INTERIM REPORT 1 JANUARY - 30 SEPTEMBER 2022

Q3 2022

- The result for the quarter amounted to -6 599 kSEK (-5 043 kSEK)
- Cash flow for the quarter amounted to -7 054 kSEK (- 6 414 kSEK)
- Cash and cash equivalents at the end of the quarter amounted to 29 593 kSEK (19 564 kSEK)

Summary Financial Highlights kSEK	July-Sep 2022	July-Sep 2021	Jan-Sep 2022	Jan-Sep 2021	Jan-Dec 2021
Net revenue	0	0	0	0	0
Operating result	-6,674	-5,045	-20,888	-14,643	-21,117
Result	-6,599	-5,043	-20,767	-14,686	-21,136
Balance sheet total	42,582	29,348	42,582	29,348	39,591
Cash flow	-7,054	-6,141	17,320	-14,056	-21,347
Cash and cash equivalents	29,593	19,564	29,593	19,564	12,273
Equity ratio %	87%	82%	87%	82%	75%
Data per share **SEK**					
Number of shares at the end of the period	13,806,142	9,806,200	13,806,142	9,806,200	11,006,056
Result per share before and after dilution*	-0.48	-0.51	-1.50	-1.51	-2.17
Cash flow per share	-0.52	-0.63	1.27	-1.45	-2.19
Equity per share	2.69	2.46	2.69	2.46	2.70

* Dilution effects is not calculated when the result is negative

Significant events during Q3 (July-Sep)

- On July 19, Ziccum published the selected partner for the development of its crucial new nebulizer component for the LaminarPace system. The chosen partner TEKCELEO is an innovative mechatronic manufacturer with advanced knowledge of nebulizers. The component is central to the advanced drying capabilities and scaleup of Ziccum's LaminarPace system.
- On July 21, it was announced that Ziccum together with the Zurich University of Applied Sciences (ZHAW) are applying for funding from the Eurostars funding body for a joint project that will develop the 3D modelling stage of LaminarPace. The project aims to strengthen, support and accelerate the development of LaminarPace – offering high-value insights into its unique particle properties, and accelerating and optimizing industrialization.
- On August 2, Ziccum informed about a reorganisation aiming to facilitate and accelerate its new strategic focus on key projects and vaccine platforms. As part of the reorganization, Senior Formulation Specialist Fabrice Rose was appointed Scientific Director. The reorganization was implemented on August 1, 2022.
- Ziccum announced on September 1 that the company will be intensifying its partnering and networking dialogues by attending major industry events across Europe.
- On September 14, Ziccum and Zurich University of Applied Sciences's School of Engineering (ZHAW) did submit a joint application for Eurostars funding. The proposed project will develop 3D modelling, and ultimately a Digital Twin, of LaminarPace (LAPA) that will accelerate development and scale-up and promote tech transfer, partnering and ultimately sales.

- On September 23, Ziccum received results from evaluation study with leading Pharmaceutical corporation, analyzing LaminarPace's ability to dry four test substances. Data demonstrated excellent results on thermostability, positive results on particle appearance but significant loss of infectivity, requiring further development. The client has paused assessment of LaminarPace on the current vaccine platform, but will consider the technology in regard to other vaccine platforms, where dry formulation could be a higher priority.
- On September 27, It was announced that Ziccum has reopened its application process for CEPI's Call for Proposals from companies developing innovative technologies to improve vaccine thermostability. Ziccum will submit an Expression of Interest with a new partner – a well-established, innovative biotechnology company.
- During the third quarter CEO Ann Gidner has bought 35,000 shares in Ziccum. In addition, the Chairman of the Board Fredrik Sjövall bought 40,000 shares in the Company.

Significant events during Q1-Q2 (Jan-June)

- At the Extraordinary General Meeting held on January 18, in addition to approving the Board's proposal, it was decided to increase the limit on the number of shares and the size of the share capital in the Articles of Association, to enable the issue of the remaining 933 362 units in the private placement.
- On January 18, an additional 2 800 086 shares and 1 866 724 warrants were registered, and all shares and warrants in the private placement are thus registered.
- The last payments from the directed share issue were received by the company in January and February 2022, a total of 40 mSEK was added to the company after deduction of issue costs.
- Ziccum announced on February 7 that it has become a member of the United Nations Global Compact, the world's largest corporate sustainability initiative.
- On February 22, it was announced that Göran Conradson was terminated from his position as CEO. The company's CFO, Frida Hjelmberg, will be acting CEO for the time being.
- On March 3, the Board released an update on strategy, goals and priorities. The company's strategy for entering into commercial agreements with industrial players has been and is clearly defined. It is based on four key priority activities:

1. Drive an active business development agenda that proactively prepares for collaboration with existing and potential partners. This is partly to offer the opportunity to evaluate specific projects in combination with Ziccum's technology, and partly to understand the requirements placed on the technology before a decision on a license agreement can be made.
2. Generate laboratory data that manifests and confirms the technology's capacity to dry different types of vaccines, so-called proof of concept.
3. Develop the company's technology to adapt its functionality, capacity and quality to the licensees' required specifications.
4. Develop conceptual plans for how Ziccum's drying technology can be adapted to the commercial scale and integrated into a commercial production environment.

With a new CEO, the Board's goal is to increase the pace of, above all, business development work – with the goal of entering into more industrial collaborations in order to evaluate LaminarPace and advance our existing collaborations into negotiations on commercial terms and license agreements.

- Ziccum AB has significantly expanded its lab facilities and capabilities, particularly in the area of mRNA/LNP. Strategic investments include a new cell lab and a system for manufacturing and evaluating dry formulations of mRNA/LNP materials. On June 22, the company informed that the installation of the new cell lab was completed, enabling in-house in vitro research.
- On June 3, it was announced that Ziccum has extended an ongoing pilot evaluation study agreement with a leading pharmaceutical corporation following the completion of the latest stage of the project.
- On May 9 Ann Gidner took office as new CEO. Ann has 25+ years of experience from Life Science management internationally, with a significant track record in strategic development, focused leadship, deal making and sales growth.
- Ziccum has been elected onto the Technical Activities Committee of the US National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL). NIIMBL, co-funded by the US Department of Commerce, funds and initiates a wide range of public-private research projects throughout the US.
- On May 6, the Board of Ziccum published the decision to officially change the company's language to English for all external communications.
- The current LAPA system is the fourth generation in development. On April 27, Ziccum informed about the selected key targeted technology developments of the LaminarPace system - some underway, and some recently completed:

1. New powder collector - Ziccum has now installed a new sealed, contained collection unit that enables the inhouse study of a wider range of test substances. The new unit increases safety, reduces humidity and enables quicker, more efficient collection of drier formulations.

2. New nitrogen usage - Ziccum has now introduced Nitrogen gas (N2) into the drying column to replace air. N2 is a highly efficient remover of moisture. The first nitrogen-based generation of LAPA is installed and has performed well in tests.

3. New nebulizer - The LAPA system's nebulizer feature is a key component in optimizing the system's capacity, reproducibility and reliability.

4. New membrane - Intensive work is currently underway in optimizing the membrane for future GMP compatibility – examining its porosity, mounting and materials for industrial setting.

- On April 25, a strategic sharpening was announced informing the market that Ziccum is now targeting three key vaccine platforms in its research and development work through 2022 and 2023 **–** driven by input from external collaborations and new internal technology capabilities.

1. Viral vector platform using Adenovirus - Four major Covid-19 vaccines already use adenovirus vaccine vectors as a platform. The platform enables efficient gene transduction and research is ongoing in a wide range of indications. Ziccum has worked extensively with adenovirus and submitted a patent application in January 2019 for a temperature-stable, dry formulation of Adenovirus.

2. Subunit vaccine (adjuvanted) platform - This platform is also being used in major Covid-19 vaccine candidates. Instead of using the whole pathogen, protein-based adjuvant vaccines use a defined protein antigen from the pathogen which can be recognized by the body's immune system to provoke an immune response. Protein-based vaccines have been successfully developed over recent decades to treat diseases from diphtheria to tetanus.

3. mRNA/LNP vaccine platform - Generating data on dry-formulated mRNA/LNP materials is a key strategic priority for Ziccum. Covid-19 has highlighted the efficacy of mRNA/LNP as a vaccine platform enormously.

- During the second quarter CEO Ann Gidner has bought 15,000 shares in Ziccum. In addition, the Board members Andreas Pettersson Rohman also bought 39,333 shares and Fredrik Sjövall 10,000 shares in the Company.

Significant events after the reporting period

- Ziccum announced proof of successful nebulization and drying of vaccine lipid nanoparticles (LNP) in its in-house mRNA project. This was carried out using LaminarPace, the company's ambient drying technology. LNP is the preferred drug delivery component in today's mRNA Covid-19 vaccines. The study resulted in a defined knowledge-space, defining the best operating conditions, and key read-out parameters were encapsulation efficiency, yield and particle size. The trials were repeated for confirmation.

CEO statement

Strategic focus reinforcement

We are rapidly going forward in Ziccum, implementing the new focus and executing on its actions, generating results. Just after quarter closing, we had the much-anticipated and important proof of successful drying of vaccine LNP particles, setting the mRNA/LNP offering center-stage – a major step for us.

Strategic focus

We have progressed significantly in our strategic development, where a number of factors assessed have helped defining our market targeting: the ground-breaking new technology, the value proposition, the small volume applicability and the regulatory pathway all point to a focus on high value, delicate, next-generation mRNA vaccines and RNA therapeutics as the top priority. We should apply our technology where it will bring the most value. This guidance is now directing efforts on all fronts.

Business development and Partnering

We have ambitious business development as a top priority, to build a broad pipeline of opportunities. Participating at Nordic Life Science Days and the World Vaccine Congress we had good meeting schedules, and were rewarded with serious interest from Pharma, Biotech and vaccine manufacturing industry – also clearly confirming the high-value strategic focus. We are currently going into secrecy agreements with a number of companies to take dialogues further.

Partnering in Pharma industry can be a lengthy process, and there are always some projects closing, so we are delighted to have many new dialogues established. The pandemic awareness and intensive efforts in vaccine development globally certainly are fuelling interest for new technology such as ours. Furthermore, we have commissioned a market study with mRNA target projects from a qualified US biopharma licensing bureau.

Technology development and Feasibility studies

Internally, the technology development program involves having a customized, top performing nebulizer rapidly developed, plus progress in membrane development and more. These steps are ensuring we are meeting our technology selling points of gentle and efficient processing in an optimized manner. Apart from developing the LaminarPace performance, we are running feasibility studies, nicely filling the new capacity installed last quarter.

The internal trials on LNP particles for mRNA have been pursued with great intensity during the quarter. It is indeed rewarding to see the outcome, where the drying step has given good read-outs in terms of encapsulation, yield and particle preservation. This is a great confirmation of the applicability of LaminarPace, giving a clear path forward for the continued development, verifying that sufficient activity is preserved.

For the existing collaboration getting read-outs end September, results were mixed. Seeing that the technology is promising but will need further development, the partner may consider a more delicate platform – very much in line with our own strategic conclusions to apply the technology to the highest value segments like mRNA/LNP.

3D- Modelling and Soft funding

Starting up the 3D-modelling is important– the LaminarPace development and scale-out can be accelerated and

significantly improved, ensuring optimal design. We are happy to have submitted the application for a Eurostars grant covering this scope, jointly with our new top-notch Swiss engineering partner. We also agreed with a key European Biotech partner to build an attractive case for the CEPI grant for Thermostable vaccines, basing our case on mRNA/LNPs.

Company structure

The new organization was implemented on August 1st, bringing clarity on responsibilities and setting a strong focus. The sharpened setup is giving good savings as we eliminate consultant expenditure, both avoiding unnecessary efforts and changing roles into employment. I am delighted to welcome the new member Tony to our staff this quarter.

I want to express my gratitude to the Ziccum team for fantastic efforts, stepping up to the new strategy and taking activities forward on all fronts. Also, we are most happy for excellent support from our collaboration partners, consultants and owners.

Lund, October 27, 2022

Ann Gidner, CEO

Expected future development

The company's overall objective is to enter into one or more license agreements to industrialize and commercialize the technology in collaboration with one or more major pharmaceutical companies.

The path to licensing agreements goes through evaluation agreements where LaminarPace functionality and capacity are evaluated together with a partner. If successful, the ambition is to continue to a negotiation regarding a license agreement. Primarily for a specific project or vaccine.

A prerequisite for being a relevant and attractive licensing partner is to be able to describe what an industrial version of LaminarPace can look like, and make it probable that the technology is suitable for upscaling and GMP production. Therefore, Ziccum conducts its own development projects where important components in LaminarPace are developed and adapted to industrial requirements.

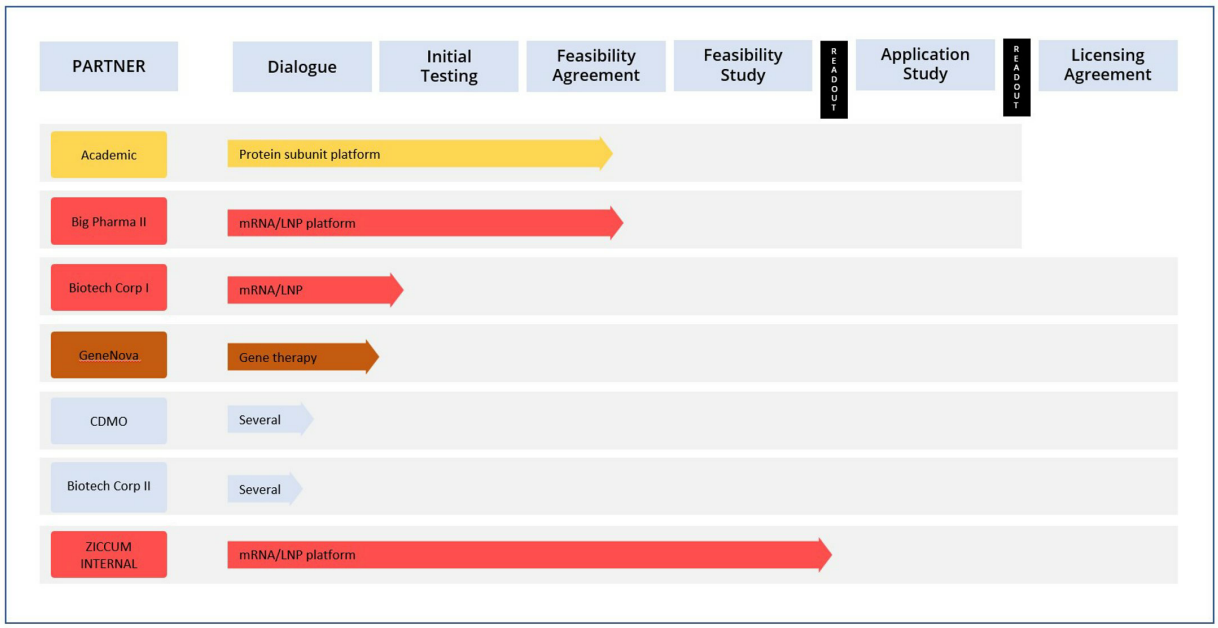
A third priority area is applications for external and non-dilutive funding for further development of the technology. Ziccum actively monitors announcements that suit the Company's area of operation and technical phase.

Project Portfolio overview

The Ziccum pipeline of external projects is depicted in a portfolio overview. This gives a general representation of the key steps towards the desired commercialization by entering into license agreements, licensing the LaminarPace technology for specific applications, and the current status of each project. The actual progress in a specific project may proceed via alternative or additional steps, and the timeline varies greatly depending on the resulting read-outs and the counterpart preferences.

Pharmaceutical development in general is subject to very strict confidentiality, and certain collaborations are given without partner name publication, until name disclosure is possible.

The company also pursues earlier dialogues with other counterparts in on-going business development efforts.



Project portfolio overview as of 30 Sep, 2022

**The text in the arrow represents the technology platform*