications Officer

Venkatesh Srinivasan, PhD
Chief Technical Operations Officer