

HpVac reports positive effects of its lead compound HpVac-R13 in a murine model of allergic asthma following oral administration

- Study results indicate beneficial effects on airway hyperresponsiveness, remodelling and inflammation

Geneva, Switzerland, March 27, 2023 – HpVac SA, a company developing novel preventive and therapeutic first-line therapies against allergic and inflammatory diseases, today announced positive results of its lead compound HpVac-R13 on airway hyperresponsiveness and inflammation in a murine model of allergic asthma.

At present, there is no cure for allergic asthma. The most common way to prevent attacks is to either avoid exposure to the allergen or undergo desensitization, a tedious and often ineffective procedure. In severe cases, patients may receive antibodies against multiple targets. HpVac's therapeutic concept is based on the observation that certain components of the human gut microbiome confer protection against various diseases. The Company's lead compound HpVac-R13 is a recombinant version of a naturally occurring immunomodulatory protein and is uniquely associated with strong epidemiologic evidence of protecting humans against asthma and other allergic diseases.

The new study of orally administered HpVac-R13 in a murine model of acute allergic asthma, using mice allergic to house dust mite (HDM), reveals that treatment with HpVac-R13 prevents the detrimental effects of HDM challenge on lung function in a dose-dependent manner and prevents lung airway remodelling. These results confirm the previous results obtained by i.p. injection.

"These are very pleasing and exciting results," said Dr. Jeffrey Shaw, CEO of HpVac. "They show for the first time that HpVac is active by oral administration, confirm the effect of HpVac-R13 in preventing asthma attacks, and reveal that HpVac-R13 also inhibits the remodelling of respiratory airways. Simply put, sensitized mice that received our molecule had improved lung function as compared to untreated mice and became much more resistant to asthmatic attacks. This is a very important outcome, and we will further study the background of this effect while proceeding with our future clinical plans."

"The unexpectedly important effects on airway remodelling suggest that future studies aimed at evaluating the potential of our compound in other fibrotic diseases and on epithelial barrier function should be considered," said Dr. Joana Vitte, CSO of HpVac.