November 8, 2017

OncoSec Announces Positive Updated Long-Term Follow-Up Data from Phase 2 Trial of ImmunoPulse® IL-12 in Combination with Pembrolizumab Demonstrating a Progression Free Survival Rate (PFS) of 57% at 15 months in Predicted Anti-PD-1 Non-Responder Melanoma Patients

Updated Phase 2 Efficacy and Durability Findings to Be Presented at the 2017 Society for Immunotherapy of Cancer Annual Meeting

OncoSec to Host Analyst and Investor Event During the 2017 Society for Immunotherapy of Cancer Annual Meeting in National Harbor, MD

SAN DIEGO, Nov. 8, 2017 /PRNewswire/ -- OncoSec Medical Incorporated ("OncoSec" or "Company") (NASDAQ:ONCS), a company developing DNA-based intratumoral cancer immunotherapies, today announced positive updated long-term follow-up data from its Phase 2 OMS I-102 combination study of ImmunoPulse® IL-12 and pembrolizumab in patients unlikely to respond to anti-PD-1 therapy. The updated data will be presented in an oral poster presentation (P524) by Dr. Alain Alagzi at the Society for Immunotherapy of Cancer (SITC) Annual Meeting in National Harbor, MD on November 10th, 2017 at 12:45 p.m. EST.

The updated clinical and correlative immune-focused biomarker data demonstrated a 57% progression free survival (PFS) rate at 15 months with 100% (11/11) duration of response and median PFS not yet reached. Building upon previously reported data of a best overall response rate (BORR) of 50% (41% complete response [CR] rate), the updated data further demonstrate that the combination of these therapies can prime a coordinated innate and adaptive immune response, and strongly suggests a synergistic relationship with anti-PD-1. The latest findings further demonstrate that this combination approach can reshape the tumor microenvironment, yielding a robust intratumoral and systemic anti-tumor response converting "cold" tumors to "hot," potentially improving clinical outcomes in patients predicted to not respond to anti-PD-1 therapy.

"Overall, the Phase 2 trial results, including progression free survival beyond two years in multiple patients, duration of response, best overall response rate, and tolerability of the combination, provide a strong and consistent theme across multiple endpoints, underscoring

the promise of ImmunoPulse IL-12 plus pembrolizumab as a viable treatment option for patients diagnosed with metastatic melanoma," said Dr. Alain Algazi, Lead Trial Investigator, Associate Professor, Department of Medicine (Hematology/Oncology), at the University of California San Francisco (UCSF) Helen Diller Family Comprehensive Cancer Center.

Dan O'Connor, CEO of OncoSec noted: "The robust PFS benefit and tolerability observed with ImmunoPulse IL-12 plus pembrolizumab is the first demonstrating efficacy in a predicted PD-1 non-responder population and shows that the combination represents a potentially important addition to the treatment landscape for metastatic melanoma patients who have progressed or are progressing on anti-PD-1 therapy."

The full abstract is available and can be viewed on the STIC website at www.sitcancer.org. The poster is available in the Publications section of OncoSec's website.

Analyst Event in National Harbor, MD

OncoSec will host an analyst and investor event with clinical investigators on Friday, November 10, 2017 at 7:00 a.m. EST in National Harbor, MD during the 2017 Society of Immunotherapy for Cancer Annual Meeting. The event will include a presentation and discussion of updated clinical data for the company's ImmunoPulse IL-12 program, highlighting the global, registration-directed PISCES/KEYNOTE-695 trial. The event will be held in-person and via live webcast.

Investors and analysts are invited to listen to a live audio webcast of the presentation. To access the audio broadcast, please dial (877) 731-1960 and enter the conference ID number 4938639. To join via webcast, please use the following link: https://edge.media-server.com/m6/p/aj3vpts5. An archived version of the presentation will be available for 90 days on the "Investors" section of OncoSec's website: http://ir.oncosec.com/events-presentations.

For those interested in attending this event in person, please contact media@oncosec.com. Please RSVP in advance as seating is limited.

Peer-Reviewed Publication

The findings published in *Immunotherapy* provide an overview of OncoSec's preclinical and Phase 1 clinical data demonstrating that ImmunoPulse IL-12 plus electroporation is safe and well-tolerated by patients. Many patients do not respond to anti-PD-1 therapies alone, representing a significant unmet medical need. ImmunoPulse IL-12 has shown to increase intratumoral lymphocyte infiltration, pro-inflammatory cytokines and TH1 immune responses, potentially boosting the activity of PD-1 antibodies without significant systemic toxicity.

For the full-article please visit, https://www.ncbi.nlm.nih.gov/pubmed/29064334.

About the SITC Annual Meeting

The Society for Immunotherapy of Cancer (SITC) is a non-profit medical professional society of influential scientists, academicians, researchers, clinicians, government representatives, and industry leaders from around the world dedicated to improving cancer patient outcomes by advancing the science and application of cancer immunotherapy. Currently, SITC has nearly 1,600 members representing 17 medical specialties and are engaged in research and

treatment of at least a dozen types of cancer. The 32nd SITC Annual Meeting & Associated Programs will take place November 8-12, 2017 at the Gaylord National Hotel & Convention Center in National Harbor, MD. For more information, please go to http://www.sitcancer.org/2017.

About PISCES/KEYNOTE-695

PISCES/KEYNOTE-695 is a global, multicenter phase 2b, open-label trial of intratumoral plasma encoded IL-12 (tavokinogene telseplasmid or "tavo") delivered by electroporation in combination with intravenous pembrolizumab in patients with stage III/IV melanoma who have progressed or are progressing on either pembrolizumab or nivolumab treatment. The Simon 2-stage study of intratumoral tavo plus electroporation in combination with pembrolizumab will enroll approximately 48 patients with histological diagnosis of melanoma with progressive locally advanced or metastatic disease defined as Stage III or Stage IV. The primary endpoint will be the Best Overall Response Rate (BORR).

About OncoSec Medical Incorporated

OncoSec is a biotechnology company developing DNA-based intratumoral immunotherapies with an investigational technology, ImmunoPulse®, for the treatment of cancer. ImmunoPulse is designed to enhance the local delivery and uptake of DNA-based immune-targeting agents, such as IL-12 (tavokinogene telseplasmid [pIL-12] or "tavo"). In Phase 1 and 2 clinical trials, ImmunoPulse® IL-12 has demonstrated a favorable safety profile, evidence of anti-tumor activity in the treatment of various solid tumors, and the potential to reach beyond the site of local treatment to initiate a systemic immune response. OncoSec's lead program, ImmunoPulse IL-12, is currently in clinical development for metastatic melanoma and triple-negative breast cancer. The program's current focus is on the significant unmet medical need in patients with melanoma who are refractory or have relapsed on anti-PD-1 therapies. In addition to tavo, the Company is also identifying and developing new immune-targeting agents for use with the ImmunoPulse platform. For more information, please visit www.oncosec.com.

University of California Disclaimer

The information stated above was prepared by OncoSec Inc. and reflects solely the opinion of the corporation. Nothing in this statement shall be construed to imply any support or endorsement of OncoSec, or any of its products, by The Regents of the University of California, its officers, agents and employees.

Cautionary Note Regarding Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, including statements about OncoSec's business strategies, including advancement of its lead melanoma program and its broader clinical portfolio and plans to pursue collaborations with industry partners, as well as the potential contributions and impact of new directors on these strategies. In some cases, you can identify forward-looking statements by terminology such as "may", "should", "expects", "plans", "anticipates", "believes", "estimates", "predicts", "potential" or "continue" or the negative of these terms or other comparable terminology.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on management's current preliminary expectations and are subject to risks and uncertainties, which may cause OncoSec's results to differ materially and adversely from the statements contained herein. Potential risks and uncertainties that could cause actual results to differ from those predicted include, among others, the following: the status, progress and results of clinical programs; ability to obtain regulatory approvals for, and the level of market opportunity for, OncoSec's product candidates; OncoSec's business plans, strategies and objectives, including plans to pursue collaboration, licensing or other similar arrangements or transactions; expectations regarding OncoSec's liquidity and performance, including expense levels, sources of capital and ability to maintain operations as a going concern; the competitive landscape of OncoSec's industry; and general market, economic and political conditions; and the other factors discussed in OncoSec's filings with the Securities and Exchange Commission, including its annual report on Form 10-K for the year ended July 31, 2017.

Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made. OncoSec disclaims any obligation to update any forward-looking statements to reflect new information, events or circumstances after the date they are made, or to reflect the occurrence of unanticipated events.

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