Aprea Therapeutics Provides Clinical Update from ACESOT-1051 Trial Showing Early Signals of Activity for WEE1 Kinase Inhibitor APR-1051

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- 3 out of 4 patients achieved stable disease (per RECIST v1.1) at the 100 mg APR-1051 dose level in heavily pretreated gastrointestinal and gynecologic malignancies
- Disease stabilization observed in patients with tumors harboring mutations relevant to WEE1 kinase inhibition (FBXW7, CCNE1, KRAS ^{G12V} and TP53)
- Dose escalation continues, with patients now enrolling in 150 mg cohort
- Preliminary results from ACESOT-1051 trial through September 17, 2025 to be featured in poster presentation today at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics

DOYLESTOWN, Pa., Oct. 24, 2025 (GLOBE NEWSWIRE) -- Aprea Therapeutics, Inc. (Nasdaq: APRE) ("Aprea", or the "Company"), a clinical-stage biopharmaceutical company developing innovative treatments that exploit specific cancer cell vulnerabilities while minimizing damage to healthy cells, today provided an update on the ongoing Phase 1 ACESOT-1051 (A Multi-Center Evaluation of WEE1 Inhibitor in Patients with Advanced Solid Tumors, APR-1051) study. The latest results show that, at the 100 mg APR-1051 dose level, 3 out of 4 patients achieved stable disease, as measured using RECIST v1.1 criteria.

A poster titled **Early safety and efficacy of APR-1051, a novel WEE1 inhibitor, in patients with cancer-associated gene alterations: Updated data from ACESOT-1051 Phase 1 trial** will be presented today at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics. The poster, to be presented by Drs. Timothy Yap MBBS, PhD, FRCP, University of Texas MD Anderson Cancer Center and lead investigator of the study, and Philippe Pultar, MD, Senior Medical Advisor at Aprea, summarizes preliminary results from the trial with a cutoff date of September 17, 2025. A copy of the poster will be available on Investors page of the Aprea corporate website under "Investor Presentations & Resources."

"We continue to be encouraged by these early clinical findings, which demonstrate signals of anti-tumor activity with APR-1051 in a heavily pre-treated patient population," said Dr. Pultar. "We believe the observation of disease control in tumors harboring FBXW7, CCNE1, and KRAS mutations align with our mechanistic understanding of WEE1 inhibition and reinforces the scientific rationale for APR-1051 development. We believe these promising data provide an important foundation as we continue with dose escalation in the ongoing study and we look forward to providing further updates as we advance to higher dose level in the ongoing study."

ACESOT-1051 Clinical Update (data cutoff October 19, 2025)

- The primary objective of the trial is to characterize the safety profile, dose-limiting toxicity, maximum tolerated dose or maximum administered dose, and recommended Phase 2 dose of APR-1051. Secondary objectives are to 1) to characterize the pharmacokinetics of APR-1051 and the major metabolites and active metabolites of APR-1051, and 2) to assess preliminary efficacy of APR-1051
- **Results from Dose Level 6 (100 mg), show 3 out of 4 patients achieved stable disease, per RECIST v1.1 in heavily pretreated gastrointestinal and gynecologic malignancies**
- Disease stabilization was observed in patients with FBXW7, CCNE1, and KRAS^{G12V} + TP53 alterations
- Favorable tolerability: No dose limiting toxicities (DLTs) or unexpected safety issues reported to date.
- Following successful clearance of the 100 mg cohort, dose escalation has progressed to Dose Level 7 (150 mg)
- For more information on ACESOT-1051, refer to ClinicalTrials.gov NCT06260514.

Individual Patient Results

- 86-year-old female with rectal cancer: Treated at a 100 mg dose after five prior lines, the patient achieved stable disease (-13% reduction). Tumor harbored FBXW7 mutation which is a mechanistically relevant biomarker for WEE1 inhibition. 145 days on treatment and ongoing
- 55-year-old male with rectal cancer: Treated at a 100 mg dose after four prior lines, the patient achieved stable disease

(+1%). Tumor harbored $KRAS^{G12V}$ + TP53-mutant patient supports mechanistic activity in this genotype. 63 days on treatment and ongoing

- 73-year-old female with endometrial cancer: Treated at a 100mg after five prior lines, patient achieved stable disease by RECIST v1.1 criteria (+15%) at the first evaluation before voluntarily withdrawing consent after approximately two months of treatment. Tumor harbored CCNE1 and TP53 mutations supports mechanistic activity in this genotype.
- 50-year-old female with colon cancer: Treated at 100mg after two prior lines. This patient had disease progression at first assessment (8 weeks).

About Aprea
Aprea's mission is to develop novel cancer therapies that target cancer cells directly, while sparing healthy ones. By exploiting unique vulnerabilities in cancer cell mutations, this approach is designed to eradicate tumors while minimizing harm to normal tissues, thereby reducing the risk of toxicity often associated with conventional chemotherapy and other treatments. Aprea's clinical programs include APR-1051, an oral, small-molecule inhibitor of WEE1 kinase, and ATRN-119, a macrocyclic small molecule ATR inhibitor, both currently in development for solid tumor indications. For more information, please visit the company website at www.aprea.com.

The Company may use, and intends to use, its investor relations website at https://ir.aprea.com/ as a means of disclosing material nonpublic information and for complying with its disclosure obligations under Regulation FD.

Forward-Looking Statement
Certain information contained in this press release includes "forward-looking statements", within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended related to our study analyses, clinical trials, regulatory submissions, and projected cash position. We may, in some cases use terms such as "future," "predicts," "believes," "potential," "continue," "anticipates," "estimates," "expects," "plans," "intends," "targeting," "confidence," "may," "could," "might," "likely," "will," "should" or other words that convey uncertainty of the future events or outcomes to identify these forward-looking statements. Our forward-looking statements are based on current beliefs and expectations of our management team and on information currently available to management that involve risks, potential changes in circumstances, assumptions, and uncertainties. All statements contained in this press release other than statements of historical fact are forward-looking statements, including statements regarding our ability to develop, commercialize, and achieve market acceptance of our current and planned products and services, our research and development efforts, including timing considerations and other matters regarding our business strategies, use of capital, results of operations and financial position, and plans and objectives for future operations. Any or all of the forward-looking statements may turn out to be wrong or be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. These forward-looking statements are subject to risks and uncertainties including, without limitation, risks related to the success, timing, and cost of our ongoing clinical trials and anticipated clinical trials for our current product candidates, including statements regarding the timing of initiation, pace of enrollment and completion of the trials (including our ability to fully fund our disclosed clinical trials, which assumes no material changes to our currently projected expenses), futility analyses, presentations at conferences and data reported in an abstract, and receipt of interim or preliminary results (including, without limitation, any preclinical results or data), which are not necessarily indicative of the final results of our ongoing clinical trials, our understanding of product candidates mechanisms of action and interpretation of preclinical and early clinical results from its clinical development programs and our ability to predict clinical outcomes based on such preclinical and early clinical results, our ability to continue as a going concern, and the other risks, uncertainties, and other factors described under "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in the documents we file with the U.S. Securities and Exchange Commission. For all these reasons, actual results and developments could be materially different from those expressed in or implied by our forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements, which are made only as of the date of this press release. We undertake no obligation to update such forward-looking statements for any reason, except as required by law.

Investor Contact:

Mike Moyer
LifeSci Advisors
mmoyer@lifesciadvisors.com