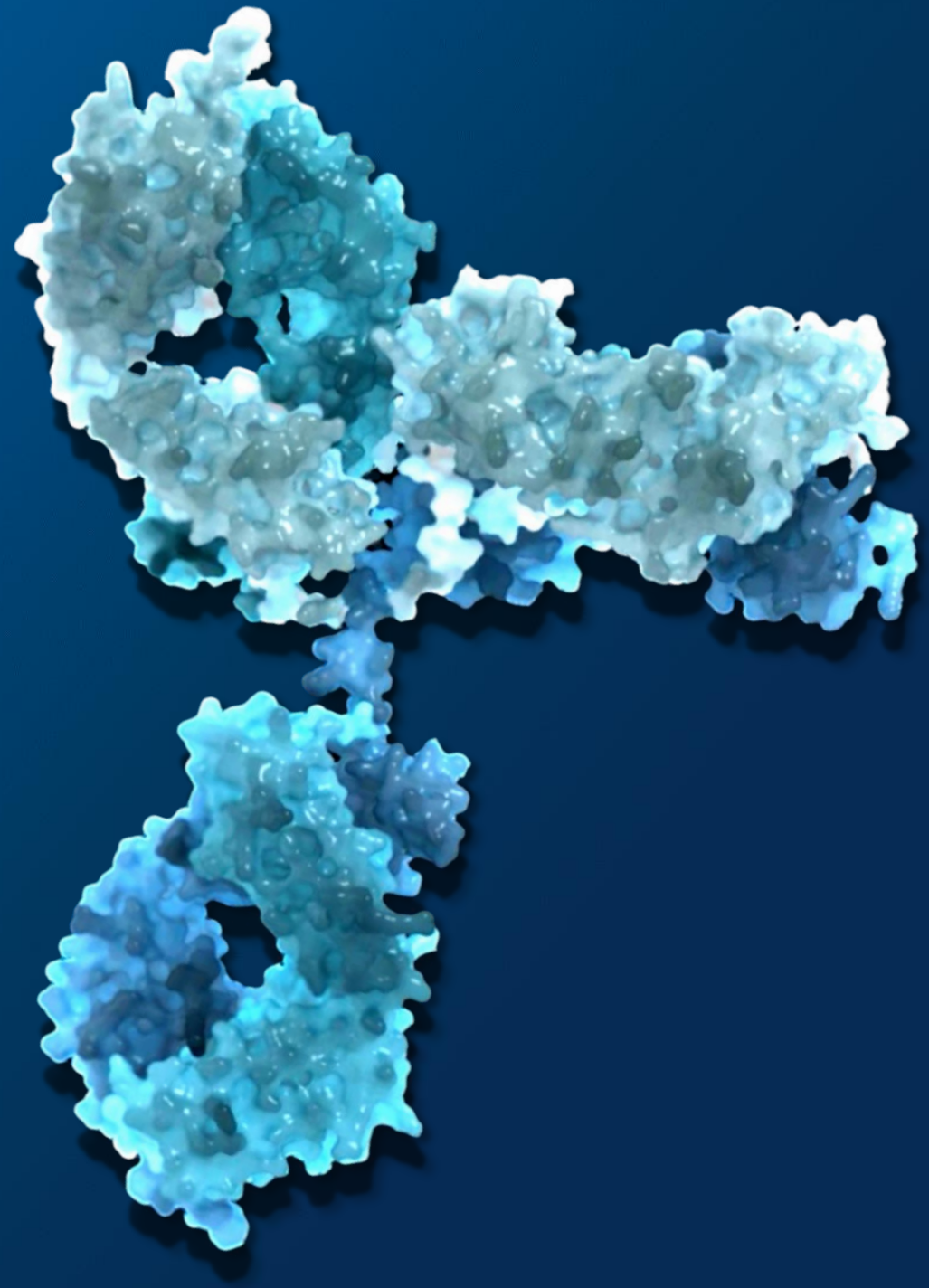
Sutro Biopharma
43rd Annual J.P. Morgan Healthcare Conference

January 2025

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.

Advancing Next-Generation ADCs with Proprietary Cell-free XpressCF® Discovery Platform

Proprietary Cell-free XpressCF® Platform Drives Significant Discovery and Manufacturing Opportunities for Sutro and its Partners

Pipeline

Luvelta: potential best-in-class tubulin inhibitor ADC for a range of FRα expressing cancers

- Two registrational trials ongoing and multiple follow-on opportunities

STRO-004 and Next-Generation ADCs: Targeting three INDs over the next three years

- STRO-004: a potential best-in-class exatecan ADC targeting tissue factor with broad, pan-tumor potential (IND expected 2H 2025)
- Novel ADCs are engineered with unique features that are not achievable with other platforms to enhance functionality inside and outside the tumor

Partnerships & Collaborations

Partnerships across multiple modalities validating platform and generating significant capital

~$975 million in funding*, with over $2 billion in potential future milestones plus royalties

*Includes payments and equity investments received through September 30,2024.

Significant Near- and Long-term Opportunities for Broad Pipeline of Precisely Designed ADCs

Luvelta
Pipeline-in-a-Product Potential

Lead Opportunity: Ovarian Cancer (Fast Track Designation)

★ REFRαME-O1 Registrational Study; ongoing

- Bevacizumab-Luvelta Combo Phase 1b; expansion data 1H25

Additional Luvelta Opportunities

★ CBF/GLIS2 Pediatric AML Registrational Study; ongoing (Orphan and Rare Pediatric Disease designations)

- Non-Small Cell Lung Cancer Phase 2; data 2025
- Endometrial Cancer; evaluating expansion options

Next-Generation ADCs:
Delivering Three INDs Over Next Three Years

Three-pronged R&D strategy to enhance ADCs' functionality within tumors:

1. Increasing ADC potency safely with higher DAR
   - STRO-004: Potential best-in-class exatecan ADC targeting tissue factor with broad, pan-tumor potential (IND planned 2H 2025)
2. Dual-payload ADCs to overcome resistance and deliver safe antitumor activity
3. iADCs: combining delivery of cytotoxin and immune stimulator

Cell-Free Platform has One-of-A-Kind ADC Design Capabilities to:

- Improve safety profile
- Enable higher dosing for enhanced efficacy
- Broaden addressable patient population

Completed commercial scale 4000 L run; Largest cell-free manufacturing run to date

★ - Registrational Studies

Well Capitalized with Strong Business Development Track Record Validating Cell-Free Platform

~$388M (1) in cash, cash equivalents & marketable securities

~$975M (2) Funding generated from our collaborators

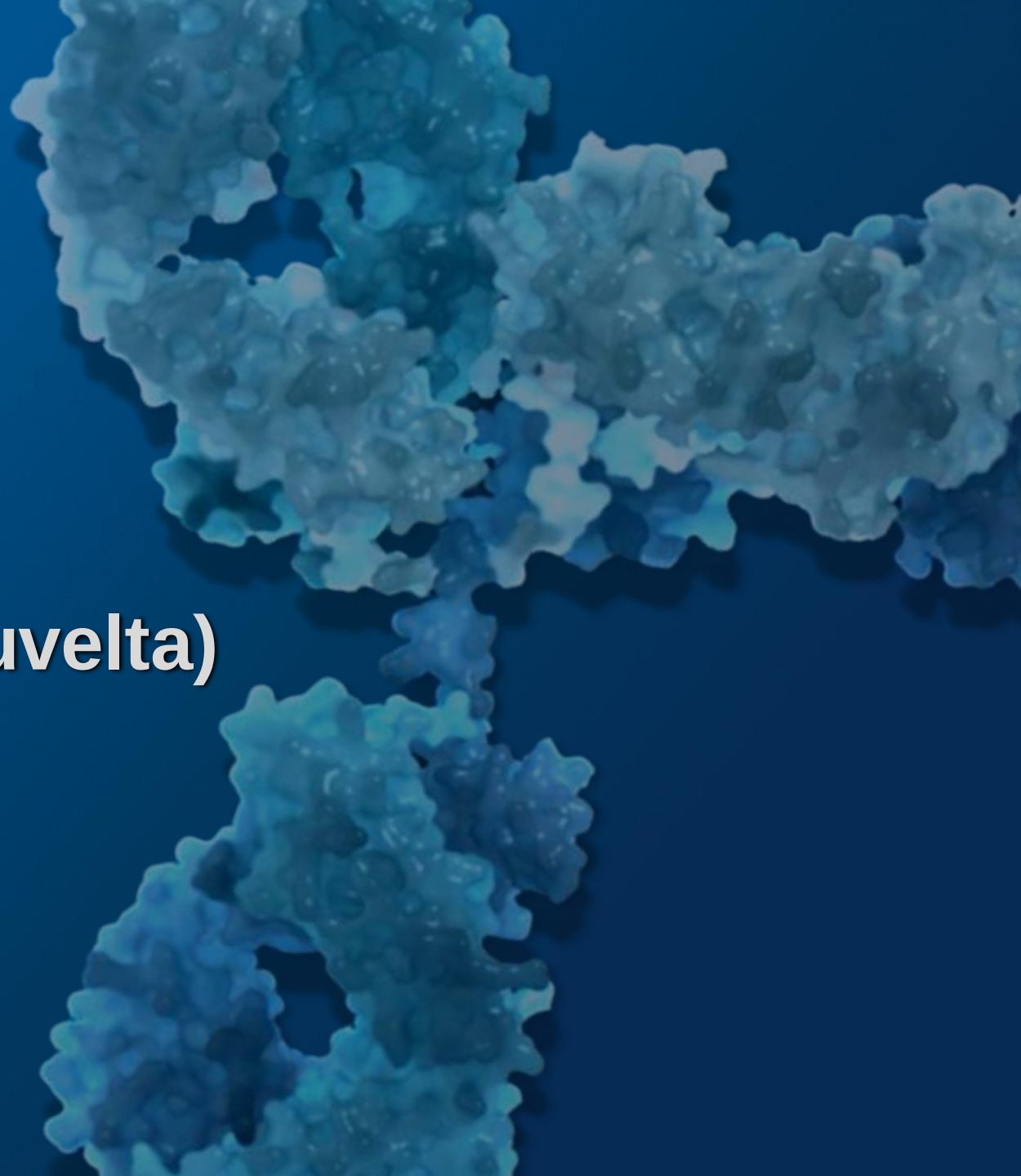
Over $2 Billion Potential Future Milestones plus Royalties

VAXCYTE	Blackstone	IPSEN	astellas	TASLY
Phase 2/3 vaccines for invasive pneumococcal disease	Purchased 4% royalties on potential future net sales of Vaxcyte PCV products	STRO-003 (ROR1 ADC) preclinical program for solid 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.

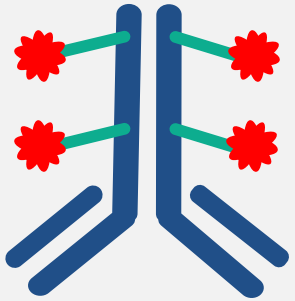
SUTRO BIOPHARMA

Luveltamab Tazevibulin (Luvelta)



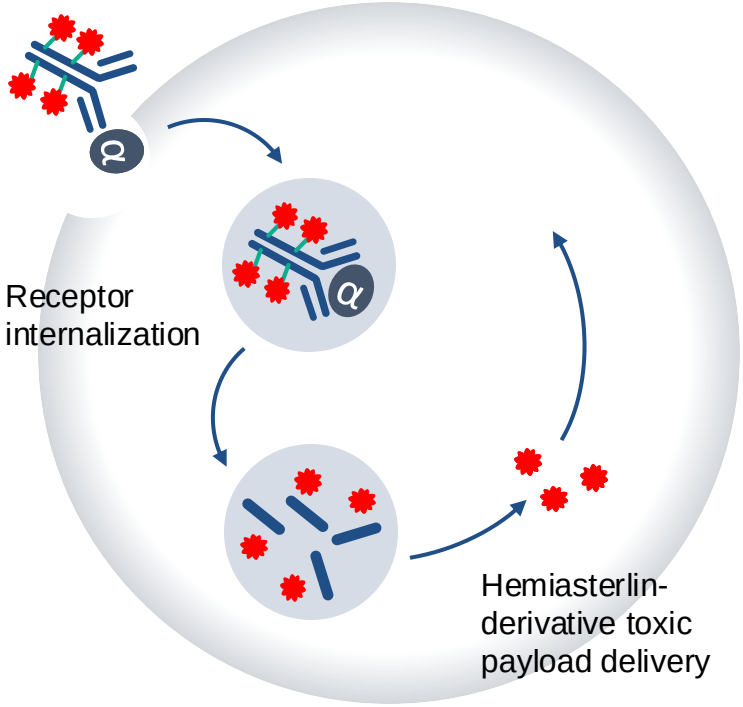
Luvelta: Precisely Designed Tubulin Inhibitor ADC with Potential to Address a Broader Patient Population of FRα-expressing Cancers

Key Features Driving Luvelta's Best-in-class Potential



Hemiasterlin payload

- Tubulin inhibitor
- High potency & ICD
- High bystander killing
- Low Pg-p substrate



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

Luvelta: Promising Clinical Activity in All FRα-Expressing Indications Evaluated

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

Ovarian Cancer: ~69K

★ **Status:** REFRαME-O1 Registrational Study Bevacizumab combo Phase 1b expansion data expected 1H 2025

NSCLC, Adenocarcinoma: ~108K

Status: Phase 2 initial data expected 2025

Pediatric AML with CBF/GLIS2 AML mutation: ~100 per market

★ **Status:** Registrational study ongoing

Endometrial Cancer: ~71K

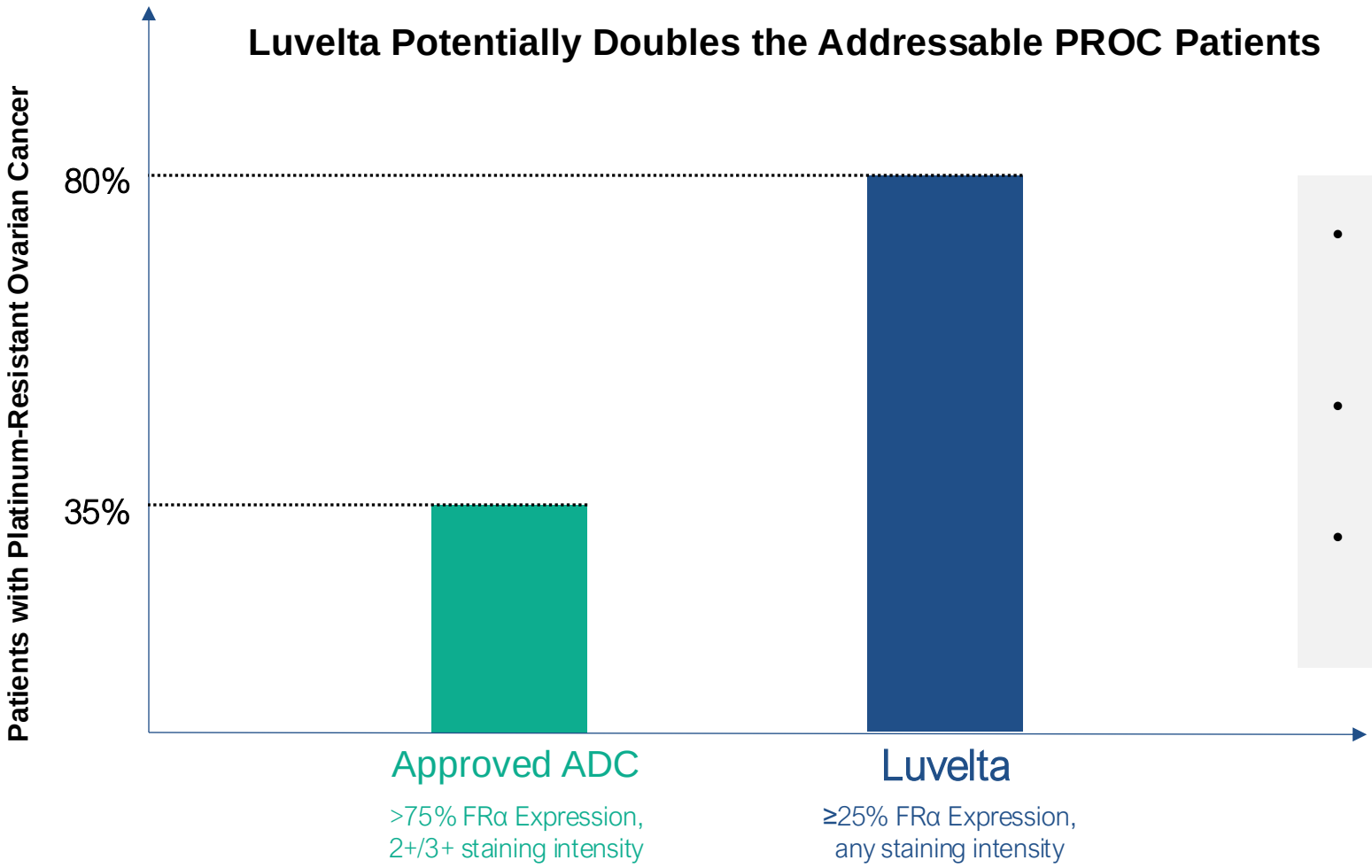
Status: Evaluating patient expansion through IST

★- Registrational Studies

FRα is broadly expressed across many cancer types, with significant potential for future follow-on opportunities

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.

Luvelta: Opportunity to be First Therapy for ~80% of PROC Patient Population with Lower TPS≥25% Threshold



- Luvelta has demonstrated clinical activity in PROC patients with FRα ≥25% of any staining intensity (1+,2+,3+)
- Treatment eligibility is driven by FRα biomarker test
- Due to high frequency of testing of FRα in OC, patient expression level may be known with initial tissue diagnosis

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

Significant Opportunity for Luvelta to Become Best-in-Class, With Clear Commercial Path

	Approved FRα ADC	Luvelta
Addressable Patient Population	35% of PROC patients[2] (TPS of ≥75% FRα, 2+ staining intensity)	80% of PROC patients[1] TPS ≥25% FRα at any staining intensity
Tolerability Profile	Black box warning on ocular toxicity	Neutropenia well-managed (no febrile neutropenia); no safety signals for ocular damage, pancytopenia, or ILD
Sales	Projected to generate ~$471 million in sales for 2024, with expectations of growth to over $700 million in 2025[3]	REFRαME-O1 registrational study ongoing, positioned for accelerated approval application mid-2027

Luvelta:

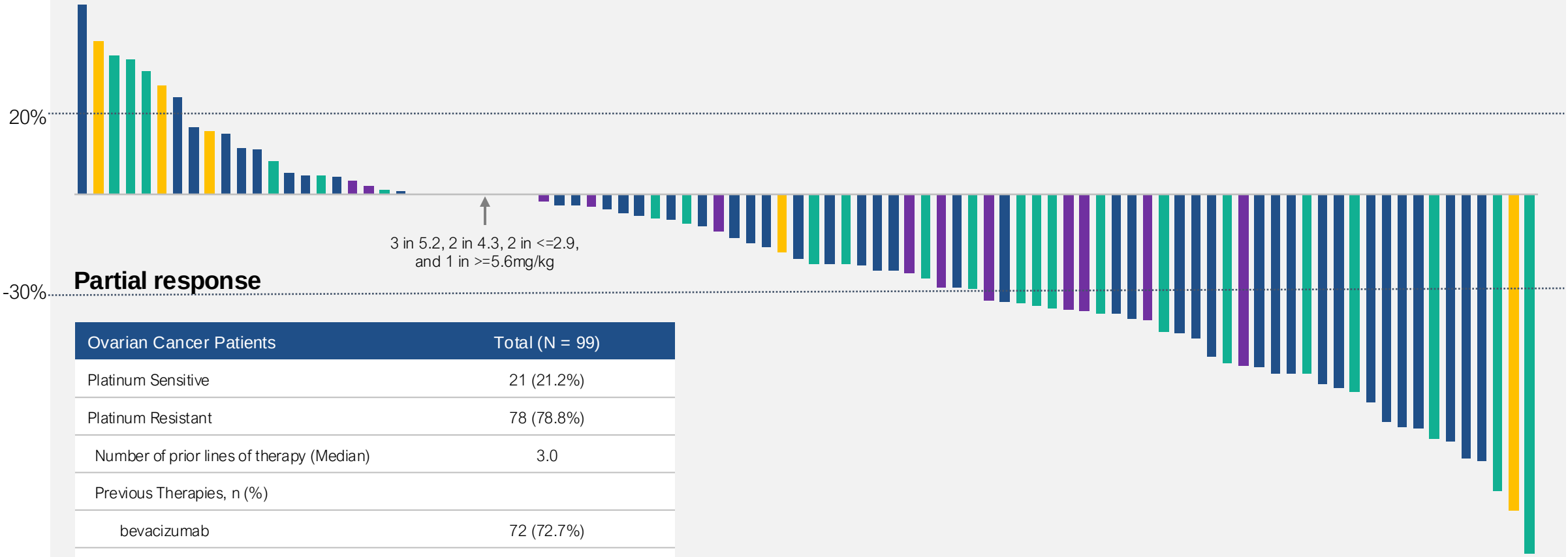
- Addresses broader market
- Improved tolerability profile
- Clear commercial path

- Approved tubulin FRα ADC validates approach, but approval is restricted to subset of patients with high expression and comes with ocular black box warning.

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
3 – FactSet consensus estimates as of January 7, 2025

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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REFRαME-O1 Enrollment Progressing Ahead of Internal Projections

Active Countries

- Australia
- Canada
- Israel
- New Zealand
- Singapore
- South Korea
- United States

Planned Countries*

- Austria
- Belgium
- Bulgaria
- Czech Republic
- Finland
- France
- Germany
- Hungary
- Ireland
- Italy
- Poland
- Spain
- Sweden
- Switzerland
- United Kingdom
- Argentina
- Brazil

*All planned countries to be active in 1H2025, except for Finland

Trial Sites/Enrollment

Phase 3 randomized part 2 enrollment tracking ahead of internal projections

Over 200 sites expected to be active by mid-2025

Active partnerships with GOG, ENGOT, APGOT to organize and align patients and recruitment efforts

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

REFRαME|O1

SUTRO BIOPHARMA

REFRαME-O1 Dose Optimization: Confirms Luvelta's Robust Response in PROC Patients with FRα ≥25%, Selected Starting Dose of 5.2 mg/kg

Topline Results from Efficacy Evaluable Patients (5.2 mg/kg group; N = 25)*

Patient Profile	Efficacy Profile	Safety Profile
• ~1/2 of the patients treated were ineligible for an approved FRα-targeting ADC • 88% of patients received prior bevacizumab	• Achieved ORR of 32%, which includes 1 PR that confirmed post data extraction • Consistent response rates across all levels of FRα expression ≥25% • High disease control rate of 96%	• No new safety findings • Neutropenia well-managed; Grade 3+ neutropenia occurred in 32%, no febrile neutropenia • No safety signals for ocular damage, pancytopenia, or Interstitial Lung Disease

Results reaffirm Luvelta's potential to benefit 8 out of 10 PROC patients

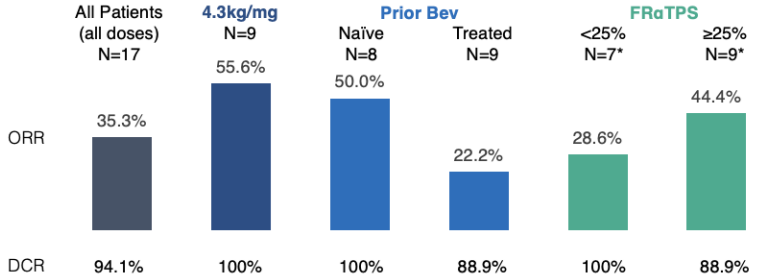
Luvelta is positioned for an Accelerated Approval application in **mid-2027**

*Data as of Aug 16, 2024

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

Bevacizumab Combo in Ovarian Cancer	RAM AML[1]	NSCLC
N = 17	N = 25	Preclinical
✓ Median PFS 8.3 months; 55.6% ORR at RP2D ✓ Anti-tumor activity irrespective of prior bevacizumab therapy or FRα expression ✓ Data from expansion cohort expected in 1H25	✓ 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

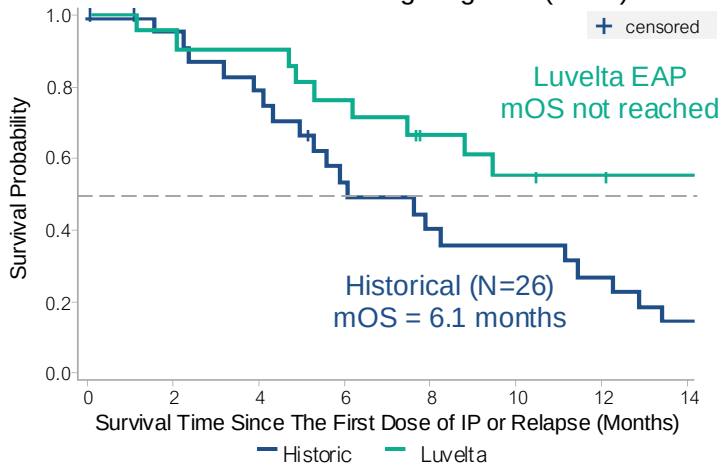
Phase 1b Response Data (Presented at ESMO 2024)[1]



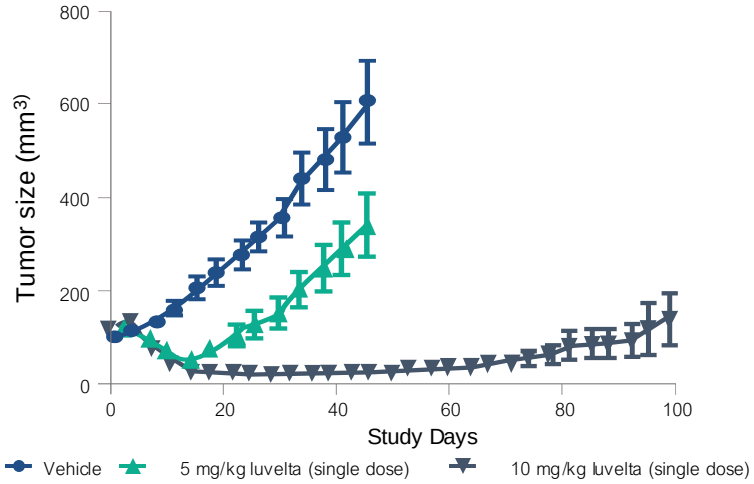
Phase 2 Expansion Cohort

- 23 patients enrolled to-date, including PSOC & PROC
- All-comers trial – no FRα cut-off requirements

Overall Survival for Children who Received Luvelta as Non-Fractionated Dosing Regimen (N=21)



NSCLC PDX model with single dose Luvelta monotherapy

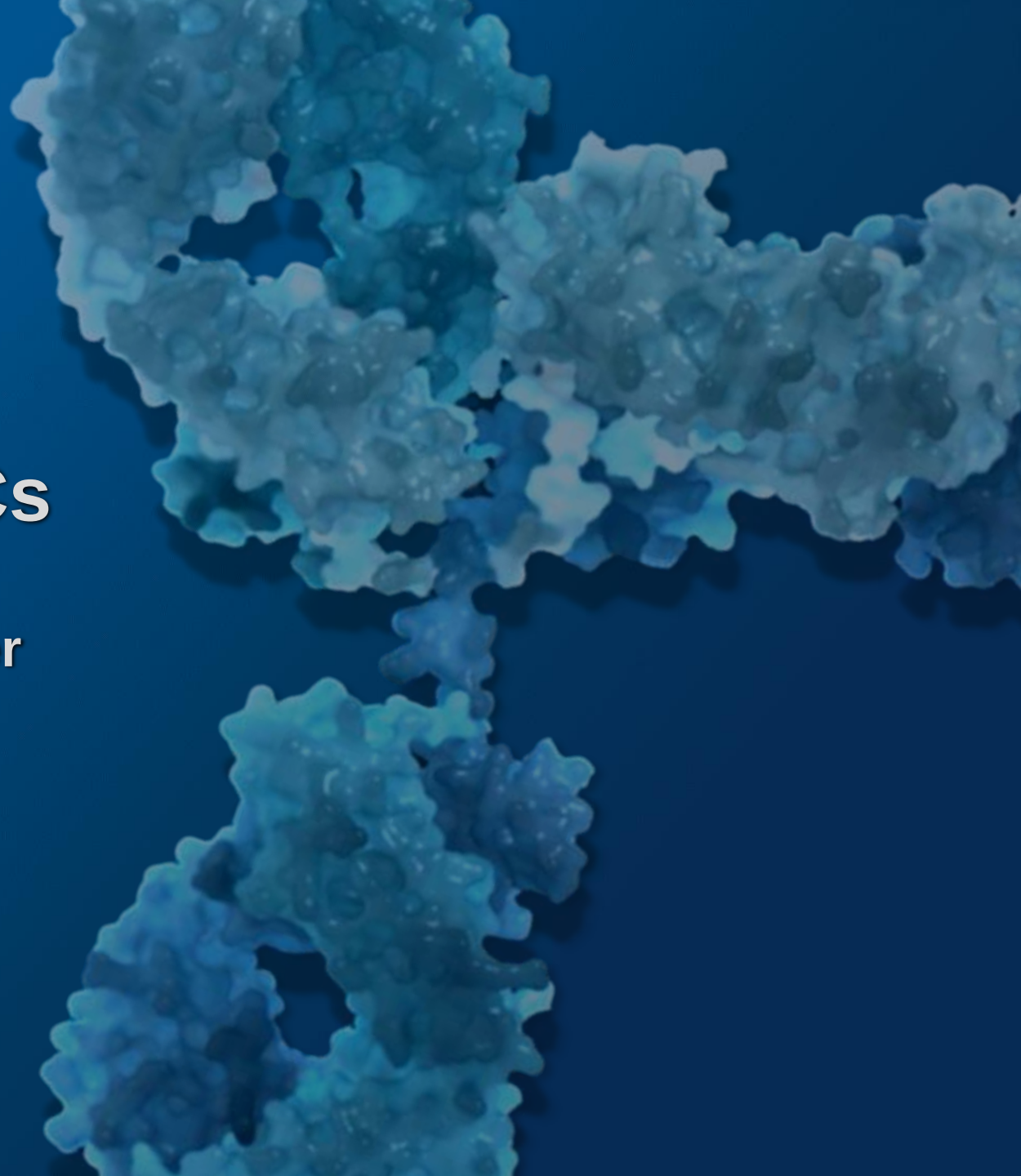


RP2D, recommended Phase 2 dose; TPS, tumor proportion score. 1 - These data were generated by the treating physicians and collected and enabled for presentation by Sutro.
Ovarian Cancer source: 1 – ESMO 2024 Poster 749P: Luveltamab tazevibulin, an anti-folate receptor alpha antibody-drug conjugate, in combination with bevacizumab in patients with recurrent high-grade epithelial ovarian cancer: STRO-002-GM2 phase 1 study * - FRα missing for one patient **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.

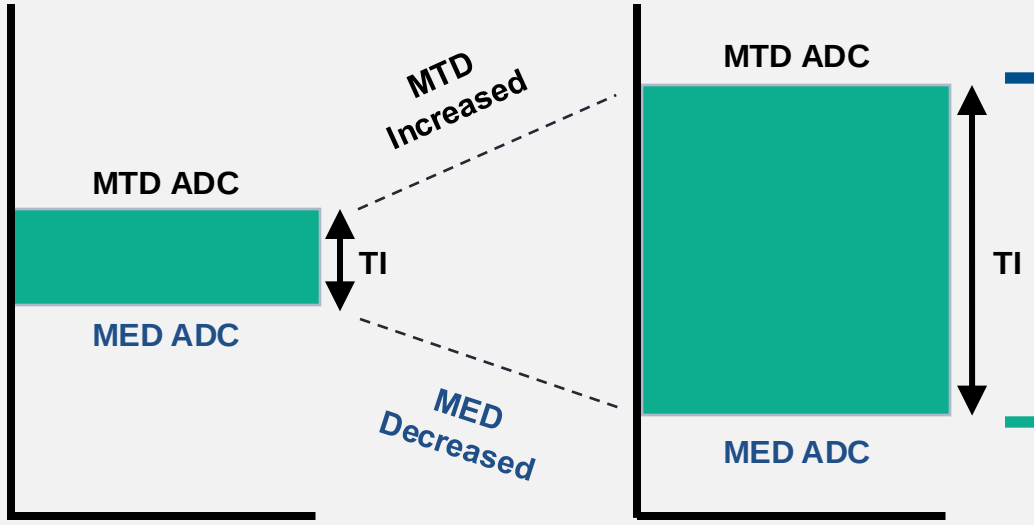
SUTRO BIOPHARMA

STRO-004 & Next-Gen ADCs

Leveraging Cell-Free Platform to Deliver Three INDs Over the Next Three Years



Wider Therapeutic Index Achieved with Sutro's Cell-free ADC Platform



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

MTD – Maximum Tolerated Dose; MED – Minimum Effective Dose

XpressCF® Platform has Unique ADC Performance Capabilities Over Other Topo1 ADC Platforms

	DAR>8	Beta-Glu Linker	ADC²/ 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		✓		✓				

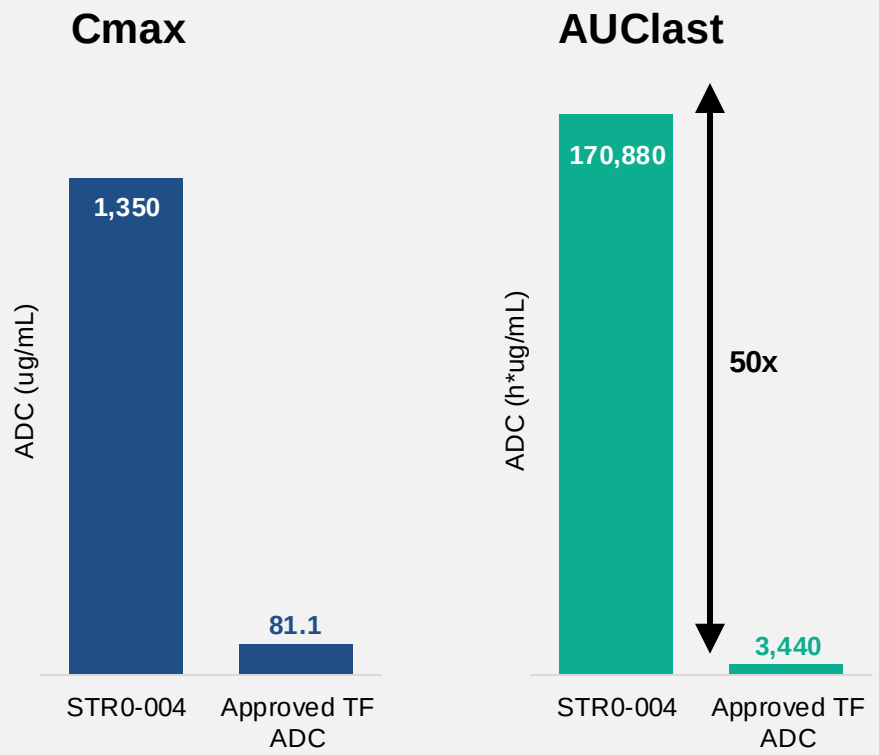
LP – linker payloads; iSAC – immune stimulating antibody conjugate; HT – high throughput; Comparison of Topo1i ADC Platforms (Selected)

STRO-004: Next Generation Tissue Factor-Targeting Exatecan/Topo1 ADC with Enhanced Therapeutic Potential

Optimally Designed for Improved Clinical Benefits, Enhanced Stability, Potency and Tumor Selectivity

- **Exatecan payload:** Clinically validated with potent activity, bystander and reduced susceptibility to resistance
  - Improved potency to reach low copy number patients
- **β-glucuronidase linker:** Engineered for enhanced tumor selectivity and hydrophilicity
- **Optimized drug performance:** High DAR8 and improved conjugation positioning
- **Widened therapeutic/safety index:** Driving higher drug exposure and efficacy than 1st gen TF ADCs; designed to minimize interference with coagulation cascade
  - Optimized to reduce risk of neutropenia, bleeding, and ocular toxicities

Increased Tolerability Leads to Enhanced Drug Exposure

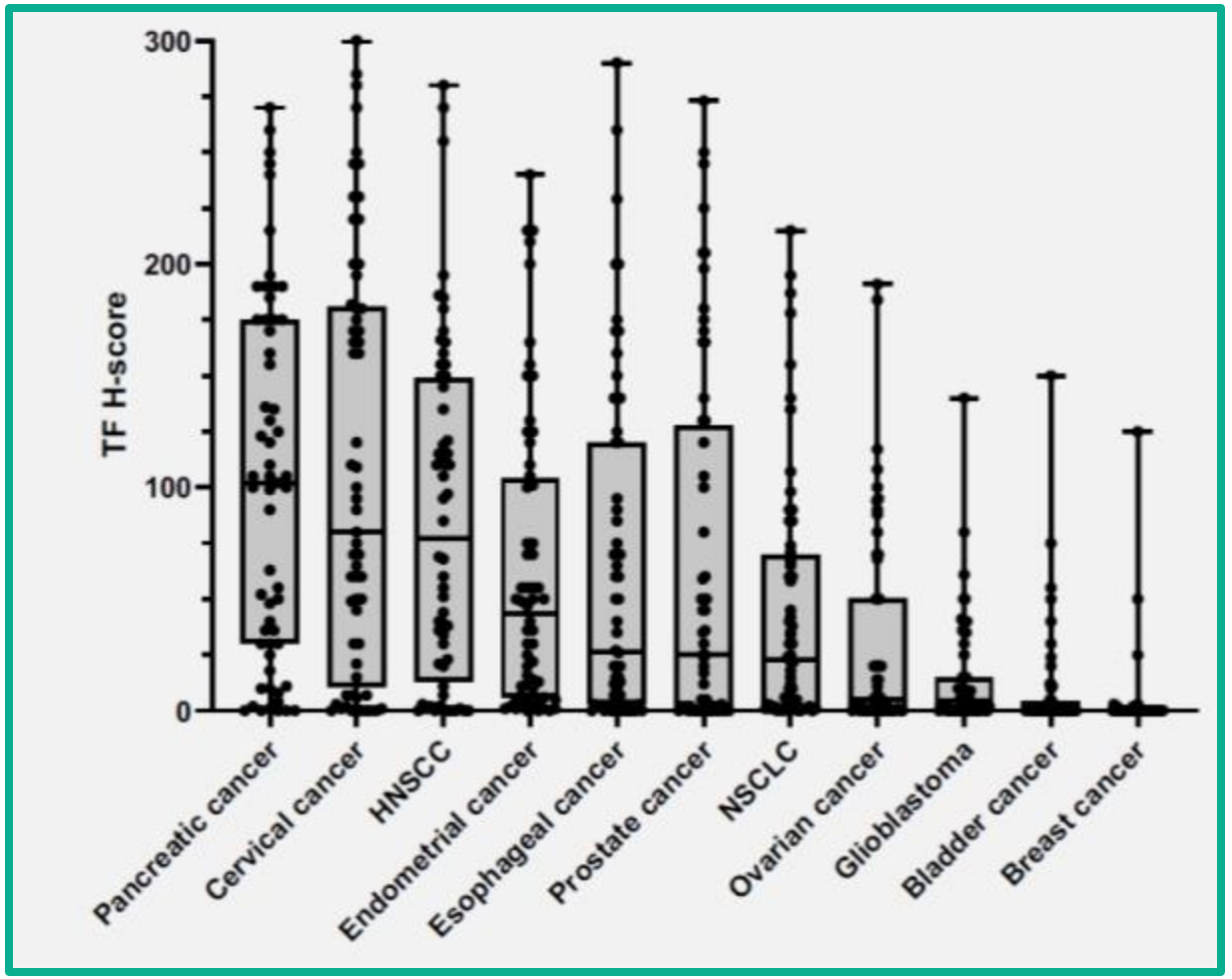


IND filing and first-in-human studies planned for 2H 2025

Tissue Factor is Broadly Expressed Across Multiple Solid Tumor Indications, Presenting Opportunity for Pan-Tumor Targeting

Broad Opportunity for TF in Many Solid Tumors of Significant Unmet Need

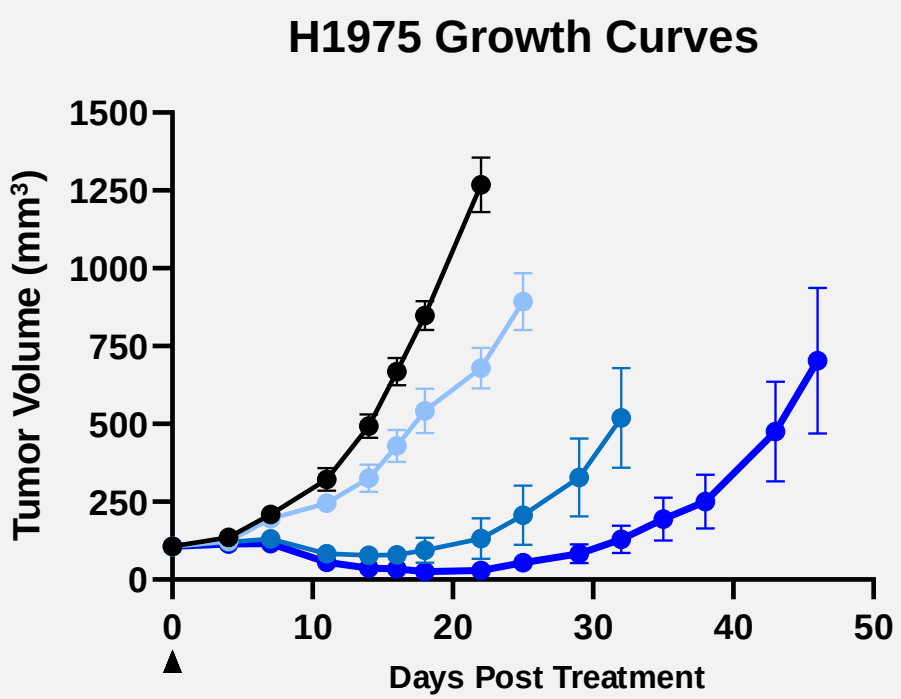
- TF expression has been associated with poor disease prognosis and increased metastatic properties
- Clinical validation of TF in cervical cancer, along with early signs of activity in HNSCC, pancreatic cancer, and multiple other solid tumors with significant unmet needs



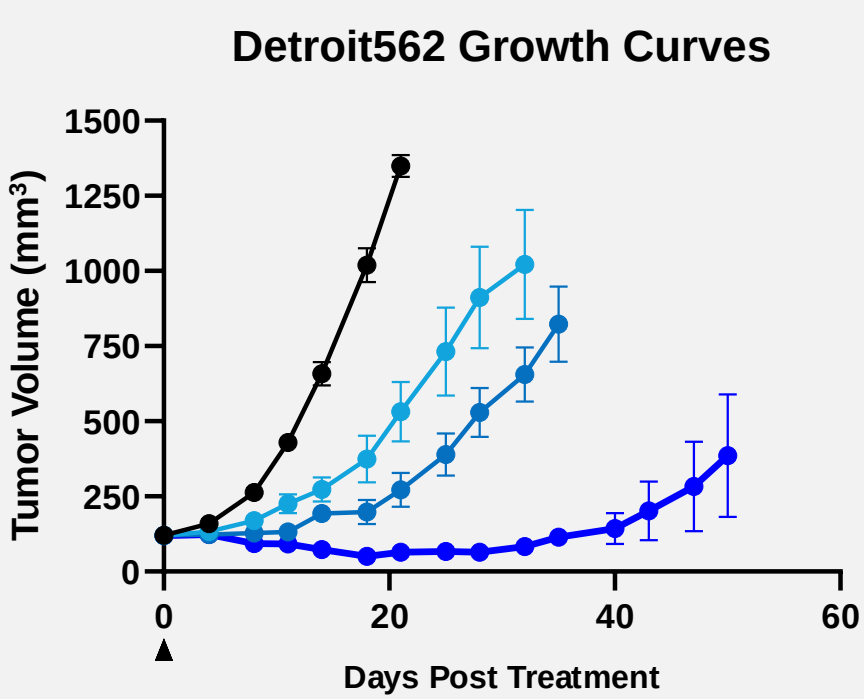
HNSCC – head and neck squamous cell carcinoma
NSCLC – non-small cell lung cancer

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

Lung (TF+++)



Head and Neck (TF++)



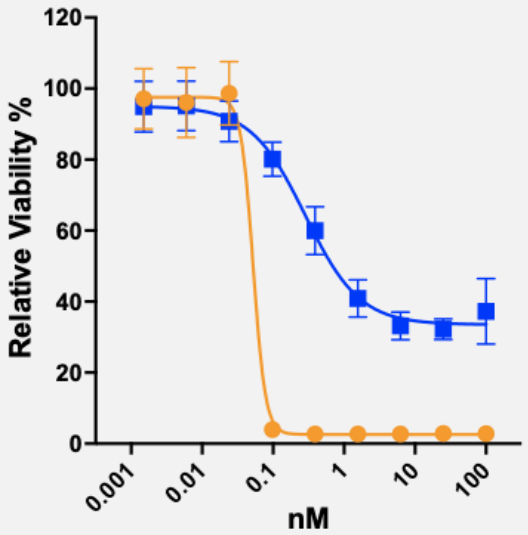
Vehicle
STRO-004 DAR8, 0.125 mg/kg
STRO-004 DAR8, 0.25 mg/kg
STRO-004 DAR8, 0.5 mg/kg
STRO-004 DAR8, 1 mg/kg

STRO-004 Demonstrated Reduced Platform and On-target Toxicity Due to Site Specific Conjugation and Beta Glu Linker-Payload Technology

STRO-004 Tolerability Profile vs. Approved aTF ADC

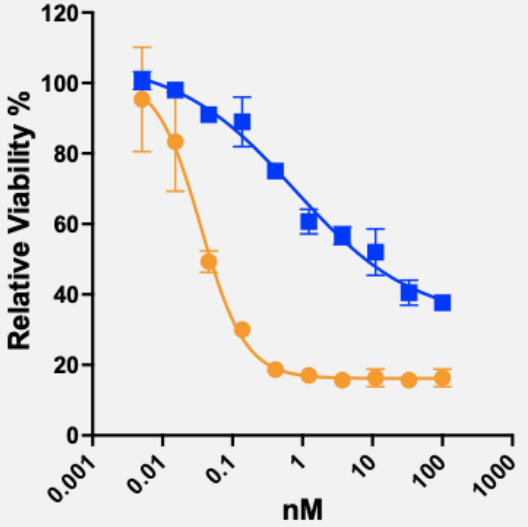
Eye Inflammation

Human Corneal Epithelial Cells



Skin Toxicities

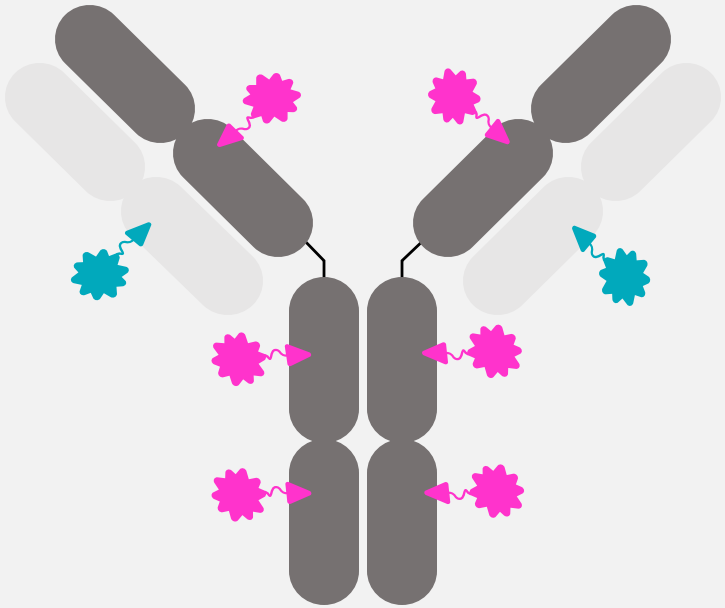
Human Keratinocyte



STRO-004 (DAR8-exatecan)

Approved aTF ADC (DAR4-MMAE)

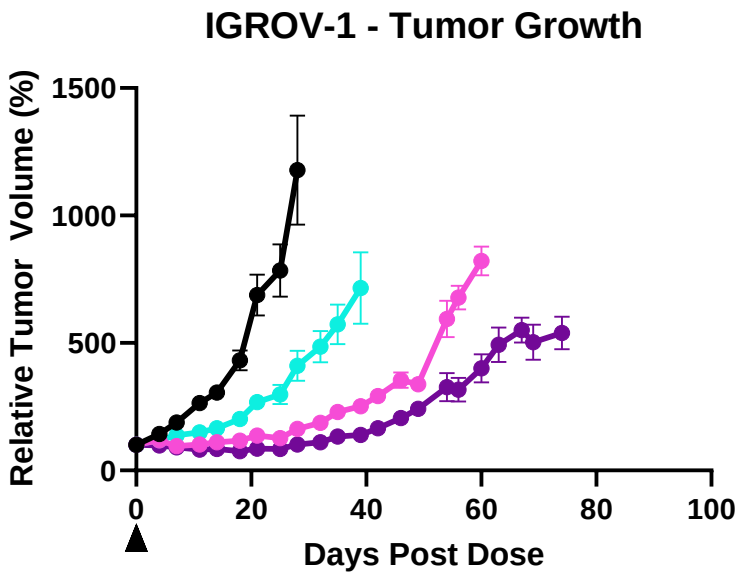
Dual-Payload ADCs: Combining Payloads to Overcome Resistance

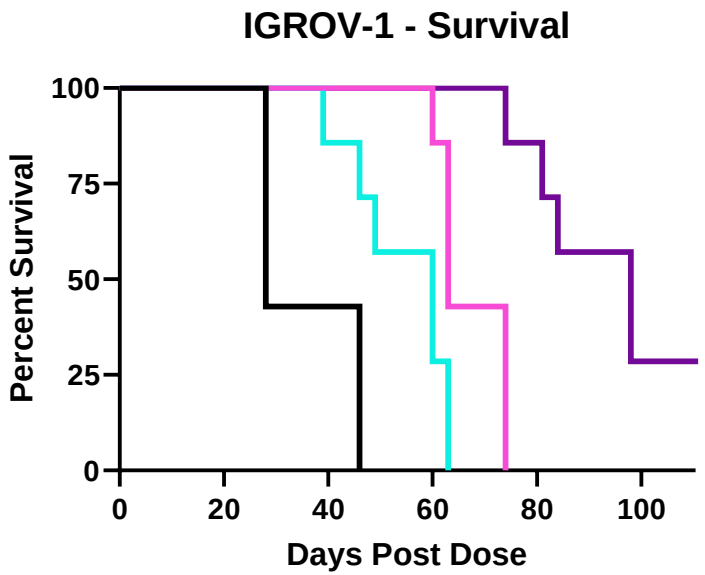


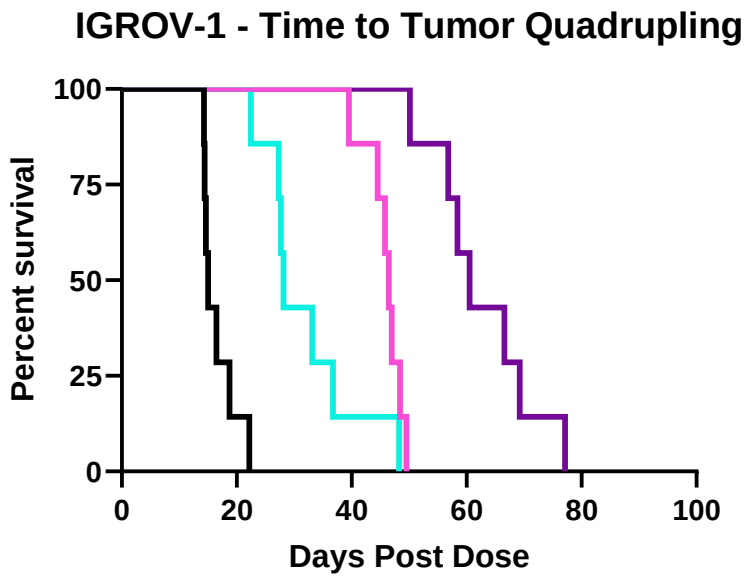
Potential Advantages of Dual-Payload ADC Approach

- Reduced Toxicity
- Reduced Clinical Complexity
- Simultaneous Payload Delivery
- Overcome Resistance Mechanisms

Dual Payload ADC (Topo1i + anti-Tubulin) Displayed Enhanced *In Vivo* Efficacy in Ovarian Cancer







Vehicle control

Trastuzumab DAR4 MTI ADC (5 mg/kg)

Trastuzumab DAR8 Topo1i ADC (5 mg/kg)

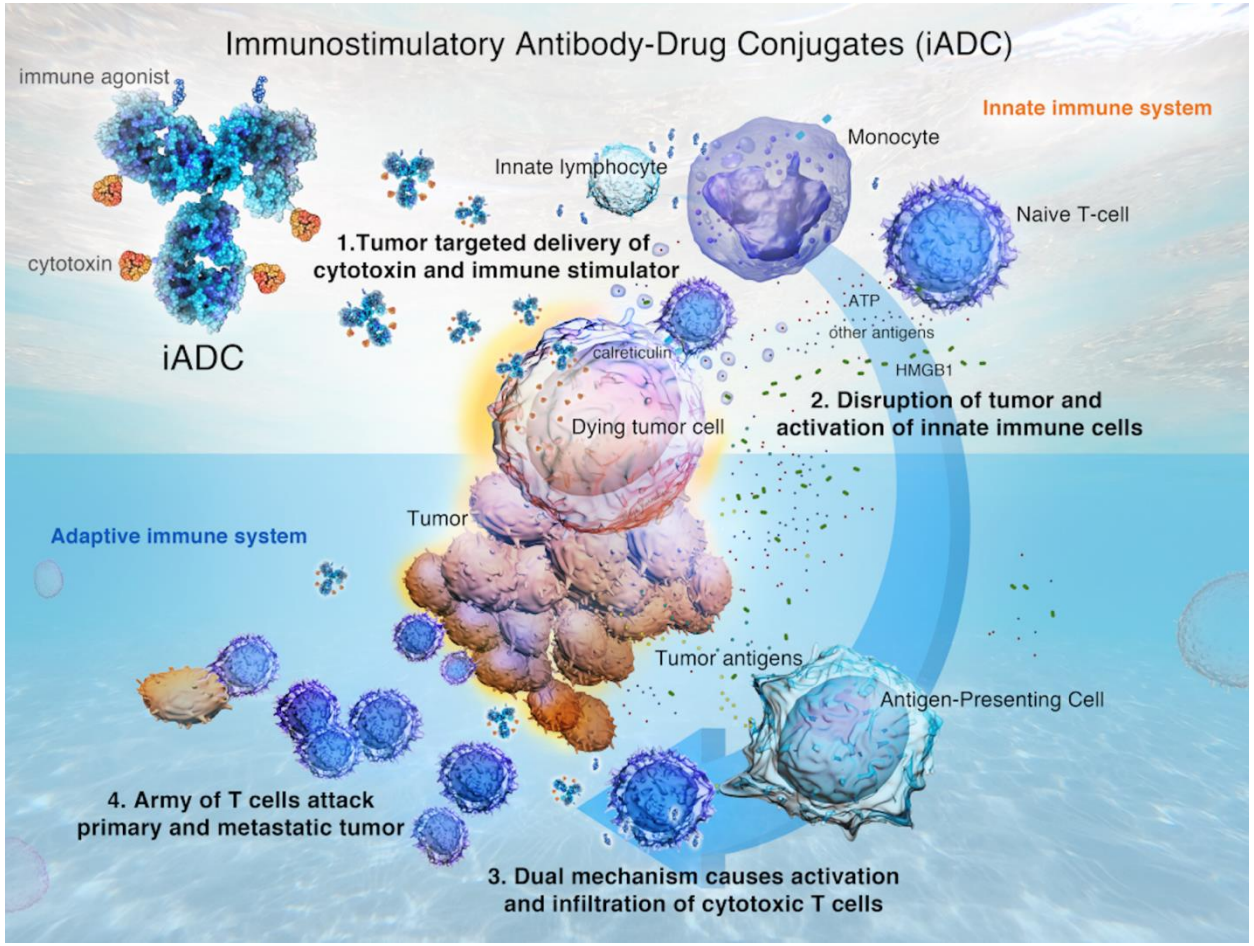
Trastuzumab DAR8 Topo1i + DAR4 MTI dpADC (5 mg/kg)

iADC: Combines Tumor-Targeted Delivery of a Cytotoxin and Immune Stimulator

Strategic Partnership with Astellas to Deliver a New Treatment Option for Cold Tumors and Patients Unresponsive to Existing Cancer Immunotherapies

Combining a cytotoxin and immune modulator gives potential to:

- **Act alone** by stimulating the immune system and priming new populations of immune cells
- **Synergize with other immune therapies** that remove inhibitory signals on the immune system (e.g. checkpoint inhibitors)
- **Address hard-to-treat cancers** by activating a robust anti-tumor immune response



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

✗ – Undesirable

Boehringer Ingelheim BioXcellence™ Collaboration: Established First-in-class Cell-free Manufacturing Capabilities at Commercial Scale

First-ever manufacturing of a cell-free ADC to large-scale GMP production, marking an industry milestone

Proprietary Cell-free XpressCF® Platform Advantages:

- Modular approach with faster discovery cycle times
- Leverages non-natural amino acids to precisely attach proteins to chemicals in ways that cell-based methods cannot achieve
- All 4,500 L batches of luvelta antibody produced at Boehringer's facility met clinical quality standards
- Over 3,000 patients have been treated to date with biologics made using Sutro's cell-free technology

Broad Pipeline Driven by Cell-free Technology

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