Atea Pharmaceuticals Announces Publication of Data Highlighting AT-752's Potent In Vitro and In Vivo Activity Against Dengue and Other Flaviviruses

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- *In vitro and in vivo data demonstrate favorable safety and potency against multiple dengue virus serotypes supporting ongoing clinical development of AT-752*
- *Dengue is the fastest-spreading mosquito-borne viral disease with an estimated 400 million infections each year globally*

BOSTON, Aug. 24, 2021 (GLOBE NEWSWIRE) -- Atea Pharmaceuticals, Inc. (Nasdaq: AVIR) ("Atea"), a clinical-stage biopharmaceutical company, today announced the publication of data demonstrating the *in vitro* and *in vivo* activity of AT-752 against dengue virus infection, in the journal, *Antimicrobial Agents and Chemotherapy.* The article titled, "Evaluation of AT-752, a double prodrug of a guanosine nucleotide analog with *in vitro* and *in vivo* activity against dengue and other flaviviruses," can be accessed here. The published data demonstrate that AT-752 has potent *in vitro* activity against multiple dengue virus serotypes and other flaviviruses tested, and reduces viremia and improves survival in an animal model of dengue disease.

"Affecting over 100 countries, dengue fever is endemic and has quickly become the most prevalent mosquito-borne viral disease globally with incidence continuing to rise. Therapeutics to treat and prevent this debilitating and life-threatening disease are urgently needed. An oral, easily administered, direct-acting antiviral that can treat infections caused by the multiple serotypes of the dengue virus would be a significant advance," said Jean-Pierre Sommadossi, PhD, Chief Executive Officer and Founder of Atea Pharmaceuticals. "The encouraging *in vitro* and *in vivo* data published in this peer-reviewed journal strongly support clinical development to evaluate AT-752 for the potential treatment and prophylaxis of dengue fever."

AT-752, an oral direct-acting antiviral, targets the non-structural protein 5 (NS5) polymerase of dengue virus. The highly conserved nature of the dengue viral polymerase potentially allows for a single, selective agent, such as AT-752 to be active against all dengue serotypes. Additionally, the structure of AT-752, a double prodrug nucleotide analog, has been uniquely designed to enhance oral bioavailability and delivery of the active triphosphate to target tissues while providing a favorable safety profile.

Atea recently completed the single ascending dose (SAD) portion of a Phase 1a clinical trial of AT-752 and the multiple ascending dose portion is currently underway. Data from the SAD portion of the Phase 1a trial demonstrated that AT-752 was well tolerated (no serious adverse events or drug-related discontinuations) with mostly dose-proportional pharmacokinetics up to 1500 mg, the highest single oral dose tested. The Phase 1a trial is a randomized, double-blind, placebo-controlled study evaluating the safety, tolerability and pharmacokinetics of AT-752 in healthy volunteers. The study is expected to enroll up to 60 subjects and is designed to support dose selection for future clinical studies of AT-752 as a potential treatment and prophylaxis for dengue fever.

About Dengue Fever

Dengue virus is part of a family of single-stranded, positive-sense RNA viruses known as flaviviruses. These mosquito and tick-borne viruses can infect humans and are responsible for widespread morbidity and mortality worldwide, according to the United States Centers for Disease Control and Prevention (CDC).

Dengue virus is the most prevalent flavivirus, according to the CDC, with an estimated 400 million infections each year resulting in 100 million clinical manifestations including dengue hemorrhagic fever, or severe dengue, and approximately 25,000 deaths. In the last 20 years, there was an 8-fold increase of dengue cases reported to the World Health Organization (WHO). Large outbreaks, while occurring mostly in tropical and sub-tropical regions of the world including Africa, Southeast Asia and South America, have also occurred in parts of Europe, and dengue is now endemic in more than 100 countries/regions worldwide including the U.S. territories of Puerto Rico, the U.S. Virgin Islands and American Samoa. Dengue fever is also on the rise in the continental United States with over 5,000 cases, mostly travel-associated, reported between 2010 and 2017.

There are four antigenically distinct but closely related dengue virus serotypes (DENV1-4). Isolation of a fifth serotype (DENV-5) was reported in 2015 but has yet to be officially recognized. According to the WHO, recovery from infection is believed to provide lifelong immunity against the specific serotype that caused the infection. However, cross-immunity to other serotypes after recovery is only partial and transient. Furthermore, subsequent infection by other serotypes increases the risk of developing severe dengue through a process known as antibody-dependent enhancement (ADE), which, in turn, increases the risk of death.

About Atea Pharmaceuticals

Atea Pharmaceuticals is a clinical stage biopharmaceutical company focused on discovering, developing and commercializing oral therapies to address the unmet medical needs of patients with life-threatening viral diseases. Leveraging the Company's deep understanding of antiviral drug development, nucleos(t)ide chemistry, biology, biochemistry and virology, Atea has built a proprietary nucleotide prodrug platform to develop novel product candidates to treat single stranded ribonucleic acid, or ssRNA, viruses, which are a prevalent cause of severe viral diseases. Currently, Atea is focused on the development of orally-available, potent, and selective nucleotide prodrugs for difficult-to-treat, life-threatening viral infections, including severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19, dengue virus, hepatitis C virus (HCV) and respiratory syncytial virus (RSV). For more information, please visit www.ateapharma.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding our expectations surrounding the potential of our product candidate, AT-752. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our reported preclinical and initial phase 1 results of AT-752 to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements including future results from subsequent clinical studies of AT-752 and our ability to successfully develop AT-752 as a treatment for dengue. These and other important factors discussed under the caption “Risk Factors” in our most recent Quarterly Report on Form 10-Q, and our other filings with the SEC could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management’s estimates as of the date of this press release. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.

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