Another development milestone as Synairgen announce results of in vitro studies which demonstrates antiviral activity against two SARS-CoV-2 variants

2 June 2021

tranScrip is delighted with the results from Synairgen's in vitro studies which shows potent antiviral activity of SNG001 against two SARS-CoV-2 variants; B.1.1.7 ("UK or "Kent") and B.1.351 ("South African").

Synairgen is developing an inhaled formulation of interferon beta (SNG001) as a broad-spectrum antiviral for the treatment of severe viral lung infections, currently in COVID-19 trials in hospitalised patients. The first patient was dosed in its international Phase III trial (SG018) in January 2021, with initial trial results expected in H2 2021.

tranScrip has provided a range of specialist support services to Synairgen for over 10 years and has been involved in the COVID-19 programme since the beginning.

Richard Marsden, CEO of Synairgen, commented: *"As expected, these data confirm that SNG001 is a broad-spectrum antiviral product, now also demonstrating applicability against SARS-CoV-2 variants. The SARS-CoV-2 virus suppresses the production of the essential antiviral protein IFN-beta to evade the host immune system; it is therefore to be expected that when IFN-beta is reintroduced into an infection experiment that the host cells are able to repel the virus."*

Dr Marcin Mankowski, Deputy Managing Partner of tranScrip, commented: *"The recent results generated by Synairgen are extremely encouraging and validate the virus/variant agnostic therapeutic approach to COVID-19. tranScrip's team will continue supporting Synairgen in bringing this important treatment to patients in need as soon as possible."*

For full results of the study, please visit Synairgen plc Press Release.

For further enquiries, please contact:
Dr Marcin Mankowski, Deputy Managing Partner
marcin.mankowski@transcrip-partners.com
0118 963 7846

Notes for Editors
About tranScrip

tranScrip is an innovative UK based provider of specialist professional services, supporting the drug development and lifecycle management activities of pharmaceutical and biotechnology companies. The Business deploys multi-disciplinary project teams to deliver both strategic leadership and operational support

to clients covering strategic development, medical, regulatory, drug safety and commercial services across a multitude of therapy areas.

tranScrip's approach benefits clients by maximising opportunities, reducing risk and creating value which continues to result in high quality, long-term relationships, with contracts often lasting many years. Synairgen is one of a number of tranScrip's clients with COVID 19 programmes.

COVID-19

COVID-19, caused by the SARS-CoV-2 virus, is a global threat and there is an urgent need to assess new treatments to prevent and effectively treat the severe lower respiratory tract illness that can occur with this disease. Older people and those with co-morbidities such as heart and lung complications or diabetes are at greatest risk of developing severe or fatal disease.

The COVID-19 trial

Synairgen's clinical trial in COVID-19 patients (SG018) is a randomised placebo-controlled trial being conducted in approximately 20 countries enrolling a total of 610 COVID-19 patients who require supplemental oxygen. After reporting the results for the primary and key secondary endpoints of the trial, enrolled patients will continue to be assessed for long-COVID-19 symptoms.

Interferon beta (IFN-beta) applicability to COVID-19

Interferon beta is a naturally occurring protein, which orchestrates the body's antiviral responses. There is evidence that deficiency in IFN-beta production by the lung could explain the enhanced susceptibility in 'at-risk' patient groups to developing severe lower respiratory tract (lung) disease during respiratory viral infections. Furthermore, viruses, including coronaviruses such as SARS-CoV-2 and MERS-CoV, have evolved mechanisms which suppress endogenous IFN-beta production, thereby helping the virus evade the innate immune system. The addition of exogenous IFN-beta before or during viral infection of lung cells either prevents or greatly diminishes cell damage and viral replication, respectively. Synairgen's SNG001 is a formulation of IFN-beta-1a for direct delivery to the lungs via nebulisation. It is pH neutral, and is free of mannitol, arginine and human serum albumin, making it suitable for inhaled delivery direct to the site of action. Two Phase II clinical trials in asthma showed that inhaled SNG001 treatment activated antiviral pathways in the lung, along with improving lung function in patients with a respiratory viral infection. The Company's global Phase III trial (SG018) evaluating SNG001 for the treatment of hospitalised COVID-19 patients is ongoing.

Reference:
Synairgen plc Press Release