



*Identifying, developing, and commercializing treatments for
Osteosarcoma (OS) and other solid cancers*

Investor Presentation

June 2024

NYSE American: OSTX

Cautionary Statement Concerning Forward Looking Statements



This document contains forward-looking statements. In addition, from time to time, we or our representatives may make forward-looking statements orally or in writing. We base these forward-looking statements on our expectations and projections about future events, which we derive from the information currently available to us. Such forward-looking statements relate to future events or our future performance, including: our financial performance and projections; our growth in revenue and earnings; and our business prospects and opportunities. You can identify forward-looking statements by those that are not historical in nature, particularly those that use terminology such as “may,” “should,” “expects,” “anticipates,” “contemplates,” “estimates,” “believes,” “plans,” “projected,” “predicts,” “potential,” or “hopes” or the negative of these or similar terms. In evaluating these forward-looking statements, you should consider various factors, including: our ability to change the direction of the Company; our ability to keep pace with new technology and changing market needs; and the competitive environment of our business. These and other factors may cause our actual results to differ materially from any forward-looking statement. Forward-looking statements are only predictions. The forward-looking events discussed in this document and other statements made from time to time by us or our representatives, may not occur, and actual events and results may differ materially and are subject to risks, uncertainties and assumptions about us. We are not obligated to publicly update or revise any forward-looking statement, whether as a result of uncertainties and assumptions, the forward-looking events discussed in this document and other statements made from time to time by us or our representatives might not occur.

Risks Related To Our Business

Our business is subject to a number of risks you should be aware of before making an investment decision. These risks include the following:

- Our success is primarily dependent on the successful development, regulatory approval and commercialization of our lead product candidates which are in the early stages of development
- Our approach to the discovery and development of innovative products is novel, and unproven and may not result in marketable products
- We have no source of predictable revenue, have incurred significant losses since inception, may never become profitable and may incur substantial and increasing net losses for the foreseeable future as we continue the development of, and seek regulatory approvals for our product candidates
- If clinical trials of our product candidates fail to demonstrate safety and efficacy, we may be unable to obtain regulatory approvals to commercialize our product candidates
- We are subject to regulatory approval processes that are lengthy, time-consuming and unpredictable. We may not obtain approval for any of our product candidates from the FDA or foreign regulatory authorities
- Even if we obtain regulatory approval, the market may not be receptive to our product candidates
- We may not be able to establish collaborative partnerships with other pharmaceutical companies, through which we expect to complete development of, obtain marketing approval for and, if approved, manufacture and market our product candidates
- We may encounter difficulties satisfying the requirements of clinical trial protocols, including patient enrollment
- We may face competition from other companies in our field or claims from third parties alleging infringement of their intellectual property

Management Team - 100+ Years of Experience



Paul Romness, MHP
President & CEO - OS Therapies



Robert Petit, PhD
Chief Medical & Scientific Officer
Founding Scientist: OST-HER2



Gerald Commissiong
Chief Business Officer



Jutta Wanner, PhD
Advisor
Founding Scientist: OST-tADC

- 25 years of experience in the biopharma
 - Johnson & Johnson
 - Amgen
 - Boehringer Ingelheim
- 9 major product launches:
 - Oncology, surgery, HIV, FSD, COPD, IPF, CV & diabetes
- Masters of Health Policy from George Washington University Medical Center & B.S. in Finance from American University

- Inventor & Founding Scientist behind OS Therapies' clinical-stage listeria cancer vaccine platform
- Large Pharma Experience: BMS, & Pharmacia
- Small Pharma Experience: MGI Pharma (Acquired by Otsuka), Advaxis, SARS Therapeutics, RGP Biotech & Orionis Biosciences
- MD from Ohio State University College of Medicine & BS in Life Science from Indiana State University
- Research interests: Oncology & Virology

- 15 years of experience in biopharma
- Small Pharma Experience: Amaranthus Bioscience Holdings, Avant Diagnostics, Todos Medical
- Specializes in M&A, Capital Raising, Strategic Planning and Investor Relations
- Therapeutic areas: Oncology, Neurology, Immunology and Regenerative Medicine
- BS in Management Science & Engineering from Stanford University

- Inventor & Founding Scientist behind OS Therapies' tunable Drug Conjugate (tDC) platform (tADC, tSMDC and tmRNADC)
- Large Pharma Experience: Roche
- Small Pharma Experience: BlinkBio
- PhD from the University of Kansas w/ postdoc training at The Scripps Research Institute in San Diego
- Research interests: Oncology & Virology

Paul Romness was inspired to launch OS Therapies following the Osteosarcoma diagnosis of a close family friend



Two Platforms: Tremendous Support from Community



OST-HER2: *Listeria monocytogenes*
Lead Clinical Program in Osteosarcoma (OS)



OST-tADC: Next-gen *Tunable* Drug Conjugate (tADC)
Unique Patented Silicone linker improves safety & efficacy



Antibody Drug Conjugates (ADC)
Small Molecule Drug Conjugates (SM-DC)
mRNA Drug Conjugates (mRNA-ADC)



Therapeutic Pipeline

Company	Preclinical	Phase 1	Phase 2a	Phase 2b	Phase 3	Approval	Launched
Osteosarcoma (OS) <i>(OST-HER2)</i>	41 patient Phase 2b fully enrolled. Final Data in Q4-24*				<ul style="list-style-type: none"> ✓ Orphan drug designation ✓ Fast Track Designation ✓ Rare Pediatric Disease Designation 		
Other Solid Tumors <i>(OST-HER2)</i>	Currently on hold, pending OS approval						
Canine OS <i>(OST-HER2)</i>	USDA has granted conditional approval. Full approval pending bacteria clearance study						
Ovarian Cancer <i>(OST-tADC)</i>							
Breast Cancer <i>(OST-tADC)</i>							
Other Solid Tumors <i>(OST-tADC)</i>							

*FDA may grant OST-HER2 accelerated approval in OS based on Phase 2b data

SCIENTIFIC ADVISORY BOARD of OSTEOSARCOMA EXPERTS



Peter M. Anderson, MD
Cleveland Clinic

Department Of Pediatric
Hematology, Oncology And Blood
& Marrow Transplantation

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EXPERT ADVISORY BOARDS



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Osteosarcoma Collaborative, Chair

Mac Tichenor

Father of OS Angel

Osteosarcoma Institute, Chair

Tony Trent

Father of OS Angel

Tyler Trent Foundation

Olivia Egge

Osteosarcoma Patient

OS Therapies, Director Emerita

Peter Tuchman

Einstein of Wall Street

NYSE Trader

Antibody Drug Conjugates (ADCs)

Dr. Jutta Wanner

Founding Scientist

BlinkBio & OS Therapies

Dr. Borys Shor

President & CEO

Manhattan Biosciences

Dr. Colin Goddard

Founding Scientist

BlinkBio & OS Therapies

Commercialization

Chris Benecchi

Chief Business Officer

Sage Therapeutics

Scott Styles

Managing Partner

Styles Strategy

Edward Robb, DVM

Chief Strategy Officer

Anivive Animal Health

2024 Pending Milestones



- **US FDA Breakthrough Therapy Designation (Q2/24)**
 - Breakthrough request submitted to US FDA in Q2/24
 - Rare Pediatric Disease Designation granted in 2021
 - Fast Track Designation granted in 2018
 - Orphan Drug Designation granted in 2018
- **Canine Osteosarcoma Full Approval (Q3/24)**
 - Conditional approval granted by US FDA
 - Full approval pending 3-week listeria shedding trial
 - Out-license opportunity upon approval
- **OST-HER2 Osteosarcoma Phase 2b Clinical Trial Data (Q4/24)**
 - If data is positive, potential for accelerated approval based upon:
 - Co-primary endpoint: 1-Year Event Free Survival (EFS)
 - Interim Co-Primary endpoint: 1-Year Overall Survival (OS)
 - If accelerated approval pathway opens, potential to sell PRV rights based on granted RPDD
- **OST-tADC Solid Tumor Preclinical Proof of Concept (POC) Data (Q4/24)**
 - OST-SM-DC Preclinical Efficacy Data in Ovarian Cancer received in 2023
 - POC for OST-ADC and OST-mRNA-DC in multiple solid tumors
 - Out-license opportunities for each new OST-tADC product candidate with POC
 - *TAM for tADC is entire \$311 billion Cancer treatment market (chemo + immune therapies)*

- **Multiple near-term milestones**

- Phase 2b trial for OST-HER2 in Osteosarcoma (Adult + Pediatric) w/data expected in Q4/24
- Pivotal Data for OST-HER2 in Canine Osteosarcoma w/data expect in Q3/24
- Proof of Concept Data for OST-tADC platform in ADC and mRNADC adding to established POC in SMDC

- **Large value target markets**

- TAM for Human (Adult + Pediatric) Osteosarcoma is \$1.72B
- TAM for Canine Osteosarcoma is \$150M+
- TAM for tADC is entire Cancer treatment market (chemo + immune therapies)

- **High need market**

- Osteosarcoma (Human and Animal): No new approvals in 40+ years

- **Priority Review Voucher (PRV) Potential**

- Orphan Designation granted by the FDA and EMA
- Fast Track Designation granted by the FDA and EMA
- Rare Pediatric Disease Designation (RPDD) granted by FDA
- If OST-HER approved, value of PRV sale - \$80-120M

- **Benefit from Significant Prior Investment**

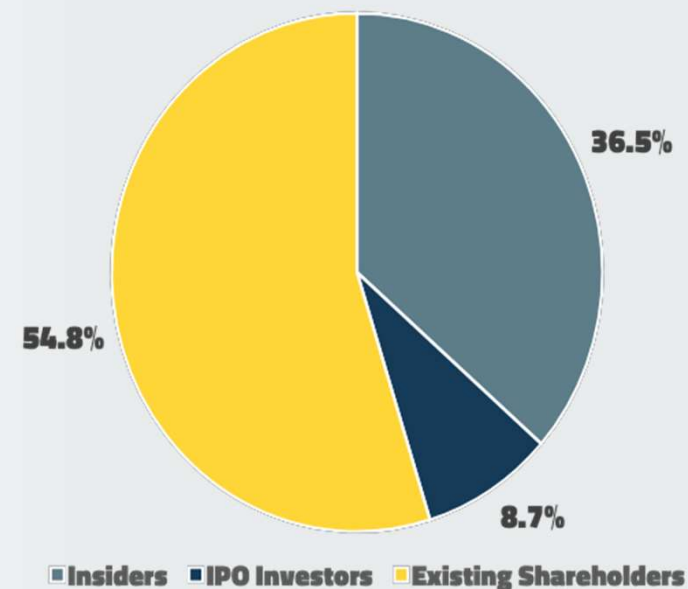
- Over \$250 million has been invested in listeria platform to date

USE OF PROCEEDS: FUNDING THROUGH YE 2025 - PRO FORMA SHARE REGISTRY¹

USE OF PROCEEDS

(1) Human Phase 2b Study, (2) Canine USDA Safety Study & (3) regulatory submissions for 1 & 2 approval	\$3,200,000
OST-tADC for ovarian cancer through GLP tox	\$2,000,000
Working capital & general corporate uses	\$1,648,000
Offering-related expenses	<u>\$1,152,000</u>
Total	\$8,000,000

¹PRO FORMA OWNERSHIP



(1) Assumes two million shares issued @ \$4.00 per share yielding net proceeds of \$6,848,000 after underwriting, legal, accounting and other expenses



OST-HER2



OSTEOSARCOMA – Bone Cancer



No Treatments Available to Prevent or Delay Subsequent Recurrences

Global Death Rate Upon Recurrence/Metastasis is 80-90%

Crompton et al: Survival after recurrence of osteosarcoma: A 20-year experience at a single institution. August 2005; Pediatric Blood & Cancer. <https://onlinelibrary.wiley.com/doi/abs/10.1002/pbc.20580>

Osteosarcoma (“Bone Cancer”) is a solid tumor of the bone

- Most Cases Present In Patients 15-20 Years Of Age
- No New Treatments In Over 40 Years
- Recurrence In ~ 50% Of Patients
- High Recurrence Fatality Rate ~ 80-90%
- Time To Mortality Upon Recurrence: ~ 12 Months
- Recurrence/Metastasis: Primarily Lung And Brain
- Objective = Prevent Recurrence - Increase Overall Survival

Standard of Care (SOC):

Primary OS: Amputation of the leg or other extremity, or orthopedic implant and highly toxic 9-month chemotherapy regimen: Cisplatin, Doxorubicin, Methotrexate (10% treatment-associated mortality)
Secondary OS / Recurrent Disease: None



LEAD PRODUCT OVERVIEW: **OST-HER2**



OST-HER2: An Off-the-Shelf Immunotherapy “Cancer Vaccine”

OST-HER2 In Depth

- Fully Enrolled Phase 2b human trial to prevent recurrence - data expected in 2024
- Delivered into the immune system by attenuated bioengineered bacteria vector (*Listeria*)
- Completed Phase 1 with positive safety data
- Significant proof-of-concept in Phase I & III canine study (p-value = .0007)
- **Granted: Fast Track Designation + Orphan Designation + Rare Pediatric Disease Designation**
- **Pending: Breakthrough Designation (BTD)**
- **Will seek accelerated FDA approval if Ph2b final data is positive**
 - **Priority Review Voucher (PRV) if approved: ~\$100M**



OS Therapies Announces Positive Clinical Update from Ongoing Phase 2b Clinical Trial in Resected, Recurrent Osteosarcoma

- 1-year Event Free Survival (EFS) of 32.5% vs. 20% 1-year EFS for comparator
- Interim 1-year and 18-month Overall Survival (OS) of 90.4%
- 0 Grade 3, 4 or 5 Treatment-related Adverse Events (AEs)
- 41 patient trial fully enrolled
- Primary endpoint 12-month EFS data and interim co-primary endpoint 12-month OS data to be released in the fourth quarter of 2024
- No novel therapeutic interventions for resected, recurrent osteosarcoma in 40+years

June 03, 2024 12:44 PM Eastern Daylight Time

ONGOING **OST-HER2** Phase 2B CLINICAL STUDY: COG AOST-2121



Proposed Registration Trial

PHASE IIB TRIAL DESIGN

- Open-label, 21 center, single arm study, 41 Patients between 12 and 39 years old with recurrent, resected metastatic pulmonary osteosarcoma
- Patients in surgical remission upon trial initiation. Event-free survival required to continue the trial
- Treatment regimen: OST-HER2 every 3 weeks for 48 weeks or until disease progression or unacceptable toxicity
- Disease surveillance imaging performed at baseline and every twelve (12) weeks

Trial Fully Enrolled

PHASE IIB TRIAL ENDPOINTS

Primary

- 1 Year Event Free Survival - EFS
- Overall Survival at Year 3 – OS
 - Interim Data Review at Year 1 and Year 2

Secondary

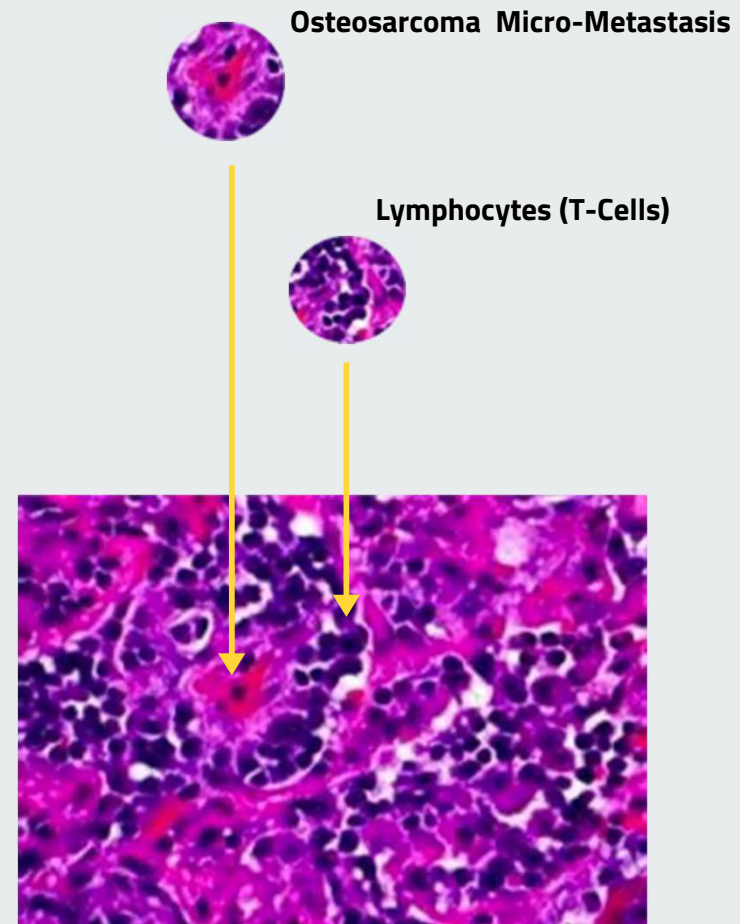
- Determine whether OST-HER2 increases the disease control rate at 12 months compared to historical COG experience
- Assess safety and tolerability of OST-HER2

Exploratory

- Identify correlates of immune response to OST-HER2
- Expand genetic data of osteosarcoma

Kill Micro-Metastases (Cancer Cells)

- Intravenous OST-HER2 vector rapidly cleared by immune system's antigen presenting cells (APCs)
- APCs are strongly activated and generate potent HER2 specific T-cells from within the patient
- T-Cells proliferate, travel through the blood and are attracted and hunt down the OS Micro-Metastasis
- Cancer cells contents spill out and additional cancer targets are revealed
- New targets are taken up by the immune system
- T-Cells are generated against the new targets, repeating the cycle and extending the treatment effects

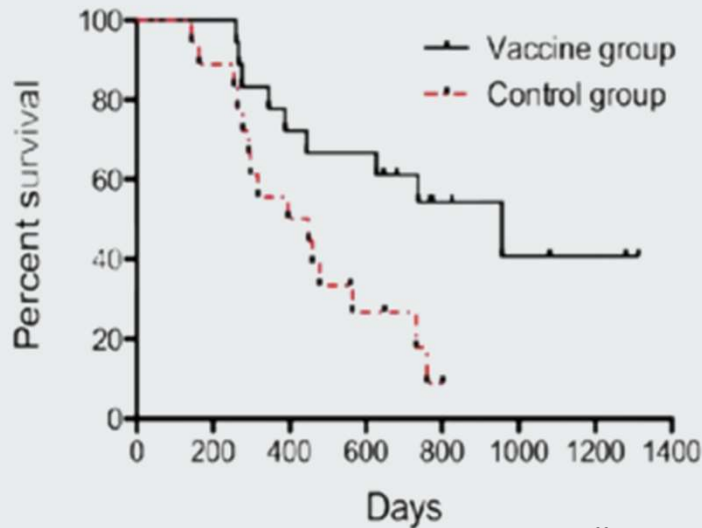
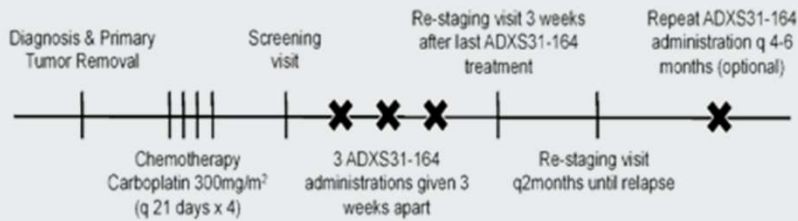


CANINE OSTEOSARCOMA CLINICAL TRIAL DATA*



**USDA has granted provisional approval for OST-HER2 for the treatment of Canine Osteosarcoma*

DESIGN



ADDITIONAL DATA

	Median Disease- Free Interval (DFI - days)	Median Survival Time (MST - days)	1 Year Survival	2 Year Survival
Vaccinated Group	615	956	78%	67%
Historical Control Group	NR	423	55%	28%
Published Retrospective Studies	123-257	2017-321	35%	10-15%

Clin Cancer Res 2016;22:4380-4390; DOI: 10.1158/1078-0432.CCR-16-0088

Full USDA approval pending 3-week XYZ SAFETY study that costs \$200,000 - then outlicense

Interview Highlights from Key Opinion Leader Experts

Consistently Enthusiastic And Positive, Confirming The Novelty Of The Lm Approach

“Canine and human osteosarcoma are the same disease genetically and as close as 2 diseases can be across to species and when we think of survival, the survival of the dog was because the *Lm* therapy was preventing the METS forming and this is usually what kills people and dogs with this disease.”

Yvonne Paterson, PhD

Emeritus Professor of Microbiology at the University of Pennsylvania Perelman School of Medicine

Yvonne’s laboratory was the first to show that the *Lm* bacterium could be used to target antigens to the MHC class I pathway for antigen processing with the induction of cytotoxic T cells and has pioneered the application of this organism in vaccine development over the past 15 years. They have shown that recombinant forms of this organism which have been transformed to express viral antigens from influenza, HIV and SIV are excellent vectors for inducing cell mediated immune responses both parenterally and at mucosal surfaces.

Furthermore, they’ve also applied this technology in the development of cancer vaccines that result in the induction of potent cell mediated immunity that can eliminate established macroscopic tumors even in the face of profound immune tolerance to the tumor-associated antigen.

“Overall, I think it's a really sound approach. I'm really excited about and I was *Listeria* skeptic for a long time until I started playing with it and now, I'm definitely a believer, I think that it is a really great platform compared to some of the other ones that are out there”

Adam Snook, PhD

Assistant professor at Thomas Jefferson University Hospital

Adam’s research focuses on the discovery and clinical development of novel cancer immunotherapeutics.

“This approach is true exciting and very easy on the patient compared to other cancer therapy as *Lm* treatment would likely be an outpatient proceed, requiring on a short IV time, with potential for only short and transient issues with patients recovered from the treatment the next day rather than greater toxicities with Chemo or Check Point Inhibitors than can also be cumulative.”

Dung Le, MD

Medical Oncologist at the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins University School of Medicine

Lm vector development and how pancreas cancer vaccines, combined with other agents, can elicit tumor-specific immune responses. She completed her training, fellowship, and residency at Johns Hopkins. Dr. Le has been involved in several trials on treatments for pancreatic cancer patients. Her work attempts to interrupt that signaling pathway, either by inhibiting negative signals that cancer cells use to turn off the immune system, or by accelerating the positive signals produced by immune system T-cells.

OST-HER2: Potential Adjunct to new SOC Trastuzumab



Potential In Multiple Additional Cancer Indications

HER2+ Solid Tumors

- » Bladder, Breast Cancer, other HER2+ solid tumors
- » OST-HER2 plus trastuzumab may prevent development of trastuzumab resistance in HER2+ solid tumors like Bladder, Breast, others
- » [https://doi.org/10.1016/S1470-2045\(07\)70190-0](https://doi.org/10.1016/S1470-2045(07)70190-0)

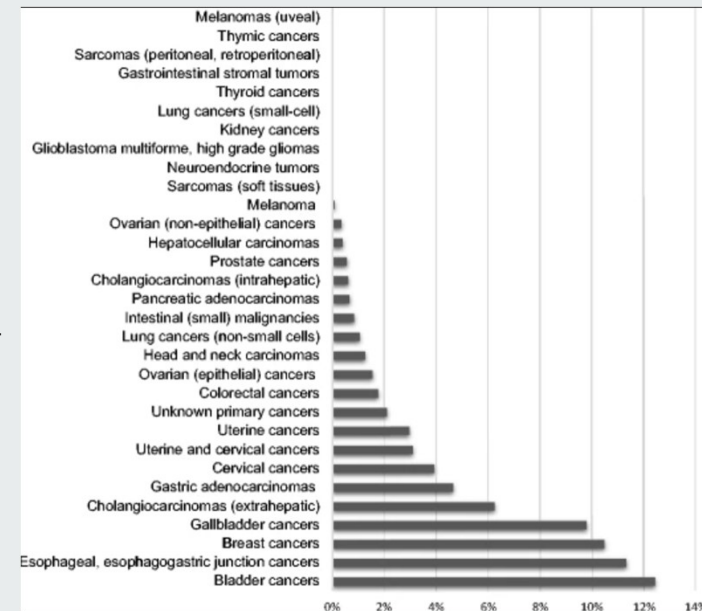
Esophageal

- » Rationale: OST-HER2 + trastuzumab may prevent development of trastuzumab resistance in HER2+ gastroesophageal cancer and extend utility of trastuzumab after first progression
- » <https://dx.doi.org/10.1186%2Fs13045-019-0737-2>

Colorectal

- » Rationale: 2-3% are HER2+, ICI have not been active in CRC except in DNA Mismatch Repair where there is high T cell infiltration Trastuzumab and lapatinib – 30% response rate in HER2 + CRC
- » Increasing T cell infiltration with OST31-164 may improve activity of ICI in CRC, especially HER2+ CRC
- » <https://ascopubs.org/doi/full/10.1200/PO.19.00154>

HER2 positivity across cancers: analysis of 37,992 samples by IHC. IHC 3+ was considered HER2 IHC positive



Yan, M., Schwaederle, M., Arguello, D. *et al.* HER2 expression status in diverse cancers: review of results from 37,992 patients. *Cancer Metastasis Rev* 34, 157–164 (2015). <https://doi.org/10.1007/s10555-015-9552-6>

PATENTED TECHNOLOGY: OST-HER2



- 21 Patents Issued: US, Japan, Austria, Belgium, Czech Republic, Germany, Denmark, Spain, Finland, France
- 10 Patents Pending: China, India, Mexico, New Zealand, Taiwan, South Korea, Hong Kong

Select Patents: Extended to 2033

Country	Status	Application Number	Patent Number	Filing Date	Application Type	Title
United States	Issued	12/945,386	9,084,747	November 12, 2010	Priority to 61/260,277	COMPOSITIONS AND METHODS FOR PREVENTION OF ESCAPE MUTATION IN THE TREATMENT OF HER2/NEU OVER-EXPRESSING TUMORS
United States	Issued	13/210,696	9,017,660	August 16, 2011		COMPOSITIONS AND METHODS FOR PREVENTION OF ESCAPE MUTATION IN THE TREATMENT OF HER2/NEU OVER-EXPRESSING TUMORS
Japan	Issued	2016-152578	6329211	November 12, 2010	Divisional of 2012539021	USE OF RECOMBINANT LISTERIA STRAIN IN PREPARATION OF MEDICAMENT FOR DELAYING ONSET OF BRAIN OR MAMMARY TUMOR
United States	Issued	14/669,629	10,016,617	March 26, 2015	Continuation-in- part of U.S. 14/268,436	COMBINATION IMMUNO THERAPY AND RADIOTHERAPY FOR THE TREATMENT OF HER-2-POSITIVE CANCERS

OST-tADC Linker Platform

tADCs / tSM-DCs / tmRNA-DCs

PRODUCT OVERVIEW: **OST-tADC**



OST-tADC: Interchangeable Ligands, Linkers, and Payloads – Tunable Drug Conjugate

- “Plug & Play” - Targeting Ligands, pH sensitive SiLinkers™ (silicon linkers), and multiple CAPed (Conditionally Active) Payloads
- Antibodies (ADC), small molecules (SM-DC) and mRNA therapeutics (mRNA-DC)

OST-tADC In Depth

- A platform technology with extensive flexibility and multiple licensing opportunities – without limiting OS Therapies therapeutic development
- Platform is currently in pre-clinical studies and working toward 2-Week & GLP toxicity trials
- Phase I trials for ovarian cancer are expected to begin in 2025

BIOTECH

ASCO: Replacing chemotherapy with ADCs? AbbVie rebuilds next-gen assets after Rova-T flop

By Gabrielle Masson

Jun 4, 2024 11:26am

AbbVie

ASCO 2024

ASCO

antibody drug conjugates



OST-tADCs: Improving Both Efficacy & Safety vs. Traditional ADCs

Driven by Innovation in Targeting Ligands, Linkers & Payloads

IMPROVING EFFICACY

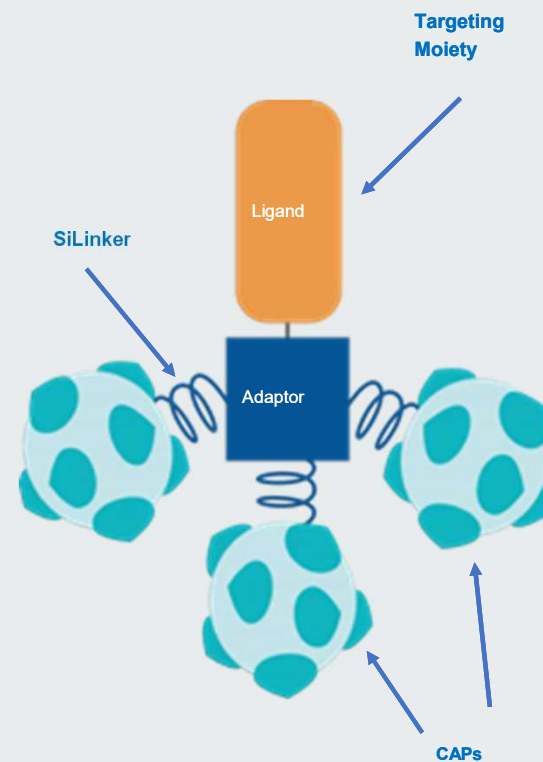
- **Smaller targeting moieties/ligands** provide better tumor penetration
- **SiLinkers** rapidly release payloads inside targeted cancer cells and in acidic tumor microenvironments
- **Conditionally Active Payloads (CAPs)** only cross cell membranes and kill cancer cells under the same acidic conditions that cleave our SiLinkers, trapping and concentrating them in tumor cells

IMPROVING SAFETY

- **Small targeting moieties/ligands** can direct more rapid clearance of the OST-tADC from the body
- **SiLinkers** are relatively stable under normal physiological conditions found throughout the body
- **CAPs** do not readily enter normal cells under physiological conditions found throughout the body

CHEMICAL MANUFACTURING & CONTROL

- **OST-tADCs** are assembled chemically and allow precise control over the number of toxin payloads per OST-tADC in payload cassettes and straight-forward purification of final OST-tADC moieties (regulatory importance)



Interview Highlights from Key Opinion Leader Experts

OST-tADC Platform Viewed As Differentiated Beyond Other ADC / TDC Players

“There's several different linkers and site specific conjugation technologies coming forward, but here's the key punchline, I'm coming to a lot of times with these technologies it's sort of here's the linker and here's a payload and one or two payloads. There's less plug and play and less adaptability. OS Therapies can manipulate each of these components and I think there's a growing appreciation that to have a platform that's widely applicable across many solid tumor types you need that kind of adaptability where one size doesn't fit all for all cancers or all tumors or all solid tumors that you're going to have to use one payload for ovarian and this might be different than the best payload for non- small cell lung.”

Morris Rosenberg, PhD

Founder and Consultant, MRosenberg BioPharma Consulting

Morris has over 25 years experience in the development of therapeutic agents to treat a variety of human diseases. He has participated in the development and launch of Adcetris, Avonex, Angiomax, Xigris, and Forteo. He played a key role over the past decade, as part of the executive management team at Seattle Genetics, in building a commercial biopharmaceutical company focused on the development of antibody- drug conjugate technology for the treatment of cancer and autoimmune disorders.

“Overall, I very excited about what you are developing here as you show true innovation in 3 out of 4 of the key components of an ADC: 1. ligands; 2. Linkers, and; 3. Payloads.”

Christoph Rader, PhD

Scripps Professor and Associate Dean,
Skaggs Graduate School of Chemical and
Biological Sciences, Department of
Immunology and Microbiology

Christopher has focused on antibody target and drug discovery strategies toward more specific and more potent treatment options for cancer patients. Target discovery efforts are aimed at identifying new cell surface antigens suitable for monoclonal antibody (mAb) therapy of cancer.

“This is fascinating. I didn't expect to hear about small molecule, I hear about antibody, ADCs but this is fascinating to me that it's interesting.”

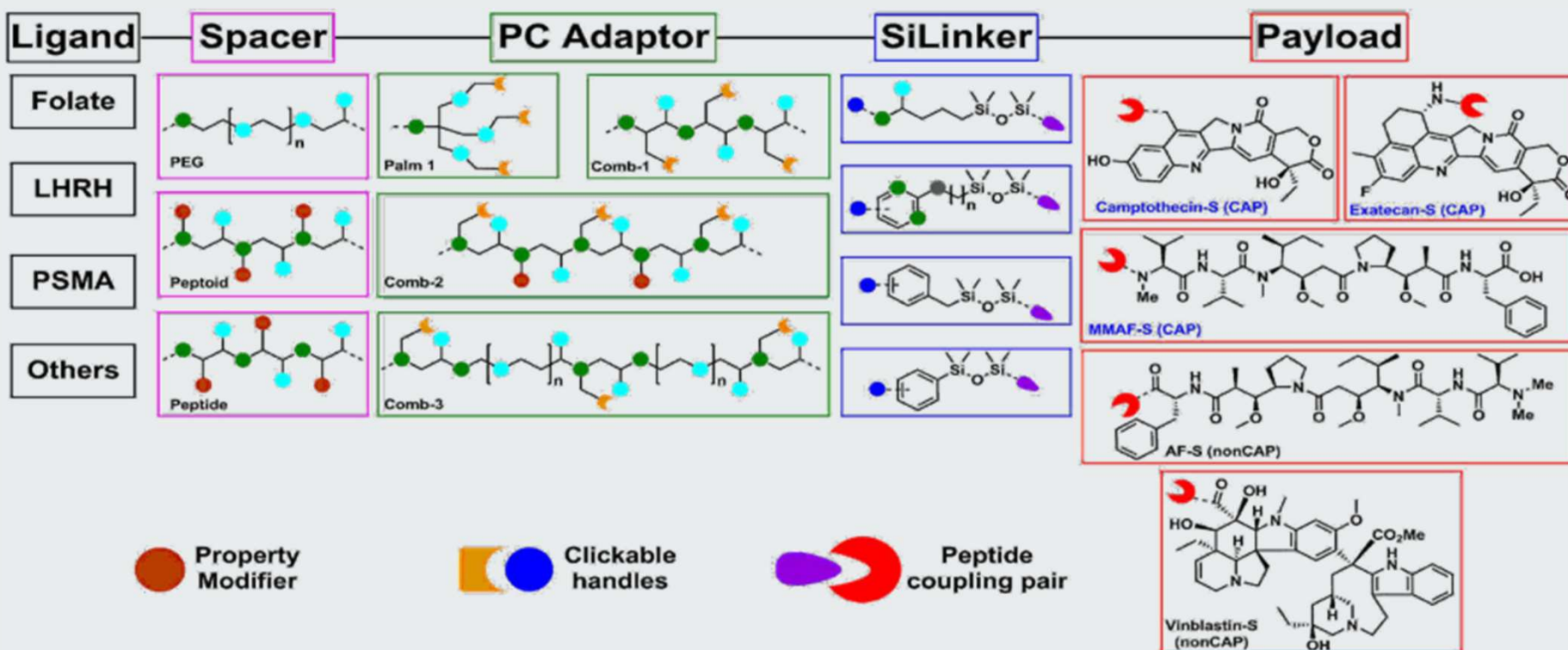
Ravi Chari, PhD

BioTechnology Consultant at RChari Consulting

Ravi assists organizations in design and optimization of ADCs (payload - including siRNAs, linkers, conjugation, analysis, biological evaluation and can also assist in patent drafting and technology evaluation.

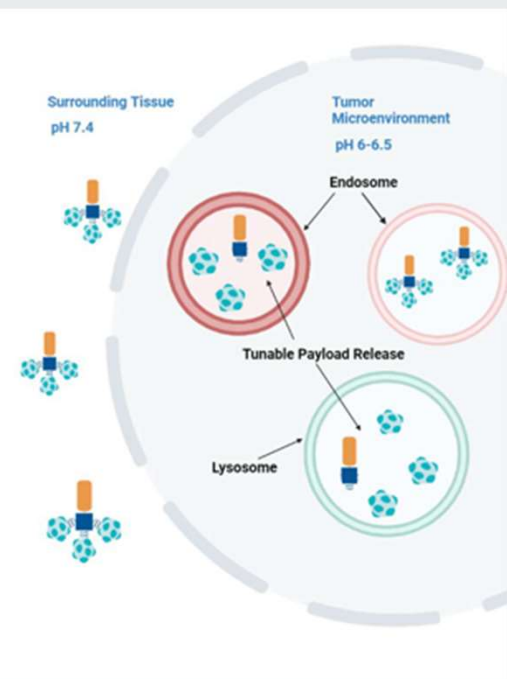
OST-tADC PLATFORM IS “PLUG AND PLAY” AND “ADAPTABLE”

Modular Approach is a Key Differentiator - Preferred Building Block Examples



CHEMICAL MODIFIERS ALLOW TUNABLE SiLINKERS CLEAVAGE

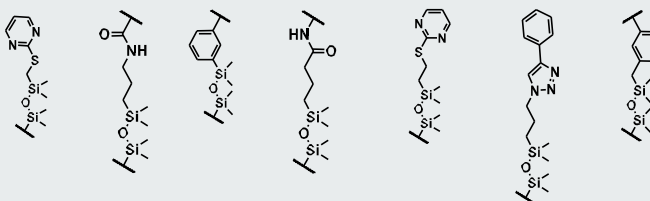
Payload Release can be Tuned to Occur Either in Endosome or Lysosome



Key Points

- Proximal functional groups influence the hydrolysis rate of the disilylether linkers
- We have demonstrated that rapid hydrolysis with the pyrimidine system *in vitro* translated to rapid linker cleavage in cells

Linkers which cleave more rapidly under slightly acidic conditions are ideal for small OST-TDC approach



	Pyrimidine	Amide	Phenyl	Carboxamide	Homologous Pyrimidine	Triazole	Benzyl
pH 7.4 $t_{1/2}$ (mins)	>600	6080	6170	>7920	9850	9134	>11520
pH 5 $t_{1/2}$ (mins)	2	77	307	95	480	445	1550

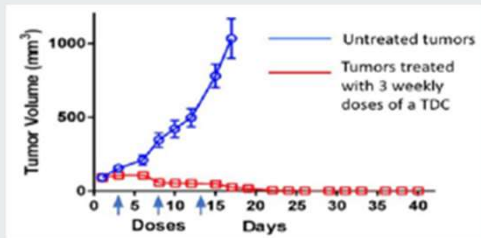
Stable SiLinkers can be used in ADCs to raise the Drug-to Antibody Ratio (DAR) to between 6 and 24 payloads per ADC

LCMS Hydrolysis studies were carried out in 50 mM HEPES buffer (pH 7.4 or pH 5) at 37 °C

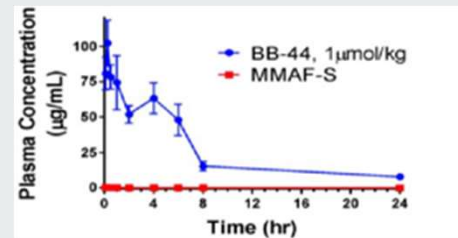
OST-tADC-FRA SHOWED IN-VIVO POC FOR tADC TECHNOLOGY INCLUDING CAP CONCEPT

OST- tADCs CAN CURE MOUSE XENOGRAFT TUMORS

KB Tumors treated with 3 doses of BB-44 'cure' 8/8 mice



OST-tADCs ARE STABLE AND ARE CLEARED RAPIDLY

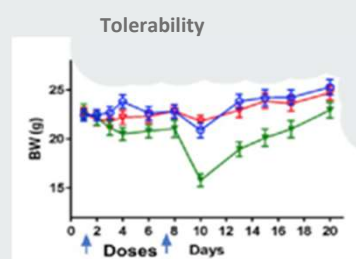
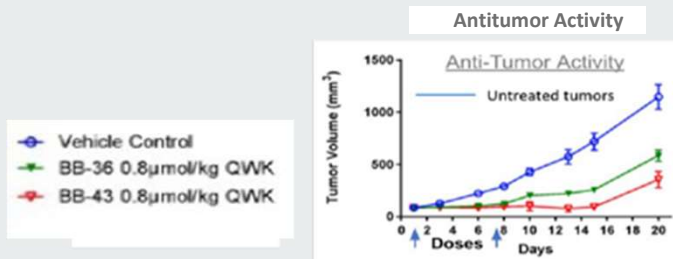


Blood levels of BB-44 (and low levels of released toxin) indicate good in vivo stability & rapid clearance in mice

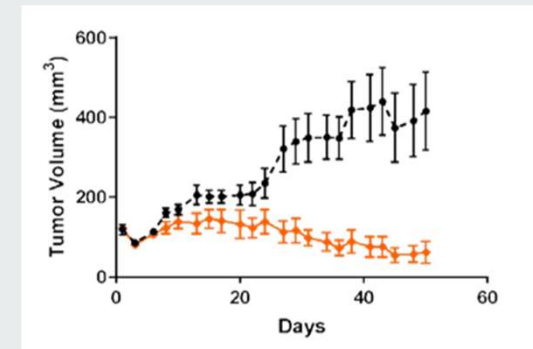
Strong Antitumor BB-94 (Hexa-Exatecan-S OST-tADC) Activity in IGROV-1 Tumors

CAP TOXINS ARE MORE EFFECTIVE & LESS TOXIC THAN NON-CAP VERSIONS OF THE SAME TOXIN

CAP version of an auristatin toxin (red) has better antitumor activity and shows no toxicity / no BWL vs. less activity and significant toxicity / BWL for a non-CAP Toxin using similar OST-tADC designs



Measured by Body Weight Loss (BWL)



Silicon-based Linkers Enable Next-Gen ADC Designs

	<u>Traditional VAL-CIT LINKER</u>	<u>Traditional GGFG LINKER</u>	<u>Next-Gen Silicone LINKER</u>
% Payload at Released at Target Tumor Site	+	+	+++
Stability in Circulation	NO	Limited	YES
New IP for Old Payloads	No	No	YES
Premature Cathespin Cleavage	YES - Ubiquitous	YES - Macrophages	NO
Myelosuppresion	YES	NO	NO
Multiple Payloads per Linker	NO	NO	YES

PATENTED TECHNOLOGY: OST- α ADC



The overarching platform claims protecting SiLinkers and Payload Cassettes are covered in US 9,931,407 issued in April 2018 which provides protection to the core platform into 2036.

Conditionally Active Payloads (CAPs) are covered in a broader payload patent filing from which two Track 1 filings (for MMAF-S and Exatecan-S) have already issued (US 10,064,880 and US 10,293,053, respectively); these filings are expected to protect our CAPs through at least 2037.





Investment Summary

SEASONED BOARD OF DIRECTORS



Colin Goddard – *PHD EXECUTIVE CHAIR CEO - BLINKBIO*

Colin Goddard is former CEO of BlinkBio, and was formerly CEO of OSI Pharmaceuticals, raising over \$1.5 billion and overseeing the development, launch and commercialization of Tarceva through to OSI's \$4 billion acquisition by Astellas. Dr. Goddard also Chairs the board of Mission Therapeutics and is a board member of ADC company Endocyte (a Novartis company). He obtained his PhD in cancer chemotherapy in the UK and completed post-doctoral training at the NCI in Bethesda, MD.



Paul Romness MHP – *PRESIDENT & CEO OS THERAPIES*

Paul Romness leads OS Therapeutics with over 25 years of experience in the biopharmaceutical industry, working in major companies like Johnson & Johnson, Amgen and Boehringer Ingelheim. He has been directly involved in the launch of 9 major products in the industry covering indications for oncology, surgery, HIV, FSD, COPD, IPF, cardiovascular and diabetes. Mr. Romness has a B.S. in Finance from American University and a Masters of Health Policy from George Washington University.



John Ciccio – *COO – SYNEOS HEALTH*

John Ciccio is COO, Technology & Data Solutions of Syneos Health. He was also President and CEO of Adheris Health, a MedAdvisor company. Adheris provides dynamic patient management solutions that activate patients, improve outcomes and elevate brand performance with customized patient behavioral models built on extensive data insights and analytics. Mr. Ciccio received his undergraduate degree from Harvard University.



Theodore Search PharmD, – *GM-CEO - NORSTELLA*

Dr. Theodore Search, PharmD – GM-CEO, Real-World Data Intelligence of Nestella. Founder and CEO of Skipta, created to enhance the communication, collaboration, knowledge, and access of healthcare professionals and life science organizations. While preparing to treat a patient discharged into his care, Ted needed to consult with another infusion pharmacist regarding the appropriate dosage of a new chemotherapy product to administer. Reluctant to tap into digital channels and social networks, due to the clinical nature of the conversation, an unmet need was identified: a place where like-minded verified healthcare professionals could communicate and collaborate on patient cases across the country. Dr. Search obtained his PharmD from the University of Pittsburgh.



Joacim Borg – *CMO – INDEX INVESTMENT GROUP*

Joacim Borg is the Chief Marketing Officer at Index Investment Group a real estate development and investment company. Joacim strategizes and spearheads the North American companies marketing and branding for their development projects and subsidiary investments across the three pillars of the company. He works closely with the team in Sweden to coordinate and execute on brand development goals and campaigns. Joacim also works with the acquisition team to identify, research and present incoming investments as well as produce the sales packages of the projects the company divests. Joacim holds a bachelor of science degree in Managerial Economics with a liberal studies degree in Entrepreneurship from Bentley University.



Olivia Egge - Emertia – *OSTEOSARCOMA SURVIVOR*

Olivia Egge was diagnosed with Osteosarcoma (OS) in February 2017, following a severe treatment protocol that has not advanced in forty years. Ms. Egge has given us the inspiration to search for new cures for OS, while continually giving us the patient perspective. She is an active 4th Year at the University of Virginia.

Key Takeaways

- **Multiple near-term milestones**
 - Phase 2b trial for OST-HER2 with data expected in Q4/24
 - Pivotal OST-HER2 Canine OS study to support full approval
- **Next Generation tADC: OST-tADC platform growth**
- **Large value markets**
 - TAM for Human Osteosarcoma is \$1.72B
 - TAM for Canine Osteosarcoma is \$150M+
 - TAM for tADC platform is \$311 billion
- **High need market**
 - No approved alternatives
- **Several early potential revenue streams**
 - Out-License Canine Osteosarcoma
 - Out-License Human Osteosarcoma
 - Out-License OST-tADC SiLinkers™ - \$20-80M
 - Priority Review Voucher ~ \$100M
- **Veteran team with Big Pharma Experience**
 - Strong track record of drug development, commercialization and multiple M&A exits

Thank You!

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