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OncoSec Presents Immunological Data Associated with Positive Tumor Response from TAVO™ KEYNOTE Studies Evaluating Patients with Advanced Solid Tumors at the Society for Immunotherapy of Cancer (SITC) 34th Annual Meeting

Robust safety data across hundreds of patients in multiple types of cancer demonstrates the consistent safety profile of TAVO as a well-tolerated cancer immunotherapy

SAN DIEGO and PENNINGTON, N.J., Nov. 12, 2019 /PRNewswire/ -- OncoSec Medical Incorporated ("OncoSec") (Nasdaq:ONCS), a company developing late-stage intratumoral cancer immunotherapies, today announced outcomes from a safety and biomarker analysis on its lead product candidate, TAVO™, at the Society for Immunotherapy of Cancer (SITC) 34th Annual Meeting. Outcomes demonstrated treatment-related changes in key immune biomarkers coinciding with clinical outcomes across both KEYNOTE-695 and KEYNOTE-890 trials of TAVO in combination with KEYTRUDA® (pembrolizumab).

In the poster, which was presented on November 9, 2019, investigators noted that following TAVO administration, increased tumor infiltrating CD8+ T-cells were consistent with tumor shrinkage in anti-PD-1 antibody refractory melanoma and chemotherapy refractory metastatic triple negative breast cancer (mTNBC). The interim analysis also highlighted the systemic immune effects of TAVO, including increases in the frequencies of circulating memory T cells and reduced frequencies of circulating immuno-suppressive PMN-MDSC cells in predominately responding patients across both indications. Additionally, a broad safety analysis of over 200 patients treated with TAVO in multiple cancer indications across several clinical trials including TAVO as a monotherapy as well as in combination with KEYTRUDA was reported. There were no Grade 4 or 5 treatment-related adverse events reported and only 7.9% of patients experienced Grade 3 treatment-related adverse events across all TAVO studies, underscoring a predictable and consistently well-tolerated safety profile.

OncoSec is currently evaluating TAVO in combination with KEYTRUDA in a pivotal trial for Stage III/VI anti-PD1 checkpoint resistant metastatic melanoma and a phase 2 trial for late stage chemo-refractory metastatic TNBC, both KEYNOTE-designated studies. The immune data presented at SITC represented those patients for whom pre- and post-treatment blood and tumor samples were obtained in these ongoing KEYNOTE studies.

"The data presented at SITC were consistent with earlier published data showing that the

well-established indicators of immune response are present in the blood and tumor tissue post-treatment and that the presence of these immune signatures continues to be associated with clinical response," said Daniel J. O'Connor, CEO of OncoSec. "Further, with more than 200 TAVO-treated patients, we clearly see that these powerful clinical responses are delivered with an excellent safety profile as both a monotherapy and importantly, in combination with anti-PD-1 therapy."

About OncoSec Medical Incorporated
OncoSec is a clinical-stage biotechnology company focused on developing cytokine-based intratumoral immunotherapies to stimulate the body's immune system to target and attack cancer. OncoSec has built a deep and diverse clinical pipeline utilizing its primary technology, TAVO™ (tavokinogene telseplasmid) as a potential treatment for multiple cancer indications either as a monotherapy or in combination with leading checkpoint inhibitors; with the latter potentially enabling OncoSec to address a great unmet medical need in oncology: anti-PD-1 non- responders. In addition to TAVO™, OncoSec is identifying and developing new DNA-encoded therapeutic candidates and tumor indications for use with its new Visceral Lesion Applicator (VLA), to target deep visceral lesions, such as liver, lung or pancreatic lesions. For more information, please visit www.oncosec.com.

TAVO™ is a registered trademark of OncoSec Medical Incorporated.

KEYTRUDA® is a registered trademark of Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc.

Forward Looking Statements
Some of the statements included in this press release may be forward-looking statements that involve a number of risks and uncertainties. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. The factors that could cause our actual results to differ materially include: the status, progress and results of our clinical programs; our ability to obtain regulatory approvals for, and the level of market opportunity for our product candidates; our business plans, strategies and objectives, including plans to pursue collaboration, licensing or other similar arrangements or transactions; expectations regarding our liquidity and performance, including expense levels, sources of capital and ability to maintain operations as a going concern; the competitive landscape of our industry; and general market, economic and political conditions; and other risk factors identified from time to time in our reports filed with the Securities and Exchange Commission. Any forward-looking statements set forth in this press release speak only as of the date of this press release. We do not intend to update any of these forward-looking statements to reflect events or circumstances that occur after the date hereof.

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