

Inhalation Sciences



PRESS RELEASE

Published: 23-11-2020

Inhalation Sciences and Astra Zeneca publish paper from landmark study using Preciselnhale® in large animals

Inhalation Sciences (ISAB) and Astra Zeneca have published results from a landmark study into the pharmacokinetics of inhaled substances administered by Preciselnhale® to pigs, whose respiratory tracts closely resemble that of humans. CEO Manoush Masarrat “This is of major significance as we move forward towards clinical validation of Preciselnhale®.”

Preciselnhale® delivered consistent, well-characterized aerosols to the deep lung regions of the animals. The study is the first ever, according to the research team, to demonstrate the use of the Preciselnhale® system for extracting drug aerosols from clinical dry powder inhalers and then dosing with precision to apneic, mechanically ventilated pigs.

The study, headed by Dr Pär Ewing and Mr Steven Oag, is part of a long-running research partnership between ISAB and R&D scientists at Astra Zeneca’s research facility in Gothenburg Sweden.

The paper, titled *Airway Epithelial Lining Fluid and Plasma Pharmacokinetics of Inhaled Fluticasone Propionate and Salmeterol Xinafoate in Mechanically Ventilated Pigs* is published in the *Journal of Aerosol Medicine and Pulmonary Drug Delivery*. It is co-authored by Per Gerde, ISAB’s CSO and Assoc Professor at Karolinska Institutet, together with Dr Ewing and an extensive team of Astra Zeneca specialists in the areas of drug metabolism and pharmacokinetics, late-stage respiratory and immunology development, biopharmaceuticals, clinical pharmacology and safety sciences, inhalation product development and advanced drug delivery.

ISAB CEO Manoush Masarrat: “This is yet another milestone for ISAB and has a major strategic, scientific and commercial importance for us. As we move towards the beginning of our planned clinical validation of Preciselnhale®, the strong results and excellent performance of Preciselnhale® in this study shows its unique capability as a precision aerosol R&D system that can generate leading data and results all the way from preclinical to clinical studies.”

For more information about Inhalation Sciences, please contact:

Manoush Masarrat, CEO

E-mail: Manoush.masarrat@inhalation.se

Mobile: +46 (0)73 628 9153

About Inhalation Sciences Sweden AB (publ)

Inhalation Sciences Sweden AB (publ) develops and commercializes world-leading instruments for research into inhalation. The company's patented lab instrument, PreciseInhale®, enables researchers to characterize, with high precision, how aerosols and small particles impact our lungs, and so our health, when we inhale them.