Aprea Therapeutics Presents Updated Phase 1 Data on WEE1 Inhibitor APR-1051 at ASCO 2026, Demonstrating Early Monotherapy Activity and Manageable Tolerability in Advanced Solid Tumors

June 1, 2026

- *Presentation highlights early clinical activity from ACESOT-1051, including partial responses and stable disease in patients across multiple tumor types*
- *Manageable tolerability confirmed across cohorts*
- *Patient expansion into uterine serous carcinoma and platinum-resistant ovarian cancer underway; dose escalation and backfill expansion expected to complete Q2 2027*

DOYLESTOWN, Pa., June 01, 2026 (GLOBE NEWSWIRE) -- Aprea Therapeutics, Inc. (Nasdaq: APRE) ("Aprea", or the "Company"), a clinical-stage precision medicine oncology company focused on the discovery and development of targeted therapies for patients with biomarker-defined cancers, announces the presentation of a poster "Early results from the first-in-human phase 1 study of WEE1 inhibitor APR-1051 in patients with advanced solid tumors (ACESOT-1051)" on May 30 at the American Society of Clinical Oncology (ASCO) 2026 annual meeting, taking place in Chicago, Illinois.

APR-1051 is an orally bioavailable, potent, and selective small molecule WEE1 inhibitor with in vivo anti-tumor activity in several cancer models. It exhibits low off-target inhibition of PLK kinases (PLK1, PLK2, PLK3), a property that differentiates it from prior WEE1 inhibitors and may contribute to an improved safety profile. ACESOT-1051 is the ongoing first-in-human Phase 1 study evaluating once-daily APR-1051 in advanced solid tumors harboring cancer-associated gene alterations.

"We are pleased to have the opportunity to present the updated ACESOT-1051 data to the oncology community at this year's ASCO meeting," said Gene Kennedy, M.D., Chief Medical Advisor of Aprea. "The partial responses and disease stabilizations we have observed in this heavily pretreated, biomarker-selected patient population reinforce our confidence in APR-1051's differentiated profile and the potential of our precision medicine strategy. With enrollment now expanding into uterine serous carcinoma and platinum-resistant ovarian cancer, dose escalation and backfill expansion is on track to complete in the second quarter of 2027. Importantly, we believe that we are on a clear path to generating the data that will demonstrate APR-1051's potential."

ACESOT-1051: A Biomarker-Focused, Phase 1 Trial of Oral WEE1 Inhibitor, APR-1051

The poster (Abstract #3107) provides an updated summary of ACESOT-1051 with a data cutoff of May 6, 2026. Key highlights from the presentation include:

- **Study objectives:** The primary objective is to characterize the safety profile, dose-limiting toxicity (DLT), maximum tolerated dose or maximum administered dose, and recommended Phase 2 dose (RP2D) of APR-1051. Secondary objectives include characterization of the PK of APR-1051 and assessment of preliminary efficacy of APR-1051
- **Clinical activity:** Two patients with endometrial cancers have achieved partial responses ("PR"). Six additional patients achieved stable disease, including those with colorectal cancer, HPV+ head and neck squamous cell carcinoma, and endometrial cancer.
- **Tolerability:** APR-1051 has been well tolerated across all dose levels. Treatment-related adverse events were reported in 54% of patients, with nausea (36%) and fatigue (14%) the most common, nearly all Grade 1 or 2.
- **Pharmacokinetics:** APR-1051 exposure is dose-proportional with a half-life of approximately 18 hours, supporting once-daily dosing.
- **Study status:** 28 patients with advanced solid tumors harboring specific cancer-associated gene alterations have been enrolled at doses from 10 mg to 300 mg once daily. Dose escalation is ongoing, with enrollment currently underway in the 300 mg cohort (dose level 9). Aprea is expanding enrollment to include at least 50 patients with uterine serous carcinoma as well as patients with cyclin E-overexpressing, platinum-resistant ovarian cancer. Completion of dose escalation and backfill expansion is anticipated in the second quarter of 2027.

For more information on ACESOT-1051, refer to ClinicalTrials.gov NCT06260514. A copy of the poster will be available on Aprea's corporate website, later today.

About Aprea Therapeutics

Aprea is a clinical-stage precision medicine oncology company focused on the discovery and development of targeted therapies

for patients with biomarker-defined cancers. The Company is pioneering a new approach to treat cancer by exploiting vulnerabilities associated with cancer cell mutations. This approach was developed to kill tumors while minimizing the effect on normal, healthy cells. Aprea's technology has potential applications across multiple cancer types, enabling it to target a range of tumors, including ovarian, endometrial, colorectal and head and neck squamous cell carcinoma. The Company's lead programs are APR-1051, an oral, small-molecule inhibitor of WEE1 kinase, and ATRN-119, a small molecule ATR inhibitor, both in clinical development for solid tumor indications. For more information, please visit 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 our clinical development programs, and our ability to predict clinical outcomes based on such preclinical and early clinical results, 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.

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