Media Release

ENA Respiratory and the COPD Foundation Partner to Develop Pan-Antiviral Nasal Spray

-- INNA-051 is being developed to stimulate innate immunity and reduce the incidence and severity of respiratory viral infections, such as COVID-19, rhinovirus, or influenza in populations at-risk of complications that include individuals with COPD.

Sydney, Australia, and Miami, Florida. – 23 February 2022 – ENA Respiratory, a clinical-stage pharmaceutical company developing INNA-051, a first-in-class broad-spectrum antiviral innate immunomodulator for pre- and post-exposure prophylaxis of respiratory viral infections, including COVID-19 in populations at-risk of complications, and the COPD Foundation, a not-for-profit organization focused on improving the lives of those affected by COPD, bronchiectasis, and nontuberculous mycobacterial (NTM) lung disease, announced a partnership to develop INNA-051 in people with chronic lung diseases.

In a Phase 1 study, INNA-051 was found to be well-tolerated, and the company expects to release additional data this year. Phase 2 studies to confirm the pan-antiviral potential of INNA-51 are expected to begin soon and include a randomised COVID-19 post-exposure antiviral prophylaxis study and an influenza challenge pre-exposure prophylaxis study.

Respiratory virus infections, especially rhinovirus (the common cold), respiratory syncytial virus (RSV), and influenza, are related to worsening of chronic lung conditions, including chronic obstructive pulmonary disease (COPD) and asthma. Detection of a viral pathogen has been associated with poor outcomes, including worsening symptoms, hospitalization, and a high likelihood of hospital readmission. There is a clear unmet medical need for an intervention that can significantly reduce the incidence of respiratory virus associated with acute exacerbations. With activity independent of the specific viral pathogen and a targeted safety profile compatible with seasonal use, INNA-051 has a profile intended to address this need.

“Millions of people are impacted by chronic lung diseases and are at a greater risk of complications from common respiratory illnesses. Our patient community surveys highlight an urgent need for treatments that prevent flare-ups triggered by viral infections, now more than ever. This fast-acting nasal spray could be used before or shortly after virus exposure to help the body respond faster and reduce the chances of complications. We are excited to partner with ENA Respiratory to advance the development of INNA-051,” said Ruth Tal-Singer, Ph.D., COPD Foundation President & Chief Scientific Officer. “Together, we will leverage our current improved understanding of the role of the lung microbiome and viruses in poor outcomes in COPD, including infectious exacerbations,” she added.

The partnership adds INNA-051 to the COPD Foundation’s COPD360Net® pipeline and will utilize its global network of accredited centres, scientific expertise, and patient investigators to optimize and accelerate the clinical development program. The expertise of the COPD Foundation and the shared commitment of the Foundation and ENA Respiratory to patient-centred drug development will allow the INNA-051 clinical program to progress with maximum efficiency.

"People with chronic lung diseases continue to be impacted not just by the COVID-19 pandemic but by the resurgence of other common respiratory viruses. There continues to be a need for convenient treatments that can be used over the winter months or after known short-term exposure to a respiratory virus, to reduce the incidence of acute exacerbations of patients with chronic lung diseases. We are thrilled to partner with the COPD Foundation to support the clinical development of INNA-051 in chronic lung diseases. They bring significant scientific and medical expertise in addition to providing access to patient feedback on the adoption of INNA-051 by this patient population," said Christophe Demaison, Ph.D., co-founder and CEO of ENA Respiratory.

ENDS

Notes to Editors

If you would like to arrange an interview, please contact:

- Glenn Silver, Finn Partners, +1 973 818 8198, glenn.silver@finnpartners.com
- Carol Johnson, COPD Foundation, +1 786 749 7104, mediarelations@copdfoundation.org

About ENA Respiratory and INNA-051

ENA Respiratory is aiming to transform the prevention of respiratory viral infections in populations at-risk of complications. The company is based in Melbourne and Sydney, Australia and it has secured a Series A investment from Brandon Capital Partners' managed funds, the Minderoo Foundation, and Uniseed.

INNA-051 is a potent innate immune TLR2/6 agonist. It is being developed for intranasal delivery to target the primary entry site of viral respiratory infections as most respiratory viruses, including SARS-CoV-2 and influenza, initially infect and replicate in nasal mucosa epithelial cells. Fast-acting and inducing a durable biologic response supporting weekly administration, INNA-051 works by recruiting innate immune cells and priming epithelial cells of the nasal mucosa to respond more quickly to infections, rapidly eliminating viruses and other pathogens before they spread throughout the body. INNA-051 and close analogues have been shown in preclinical studies to be effective against multiple respiratory viruses, including SARS-CoV-2, influenza (H1N1 and seasonal H3N2), and rhinovirus.

Key features of INNA-051 intranasal administration include limited minimal or no systemic bioavailability, minimal or no systemic pro-inflammatory cytokine release, no direct type I interferon upregulation which is known to be associated with fever in humans, durable immune response supporting weekly administration, and compatibility with vaccine and intranasal corticosteroids.

For more information, please visit https://enarespiratory.com

About The COPD Foundation and COPD360Net

The COPD Foundation is a not-for-profit organization established to improve the lives of people with COPD, bronchiectasis, and nontuberculous mycobacterial (NTM) lung disease through initiatives that expand services and speed innovations to make treatment more effective and affordable. The Foundation does this through scientific research, education, advocacy, and awareness to prevent disease, slow progression, and ultimately find a cure. The COPD Foundation's Digital Health and

Therapeutics Accelerator Network (COPD360Net) supports the development and adoption of novel digital health tools, medical devices, and therapeutics that treat COPD, bronchiectasis, and NTM lung disease. This network consists of COPD Foundation accredited centers; experts in COPD and related lung diseases; relevant subject matter experts, including primary care physicians; clinical trial designers; health economists; and psychosocial experts. For more information, visit copdfoundation.org, or follow us on Twitter and LinkedIn.

About COPD

Chronic Obstructive Pulmonary Disease (COPD) is a term used to describe chronic lung diseases, including emphysema and chronic bronchitis. It impacts about 250 million people worldwide and is currently the third leading cause of death from chronic diseases accounting for over 3 million fatalities in 2019. COPD is characterized by breathlessness and tiredness, and chronic cough with or without mucus in some people. COPD exacerbation is a flare-up or episode when breathing gets worse than usual and may continue to get worse without extra treatment. Exacerbation/flare-up symptoms include worsening cough, shortness of breath, or increased mucus in the airways, often caused by a lung infection. Exacerbations may result in faster disease progression, loss of lung function, and worsening health status. The U.S. Centers for Disease Control (CDC) estimated the cost of COPD care in 2020 to be $49 Billion per year and reported 16.4 million days of work lost because of COPD in 2010. Between 2001 and 2012, acute exacerbations of COPD (AECOPD) were associated with over 1.5 million emergency department visits and 700,000 hospitalizations in the United States, with estimated costs of $11.9 billion related to emergency room visits and hospitalization in 2006.