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Achieve Announces Publication of the RAUORA Head-to-Head Non-Inferiority Clinical Trial Comparing Cytisinicline and Chantix(R) (varenicline) in Addiction

Subjects treated with cytisinicline were 55% more likely to quit smoking at 6 months and experienced significantly fewer side effects compared to those who received varenicline

SEATTLE, WA and VANCOUVER, BC / ACCESSWIRE / March 25, 2021 / Achieve Life Sciences, Inc. (NASDAQ:ACHV), a clinical-stage pharmaceutical company committed to the global development and commercialization of cytisinicline for smoking cessation and nicotine addiction, today announced online publication of the results from the Phase 3 RAUORA trial in the scientific journal *Addiction*. The RAUORA study was led by Dr. Natalie Walker, Associate Professor at the University of Auckland, and evaluated the effectiveness and safety of cytisinicline compared to varenicline (Chantix®) as a smoking cessation aid in 679 indigenous New Zealanders (Māori) or their extended family.

The published results indicate that cytisinicline met the pre-specified non-inferiority endpoint, and was trending towards superiority with an Absolute Risk Difference of +4.29 in favor of cytisinicline (95% CI -0.22 to 8.79), and a 55% improvement in quit rates at six months in favor of cytisinicline when compared to varenicline. A Bayesian analysis of the primary efficacy outcome is ongoing.

Additionally, statistically significant fewer overall adverse events (AEs) were reported in cytisinicline-treated subjects (Relative Risk 0.56, 95% CI 0.49 to 0.65, $p<0.001$) including a significantly lower rate of nausea when compared to subjects on varenicline. Notably, as participants were not blinded to study drug, more subjects refused to participate and withdrew consent when randomized to varenicline compared to subjects who were randomized to cytisinicline.

"These data add to the growing body of evidence in support of cytisinicline as a much-needed, potential new treatment alternative to existing smoking cessation therapies," said John Bencich, Chief Executive Officer of Achieve Life Sciences. "Many smokers refuse to

take current medications or stop treatment when they experience side effects which impedes their ability to quit successfully. We believe the tolerability profile of cytisinicline, as shown in trials such as RAUORA, may help smokers remain on treatment and lead to better outcomes for those battling nicotine addiction."

To access the RAUORA publication, visit https://onlinelibrary.wiley.com/doi/10.1111/add.15489.

Achieve is currently enrolling smokers in the 750-subject, Phase 3 ORCA-2 study of cytisinicline at 15 sites in the U.S. For more information on cytisinicline and the ORCA-2 study, visit www.achievelifesciences.com or www.orca-2.com.

About the RAUORA Study

The RAUORA study was conducted by the researchers at the University of Auckland, in conjunction with the Health Economics Research Group (HERG) at Brunel University London, and Lakes District Health Board. Currently, 3 in 10 Māori smoke, three times more than non-Māori, and supporting this population to quit smoking is a priority of the New Zealand government. The study compared cytisinicline administered on a schedule of 25 days of downward dosing titration followed by twice-daily dosing for a total of 12 weeks with varenicline administered on a schedule of 7 days of upward titration followed by twice-daily dosing for a total of 12 weeks. The primary endpoint was continuous abstinence from smoking for 6 months post-quit date.

In total, 1,105 Māori or whānau (Māori extended family members) expressed interest in participating in the study and a total of 679 were randomized to receive either cytisinicline or varenicline. The average age of participants in the trial was 43 years and approximately 70% of the participants were women. Contact was sought over a period of six to 12 months to collect data and support their quit journey.

About Achieve and 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 U.S. 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]

Achieve's focus is to address the global smoking health and nicotine addiction epidemic through the development and commercialization of cytisinicline.

Cytisinicline is a plant-based alkaloid with a high binding affinity to the nicotinic acetylcholine receptor. It is believed to aid in smoking cessation by interacting with nicotine receptors in the brain by reducing the severity of nicotine withdrawal symptoms and by reducing the reward and satisfaction associated with smoking.

Cytisinicline is an investigational product candidate being developed for treatment of nicotine addiction, and has not been approved by the FDA for any indication in the U.S.

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 activities, the potential market size and market acceptance for cytisinicline, the potential benefits of cytisinicline and the development and effectiveness of new treatments. 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; 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 law.

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References

[1] World Health Organization. WHO Report on the Global Tobacco Epidemic, 2019. Geneva: World Health Organization, 2017.
[2] U.S. Department of Health and Human Services. The Health Consequences of Smoking - 50 Years of Progress. A Report of the Surgeon General, 2014.

SOURCE: Achieve Life Sciences, Inc.