

Photonamic and Lumeda Enter into Collaboration for a Clinical Study with Photodynamic Therapy ("PDT") in the Field of Non-Small Cell Lung Cancer (NSCLC)

Companies combining expertise to increase number of late-stage lung cancer patients realizing extended survival from immunotherapy

Rocky Hill, CT and Pinneberg, Germany – February 15, 2023 – Lumeda Inc, a clinical stage medical technology company focused on improving treatment outcomes of patients with lung cancer, and photonamic GmbH & Co KG, a pharmaceutical company involved in the development of 5-aminolevulinic acid (5-ALA) in various applications as precursor for the photosensitizer PpIX, today announced their commitment to collaborate on a Phase I-II clinical study to evaluate the safety and efficacy of Photodynamic Therapy (PDT) with 5-ALA as an adjuvant in combination with Immune Checkpoint Inhibitors (ICIs) to prime the immune system in treatment of lung cancer patients. The collaboration will combine the respective expertise of both companies, where photonamic's photosensitizing drug Gleolan™(5-ALA) is used in combination with Lumeda's proprietary DigiLum™ PDT technology, a breakthrough light delivery and dosimetry system. Ulrich Kosciessa, CEO of photonamic said "The photonamic team is excited about the potential for this collaboration to expand the therapeutic indications for Gleolan™, starting with lung cancer."

Gleolan[™] is approved for use in over 40 countries for fluorescence-guided surgery during brain tumor resection. After a comprehensive global assessment of approved and clinical-stage photosensitizers, Lumeda chose Gleolan[™] because of its known safety and tolerability profile as well as its tumor selectivity. This combination study using Gleolan[™] and DigiLum[™] seeks to assess the response of patients with late-stage lung cancer. Lung cancer is one type of cancer for which PDT has demonstrated a potential to offer clinical benefit. As part of the collaboration, photonamic will invest into Lumeda through a convertible note and will supply the clinical trial product through its wholly-owned subsidiary in the USA, NX Development Corp. Inc. Sandy Zinke, Lumeda CEO said, "We believe that the combination of Gleolan[™] and DigiLum[™] can produce strong clinical results which can in turn lead to broader adoption of PDT in combination with immunotherapy to improve outcomes for lung cancer patients."

About 5-aminolevulinic acid in PDT

5-aminolevulinic acid ("5-ALA") is an endogenous amino acid derivative produced in mitochondria. Aminolevulinic acid in combination with iron ions is a normal precursor of hemoglobin that is metabolized to protoporphyrin IX (PpIX) in cancer cells. PpIX is a photosensitizer that can be activated by light of a certain wavelength to produce reactive oxygen species which cause tumor cell death. PDT with 5-ALA is currently being investigated in clinical trials and is not approved for use in clinical practice. 5-ALA is contraindicated in patients with hypersensitivity to 5-ALA or porphyrins or patients with acute/chronic porphyria.

About Lumeda, Inc.

Lumeda was founded in 2019 and has developed DigiLum[™], a breakthrough light delivery and dosimetry system with AI software, designed to make PDT more standardized and efficient to enable broader adoption and treatment of more patients. Lumeda has a close collaboration with the world-renowned Photodynamic Therapy (PDT) Center at Roswell Park Comprehensive Cancer Center in Buffalo, NY. The company has an exclusive global license to two Roswell Park patents that enable the application of intraoperative PDT for patients suffering from lung cancer and pleural malignancies. Lumeda is currently involved in two clinical studies at Roswell Park related to lung cancer and is developing other tools to enable the use of PDT in robotic and endoscopic procedures for additional indications. For more information please go to the Lumeda website at www.lumedainc.com or contact Sandy Zinke, Lumeda CEO at sandyz@lumedainc.com.

About photonamic GmbH & Co KG

photonamic is a German based company involved in the development of 5-ALA in various applications as precursor for the photosensitizer PpIX. As a member of the SBI group with its parent company SBI ALApharma Hong Kong, photonamic has developed 5-ALA for the fluorescence-guided resection of glioblastoma which is marketed as Gliolan[®], Gleolan[™] or Alabel[™] in Europe, United States, Canada, Japan, Australia and Korea. Within the group, photonamic and its affiliated companies in the US, Canada and Japan are diligently extending the development activities with 5-ALA even outside the field of photodynamic application, e.g. immune modulation in infectious diseases, food supplement and cosmetics.

Forward-Looking Information

This press release contains forward-looking statements. Generally, words such ad "may", "will", "should", "could", "anticipate", "expect", "intend", "estimate", "plan", "continue", and "believe" or the negative of or other variation on these and other similar expressions identify forward-looking statements. These forward-looking statements are made only as of the date of this press release. We do not undertake to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise. Forward-looking statements are based on current expectations and involve risks and uncertainties and our future results could differ significantly from those expressed or implied by our forward-looking statements.