

OS Therapies Announces Positive Efficacy and Safety Data for Ovarian Cancer Therapeutic Candidate Developed Based on Tunable Antibody Drug Conjugate (tADC) Platform Using Proprietary Silicone Linker Platform in Preclinical Models

- *Folate receptor alpha targeting drug conjugate & hexa silanol exatecan (FRA-H) payloads tested in animal models of ovarian cancer*
- *Strong efficacy for FRA-H in KB and IGROV-1 mouse models of ovarian cancer*
- *Strong safety profile for FRA-H with no loss of bodyweight as compared with control in animal models*
- *Success of tADC proof-of-concept study paves way for creating multiple potential therapeutic candidates for preclinical and clinical evaluation*

NEW YORK, NY / ACCESSWIRE / September 11, 2024 /[OS Therapies](#) (NYSE American:OSTX) ("OS Therapies" or "the Company"), a clinical-stage immunotherapy and Antibody Drug Conjugate biopharmaceutical company, today announced positive data in animal models of ovarian cancer for its first therapeutic candidate developed based upon its proprietary tunable Antibody Drug Conjugate (tADC) platform. The first therapeutic candidate leverages a folate receptor alpha targeting small molecule combined with hexa-exatecan payloads (OST-tADC-FRA-H) linked together with the Company's proprietary silicone linker technology, SiLinker™. The data generated showed strong antitumor activity in the KB and IGROV-1 mouse models of ovarian cancer. Taken together, the data provide compelling preclinical proof of concept that the Company's SiLinker™ platform can be used to develop new therapeutic tADC-based drug candidates that can improve the safety and/or efficacy of ADC combinations currently on the market or in development, in addition to creating new intellectual property for competitive and life cycle management purposes.

OST-tADC technology is centered around the Company's proprietary next-generation tunable Antibody Drug Conjugate (tADC) platform. This advanced technology incorporates pH-sensitive silicon-based linkers, trademarked as SiLinkers™, which can release multiple therapeutic agents selectively within the tumor and tumor microenvironment, which experiences lower pH levels than the rest of the body. This approach aims to maximize the therapeutic effects while minimizing damage to healthy cells.

"We are very pleased with the results of this proof-of-concept data demonstrating that our tADC silicone linker SiLinker technology is able to safely deliver multiple payloads to the

tumor without demonstrating side effects of payload loss in animal models of ovarian cancer," said Colin Goddard, PhD, tADC Founder and member of the OS Therapies ADC Advisory Board. "With the ability to link multiple payloads, including with different therapeutic agent combinations, we are potentially revolutionizing the way antibody drug conjugates will be constructed in the future."

- KB tumor growth model: In this animal model, animals implanted with the KB tumor cell line were treated at Day 4, Day 8 and Day 12 with either OST-tADC-FRA-H or vehicle control. At Day 20, FRA-H treated animals demonstrated an average tumor volume of 10mm³ as compared with 1000 mm³ for the untreated animals. At Day 40 OST-tADC-FRA-H treated animals had no evidence of tumor growth, whereas control animals had expired.
- IGROV-1 tumor growth model: In this animal model, animals implanted with the IGROV-1 tumor cell line were treated with either OST-tADC-FRA-H or vehicle control. At Day 50, the OST-tADC-FRA-H treated animals had an average tumor size of 40mm³ as compared animals treated placebo who had an average tumor size of 400 mm³
- Bodyweight Comparison: Animals treated with OST-tADC-FRA-H at Day 1 and Day 7 demonstrated no loss in bodyweight as compared with control animals.

"This animal proof of concept experiment for tADC really opens the door in terms of creating multiple therapeutic candidates for preclinical and clinical evaluation," said Borys Shor, PhD, member of the OS Therapies ADC Advisory Board. "Now that we have this animal data and have begun the process of creating multiple other tADC constructs, we are able to meaningfully engage with potential collaborators and partners on helping them improve the way their ADC combinations are delivered, in addition to developing our own candidates in the future."

[Grandview Research](#) reports that the global Antibody Drug Conjugate market size was estimated at USD 11.29 billion in 2023 and is anticipated to grow at a compound annual growth rate (CAGR) of 9.2% from 2024 to 2030 to an estimated USD 20.9 billion. Additionally, [Grandview Research](#) reports that the global ovarian cancer drugs market size was estimated at USD 3.37 billion in 2022 and is anticipated to grow at a compound annual growth rate (CAGR) of 6.6% from 2023 to 2030 to USD 5.6 billion.

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. 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. The Company has completed enrollment for a 41-patient Phase 2b clinical trial of OST-HER2 in resected, recurrent osteosarcoma, with results expected in the fourth quarter of 2024. OST-HER2 has completed a Phase 1 clinical study primarily in breast cancer patients, in addition to showing strong preclinical efficacy data in various models of breast cancer. In addition, OS Therapies is advancing its next generation Antibody Drug Conjugate (ADC) platform, known as *tunable ADC* (tADC), which features tunable, tailored

antibody-linker-payload candidates. This platform leverages the Company's proprietary silicone linker 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. Prospective investors are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, including those described under the section entitled "Risk Factors" of our Registration Statement on Form S-1 declared effective by the Securities and Exchange Commission (the "SEC") on July 31, 2024, as well as any of our periodic reports filed with the SEC, and that actual results may differ materially from those indicated by such forward-looking statements. 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.

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