

Candel Therapeutics Presents Preclinical Data from its enLIGHTEN™ Discovery Platform at SITC

November 4, 2023

- The first experimental agent from the enLIGHTEN[™] Discovery Platform is Alpha-201-macro1, an investigational viral immunotherapy designed to activate innate immune surveillance
- Application of the enLIGHTEN[™] Advanced Analytics suite to datasets from immune checkpoint inhibitor (ICI)-treated patients enabled in silico prediction and subsequent preclinical validation of multi-gene payload combinations to overcome lack of response to ICI
- Candel's enLIGHTEN[™] Discovery Platform is the first systematic, iterative herpes simplex virus (HSV)-based platform designed to leverage human biology and advanced analytics to create new viral immunotherapies for solid tumors

NEEDHAM, Mass., Nov. 04, 2023 (GLOBE NEWSWIRE) -- Candel Therapeutics, Inc. (the Company or Candel) (Nasdaq: CADL), a clinical stage biopharmaceutical company focused on developing viral immunotherapies to help patients fight cancer, today will present two posters during the 2023 Society for Immunotherapy of Cancer (SITC) Annual Meeting in San Diego focused on the enLIGHTEN™ Discovery Platform.

"We aim to leverage artificial intelligence and machine learning to expedite various aspects of drug discovery and development," said Paul Peter Tak, MD, PhD, FMedSci, President and Chief Executive Officer of Candel. "Combined with our strong focus on human biology for drug discovery and our deep experience with herpes simplex virus as therapeutic vectors, Candel is poised to expand its portfolio of promising viral immunotherapy candidates and create value through discovery partnerships."

The first poster titled 'Development of enLIGHTEN™ Alpha-201 herpes simplex viral vectors encoding payloads targeting the tumor microenvironment' reports preclinical characterization of the enLIGHTEN™ viral chassis Alpha-201. Profiling of biological responses to Alpha-201 unveiled its potential to orchestrate changes in the tumor microenvironment, supportive of effective anti-tumor immune responses to immune checkpoint inhibitor (ICI) treatment. In preclinical models, Alpha-201 displayed enhanced peripheral blood mononuclear cell-mediated cancer cell killing and immune activation when armed with certain immunostimulatory payload combinations which was predicted in silico using the enLIGHTEN™ Advanced Analytics suite. These data validate Candel's novel approach for in silico prediction of payload combinations and selection of indication-specific payloads with anti-tumoral activity using human datasets as a tool to accelerate, improve and de-risk certain aspects of the development of transformative viral immunotherapies.

"Tumor resistance to immunotherapy is driven by multiple mechanisms, which are heterogeneous in nature," said Francesca Barone, MD, PhD, Chief Scientific Officer at Candel. "By interrogating human datasets and generating predictions on tumor-specific mechanisms of progression, enLIGHTEN provides a unique opportunity to predict optimal gene payload combinations to arm viral vectors, enabling the design of multimodal therapeutics with greater potential to overcome tumor resistance."

The second poster titled 'A novel viral immunotherapeutic targeting the CD47/SIRP α axis demonstrates potent anti-tumor effects' describes the design of the first experimental agent based on the enLIGHTENTM Discovery Platform, Alpha-201-macro1. This investigational agent is comprised of an immunostimulatory and oncolytic engineered viral chassis armed with a novel gene payload that is designed to interfere with the CD47/SIRP α pathway.

"Therapies targeting the CD47/SIRPα pathway have shown promising clinical results in solid and hematological malignancies; however, efficacy is often hindered by systemic toxicity," said Anne Diers, PhD, Senior Director of Research at Candel Therapeutics. "The Alpha-201-macro1 preclinical data presented today support the utility of local delivery of an immunologically active, multimodal agent as a potential alternative to systemic therapy. We are excited to leverage the enLIGHTEN[™] Discovery Platform to optimize the immunostimulatory payload of this agent for activation of innate immune surveillance with the goal of maximizing its therapeutic potential."

Further details from the posters are available on the Candel website at: www.candeltx.com/media

About the enLIGHTEN ™Discovery Platform

Candel's enLIGHTEN[™] Discovery Platform is a systematic, iterative HSV-based discovery platform leveraging human biology and advanced analytics to create new viral immunotherapies for solid tumors. In October 2022, the Company announced a discovery collaboration with the University of Pennsylvania Center for Cellular Immunotherapies to identify how viral immunotherapy could enhance the efficacy of CAR-T cell therapy in solid tumors. The enLIGHTEN[™] Discovery Platform is designed to deconvolute the complexity of the tumor microenvironment to identify druggable properties that correlate with clinical outcomes. These discoveries are translated into optimized multi-gene payloads of tumor modulators that are tailored for specific indications, disease stage, and rationally designed therapeutic combinations.

About Candel Therapeutics

Candel is a clinical stage biopharmaceutical company focused on developing off-the-shelf viral immunotherapies that elicit an individualized, systemic anti-tumor immune response to help patients fight cancer. Candel's engineered viruses are designed to induce immunogenic cell death through direct viral-mediated cytotoxicity in cancer cells, thus releasing tumor neo-antigens while creating a pro-inflammatory microenvironment at the site of

injection. This leads to in situ vaccination against the injected tumor and uninjected distant metastases.

Candel has established two clinical stage viral immunotherapy platforms based on novel, genetically modified adenovirus and herpes simplex virus (HSV) gene constructs, respectively. CAN-2409 is the lead product candidate from the adenovirus platform and is currently in ongoing clinical trials in non-small cell lung cancer (NSCLC) (phase 2), borderline resectable pancreatic cancer (phase 2), and localized, non-metastatic prostate cancer (phase 2 and phase 3). CAN-3110 is the lead product candidate from the HSV platform and is currently in an ongoing investigator-sponsored phase 1 clinical trial in recurrent high-grade glioma. In addition, Candel's enLIGHTEN™ Discovery Platform is a systematic, iterative HSV-based discovery platform leveraging human biology and advanced analytics to create new viral immunotherapies for solid tumors.

For more information about Candel, visit: www.candeltx.com

Forward-Looking Statements

This press release includes certain disclosures that contain "forward-looking statements," within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, express or implied statements regarding the timing and advancement of current and future development programs, including the timing and availability of additional data, the possibility to use preclinical readouts as predictor of clinical response, the potential for the enLIGHTENTM Discovery Platform to expedite drug discovery and development and expand Candel's portfolio of viral immunotherapy candidates and expectations regarding the therapeutic benefit of its product candidates and experimental agents, including Alpha-201. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, those risks and uncertainties related to the timing and advancement of current and future development programs; that final data from our pre-clinical studies and completed clinical trials may differ materially from reported interim data from ongoing studies and trials; expectations regarding the therapeutic benefit of the Company's programs; the Company's ability to efficiently discover and develop product candidates; the Company's ability to obtain and maintain regulatory approval of product candidates; the Company's ability to maintain its intellectual property; the implementation of the Company's business model, and strategic plans for the Company's business and product candidates, and other risks identified in the Company's SEC filings, including the Company's most recent Quarterly Report on Form 10-Q filed with the SEC, and subsequent filings with the SEC. The Company cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. The Company disclaims any obligation to publicly update or revise any such statements to reflect any change in expectations or in events, conditions, or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements. Any forward-looking statements contained in this press release represent the Company's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date.

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