

Aprea Therapeutics Announces Phase II SBIR Award from the National Cancer Institute (NCI)

February 15, 2023

DOYLESTOWN, Pa., Feb. 15, 2023 (GLOBE NEWSWIRE) -- Aprea Therapeutics, Inc. (Nasdaq: APRE), a biopharmaceutical company focused on developing novel synthetic lethality-based cancer therapeutics targeting DNA damage response (DDR) pathways, today announced that it received an award notification from the National Cancer Institute (NCI) for the development of a first-in-class combination of DNA damage response inhibitors for the treatment of high-grade serous ovarian cancer (HGSOC). Total funding under the award is up to \$1,996,571 over a period of two years, subject to the availability of funds and satisfactory progress of the project over such period.

HGSOC is a devastating disease responsible for the deaths of about 125,000 women worldwide each year and has low survival rates. Approximately 50% of HGSOCs harbor genetic mutations in BRCA1, BRCA2, or other genes that cause defects in homologous recombination (HR). Another large fraction of HGSOCs exhibit amplification of the cell proliferation regulator Cyclin E1 (CCNE1). To develop a potential therapy for this disease, Aprea Therapeutics is initiating a first-in-human clinical trial of a new highly selective ataxia—telangiectasia and Rad3 related (ATR) inhibitor, ATRN-119. In addition, Aprea Therapeutics has also developed a highly potent and selective WEE1 inhibitor, ATRN-W1051, with a differentiated structure and potentially preferable pharmacokinetic properties. In pre-clinical studies, ATRN-W1051 has demonstrated anti-proliferative activity against a variety of cancer cell lines and shown the potential to inhibit the growth of genetically-defined HGSOC tumors in xenograft models. Notably, the combination of these two agents is a potential treatment for women with CCNE1-amplified HGSOC.

"We are honored and grateful to receive this competitive award to support our scientific approach and compelling opportunities within our pipeline. This award validates our efforts to bring new and effective therapies to cancer patients carrying genetically defined cancers with high unmet medical needs," said Oren Gilad, Ph.D., President, and Chief Executive Officer of Aprea Therapeutics. "A growing body of scientific evidence provides exciting development opportunities for our ATR and WEE1 inhibitors, and the studies proposed in this grant have the potential to provide additional support in validating our findings and progressing these studies towards a clinical trial."

A portion of the work will be carried out at the laboratories of University of Pennsylvania Perelman School of Medicine researchers Drs. Fiona Simpkins, Professor of Obstetrics and Gynecology, and Eric Brown, Associate Professor of Cancer Biology.

This grant will support an evaluation of the in vivo and in vitro activity and tolerability of ATRN-119 and ATRN-W1051 using a library of cell lines and patient-derived xenograft models of HGSOC that express varying levels of CCNE1. These studies could potentially identify mechanistically relevant biomarkers of sensitivity to ATRN-W1051 and may inform future clinical trial protocols using ATRN-119 combination and ATRN-W1051 for the treatment of HGSOC.

Disclosure:

Dr. Simpkins is a member of the Aprea Therapeutics Scientific Advisory Board and affiliated with the University of Pennsylvania. Dr. Brown is a Scientific Consultant for Aprea Therapeutics and owns equity interest in the company in addition to serving on the Scientific Advisory Board.

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About Aprea Therapeutics, Inc.

Aprea Therapeutics, Inc. is a biopharmaceutical company headquartered in Doylestown, Pennsylvania, focused on developing and commercializing novel synthetic lethality-based cancer therapeutics targeting a critical pathway and some of the most central targets in DDR and cancer progression. The Company's lead program is ATRN-119, a clinical-stage small molecule ATR inhibitor being developed for solid tumor indications. The Company's WEE1inhibitor is being advanced to IND submission. 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 future stock price, the effect of the reverse stock split on stockholders and compliance with listing standards, 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 that involve risks, potential changes in circumstances, assumptions, and uncertainties. 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 risks related to the success and timing of our clinical trials or other studies, risks associated with the coronavirus pandemic and the other risks set forth in our filings 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 publicly update such forward-looking statements to reflect subsequent events or circumstances.

Source: Aprea Therapeutics, Inc.

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