Simphotek, Inc Announces NIH Grant for Development of an In Situ System for Treatment of Mesothelioma

NEWARK, NJ, UNITED STATES, April 13, 2021 /EINPresswire.com/ -- Simphotek, Inc., an early-stage biotechnology company advancing its computational platform Dosie™ to assist cancer treatment with photosensitizing drugs, today announced that its computational software tool Dosie™ will be used in a four-year NIH Academic-Industrial Partnership Grant from the National Institute of Biomedical Imaging and Bioengineering (R01EB028778). The grant, titled "In situ PEDSy and light delivery platform for Intracavitory Photodynamic Therapy", was awarded to a consortium of the Perlman School of Medicine at the University of Pennsylvania with Simphotek, Inc. It involves research into the diagnosis and treatment of mesothelioma with photodynamic therapy (PDT). A major purpose of this research is to develop, evaluate, and clinically test an integrated light delivery and dosimetry platform for the quantitative measurement of PDT. The research includes two components: 1) University of Pennsylvania's hardware for in situ PDT dosimetry measurement and light source tracking; and 2) Simphotek's computational software tool Dosie™ for monitoring light distribution throughout the pleural cavity during photodynamic therapy of mesothelioma. Dosie™ utilizes real-time Monte Carlo simulation of light distribution coupled with distribution and photokinetics simulation of a photosensitizing drug. The hypothesis is that quantitative modeling of PDT dose by Dosie™ will allow for more effective PDT treatment delivery than current methods which employ only light dose measurements without incorporating a component of photosensitizing drug photokinetics.

About Photodynamic Therapy (PDT)
PDT is an evolving cancer treatment modality that utilizes light to activate a photosensitive drug which, in turn, creates reactive oxygen species that directly cause the death of tumor cells. The FDA has currently approved photodynamic therapy for some types of tumors. For many tumors deep inside the body, such as those in the brain, lungs, head and neck, pancreas, and prostate, PDT is not yet approved by the FDA. Unlike chemotherapy, PDT does not cause systemic toxicity, and unlike radiation therapy it does not cause cumulative tissue damage. A well-developed dosimetry tool, essential to achieve reproducible PDT treatment results, is yet to be built.

About Simphotek, Inc,
Simphotek is an early-stage biotechnology company advancing its computational software platform Dosie™ to assist cancer treatment with light-sensitive drugs. Dosie™ is a tool that can be used with PDT therapy of tumors originating in many locations in the body. Dosie™ performs near real-time dosimetry simulation which allows for clinical information to be available to

treating physicians while in the operating room or clinic, which is not currently possible. The advanced visualization methods developed in Dosie™ could allow treating physicians to perform detailed examination of tumors and their surrounding tissue during treatment sessions. To accomplish this, Dosie™ runs on a custom-built computation system that is configured with multiple GPUs and highly-multicore CPUs. Dosie™ has not yet been evaluated or approved by the FDA.

For further information regarding Simphotek, Inc., please visit the Company's website at www.simphotek.com or contact [Dr. M. Potasek, mpotasek@simphotek.com, 973-621-2340]

This press release may contain forward-looking statements that reflect Simphotek, Inc.'s current expectations about its future results, performance, prospects and opportunities, including but not limited to, potential market sizes, patient populations, and preclinical and clinical study outcomes. Statements that are not historical facts, such as "anticipates," "estimates," "believes," "hopes," "intends," "plans," "expects," "goal," "may," "suggest," "will," "potential," or similar expressions, are forward-looking statements. These statements are subject to a number of risks, uncertainties and other factors that could cause actual events or results in future periods to differ materially from what is expressed in, or implied by, these statements. Simphotek cannot assure you that it will be able to successfully develop, achieve regulatory approval for or commercialize products based on its technologies, particularly in light of the significant uncertainty inherent in conducting preclinical and clinical development that it will be able to successfully obtain any further funding to support continued development and commercialization efforts, including grants and awards, maintain its existing grants which are subject to performance requirements with the U.S. Government, that it will be able to compete with larger and better financed competitors in the industry, that changes in health care practice, third party reimbursement limitations and Federal and/or state health care reform initiatives will not negatively affect its business.

M. Potasek
Simphotek, Inc
email us here
Visit us on social media:
Facebook
Twitter
LinkedIn