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# OncoSec Presents Clinical Overview of Comprehensive Immune Monitoring Data Demonstrating Conversion of "Cold" Tumors to "Hot" Tumors with ImmunoPulse® IL-12 and Pembrolizumab Combination Therapy

SAN DIEGO, Sept. 27, 2017 /PRNewswire/ -- OncoSec Medical Incorporated ("OncoSec") (NASDAQ:ONCS), a company developing DNA-based intratumoral cancer immunotherapies, today presented an overview of the comprehensive immune monitoring data from the Phase 2 Investigator Sponsored Trial led by the University of California, San Francisco (UCSF) at the 2nd World Congress on Electroporation and Pulsed Electric Fields in Biology, Medicine and Food & Environmental Technologies in Norfolk, VA. The trial assessed the combination of ImmunoPulse® IL-12 and the approved anti-PD-1 therapy pembrolizumab in patients with unresectable metastatic melanoma and its ability to convert "cold" to "hot" tumors.

In a plenary lecture today, at 8:30 AM ET entitled: "In situ priming with concurrent immune checkpoint inhibition: A phase 2 clinical trial of intratumoral plasmid IL-12 with electroporation in combination with pembrolizumab," Alain Algazi, MD, Principal Investigator from UCSF, will discuss the clinical data presented at ASCO-SITC earlier this year, demonstrating that ImmunoPulse® IL-12 in combination with pembrolizumab is well-tolerated and yields clinically meaningful synergy in immunologically "cold" tumors. Furthermore, translational data will be shown that suggest that therapeutic strategies depleting regulatory T-cells may enhance anti-tumor immunity potentially leading to additional improvements in objective response rates (ORR).

"These data support our planned phase 2b registration-directed trial, PISCES, which is designed to demonstrate that the combination of ImmunoPulse® IL-12 and pembrolizumab provides an opportunity to address the resistance to anti-PD-1 therapy in the melanoma patient population," said Punit Dhillon, CEO and President at OncoSec. "Patients with metastatic melanoma who are progressing or have progressed on anti-PD-1 therapy have limited treatment options and we look forward to presenting further data from our recently completed trials at a future medical conference later this year."

Earlier in the week, Adil Daud, MD, Chief Clinical Strategist at OncoSec and Professor of Medicine at the University of California, San Francisco, gave an oral presentation at the 2nd World Congress of Electroporation titled, "Local and Systemic Immunotherapy by Electroporation," which provided an overview of the development of OncoSec's Phase 2 clinical studies assessing ImmunoPulse® IL-12 as a monotherapy in patients with metastatic

melanoma.

Shawna Shirley, Ph.D., Senior Scientist at OncoSec, also gave an oral presentation at the 2nd World Congress of Electroporation entitled, "Intratumoral Electroporation of Plasmid IL-12 Using Modified Parameters and an Optimized DNA Plasmid Increases Immunogenicity in Untreated Lesions in Mice," which provided an overview of the improved preclinical efficacy using an optimized IL-12 plasmid and the novel TRACE™-enabled DNA electroporation device.

**About PISCES (Anti-PD-1 IL-12 Stage III/IV Combination Electroporation Study)**
PISCES is a planned, global, multicenter phase 2b, open-label trial of intratumoral pIL-12 (tavokinogene telseplasmid or "tavo") plus electroporation in combination with intravenous pembrolizumab in patients with stage III/IV melanoma who are progressing on either pembrolizumab or nivolumab treatment. The Simon 2-stage study of ImmunoPulse® IL-12 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) in anti-PD-1 non-responder patients.

For more information please visit our website atwww.oncosec.com.

**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. In Phase 1 and 2 clinical trials, ImmunoPulse® IL-12 has demonstrated a favorable safety profile and evidence of anti-tumor activity in the treatment of various solid tumors and has shown the potential to reach beyond the site of local treatment to initiate a systemic immune response. ImmunoPulse® IL-12, OncoSec's lead program, 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 ImmunoPulse® IL-12, 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.

**OncoSec Medical Incorporated Forward Looking Statements**
To the extent statements contained in this press release are not descriptions of historical facts regarding OncoSec Medical Incorporated, they may be considered forward looking statements, as described in the Private Securities Litigation Reform Act of 1995, reflecting management's current beliefs and expectations. Forward looking statements speak only as of the date they are made, and they are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from those anticipated by such statements. You can identify forward-looking statements by words such as "aim," "anticipate," "believe," "can," "could," "estimate," "expect," "focus," "forecast," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would," or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes. Forward looking statements contained in this press release include, but are not limited to, statements

regarding: (i) the success and timing of our product development activities and clinical trials; (ii) our ability to develop and commercialize our product candidates; (iii) our plans to research, discover, evaluate and develop additional potential product, technology and business candidates and opportunities; (iv) our and our partners' ability to develop, manufacture and commercialize our product candidates and to improve the manufacturing process; (v) the size and growth potential of the markets for our product candidates, and our ability to serve those markets; (vi) the rate and degree of acceptance of our product candidates; (vii) our ability to attract and retain key scientific or management personnel; (viii) the anticipated timing of clinical data availability; (ix) the anticipated timing of commercial launch of ImmunoPulse® IL-12; (x) our ability to meet our milestones; (xi) our expectations regarding our ability to obtain and maintain intellectual property protection; (xii) the level of our corporate expenditures; (xiii) the assessment of our technology by potential corporate partners; and, (xiv) the impact of capital market conditions on our Company. Undue reliance should not be placed on forward looking statements. Such statements are subject to factors, risks and uncertainties, such as those described in our periodic filings with the Securities and Exchange Commission, including without limitation our Quarterly Reports on Form 10-Q, our annual reports on Form 10-K and other filings. Various factors may cause actual results to differ materially from those expressed or implied by such forward looking statements. We undertake no obligation to publicly update any forward-looking statements. OncoSec's investigational drug and device products have not been approved or cleared by the FDA.

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