

OncoSec Strengthens IP Portfolio with Allowance of Two European Patent Applications Covering TAVO™ and Its Gene Electrotransfer Technology

-- Allowed claims cover methods to deliver TAVO using intratumoral gene electrotransfer in combination with a PD-1/PD-L1 inhibitor

PENNINGTON, N.J. and SAN DIEGO, Dec. 10, 2020 /PRNewswire/ -- OncoSec Medical Incorporated (NASDAQ:ONCS) (the "Company" or "OncoSec") today announced that the European Patent Office has issued notices of intention to grant for two patent applications. The applications are directed to the use of OncoSec's interleukin-12 (IL-12)-based immunotherapy platform, including its lead product candidate TAVO™ (tavokinogene telseplasmid) delivered with the Company's proprietary intratumoral gene electrotransfer system for the treatment of cancer.

The allowed patent claims cover methods of using TAVO delivered by intratumoral electroporation given in combination with a PD-1/PD-L1 inhibitor, which OncoSec has shown stimulates the tumor microenvironment and enables the immune system to target and attack tumors throughout the body. The allowed claims are also directed to the delivery of a gene encoding a therapeutic protein, such as a cytokine, using electroporation, to treat microscopic residual tumors following tumor resection, an important treatment step that if implemented clinically, has the potential to improve outcomes of cancer patients. Once granted, these two patents extend key patent coverage until March 24, 2036 and March 2, 2027 respectively.

"Pursuing these patents is important to strengthen the intellectual property protections around TAVO and our electroporation gene delivery system," said Daniel O'Connor, Chief Executive Officer of OncoSec. "The cancer therapy methods covered under these patents have potential to be applied to the treatment of a variety of cancer types and will provide additional proprietary protection as we seek to expand our global footprint."

As a next-generation intratumoral therapy, TAVO has already demonstrated the ability to induce regression of both treated lesions and untreated distant and visceral lesions, when used in combination with KEYTRUDA® (pembrolizumab), a PD-1 inhibitor, in patients with recurrent metastatic melanoma who are in need of a more effective treatment option.

About TAVO[™]

OncoSec's gene therapy technology combines TAVOTM (tavokinogene telseplasmid), a DNA plasmid-based interleukin-12 (IL-12), with an intra-tumoral electroporation gene delivery platform to achieve endogenous IL-12 production in the tumor microenvironment that

enables the immune system to target and attack tumors throughout the body. TAVO has demonstrated a local and systemic anti-tumor response in several clinical trials, including the pivotal Phase 2b trial KEYNOTE-695 for metastatic melanoma and the KEYNOTE-890 Phase 2 trial in triple negative breast cancer (TNBC). TAVO™ has received both Orphan Drug and Fast-Track Designation by the U.S. Food & Drug Administration for the treatment of metastatic melanoma.

About OncoSec Medical Incorporated

OncoSec Medical Incorporated (the "Company," "OncoSec," "we" or "our") is a late-stage biotechnology company focused on developing cytokine-based intratumoral immunotherapies to stimulate the body's immune system to target and attack cancer. OncoSec's lead immunotherapy investigational product candidate – TAVO™ (tavokinogene telseplasmid) – enables the intratumoral delivery of DNA-based interleukin-12 (IL-12), a naturally occurring protein with immune-stimulating functions. The technology, which employs electroporation, is designed to produce a controlled, localized expression of IL-12 in the tumor microenvironment, enabling the immune system to target and attack tumors throughout the body. OncoSec has built a deep and diverse clinical pipeline utilizing TAVO™ 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. Results from recently completed clinical studies of TAVO™ have demonstrated a local immune response, and subsequently, a systemic effect as either a monotherapy or combination treatment approach along with an acceptable safety profile, warranting further development. 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 trademark of OncoSec Medical Incorporated.

 $\mathsf{KEYTRUDA}^{\otimes}$ is a registered trademark of Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc.

Risk Factors and Forward-Looking Statements

This release, as well as other information provided from time to time by the Company or its employees, may contain forward-looking statements that involve a number of risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Forward-looking statements provide the Company's current beliefs, expectations and intentions regarding future events and involve risks, uncertainties (some of which are beyond the Company's control) and assumptions. 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. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "should," "will" and "would" and similar expressions (including the negative of these terms). Although we believe that expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. The Company intends these forward-looking statements to

speak only at the time they are published on or as otherwise specified, and does not undertake to update or revise these statements as more information becomes available, except as required under federal securities laws and the rules and regulations of the Securities Exchange Commission ("SEC"). In particular, you should be aware that the success and timing of our clinical trials, including safety and efficacy of our product candidates, patient accrual, unexpected or expected safety events, the impact of COVID-19 on the supply of our candidates or the initiation or completion of clinical trials and the usability of data generated from our trials may differ and may not meet our estimated timelines. Please refer to the risk factors and other cautionary statements provided in the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2020 and subsequent periodic and current reports filed with the SEC (each of which can be found at the SEC's website www.sec.gov), as well as other factors described from time to time in the Company's filings with the SEC.

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