



PRESS RELEASE

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Ziccum AB (publ) Year-end report January 1 – December 31, 2019

LUND, SWEDEN – 13 February 2020. Ziccum AB (publ); Ziccum is well on its way to delivering what we promised when listing our share - to start three projects during the year to develop stable, dry vaccine formulations as well as biological drugs.

CEO Statement

Ziccum has a unique, patented technology - LaminarPace™ - that enables us to manufacture biological drugs in dry form. In principle, dry form is always sought after in the development of new drugs and the benefits are many. It increases the stability of the product and thus its service life, it facilitates the entire transport and supply chain from factory to patient and it enables distribution of medicines to new places where, for example, refrigeration and freezer storage is a major challenge. This means that patients who do not have treatment or treat themselves in their homes can have access to safer and more effective vaccines and medicines.

In 2019, we filed two patent applications, one on a very important component in the development of new vaccines - Adenovirus, and on viruses in the same family as the measles virus. As a result, several industrial players have taken note of our technology. We have also announced that we have entered into agreements with two of these companies for the purpose of evaluating LaminarPace™ in combination with their particular projects. In both collaborative projects, we have delivered test materials dried in our LaminarPace technology and at present, each counterparty is working on evaluating these materials in their own models and methods. When this is clear, we look forward to discussing the next step with each company. Our hope is that this will happen in the first half of this year. Further patent applications and industrial collaborations continue to be the cornerstones of our business.

We continue to work in-depth with a consortium of several important players - both industrial and academic - including Aix-Marseille University, France, which has the opportunity to work on virtually all vaccines and pathogenic viruses on its own premises. There is a common strong interest in developing temperature-stable formulations together, which gives us further opportunities. This new partnership will provide us with many benefits as well as a significant extension of our resources. During Q1, we will deliver a system to their high-security laboratory to further develop new temperature-stable formulations. Work developing LaminarPace™ systems adapted for large-scale industrial production of biological drugs and vaccines is

proceeding according to plan. This will continue to be a very important project in 2020, better positioning us for future partnership discussions.

In 2020, we will develop our commercial work by collaborating with various policy groups that are working to improve the uptake of vaccinations around the world, so increasing awareness of the importance of our method. European manufacturing vaccine companies know us well and in 2020 we will expand our work with overseas manufacturers.

In conclusion, we are well on our way to delivering on everything we promised when listing our company – we have three pilot studies ongoing within the year to develop stable, dry vaccine formulations and biological drugs. We now look forward to maintaining a continued high rate of development of our competitive offering, where we can generate significant benefits for patients as well as create value for our shareholders.

Oct-Dec 2019

- Net sales SEK 0,0 (35)
- Operating income SEK -3,344 thousand (-1,734)
- Earnings per share before and after dilution SEK -0.56 (-0.32)

Jan-Dec 2019

- Net sales SEK 0,0 (227)
- Operating profit SEK -8,721 thousand (-4,210)
- Earnings per share before and after dilution SEK -1.45 (-1.27)

Significant events during fourth quarter 2019

In early October, an agreement was concluded for evaluation with a global pharmaceutical and vaccine company, where together we will evaluate Ziccum's technology to generate stable and temperature-stable vaccines.

A new patent application for a new temperature-stable formulation of virus in the same family as measles was filed in December 2019.

Collaboration with a world-leading virology group in Marseille was started.

We have initiated work on impact work by international policy groups on vaccine use.

As of the balance sheet date (which was the last subscription day), outstanding warrants had been subscribed for 92.6 percent of the total number of outstanding warrants, which corresponds to approximately SEK 13.9 million.

Significant events during the reporting period (Jan-Dec) 2019

Ziccum reported on January 10, 2019 that the company filed a patent application for Adenovirus with dry and temperature-stable formulation which meets WHO's requirements for CTC status.

The dry formulation (the "powder") generated by Ziccum's technology in LaminarPace™ dissolves rapidly upon the addition of sterile water, after which vaccination or treatment can be performed.

Final liquidity from EU support for FORMBECC was received during the second quarter amounting to approximately SEK 315 thousand.

Ziccum has been granted SEK 200,000 in research grants from Vinnova. The research grant will be used to evaluate Ziccum's method for developing dry preparations of vaccines.

Ziccum has hired additional staff with expertise in the formulation of vaccines.

We received a special invitation to attend the Global Vaccine Summit in Brussels where several important contacts were made.

Ziccum, on behalf of a vaccine development company, has conducted a feasibility study on the development of stable vaccines. The work is underway and the samples have been sent back for further evaluation. In the second collaboration, we have delivered dried material. Respective collaborator are evaluating the material with their own methods and models. Results from both collaborations are expected to come in the first half of 2020.

A second patent application has been filed for a group of viruses belonging to the measles virus family.

We have initiated collaboration with a French virology group at Aix-Marseille University. A LaminarPace system will be placed in their BSL3 (BioSafety Level 3) facility during the first quarter, for further development of new formulations. The group is also a co-ordinator of a large EU-funded global collaboration on the distribution of various virus strains for research, development and as reference material in diagnostics and for vaccine companies, EVAg, European Virus Archive Global.

We have begun the impact work of international policy groups to improve the uptake of vaccinations. The European vaccine companies know us well.

Significant events after the reporting period

The issue proceeds relating to warrants amounted to approximately SEK 13.9 million, which were added to the company in January 2020. The issue was registered by the Swedish Companies Registration Office on 2020-01-14.

Otherwise, no significant events have occurred since the reporting period.

Lund, February 13, 2020

Göran Conradson

CEO

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About Ziccum AB

Ziccum AB develops and commercializes the patented spray-drying instrument LaminarPace®. LaminarPace is an innovative, CE-labelled instrument that dries small amounts of drug substances with very low losses. The vast majority of pharmaceutical projects prefer substances in dry powder form, as it increases their stability, durability and simplifies logistics and transportation. LaminarPace is also unique in its ability to handle temperature-sensitive materials such as proteins and peptides.

The information above was provided by Ziccum AB (publ) through the above contact person, for publication on 08.00 February 13, 2020.