Candel Therapeutics Announces New Data from Ongoing Phase 1 Clinical Trial of CAN-3110 in Recurrent High-Grade Glioma at the American Society of Gene & Cell Therapy (ASGCT) 26th Annual Meeting

May 19, 2023

- *Treatment with CAN-3110 in arm A showed encouraging median overall survival rate at 11.8 months after a single injection. These data are supported by independent cohort (arm B); median overall survival was 12.0 months in patients who received a single administration of CAN-3110 after cyclophosphamide pre-treatment compared to < 6 to 9 months expected with standard of care treatment options*
- *CAN-3110 was reported to be well tolerated with no dose-limiting toxicities observed*
- *The Company is currently enrolling arm C, which will evaluate a repeat dosing regimen of CAN-3110 (up to 6 injections over 4 months) in patients with recurrent high-grade glioma*

NEEDHAM, Mass., May 19, 2023 (GLOBE NEWSWIRE) -- Candel Therapeutics, Inc. (Candel or the Company) (Nasdaq: CADL), a clinical stage biopharmaceutical company focused on developing viral immunotherapies to help patients fight cancer, today announced new data from an ongoing phase 1 investigator-sponsored clinical trial of its herpes simplex virus-1 (HSV-1) replication-competent viral immunotherapy candidate, CAN-3110, in patients with high-grade glioma that has recurred after standard of care (SoC) treatment. The data were presented today in an Oral Presentation Session at the 26th Annual Meeting of the American Society of Gene & Cell Therapy (ASGCT).

“After one dose of CAN-3110, we observed encouraging responses in individual patients with recurrent high-grade glioma, including responses in both injected and uninjected lesions,” said Francesca Barone, MD, PhD, Chief Scientific Officer of Candel. “We are encouraged by the increased survival of treated patients in two independent cohorts observed to date. We believe the responses are notable, given that recurrent high-grade gliomas are fast-growing, spread quickly and are treatment-resistant.”

Dr. Barone continued, “Results demonstrated that CAN-3110 was well tolerated without dose-limiting toxicities and significantly increased the median overall survival rate to 12.0 months in nine patients from arm B. These findings support the median overall survival rate observed in 41 patients from arm A who received CAN-3110 and exceeded the historical median overall survival rates of less than 6 to 9 months achieved by standard of care. In arm C, we look forward to investigating whether multiple doses of CAN-3110 can further increase survival rates for these patients who desperately need new treatment options.”

“We believe data from the first 50 patients with recurrent high-grade glioma who received a single intratumoral injection of CAN-3110 supports the notion that this approach is generally well tolerated and may provide clinical improvement and survival benefit,” said Paul Peter Tak, MD, PhD, FMedSci, President and Chief Executive Officer of Candel. “Sadly these patients have extremely limited treatment options, which makes these data even more encouraging.”

Dr. Tak continued, “In arm C, we and our collaborators are studying a repeat dosing regimen of CAN-3110 for up to six injections over four months in patients with recurrent high-grade glioma to evaluate whether we can further improve our current results. CAN-3110 is designed to replicate specifically in tumor cells expressing Nestin. This specificity allows us to test this asset in the future in other indications that are characterized by Nestin expression, potentially allowing for a pipeline expansion opportunity into new diseases.”

Highlights from the Oral Presentation Session at ASGCT

An ongoing phase 1 clinical trial, which includes arms A, B, and C, is evaluating the safety and activity of CAN-3110 in patients with recurrent high-grade glioma who have experienced disease progression following prior treatment with SoC therapies. Based on historical clinical data, overall survival in this patient population is < 6-9 months. The Company previously announced data from arm A (n=41), which demonstrated that treatment with a single dose of CAN-3110 was generally well tolerated and resulted in median overall survival (mOS) rate of 11.6 months as of the data cutoff date on July 22, 2022. This has now been updated to 11.8 months as of the data cutoff date on April 20, 2023. New clinical data from arm B (n=9) and updated data from arm A demonstrated the following results as of the data cutoff date:

- CAN-3110 was well tolerated without dose-limiting toxicities.
- mOS in arm B is ongoing at 12.0 months and supports the encouraging clinical activity of CAN-3110 observed in in arm A.
- Responses were observed in both injected and uninjected lesions in patients with multifocal disease.

- In addition to the two patient case studies disclosed from arm A, one patient from arm B exhibited continued reduction in tumor volume approximately one year after CAN-3110 treatment. Clinical response for this patient, currently in follow-up, continues without additional treatment.
- Analysis of post treatment samples demonstrated evidence of HSV antigen expression and replication in uninjected tumor tissue associated with CD8+ T cell infiltration, which may explain the clinical responses observed in uninjected tumors.
- Additional extensive biomarker studies including histology, transcriptomics, and single cell sequencing are ongoing.

About CAN-3110 evaluated in the phase 1 clinical trial

CAN-3110 is a first-in-class HSV-1 viral immunotherapy candidate engineered to express one copy of the ICP34.5 gene under the transcriptional control of the Nestin-specific promoter. This modification is designed to largely restrict CAN-3110 replication and oncolytic activity to Nestin+ tumor cells. The phase 1 clinical trial is evaluating the safety and activity of CAN-3110 in patients with recurrent high-grade glioma who have experienced disease progression following prior treatment with SoC therapies.

This investigator-sponsored study is led by E. Antonio Chiocca, MD, PhD, Head of the Department of Neurosurgery at Brigham & Women's Hospital and Professor at Harvard Medical School. The clinical trial comprises three arms. In arm A, 41 patients with recurrent high-grade glioma were treated by a single intratumoral injection of CAN-3110 (dose ranging from $1x10^6$ plaque forming units (pfu) to $1x10^{10}$ pfu), including nine patients with multifocal/multicentric, deep or bilateral tumors associated with poor survival. After showing tolerability of this regimen without dose-limiting toxicity, patients in arm B (n=9) were treated with a single high dose of cyclophosphamide (24 mg/kg), two days before CAN-3110 injection at doses of 1×10^8 pfu (n=3) and 1×10^9 pfu (n=6). The rationale is based on findings in mouse models, where cyclophosphamide improved viral persistence in injected tumors. In arm C, supported by the Break Through Cancer foundation, two cohorts of 12 patients with recurrent high-grade glioma will receive up to six injections of CAN-3110 over a four-month period.

Details of the oral presentation are as follows:

- **Abstract Title:** Safety and Survival Outcomes in Recurrent High-Grade Glioma Patients Treated with CAN-3110, a First-in-Class ICP34.5 Expressing Oncolytic HSV1
- **Presenter:** Francesca Barone, MD, PhD, Chief Scientific Officer, Candel Therapeutics
- **Session Title:** Late-Breaking Abstracts 1
- **Session Date and Time:** Friday, May 19, 2023, 8:00 - 9:45 am PT
- **Location:** Room 515 AB, Los Angeles Convention Center, Los Angeles, CA

About Candel Therapeutics

Candel is a clinical stage biopharmaceutical company focused on developing viral immunotherapies that elicit a 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. 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 CAN-3110 is the lead product candidate from the HSV 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.

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 development programs, include key data readout milestones; expectations regarding the therapeutic benefit of its programs; and expectations regarding cash runway and expenditures. 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 development programs; 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

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