ziccum

ZICCUM AB engages Emerging Viral Diseases unit of Aix-Marseille University to develop dry viruses and vaccines, strengthening Ziccum's future IP portfolio

Lund, 19th December 2019. The Emerging Virus Unit (Unité des Virus Émergents) is one of the world's leading virology laboratories. Ziccum has now engaged UVE to use Ziccum's technology to develop and formulate vaccines and viruses as dry powders, boosting global access to them and making them significantly faster and cheaper to transport. This collaboration will significantly strengthen Ziccum's IP portfolio.

"Underimmunisation has never been more urgent" says Ziccum CEO Göran Conradson "this decision by *Unité des virus émergents (UVE)* to collaborate and develop the use of our technology to see if it can make virus and vaccine materials easier and more cost-effective to transport worldwide is far-sighted and timely. We believe it could ultimately play a part in making vaccines more globally accessible."

UVE is one of the world's leading virology labs and together with its partners they prepare and ship reference materials for vaccine development, academic research and diagnosis worldwide. Ziccum has engaged UVE in the company's development of new dry versions of vaccines in the highly advanced laboratories (BSL3) available at UVE.

During an initial 18 month period UVE will formulate and test a wide range of viruses and vaccines as dry powders with an ultimate goal to make them transportable without any need for cold chain refrigeration.

"This gives us much prized access to UVE's world-leading, high-safety BSL3 labs. That is a rare asset and will secure data and IP for Ziccum", continues Göran Conradson.

Since 2014 UVE has also coordinated the European Commission sponsored European Vaccine Archive, which in 2020 will be a global consortium with 46 partner and associated partner labs across 21 countries. UVE will use LaminarPace to carry out stability testing, temperature analyses and more on the new dry-form viruses and vaccines.

Professor Remi Charrel, scientific head at UVE: "Ziccum technology has the potential to significantly improve the storage and shipping of virus samples, two key steps to promoting the distribution of high-quality biological material to support research in virology."

Ziccum CEO Göran Conradson: "The contract for the engagement with AMU has already been signed, with implementation pending a successful outcome to Ziccum's ZICC TO 1 subscription option. A new range of tough, dry powder virus and vaccine

materials that is faster and more cost-effective to transport could be a key part of solving the underimmunisation crisis. We're very excited to move this project forward."

For more information about Ziccum, please contact:

Göran Conradson: CEO Ziccum AB E-mail: conradson@ziccum.com Mob: +46 709 61 55 99

About Ziccum

Ziccum AB (publ) develops new patented formulations of biological drugs where sensitivity to temperature differences, especially during transportation, currently limits medical and so commercial potential. The company's patented technology, LaminarPace, develops dry powder formulations of drugs and vaccines that currently only exist in liquid form. By doing so Ziccum can increase the availability of drugs and vaccines in existing markets—and open up new ones.