UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 30, 2026

OS THERAPIES INCORPORATED
(Exact name of registrant as specified in its charter)

Delaware	001-42195	82-5118368
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

115 Pullman Crossing Road, Suite 103 Grasonville, Maryland	21638
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: (410) 297-7793

N/A
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value $0.001 per share	OSTX	NYSE American

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

CURRENT REPORT ON FORM 8-K

OS Therapies Incorporated

April 30, 2026

Item 7.01. Regulation FD Disclosure.

On April 30, 2026, OS Therapies Incorporated (the "Company") issued a press release announcing, among other things, that the European Medicines Agency has initiated a rolling review (continuous evaluation) of the Company's regulatory dossier for OST-HER2 and providing an update on certain other regulatory interactions and related Company developments. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

On April 30, 2026, the Company also held a conference call to review OST-HER2 immune pharmacodynamic biomarker response (seroconversion) data and to review regulatory updates relating to the OST-HER2 program. A copy of the slide presentation that was used during the conference call is furnished as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

The information in this Item 7.01 of this Current Report on Form 8-K, including Exhibits 99.1 and 99.2, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, and shall not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Cautionary Note Regarding Forward-Looking Statements

This report, including Exhibits 99.1 and 99.2, contains forward-looking statements within the meaning of the federal securities laws. Forward-looking statements include statements regarding the Company's expectations, plans, prospects, anticipated timing of regulatory interactions, anticipated timing and outcomes of regulatory review processes, anticipated clinical and regulatory milestones, anticipated commercialization and market access opportunities, anticipated sales and other financial or operating expectations, and other statements that are not historical facts. Words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "might," "plan," "potential," "project," "should," "target," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are based on management's current expectations and assumptions as of the date of this report and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These risks and uncertainties include, among others, risks and uncertainties related to regulatory processes and outcomes, the timing and results of clinical trials and data analyses, the Company's ability to obtain and maintain regulatory approvals, authorizations, designations, and reimbursement, the Company's ability to execute its development and commercialization strategy and other risks and uncertainties described in the Company's filings with the Securities and Exchange Commission (the "SEC"), including under the heading "Risk Factors" in the Company's most recent Annual Report on Form 10-K and other filings the Company may make with the SEC from time to time. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove to be incorrect, actual results may vary materially from those indicated or anticipated by these forward-looking statements. Therefore, you should not rely on any of these forward-looking statements.

The forward-looking statements included in this report are made only as of the date of this report, and except as otherwise required by applicable securities law, the Company assumes no obligation, nor does the Company intend to publicly update or revise any forward-looking statements to reflect subsequent events or circumstances.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
99.1	Press Release issued by OS Therapies Incorporated on April 30, 2026.
99.2	Slide Presentation dated April 30, 2026.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

OS THERAPIES INCORPORATED

Dated: April 30, 2026

By: /s/ Paul A. Romness, MPH
Name: Paul A. Romness, MPH
Title: President and Chief Executive Officer

Exhibit 99.1

OS Therapies Announces EMA Initiates Rolling Review of Conditional Marketing Authorization Application for OST-HER2 in the Prevention or Delay of Recurrence in Fully Resected Pulmonary Metastatic Osteosarcoma

Conference call scheduled for Thursday, April 30, 2026, at 8:30 am ET to review new OST-HER2 immune pharmacodynamic biomarker response (seroconversion) data and review regulatory successes validating the OST-HER2 approach. Participants will include strategic advisors Dr. Craig Eagle and Dr. Bob Langer, and Osteosarcoma key opinion leader Dr. Peter Anderson from Cleveland Clinic.

- *EMA and Australia TGA (ATGA) align on 3-year overall survival as the approvable clinical efficacy endpoint for Conditional Marketing Authorizations (CMAs), with alignment also achieved on confirmatory Phase 3 initiation, initially only in Australia, planned for Q3 2026 to meet regulatory requirement to support early approvals in the U.S., U.K., Europe and Australia*
- *Alignment achieved with EMA and ATGA on Seroconversion data serving as surrogate clinical efficacy data to support CMAs for early market access and eligibility for a Priority Review Voucher (PRV) under Rare Pediatric Disease Designation (RPDD)*
- *Alignment achieved with EMA and ATGA on non-clinical, CMC and safety data*
- *Alignment achieved with ATGA on existing drug product being used to initiate Phase 3*
- *EMA selects Company into Raw Data Pilot Program*
- *OST-HER2 granted ATMP designation by U.K. MHRA*
- *Company forecasts European peak OST-HER2 osteosarcoma sales exceeding $300 million following ATMP designation grant, with over $50 million in sales expected in 2027*
- *Upcoming U.S. FDA and U.K MHRA meetings scheduled in 2nd quarter of 2026*
- *OST-504 Phase 1b castrate resistant prostate cancer trial biomarker analysis to mirror OST-HER2 Phase 2b osteosarcoma biomarker analysis*
- *OST-503 Phase 2 non-small cell lung cancer candidate indications expanded to include pancreatic cancer following review of target vector antigens include all KRAS G12 position mutations, which represents 76% of all KRAS mutations in cancer*

New York, NY, April 30, 2026 – OS Therapies, Inc. (NYSE American: OSTX) ("OS Therapies" or "the Company"), the world leader in gene-edited, listeria-based cancer immunotherapies, today announced that the European Medicines Agency (EMA)'s Committee for Advanced Therapy (CAT), in conjunction with the Committee for Medicinal Products for Human Use (CHMP) and Pharmacovigilance Risk Assessment Committee (PRAC), has initiated Continuous Evaluation ("Rolling Review") of the OST-HER2 Conditional Marketing Authorisation (CMA) request regulatory dossier for the prevention of recurrence in fully resected, pulmonary metastatic osteosarcoma.[1] The Company also announced that it was selected into EMA's Raw Data Pilot programme that will done in concert with the EMA Scientific Advice Working Party (SAWP).

Australia Therapeutic Goods Association (ATGA) has also invited the OS Therapies to make an application for Provisional Determination, the Australian equivalent of a Conditional Marketing Authorisation of the OST-HER2 regulatory dossier, and is expected to make a decision on rolling review following the receipt of the Clinical Trial Notification (CTN) for the confirmatory Phase 3 trial later this quarter that will position the OS Therapies to initiate the confirmatory Phase 3 in the third quarter of 2026.

“I am delighted with the regulatory interactions OS Therapies has had to date, and I look forward to supporting OS Therapies in upcoming meetings with U.S. and U.K regulators,” said Dr. Craig Eagle, strategic advisor for OS Therapies.

OST-HER2 Immune Pharmacodynamic Biomarkers Conference Call Details

Title: OS Therapies (NYSE: OSTX) | Conference Call: OST-HER2 immune pharmacodynamic response biomarkers
Date: April 30th, 2026
Time: 8:30 AM Eastern Time
Registration Link: https://zoom.us/webinar/register/WN_Xlmj7kdNTH6C0MA_xdwiiQ

EMA OST-HER2 Rolling Review Status

OS Therapies and EMA have agreed that 3-year overall survival data will serve as the basis to complete evaluation of the CMA request. The Company’s recently submitted clinical efficacy data includes 2-year overall survival data, with EMA requesting updated 2.5-year overall survival data that will be available by the middle of the second quarter of 2026, and 3-year overall survival data that will become available early in the fourth quarter of 2026, which will complete the CMA submission. The Company anticipates a potential CMA decision by EMA in the fourth quarter of 2026. Market access interactions related to reimbursement with the UK’s NICE and EMA Health Technology Assessment (HTA) processes have commenced simultaneously to minimize the time between regulatory approval(s) and patient access to treatment. International regulatory coordination has also commenced under the EMA FDA Information Sharing programme[2].

Additionally, the Company has been granted Advanced Therapy Medicinal Product designation from the U.K. Medicines and Healthcare products Regulatory Agency (MHRA)[3] by virtue of its reciprocal designation agreement with EMA.

1 https://www.ema.europa.eu/en/about-us/how-we-work/data-regulation-big-data-other-sources/use-clinical-study-data-medicine-evaluation
2 https://www.fda.gov/drugs/cder-international-program/international-agreements-information-sharing
3 https://www.gov.uk/guidance/advanced-therapy-medicinal-products-regulation-and-licensing

“We are grateful for EMA and ATGA’s strong support of our OST-HER2 program as we urgently work to improve outcomes for patients facing this rare and deadly pediatric cancer,” said Paul Romness, Chair and Chief Executive Officer of OS Therapies. “With all currently available data submitted and key regulatory alignment achieved, we are advancing toward early market access via Conditional Marketing Authorizations in Europe, the U.K., and Australia, as well as a U.S. Biologics License Application (BLA) under Accelerated Approval. Following our recent ATMP designation in Europe, we believe peak European sales could exceed $300 million annually, with the potential to generate more than $50 million in sales beginning in 2027.” Mr. Romness continued: “We have aligned with EMA and ATGA on the provisional design of our global confirmatory Phase 3 trial that is required to be initiated prior to being granted early market access, including 3-year overall survival as the primary efficacy endpoint. 3-year overall survival will also be the efficacy endpoint that will serve as the basis for potential early market access in the U.S., U.K., Europe, and Australia. This gives us strong confidence as we head into upcoming FDA and MHRA meetings, while reinforcing the growing recognition of our pharmacodynamic biomarker response seroconversion data as a meaningful surrogate for the key overall survival efficacy endpoint, further supporting our global regulatory pathway. We are delighted that immunotherapies are becoming more central in the approach to treating cancers globally, which bolsters OST-HER2 and the rest of our attenuated *listeria monocytogenes* platform candidates.”

“With the significant momentum we now have surrounding OST-HER2 in osteosarcoma, we are actively working to be prepared for the time when resources become available to advance our exciting listeria monocytogenes platform pipeline,” said Robert Petit, PhD, Chief Medical and Scientific Officer at OS Therapies. “Based upon the extensive biomarker work we have done to date on the OST-HER2 osteosarcoma program, we are now positioned to generate congruent data for the OST-504 castration-resistant prostate cancer program. Additionally, following significant advancement in the exciting KRAS-targeted antibody pancreatic cancer field with important clinical data showing significant survival benefit, we have identified that our promising Phase 2 non-small cell lung cancer (NSCLC) candidate OST-503 was constructed to target all KRAS G12 position-related antigen mutations, which represents 76% of all KRAS mutations in cancer. As a result, we believe OST-503 could represent a highly complementary approach to KRAS-target antibodies currently in development.”

OST-HER2 has received Orphan Drug Designation (ODD), Fast Track Designation (FTD) and Rare Pediatric Disease Designation (RPDD) from the FDA, and ODD, FTD and ATMP from the EMA. Under the RPDD program, if the Company receives a BLA in the United States, it will become eligible to receive a Priority Review Voucher (PRV) that it intends to sell. The Company is seeking to obtain a BLA under the Accelerated Approval Program for OST-HER2 in osteosarcoma in the second half of 2026, in addition to CMAs in Europe, the U.K. and Australia.

Upcoming 2nd Quarter Milestones

- 2.5-year overall survival data
- FDA Pre-BLA Type B meeting to gain alignment on surrogate clinical efficacy endpoints based on most up-to-date Phase 2b clinical, biomarker and CMC, following the December 2025 alignment achieved non-clinical and safety data

- Regenerative Medicine Advanced Therapy designation ("RMAT" – FDA equivalent to EMA ATMP designation) decision to be based upon preliminary evidence of efficacy supported by clinical and biomarker data metrics aligned upon
- FDA rolling review decision based upon pre-BLA meeting outcome
- FDA Type C meeting to gain alignment on the design of the confirmatory Phase 3 study
- Submission of the Accelerated Approval BLA request to FDA
- MHRA meeting to gain alignment on the design of the confirmatory Phase 3 study
- Submission of CMA request to MHRA
- MHRA rolling review decision based on Phase 3 confirmatory study design alignment
- Submission of CMA request to Australia in conjunction with Clinical Trial Notification (CTN) request for confirmatory Phase 3 study
- Receipt of approximately 1.45 million GBP in non-dilutive cash VAT tax refund

About OS Therapies

OS Therapies is a clinical stage oncology company focused on the identification, development, and commercialization of treatments for Osteosarcoma (OS) and other solid tumors. The Company is the world leader in listeria-based cancer immunotherapies. OST-HER2, the Company's lead asset, is an immunotherapy leveraging the immune-stimulatory effects of Listeria bacteria to initiate a strong immune response targeting the HER2 protein. OST-HER2 is designed to target two mutated extracellular epitopes and one mutated intracellular epitope of the HER2 oncogene, requiring only one of these three epitopes to be present in a tumor (or micro-metastasis) to trigger the desired immune response. OST-HER2 has received Orphan Drug Designation (ODD), Fast Track Designation (FTD) and Rare Pediatric Disease Designation (RPDD) from the U.S. Food & Drug Administration and has received ODD, FTD and ATMP from the European Medicines Agency.

The Company reported positive data in its Phase 2b clinical trial of OST-HER2 in recurrent, fully resected, lung metastatic osteosarcoma, demonstrating clinically significant benefit in the 12-month event free survival (EFS) primary endpoint of the study and the overall survival (OS) secondary endpoint. The Company anticipates receiving a Biologics License Application (BLA) from the U.S. FDA for OST-HER2 in osteosarcoma in 2026 and, if approved, would become eligible to receive a Priority Review Voucher that it could then sell. The Company also anticipates receiving Conditional Marketing Authorisations from the U.K.'s Medicines and Healthcare products Regulatory Agency and the EMA for OST-HER2 in 2026. OST-HER2 has completed a Phase 1 clinical study primarily in breast cancer patients, in addition to showing preclinical efficacy data in various models of breast cancer. OST-HER2 has been conditionally approved by the U.S. Department of Agriculture for the treatment of canines with osteosarcoma. The Company also anticipates reading out data from a Phase 1b study of OST-504 in castration resistant prostate cancer in the first half of 2026.

In addition, OS Therapies is advancing its next-generation Antibody Drug Conjugate (ADC) and Drug Conjugates (DC), known as tunable ADC (tADC), which features tunable, tailored antibody-linker-payload candidates. This platform leverages the Company's proprietary silicone Si-Linker and Conditionally Active Payload (CAP) technology, enabling the delivery of multiple payloads per linker. For more information, please visit www.ostherapies.com.

Forward-Looking Statements

Statements in this press release about future expectations, plans and prospects, as well as any other statements regarding matters that are not historical facts, may constitute forward-looking statements within the meaning of the federal securities laws. These forward-looking statements and terms such as "anticipate," "expect," "intend," "may," "will," "should" or other comparable terms involve risks and uncertainties because they relate to events and depend on circumstances that will occur in the future. Those statements include statements regarding the intent, belief or current expectations of OS Therapies and members of its management, as well as the assumptions on which such statements are based. OS Therapies cautions readers that forward-looking statements are based on management's expectations and assumptions as of the date of this press release and are subject to certain risks and uncertainties that could cause actual results to differ materially, including, but not limited to our expected to provide cash runway into 2027, the intended use of net proceeds from the offering, the potential approval of OST-HER2 by the U.S. FDA and other risks and uncertainties described in "Risk Factors" in the Company's most recent Annual Report on Form 10-K and other subsequent documents the Company files with the Securities and Exchange Commission. Any forward-looking statements contained in this press release speak only as of the date hereof, and, except as required by the federal securities laws, OS Therapies specifically disclaims any obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise.

OS Therapies Contact Information:

Investor Relations
Harrison Seidner, PhD
WaterSeid Partners
OSTX@waterseid.com

Public Relations
Stephanie Chen
Elev8 New Media
media@ostherapies.com

https://x.com/OSTherapies
https://www.instagram.com/ostherapies/
https://www.facebook.com/OSTherapies/
https://www.linkedin.com/company/os-therapies/

Exhibit 99.2


OS THERAPIES
OS THERAPIES
Biomarker-focused Conference Call
April 30, 2026
NYSE American: OSTX

Safe Harbor Statement

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.

Agenda

1. **Introduction – Harrison Seidner, PhD**
2. Corporate Update – Paul Romness, MPH
3. Biotech Innovation Curve – Dr. Robert Langer
4. Clinical, Biomarker and Safety Data – Andrew Exley, MD, FRCP, FRCPath
5. Regulatory status by Jurisdiction (Europe, Australia, U.K. and U.S.) – David Brindley, PhD
6. Insights on developing treatments for rare pediatric cancers – Dr. Craig Eagle
7. Questions

Agenda

1. Introduction – Harrison Seidner, PhD
2. **Corporate Update – Paul Romness, MPH**
3. Biotech Innovation Curve – Dr. Robert Langer
4. Clinical, Biomarker and Safety Data – Andrew Exley, MD, FRCP, FRCPath
5. Regulatory status by Jurisdiction (Europe, Australia, U.K. and U.S.) – David Brindley, PhD
6. Insights on developing treatments for rare pediatric cancers – Dr. Craig Eagle
7. Questions

Agenda

1. Introduction – Harrison Seidner, PhD
2. Corporate Update – Paul Romness, MPH
3. **Biotech Innovation Curve – Dr. Robert Langer**
4. Clinical, Biomarker and Safety Data – Andrew Exley, MD, FRCP, FRCPath
5. Regulatory status by Jurisdiction (Europe, Australia, U.K. and U.S.) – David Brindley, PhD
6. Insights on developing treatments for rare pediatric cancers – Dr. Craig Eagle
7. Questions

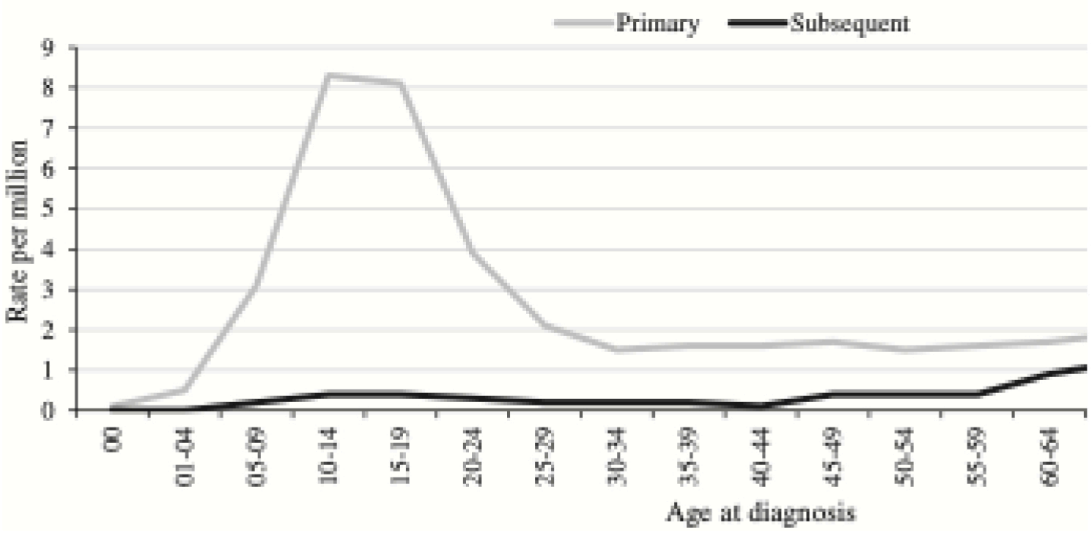
Agenda

1. Introduction – Harrison Seidner, PhD
2. Corporate Update – Paul Romness, MPH
3. Biotech Innovation Curve – Dr. Robert Langer
4. **Clinical, Biomarker and Safety Data – Andrew Exley, MD, FRCP, FRCPath**
5. Regulatory status by Jurisdiction (Europe, Australia, U.K. and U.S.) – David Brindley, PhD
6. Insights on developing treatments for rare pediatric cancers – Dr. Craig Eagle
7. Questions

Osteosarcoma: Clinical Outline

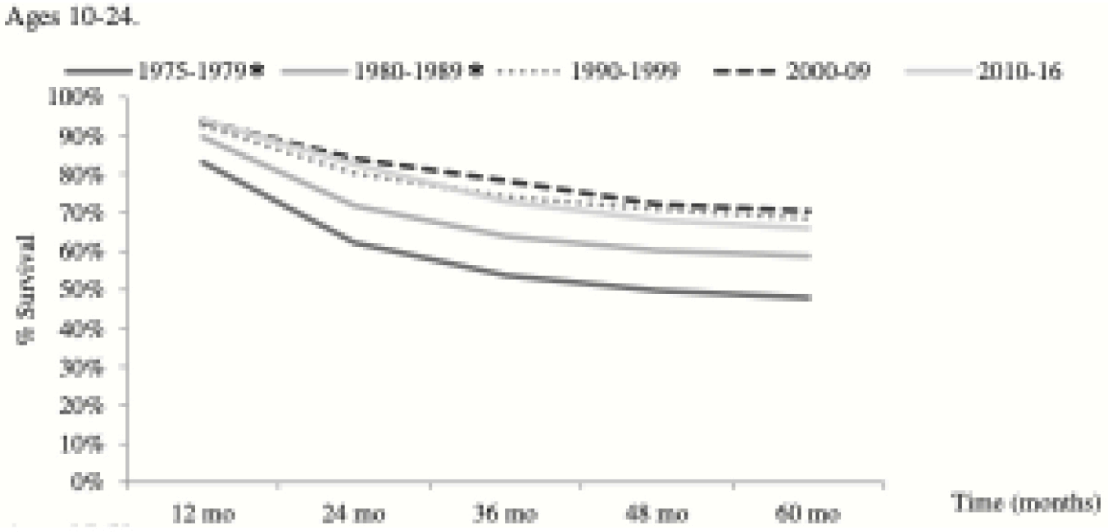
- Major form of pediatric bone cancer
- ~1,000 cases diagnosed annually in US
- Primarily affects adolescents & young adults: 12 – 39 yrs
- Localized disease
  - Chemotherapy & Surgery can sometimes achieve remission
- Recurrent / Metastatic disease e.g. in Lungs
  - No FDA-approved treatment options for recurrent, resected lung metastases
  - Systematic reviews highlight dearth of new therapies (Gazouli 2021, Biermann 2025)
  - Some progress on disease mechanisms BUT
  - Prognosis is dire with little improvement over the last 30 years (Cole 2022)
  - *Justifies use of historical control data*

Age-Related Incidence of Primary & Subsequent Osteosarcoma



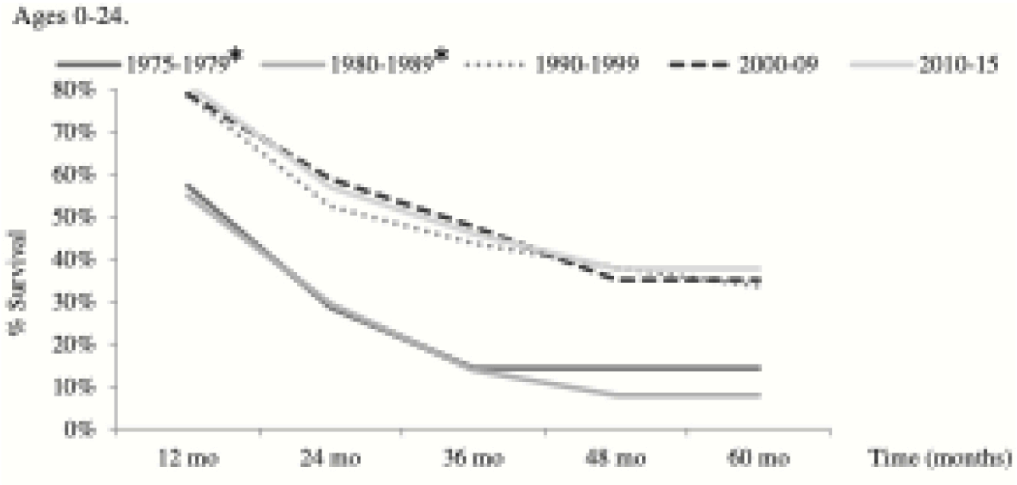
Cole 2022

Overall Survival in Primary Osteosarcoma: No Improvement in 30 years



Cole 2022

Overall Survival in Metastatic Osteosarcoma: No Improvement in 30 years



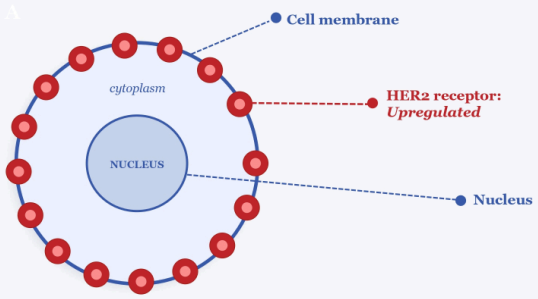
Cole 2022

OST31-164: Innovation – Novel Immunotherapy

1. 1st in class microbial vector gene therapy (MVGT)
   - Attenuated Listeria (Lm) bearing plasmids encoding chimeric fusion protein
     - Truncated Listerolysin: *promotes Ag presentation* & *acts as adjuvant* *
     - Tumour-associated antigen (TAA): Her2
2. Triggers a multi-modal anti-tumour immune response
   - Induces Her2 specific T cells
   - Boosts specific T cells to *structurally unrelated* TAAs *
   - Intratumoral *Lm* induces anti-tumour immunity as a cytosolic bacterium *
   - Boosts innate immune response to tumor – DCs, M1 monocytes, NK cells
   - Modulates tumour microenvironment – reduces MDSCs & Tregs

How OST-HER2 works

Her2 Expression in BREAST & OVARIAN CANCER

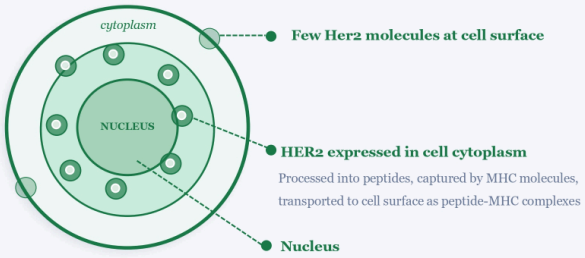


What this means:

- **HER2 is an "oncogenic driver"**
  It actively causes the cancer to grow and spread.
- **Upregulated: increased levels of Her2 expressed at cell surface**
- **Targetable by Antibodies (Ab): Ab-Drug conjugates (ADCs) or CAR-T cells**
- **Clinical Efficacy of ADCs: Trastuzumab-emtansine, Trastuzumab-duocarmycin**

VS

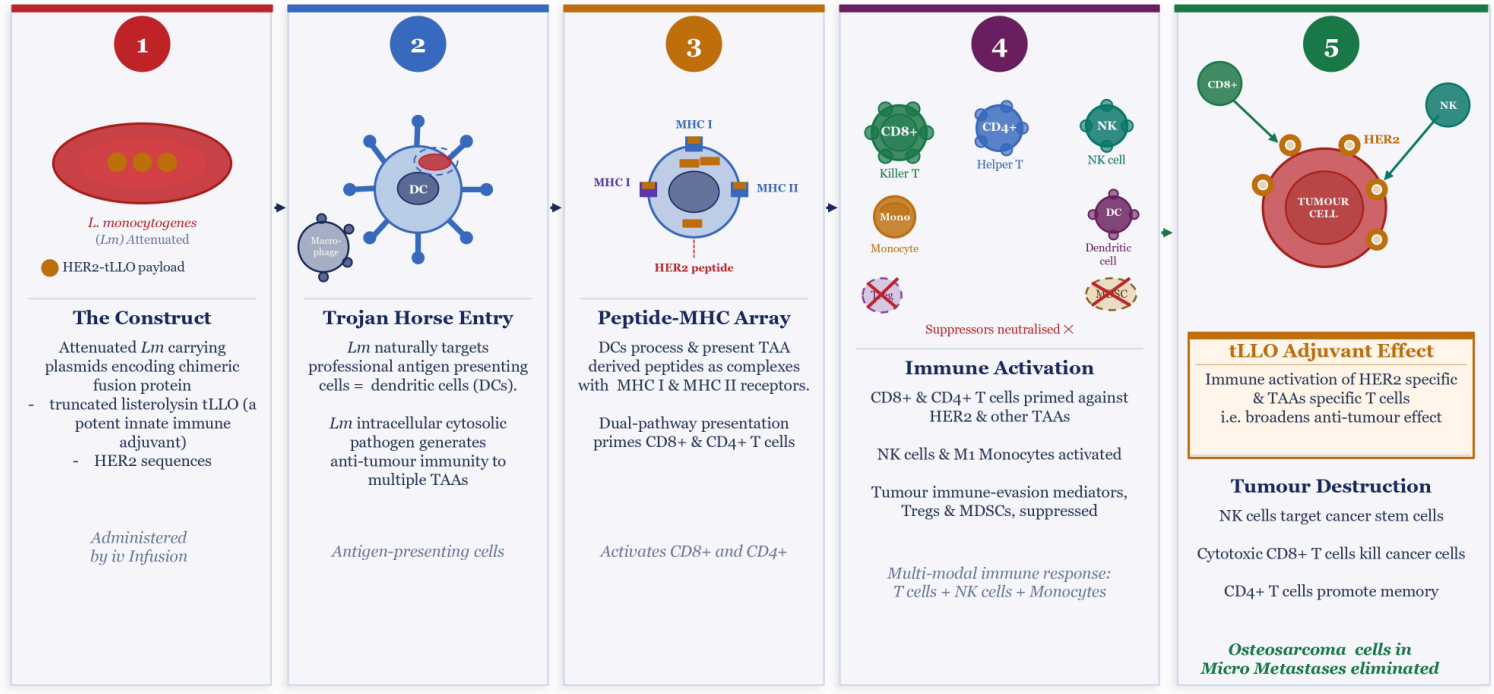
Her2 Expression in OSTEOSARCOMA (BONE CANCER)



What this means:

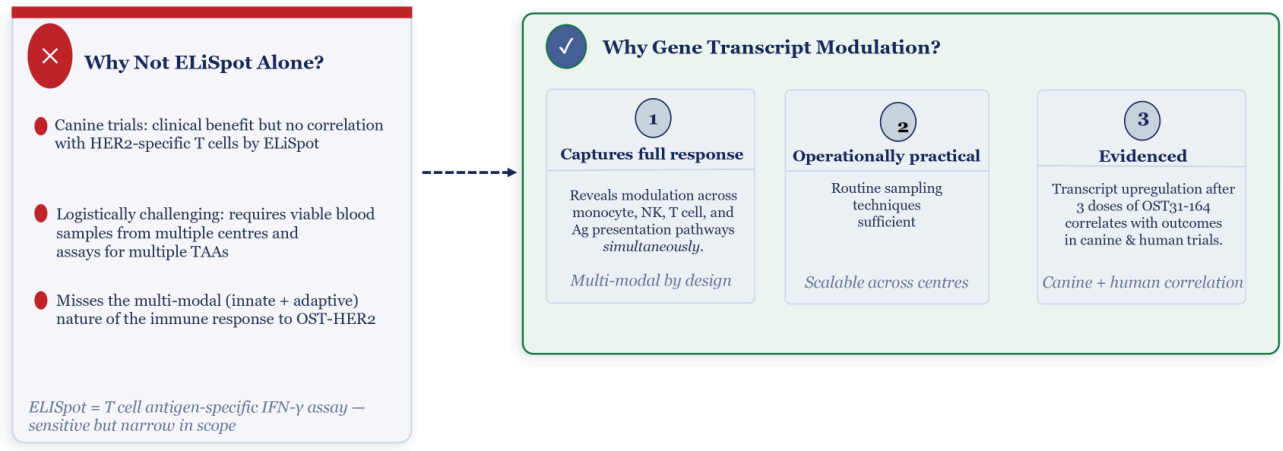
- **Not an oncogenic driver: expression not mechanistically linked to cancer**
- **~80% express HER2 but mostly cytoplasmic, low intensity, variable density**
- **Antibody-based detection (ADCs / CAR-T cells) limited by sensitivity**
- **Highly-sensitive T cells detect even low levels of HER2-peptide-MHC complexes**
- **OST31-164: multi-modal action including T cells against Her2 and other TAAs**

How OST-HER2 works



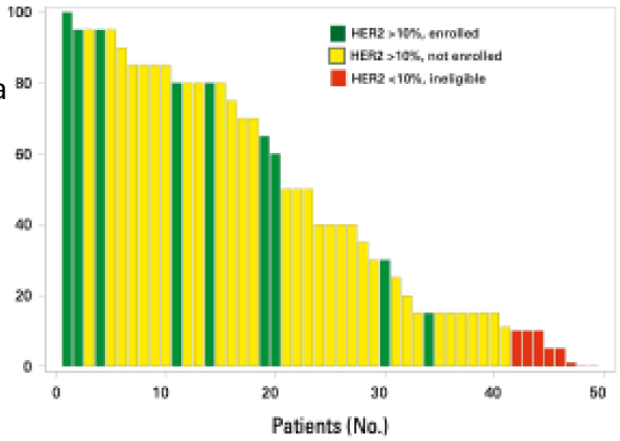
Biomarker strategy and trial findings

Gene transcript modulation as the preferred biomarker of response to OST-HER2 (OST31-164)

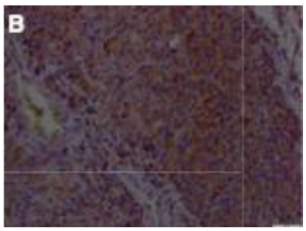


Her2 Expression by ImmunoHistoChemistry (CB11 murine mAb to intracellular domain AA 1244–1249) in Relapsed Osteosarcoma

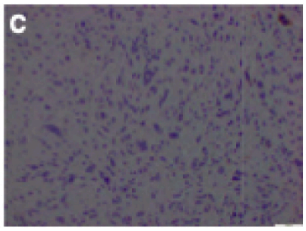
Osteosarcoma Tumour Cells Her2 positive (Percent)



85% Her2 +ve



Her2 -ve



Reed 2025

OST31-164: Proof of Principle: Comparative Oncology

3. NIH supported collaboration with comparative oncology experts demonstrates efficacy of OST31-164 in spontaneous osteosarcoma in canines

Canine Osteosarcoma: Parallels with Human Osteosarcoma

I. Spontaneous onset in immunocompetent dogs: rate >10x human rate

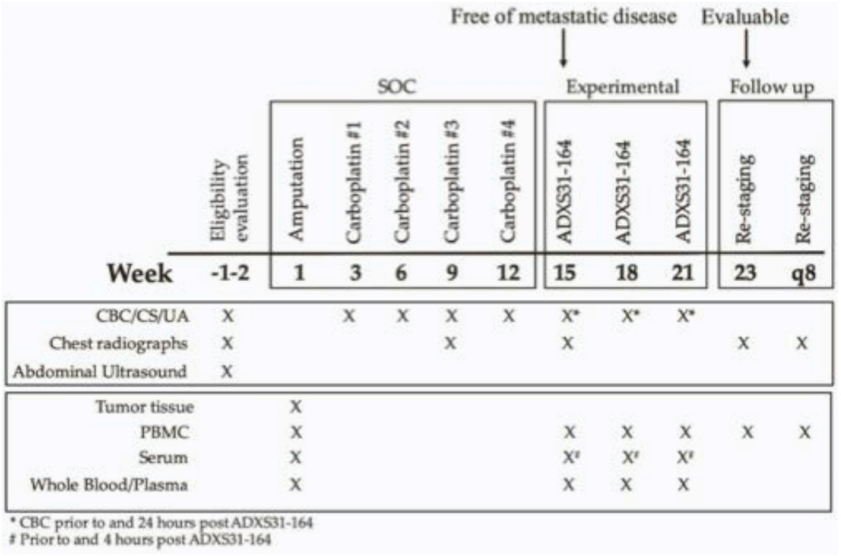
II. Many clinical, biological, and molecular features in common
   i. Primary lesion: typically, high-grade tumours in long bones
   ii. Standard treatment: chemotherapy & radical surgery
   iii. Disease course: metastatic disease often in the lungs
   iv. Highly rearranged genomes often affecting TP53, CDKN2A, RB1 genes

III. Similar molecular pathway alterations of prognostic significance
   - TH_1 & TH_2 immune cell signalling, Interferon signalling, Inflammatory responses

IV. Share 3 distinct TME subtypes – independent predictors of PFS
   - Immune Enriched [IE]; IE dense extracellular matrix-like; Immune Desert

Makielski 2019, Mannheimer 2023, Mason 2025, Patkar 2024

Immunological responses and clinical outcomes in dogs with osteosarcoma receiving SOC + ADXS31-164



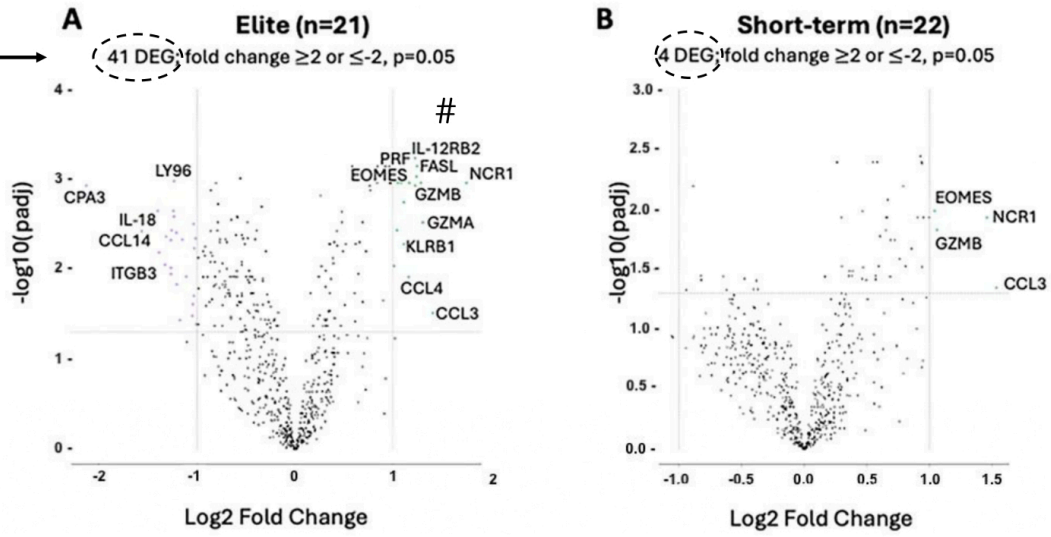
		Free of metastatic disease							Evaluable	
		SOC					Experimental			Follow up
	Eligibility evaluation	Amputation	Carboplatin #1	Carboplatin #2	Carboplatin #3	Carboplatin #4	ADXS31-164	ADXS31-164	ADXS31-164	Re-staging	Re-staging
Week	**-1-2**	**1**	**3**	**6**	**9**	**12**	**15**	**18**	**21**	**23**	**q8**
CBC/CS/UA	X		X	X	X	X	X*	X*	X*		
Chest radiographs	X				X		X			X	X
Abdominal Ultrasound	X										
Tumor tissue		X									
PBMC		X					X	X	X	X	X
Serum		X					X#	X#	X#		
Whole Blood/Plasma		X					X	X	X		

* CBC prior to and 24 hours post ADXS31-164
# Prior to and 4 hours post ADXS31-164

Mason NJ 2025

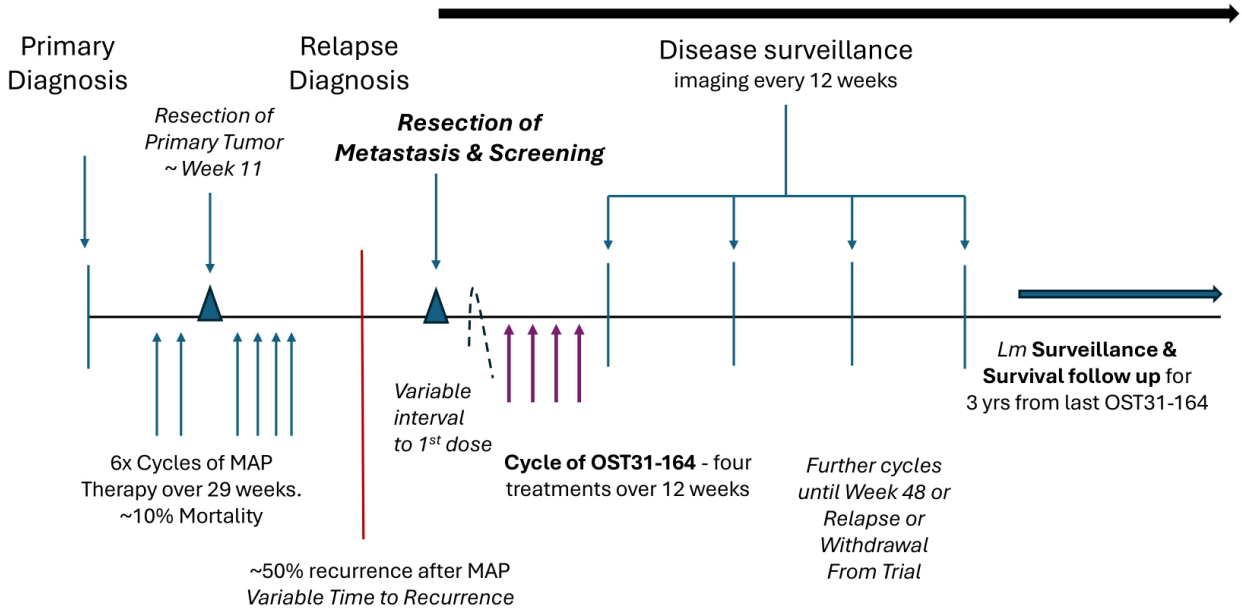
Canine Osteosarcoma Elite vs Short-term Survivors: PBMCs **D**ifferentially **E**xpressed **G**enes – Baseline vs last ADXS31-164

 # Up-regulation of Cytotoxic T cell, NK cell, & Ag presenting cell gene transcripts



Mason NJ 2025

OST31-164-01: Clinical Trial in Recurrent (Pulmonary) Osteosarcoma



OST31-164: Innovation – Historic Controls

4. Justification for use of Historic Controls
    i. Lack of improvement in OS (Cole 2022)
        i. Reduces risk of bias thru improvements in Standard Of Care (SOC)
    ii. *Systematic identification* of published trials
    iii. *Systematic screening* for comparable populations
    iv. *Conservative approach*: treatment effect of chemotherapy +/- IND in controls
    v. *Systematic extraction* of data from comparable populations

Rationale for EFS vs Objective Response Rate (ORR)

I. Radiographic response may not reflect critical cellular effect

II. Surgical resection is standard approach to pulmonary recurrence i.e. no lesion to determine ORR

III. Likely difference in drug activity in microscopic vs macroscopic disease

IV. Propose EFS vs historical benchmark

A. Measurable, unresectable osteosarcoma

- EFS ≤4 months vs >4 months = disease control failure v success

B. **Completely resected osteosarcoma**

- EFS ≤12 months vs >12 months

Lagmay 2016

Rationale for Preferring Overall Survival to Event Free Survival in the Assessment of Immunotherapies for Osteosarcoma

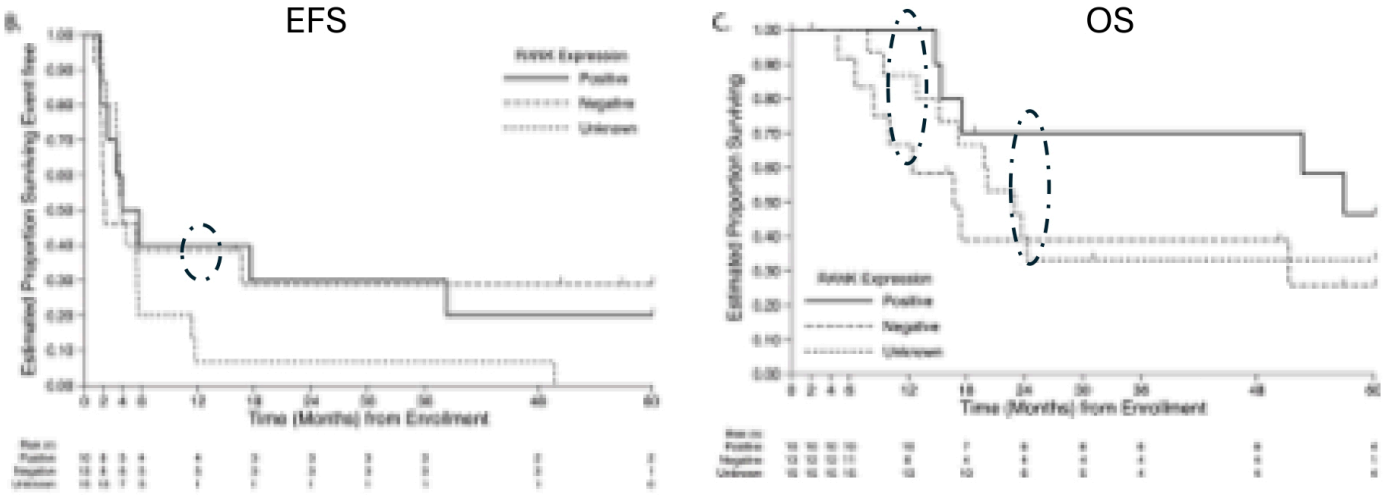
1. Patients value Overall survival over Event Free Survival (Tregear 2024)
2. Regulators prefer Overall Survival as a Hard Endpoint
3. Delayed effect of immunotherapies reduces discriminating power of 12month Event Free Survival

Measures Reducing Potential Bias in Single Arm Trial of OST31-164

Parameter	Measures Adopted to Reduce Potential bias
1. Assessment bias	Hard endpoints: Overall survival (OS)
2. Attrition bias	Overall survival preferred to Event-Free Survival; Sensitivity analyses
3. Pre-planning	Statistical analysis plan (SAP) pre-specified before data completion
4. Regression to mean	Standard criteria for patient selection
5. Variability in Disease History	Systematic selection of comparable control populations
6. Intercurrent events	Estimands defined in Statistical analysis plan
7. Selection bias with controls	Systematic selection of comparable control populations
8. Selection bias in study	Standard criteria for patient selection
9. Trial bias due to improved SOC	No improvement in Overall Survival in last 3 decades Controls include treatment effect of chemotherapy +/- IND in controls

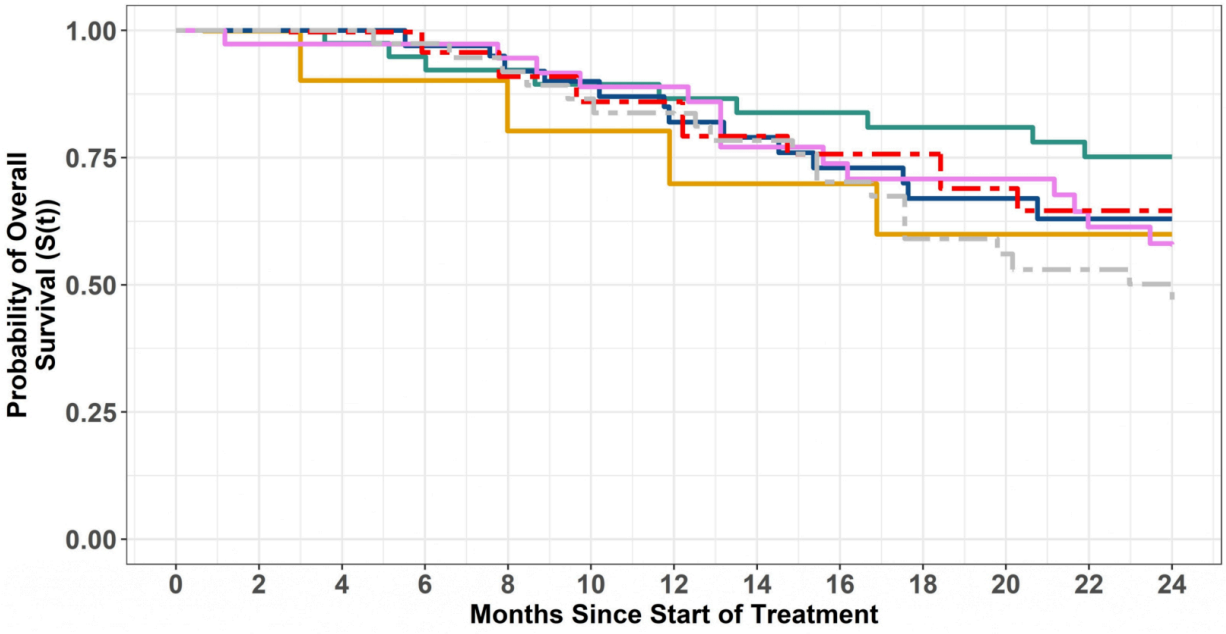
EMA/CHMP/458061/2024: Reflection paper on establishing efficacy based on single-arm trials

EFS vs OS after Immunotherapy: Single Arm Trial of Denosumab (RANKL mAb) in Patients with Recurrent / Refractory Osteosarcoma

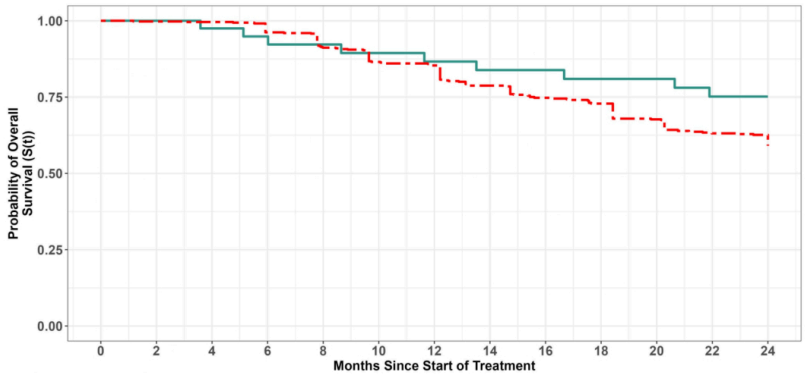


Janeway 2026

OS: OST-HER2 Phase 2b Trial vs. Historical Control



OS: OST-HER2 Phase 2b Trial vs. Pooled Historical Control



P=0.0344

Study	Population	Number of patients
OST-HER2	Recurrent, Completely Resected, Pulmonary	41
Pooled Historical Control	Recurrent, Completely Resected	467

Isolation of Treatment Effect

- Clinically significant improvement in Overall Survival & EFS

I. Highly significant link between Overall Survival & Immune Response Gene Signature (IRGS) after 3rd dose of OST31-164

II. IRGS includes cytotoxic effectors (NK/T cells) & T cell memory, and modulators of *Tumour MicroEnvironment (M1/M2, MDSCs)*

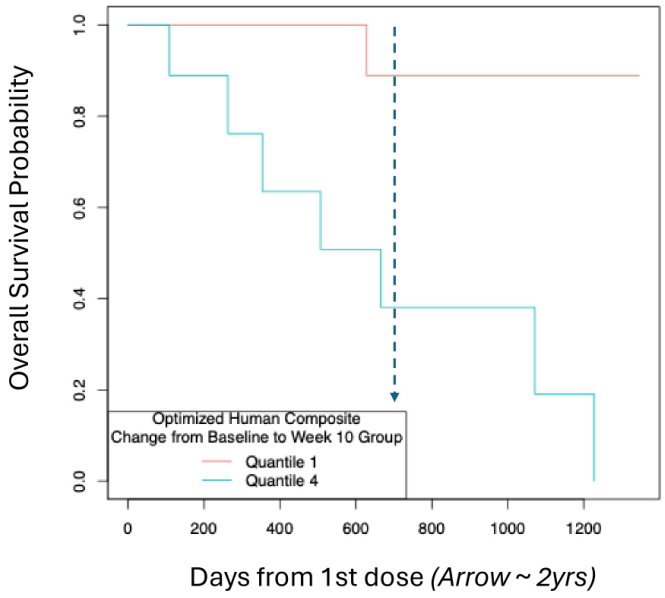
III. IRGS maps directly to the Mechanism of Action of OST31-164

IV. Clinical trial extends findings in parallel population of spontaneous osteosarcoma in canines: multi-modal immune response links Overall Survival to Mechanism of Action

Immune Response Gene Signatures after 3rd Dose of OST31-164 Link Mechanism of Action to OS in Canine & Human Osteosarcoma

- Cox Proportional Hazards Model
- Canine IRGS (optimized): p=10e-8 for Overall Survival
  - Beneficial: Ag presentation, NK cell activation, T cell activation
  - Detrimental: Type 1 IFN; M2 polarization; Myeloid Derived Suppressor Cells
- Human IRGS (optimized): p=10e-4 for Overall Survival
  - Beneficial: Ag presentation; NK cell activation; T cell activation/differentiation; M1 polarization
  - Detrimental: M2 polarization; failure to generate central memory CD8+ T cells

Kaplan Meier Analysis of Overall Survival by Immune Response Gene Composite (Baseline vs Post 3rd Dose)



Safety Profile

I. Infusion related cytokine release syndrome
- Frequency & severity reduced by pre-infusion regimen; no Rx discontinued
  - IV fluids, antihistamine, NSAID, antiemetic, H2-receptor antagonist

Cytokine release syndrome: maximum grade 2 intensity, 1st cycle

II. Infection risk
- Single episode of asymptomatic bacteraemia in subject with indwelling infusion port; responsive to antibiotics & removal of port

III. On-Target Off Tumor Effects
- Her2 widely expressed at low level including skeletal & cardiac muscle
- 1 episode of ?rhabdomyolysis: grade 3 *(*haematuria + raised CK) in body builder
- No signal in canine spontaneous osteosarcoma despite intensive monitoring

Agenda

1. Introduction – Harrison Seidner, PhD
2. Corporate Update – Paul Romness, MPH
3. Biotech Innovation Curve – Dr. Robert Langer
4. Clinical, Biomarker and Safety Data – Andrew Exley, MD, FRCP, FRCPath
5. **Regulatory status by Jurisdiction (Europe, Australia, U.K. and U.S.) – David Brindley, PhD**
6. Insights on developing treatments for rare pediatric cancers – Dr. Craig Eagle
7. Questions

Agenda

1. Introduction – Harrison Seidner, PhD
2. Corporate Update – Paul Romness, MPH
3. Biotech Innovation Curve – Dr. Robert Langer
4. Clinical, Biomarker and Safety Data – Andrew Exley, MD, FRCP, FRCPath
5. Regulatory status by Jurisdiction (Europe, Australia, U.K. and U.S.) – David Brindley, PhD
6. **Insights on developing treatments for rare pediatric cancers – Dr. Craig Eagle**
7. Questions

Agenda

1. Introduction – Harrison Seidner, PhD
2. Corporate Update – Paul Romness, MPH
3. Biotech Innovation Curve – Dr. Robert Langer
4. Clinical, Biomarker and Safety Data – Andrew Exley, MD, FRCP, FRCPath
5. Regulatory status by Jurisdiction (Europe, Australia, U.K. and U.S.) – David Brindley, PhD
6. Insights on developing treatments for rare pediatric cancers – Dr. Craig Eagle
7. **Questions**

Thank you for attending!

OS Therapies, Inc. (NYSE American: OSTX)