

## NEWS RELEASE

# Onco-Innovations Provides Information Regarding Exclusive License for Patented Drug with Potential to Enhance Cancer Treatment Options

**Vancouver, Canada – January 8, 2025** – Onco-Innovations Limited (CSE: **ONCO**) (Frankfurt: **W1H**, WKN: **A3EKSZ**) ("**Onco**" or the "**Company**") is pleased to provide information on its exclusively-licensed PNKP (Polynucleotide Kinase 3'-Phosphatase) inhibitors technology (the "**Technology**"), which the Company believes holds the potential to significantly enhance the effectiveness of several cancer treatment options across a broad spectrum of cancer types including colorectal cancer (CRC), breast cancer and lung cancer.

This Technology targets cancer cells to effectively eliminate them. It also prevents DNA repair in cancer cells. Unlike conventional cancer therapies, which often face challenges in accurately targeting tumours and overcoming resistance in certain cancer cells, Onco's exclusively-licensed Technology has demonstrated effectiveness both as a standalone treatment and in combination with radiation and chemotherapy.<sup>1</sup>

The Company considers this advanced delivery system to have the potential to make a significant impact in the rapidly expanding oncology market, which is projected to reach USD 521.60 billion globally and USD 180.12 billion in the U.S. by 2033<sup>2</sup>. The Company believes this exclusively licensed Technology, once further developed, and contingent upon U.S. Federal Drug Administration (FDA) Phase 1 – 3 clinical trials being completed and approved, has the potential to both capture market share and address the pressing challenges that conventional cancer treatments have struggled to overcome.

Traditional cancer treatments face significant limitations, such as the inability to exclusively target tumours, resistance from subgroups of cancer cells, and challenges in reaching all affected cells during chemotherapy. Additionally, radiation therapy can leave behind hard-to-destroy cancer cells in low-oxygen environments, and some cells are able to repair their DNA after treatment, leading to potential recurrence. The Technology directly addresses these challenges, particularly with respect to common cancers like colorectal cancer, offering a novel approach that, it is hoped, will improve patient outcomes and provide a much-needed solution where traditional therapies have been less effective.

*"We believe our innovative Technology could be a game-changer in oncology, offering new hope to millions of patients worldwide where traditional therapies have struggled. This Technology not only has the potential to transform cancer treatment but, upon successful completion of U.S. FDA Phase 1 - 3 clinical trials, also positions our Company to tap into the multi-billion-dollar oncology market. With the Company expected to commence Phase 1 clinical trials this year, we are excited about the transformative potential Onco-Innovations could have as we strive to transform cancer treatment worldwide,"* said Thomas O'Shaughnessy, CEO of the Company.

### **About Colorectal Cancer (CRC):**

Colorectal cancer is the third most common cancer worldwide, accounting for approximately 10% of all cancer

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<sup>1</sup> [See Company website - Animal Model Study: Colorectal Cancer in Mice and subsequent sections](#)

<sup>2</sup> <https://www.novaoneadvisor.com/report/oncology-market>

cases and is the second leading cause of cancer-related deaths worldwide.<sup>3</sup> By 2040 the burden of colorectal cancer will increase to 3.2 million new cases per year (an increase of 63%) and 1.6 million deaths per year (an increase of 73%).<sup>4</sup> Clinical outcomes appear to depend on the location as well as molecular features of individual tumours, and surgery is a very common option for most CRC patients. Adjunctive chemotherapy or ionizing radiation (IR) is often accompanied before or after surgery (to help in shrinking the localized CRC tumours before surgery and/or to eradicate cancer cells that may have been left behind with the resection boundary after the surgery).<sup>5</sup>

Inherent or acquired cellular resistance mechanisms in CRC cells can undermine the effectiveness of IR, eventually leading to cancer recurrence in CRC patients. The intracellular capacity to repair damaged DNA is one of the major causes of resistance to IR. Inhibition of DNA repair is considered a promising approach to improve the sensitivity of cancer cells to IR, thus, different DNA repair enzymes have been validated as therapeutic targets for radio sensitization in various cancers.<sup>6</sup>

Human polynucleotide kinase-phosphatase (PNKP) has been identified as a key enzyme involved in DNA repair following damage by IR or topoisomerase I inhibitors in many types of cancer including CRC. The validity of PNKP as a therapeutic target in sensitizing cancer cells to topoisomerase I inhibitors and IR, has been previously shown by a number of groups.<sup>7</sup>

## **About Onco-Innovations Limited**

Onco-Innovations is a Canadian-based company dedicated to cancer research and treatment, specializing in oncology. Onco's mission is to prevent and cure cancer through pioneering research and innovative solutions. The Company has secured an exclusive worldwide license to patented groundbreaking technology that targets solid tumours, setting new standards in cancer treatment. Onco's commitment to excellence and innovation drives it to develop advanced therapies that improve patient outcomes and offer hope in the fight against cancer.

### **ON BEHALF OF ONCO-INNOVATIONS LIMITED,**

**"Thomas O'Shaughnessy"**

Chief Executive Officer

For more information, please contact:

Thomas O'Shaughnessy

Chief Executive Officer

Tel: + 1 888 261 8055

investors@oncoinnovations.com

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<sup>3</sup> <https://www.sciencedirect.com/science/article/abs/pii/S1521691823000197>

<sup>4</sup> [Global colorectal cancer burden in 2020 and projections to 2040](#)

<sup>5</sup> [See American Cancer Society: chemotherapy or ionizing radiation \(IR\) section 'To cure or shrink early-stage cancer'](#)

<sup>6</sup> [For more information on cancer resistance to radiotherapy and chemotherapy, as well as cancer recurrence, see the study published by the National Library of Medicine titled "Molecular Mechanisms of Chemo- and Radiotherapy Resistance and the Potential Implications for Cancer Treatment."](#)

<sup>7</sup> See study for more information: "Nano-Delivery of a Novel Inhibitor of Polynucleotide Kinase/Phosphatase (PNKP) for Targeted Sensitization of Colorectal Cancer to Radiation-Induced DNA Damage" in *Frontiers in Oncology*. Volume 11, 2021 Dec 22 11:772920

The CSE and Information Service Provider have not reviewed and do not accept responsibility for the accuracy or adequacy of this release.

**Forward-Looking Statements Caution.** This news release contains forward-looking statements relating to the further development, potential commercialization and benefits of the Technology, the Company's ability to submit and complete U.S. FDA trials, and the prospects of the Company, and the Company's business and plans generally, and other statements that are not historical facts. Forward-looking statements are often identified by terms such as "will", "may", "potential", "should", "anticipate", "expects" and similar expressions. All statements other than statements of historical fact, included in this release are forward-looking statements that involve risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include the failure to further develop, prove out or commercialize the Technology, the failure to complete U.S. FDA clinical trials, the failure to receive regulatory approval in respect of the Technology, and other risks detailed from time to time in the filings made by the Company with securities regulators. The reader is cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company. The reader is cautioned not to place undue reliance on any forward-looking information. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are made as of the date of this news release and the Company will update or revise publicly any of the included forward-looking statements as expressly required by applicable law.