June 29, 2022

Achieve Life Sciences Announces Initiation of Phase 2 ORCA-V1 Clinical Trial Evaluating Cytisinicline for Nicotine e-cigarette Cessation

SEATTLE and VANCOUVER, British Columbia, June 29, 2022 (GLOBE NEWSWIRE) -- Achieve Life Sciences, Inc. (Nasdaq: ACHV), a late-stage pharmaceutical company committed to the global development and commercialization of cytisinicline for smoking cessation and nicotine addiction, today announced it has initiated screening of subjects for the ORCA-V1 Phase 2 clinical trial.

ORCA-V1 will evaluate the efficacy and safety of 3mg cytisinicline dosed 3 times daily compared to placebo in approximately 150 adult e-cigarette users at 5 clinical trial locations in the United States. Participants will be randomized to receive cytisinicline or placebo for 12 weeks in combination with standard cessation behavioral support. ORCA-V1 is being supported by the National Institute on Drug Abuse (NIDA) of the National Institutes of Health (NIH) through grant funding which was awarded in two phases totaling $2.8 million. During the first phase, Achieve's Investigational New Drug application for nicotine e-cigarette cessation was reviewed and accepted by the U.S. Food and Drug Administration (FDA) late last year.

"The initiation of the ORCA-V1 trial of cytisinicline in e-cigarette users is yet another example of honoring our commitment to deliver on key milestones and our dedication to helping the millions of people who desire to overcome their addiction to nicotine," stated John Bencich, Chief Executive Officer of Achieve. "We are appreciative of the partnership with NIDA and NIH that is enabling this important research to be conducted and to our clinical trial sites who are eager to begin enrolling participants."

In addition to the initiated ORCA-V1 trial, Achieve is evaluating smoking cessation of combustible cigarettes in its Phase 3 clinical development program. The ORCA-2 clinical trial, which was comprised of 810 adult smokers, announced positive topline results in April. Smokers who received cytisinicline in ORCA-2 were up to 8 times more likely to have quit smoking compared to those who received placebo. The ORCA-3 trial, the intended confirmatory Phase 3 trial required for regulatory submission of cytisinicline, is currently

enrolling smokers at 15 clinical trial locations in the United States. For additional information on Achieve or the cytisinicline development program, visit achievelifesciences.com or orcaprogram.com.

The planned research and clinical study discussed in this press release is supported by the National Institute on Drug Abuse (NIDA) of the National Institutes of Health (NIH) under Award Number 4R44DA054784-02. The content is the sole responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

About Achieve and Cytisinicline

Achieve's focus is to address the global smoking health and nicotine addiction epidemic through the development and commercialization of cytisinicline. Tobacco use is currently the leading cause of preventable death that is responsible for more than eight million deaths worldwide and nearly half a million deaths in the United States annually.[1,2] More than 87% of lung cancer deaths, 61% of all pulmonary disease deaths, and 32% of all deaths from coronary heart disease are attributable to smoking and exposure to secondhand smoke.[2]

In addition, there are nearly 11 million adults in the United States who use e-cigarettes, also known as vaping.[3] While nicotine e-cigarettes are thought to be less harmful than combustible cigarettes, they remain addictive and can deliver harmful chemicals which can cause lung injury or cardiovascular disease.[4] In 2021, e-cigarettes were the most commonly used tobacco product reported by 1.72 million high school students.[5] Research shows adolescents who have used e-cigarettes are seven times more likely to become smokers one year later compared to those who have never vaped.[6] Currently, there are no FDA-approved treatments indicated specifically as an aid to nicotine e-cigarette cessation.

Cytisinicline is a plant-based alkaloid with a high binding affinity to the nicotinic acetylcholine receptor. It is believed to aid in treating nicotine addiction for smoking and e-cigarette cessation by interacting with nicotine receptors in the brain, reducing the severity of withdrawal symptoms, and reducing the reward and satisfaction associated with nicotine products. Cytisinicline is an investigational product candidate being developed for treatment of nicotine addiction and has not been approved by the Food and Drug Administration for any indication in the United States. For more information on cytisinicline and Achieve visit www.achievelifesciences.com.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to, statements regarding the timing and nature of cytisinicline clinical development, data results and commercialization activities, the potential market size for cytisinicline, the potential benefits, safety and tolerability of cytisinicline, the ability to discover and develop new uses for cytisinicline, including but not limited to as an e-cigarette cessation product, the development and effectiveness of new treatments, and the intention to submit cytisinicline to the FDA for approval. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. Achieve may not actually achieve its plans or product development goals in a timely manner, if at all, or otherwise carry out its intentions or meet its expectations or projections disclosed in these forward-looking statements. These statements are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions that could cause actual results to differ materially from those described in the forward-looking statements, including, among others, the risk that cytisinicline may not demonstrate the hypothesized or expected

benefits; the risk that Achieve may not be able to obtain additional financing to fund the development of cytisinicline; the risk that cytisinicline will not receive regulatory approval or be successfully commercialized; the risk that new developments in the smoking cessation landscape require changes in business strategy or clinical development plans; the risk that Achieve's intellectual property may not be adequately protected; general business and economic conditions; risks related to the impact on our business of the Russian military action in *Ukraine*; risks related to the impact on our business of the COVID-19 pandemic or similar public health crises and the other factors described in the risk factors set forth in Achieve's filings with the Securities and Exchange Commission from time to time, including Achieve's Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q. Achieve undertakes no obligation to update the forward-looking statements contained herein or to reflect events or circumstances occurring after the date hereof, other than as may be required by applicable.

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Source: Achieve Life Sciences