Perimeter Medical Imaging AI Announces Publication of Peer-Reviewed Journal Article Validating Potential Use of Wide-Field Optical Coherence Tomography (WF-OCT) in Head and Neck Surgeries

Research concludes WF-OCT allowed for real-time margin visualization of excised oral and oropharyngeal tissue without impacting specimen integrity or surgical and pathology workflows

TORONTO and DALLAS, December 5, 2022 – Perimeter Medical Imaging AI, Inc. (TSX-V: PINK)(OTC: PYNKF) (FSE: 4PC) ("Perimeter" or the "Company") announced the publication of a peer-reviewed research article in *JAMA Otolaryngology—Head and Neck Surgery*. The study's findings validate the further exploration of the use of Perimeter's wide-field Optical Coherence Tomography (WF-OCT) technology to visualize margins during head and neck surgeries.

The research study, conducted at Mount Sinai Icahn School of Medicine, included 53 adult patients undergoing primary ablative surgery of the oral cavity or oropharynx for squamous cell carcinoma (SCC). Resected specimens were imaged with Perimeter S-Series OCT in the operating room prior to routine pathology to allow for post-operative comparisons.

Arvind K. Badhey, MD, Department of Otolaryngology, University of Massachusetts Chan Medical School, and lead author, stated, "We understand that SCC patients with positive margins after initial surgery are known to have increased risk of local recurrence, poorer rates of progression-free survival, and a need for adjuvant treatments such as radiotherapy, chemotherapy and additional surgery. Our research findings suggest that wide-field OCT may be a promising adjunct imaging modality for intraoperative visualization in head and neck surgery, especially at deep margins. Our results support the further exploration of Perimeter's technology, with the hope that this technology could help address this unmet need in SCC patients."

Brett A. Miles, DDS MD, Professor and Chair Otolaryngology Head and Neck Surgery Lenox Hill Hospital New York, and senior author, commented, "Novel technologies that have potential to improve our ability to determine surgical margins are needed in order to improve outcomes in head and neck cancer. This work represents a novel optical coherence imaging approach which has shown promise for examining margin depth in real-time during surgery for tongue cancer, and I am excited to be part of this research effort."

Jeremy Sobotta, Perimeter's Chief Executive Officer commented, "This publication further supports the potential use of our flagship Perimeter S-Series OCT medical imaging technology across several tissue types, including head and neck surgery. Further, this clinical research shows that the Perimeter OCT images correlate to histological results, with a process that does not interfere with surgical procedures or final pathology. Ultimately, our hope is that the 'real-time' use of our innovative technology can help improve outcomes for patients."

About Perimeter Medical Imaging AI, Inc.
Based in Toronto, Canada and Dallas, Texas, Perimeter Medical Imaging AI (TSX-V: PINK) (OTC: PYNKF) (FSE: 4PC) is a medical technology company driven to transform cancer surgery with ultra-high-resolution, real-time, advanced imaging tools to address areas of high unmet medical need. Available

across the U.S., our FDA-cleared Perimeter S-Series OCT system provides real-time, cross-sectional visualization of excised tissues at the cellular level, with 10x greater image resolution than X-ray and ultrasound, and 100x greater than MRI. The breakthrough-device-designated investigational Perimeter B-Series OCT with ImgAssist AI represents our next-generation artificial intelligence technology that is currently being evaluated in a pivotal clinical trial, with support from a grant of up to US$7.4 million awarded by the Cancer Prevention and Research Institute of Texas. The company's ticker symbol "PINK" is a reference to the pink ribbons displayed during Breast Cancer Awareness Month.

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Forward-Looking Statements

This news release contains statements that constitute "forward-looking information" within the meaning of applicable Canadian securities legislation. In this news release, words such as "may," "would," "could," "will," "likely," "believe," "expect," "anticipate," "intend," "plan," "estimate," and similar words and the negative form thereof are used to identify forward-looking statements. Forward-looking information may relate to management's future outlook and anticipated events or results and may include statements or information regarding the future financial position, business strategy and strategic goals, competitive conditions, research and development activities, projected costs and capital expenditures, research and clinical testing outcomes, taxes and plans and objectives of, or involving, Perimeter. Without limitation, information regarding the potential benefits of Perimeter S-Series OCT, Perimeter B-Series OCT, and Perimeter ImgAssist; Perimeter's expected development activities, future uses of Perimeter's WF-OCT technology in relation to head and neck surgeries, and the expected details regarding Perimeter's ongoing clinical trials are forward-looking information. Forward-looking statements should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether, or the times at or by which, any particular result will be achieved. No assurance can be given that any events anticipated by the forward-looking information will transpire or occur. Forward-looking information is based on information available at the time and/or management's good-faith belief with respect to future events and are subject to known or unknown risks, uncertainties, assumptions, and other unpredictable factors, many of which are beyond Perimeter's control. Such forward-looking statements reflect Perimeter's current view with respect to future events, but are inherently subject to significant medical, scientific, business, economic, competitive, political, and social uncertainties and contingencies. In making forward-looking statements, Perimeter may make various material assumptions, including but not limited assumptions related to (i) the accuracy of Perimeter's financial projections; (ii) obtaining positive results from trials; (iii) obtaining necessary regulatory approvals; and (iv) general business, market, and economic conditions. Further risks, uncertainties and assumptions include, but are not limited to, those applicable to Perimeter and described in Perimeter's Management Discussion and Analysis for the year ended December 31, 2021, which is available on Perimeter's SEDAR profile at www.sedar.com, and could cause actual events or results to differ materially from those projected in any forward-looking statements. Perimeter does not intend, nor does Perimeter undertake any obligation, to update or revise any forward-looking information contained in this news release to reflect subsequent information, events, or circumstances or otherwise, except if required by applicable laws.

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