INTERIM REPORT

1 JANUARY - 31 MARCH 2023

Q1 2023

- The result for the quarter amounted to -4 872 kSEK (-6 285 kSEK)
- Cash flow for the quarter amounted to -3 928 kSEK (31 961 kSEK)
- Cash and cash equivalents at the end of the quarter amounted to 19 023 kSEK (44 234 kSEK)

Summary Financial Highlights kSEK	Jan-March 2023	Jan-March 2022	Jan-Dec 2022
Net revenue	0	0	0
Operating result	-4,936	-6,340	-28,955
Result for the period	-4,872	-6,285	-28,788
Balance sheet total	28,915	58,295	33,285
Cash flow for the period	-3,928	31,961	10,678
Cash and cash equivalents	19,023	44,234	22,951
Equity ratio %	85%	88%	88%
Data per share **SEK**			
Number of shares at the end of the period	13,806,142	13,806,142	13,806,142
Result per share before and after dilution*	-0.35	-0.46	-2.09
Cash flow per share	-0.28	2.41	0.78
Equity per share	1.78	3.73	2.12

** Dilution effects is not calculated when the result is negative*

Q1
Jan-March
Significant events

- On January 18, Ziccum announced that the company on 24 - 26 January would attend the mRNA-based Therapeutics Summit in Berlin, the leading European event for mRNA innovation expertise in Europe. At the event, CEO Ann Gidner presented LaminarPace with a presentation titled *LaminarPace: a novel unit operation successfully drying mRNA/LNP by mass transfer* to an audience of senior Pharmaceutical industry decision makers, scientists and key opinion leaders.
- On January 23, Ziccum announced that the company had submitted its Expression of Interest application for CEPI's Call for Proposals for funding of innovations that improve vaccine thermostability. The Coalition for Epidemic Preparedness (CEPI), in 2022 invited players developing innovative technologies to improve vaccine thermostability to apply for a funding opportunity.
- On March 10, Ziccum entered into a partnership with the FinTech platform eucaps.com, aiming to offer existing shareholders a new forum for news and dialogue whilst also increasing visibility to new investors beyond Sweden. A new portal dedicated to Ziccum was launched on the platform, containing new content on the company, reports and financials to be regularly updated, plus a secure chat forum for investors, to strengthen the resources and dialogue Ziccum offers to investors.
- On March 17, Ziccum announced that the company on 20 - 22 March would attend the BIO-Europe Spring 2023 Conference in Basel, Switzerland. The event attracts pharma and biopharma corporations from across the globe. The latest updates from Ziccum technology development were presented at meetings at the event.
- On March 20, Ziccum announced an update of the latest stage of its ongoing in-house mRNA/LNP project, last reported in Oct, 2022. In the previous stage, an mRNA-like molecule in LNP formulation was successfully nebulized and dried. The current stage has proceeded to nebulization and drying using active mRNA. Results from this stage confirm and strengthen findings from the previous stage: encapsulation efficiency (how much mRNA is kept inside the particles) and particle size preservation (keeping the right size of LNP particles, without aggregation) were excellent. Furthermore, mRNA activity testing has now been initiated, using a cell-based *in vitro* assay. Initial results are promising, with a commercially viable level of mRNA activity demonstrated in the material, after LaminarPace drying and reconstitution to liquid. Ziccum's inhouse mRNA project aims to explore and evaluate the capabilities of its unique mass transfer drying technology, LaminarPace, in drying RNA materials to a thermostable dry powder form that could ultimately be more easily handled and transported by the industry, as well as prove suitable for novel administration routes such as inhalation.
- During the first quarter CEO Ann Gidner bought 16,000 shares in Ziccum.

Significant events after the reporting period

- No significant events have occurred after the reporting period.

CEO statement

Following up with a clear road ahead

Gathering the team for a Ziccum Day on March 31, nicely wrapping up the quarter, we could jointly conclude that a lot of major improvements and top priority plans now are in place, and we can spend our efforts more efficiently focusing on execution and delivery in a number of areas.

Positioning Ziccum in a booming field

The sharpened strategy with selected vaccine platforms and the next-generation mRNA vaccines and RNA therapeutics as top priority gives a clear road ahead for the Ziccum efforts. In January we presented Ziccum at the European mRNA Summit in Berlin, alongside world-leading Big Pharma and mRNA vaccine providers, and we felt that this visibility was very rewarding to position the company as an international mRNA player, in addition to our on-going successful relationship building. Our presence at the Berlin Summit and BIO-Europe Spring in Basel enabled good follow-up in existing dialogues as well as new interesting contacts to develop. We are pleased to have a good spread in dialogues, over Big Pharma as well as Biotech, European as well as US companies, and projects on several platforms. A key focus now is to get to signing of paid feasibility studies.

Internal Trials giving clear confirmations for mRNA/LNP

A truly significant milestone was achieved during the quarter, when we were able to confirm excellent drying results with actual messenger RNA in lipid nanoparticle formulation. Previous trials with a model molecule led the way to these trials on mRNA, which is a most demanding challenge in turning liquid biomolecules into dry powder. It is a great confirmation of how the gentle drying at ambient temperature allows such a delicate and complex molecule structure to keep its shape, size and structure. Confirming that the resulting mRNA also retains its genetic effect is of course crucial – and on-going trials in a cell-based model are confirming good activity, viable for commercial applications. These confirmations are indeed fuelling the industry interest for our technology.

Taking LaminarPace to real applicability in industry

Potential partners in the industry are keen to understand the long-term capabilities. Thanks to developing an ambitious plan for our 3D-modelling project LaPaSim last quarter, and the resulting full Eurostars funding awarded, we are able to move straight ahead with important fine-tuning and scaling of the technology. In February we gathered the Swiss and Swedish joint team for a Project kick-off and secured a high quality foundation in the project. Both sides are now generating results in real life versus digitally, to calibrate the model, and final design of the LaminarPace product outtake has started. The next step of scaling out for long term industrialization is not too far away.

We also keep moving forward with the final design of equipment components, like previously reported, with excellent industry partners. There will be new intellectual property generated for Ziccum thanks to these efforts.

Communication and team work

On the Investor relations side, we were pleased to take part as pioneers in the launch of a new European platform for trading and information. We are hoping this will nicely complement other channels for Ziccum information.

During the quarter we also implemented some further refinement in work processes, and it is a pleasure to have the high caliber Ziccum team taking great strides in our projects. I am happy to thank collaboration partners, consultants and owners as well, for continued support and fruitful dialogues.

Lund, April 26, 2023

Ann Gidner, CEO

Expected future development

The company's overall objective is to enter into 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. Ziccum is carrying out intensive work on developing 3D modelling, and ultimately a Digital Twin, of LaminarPace in partnership with the ICP Institute of Computational Physics team at the Zurich University of Applied Sciences's School of Engineering (ZHAW.) The 3D modelling is being used to optimize LaminarPace design, exploring optimal capacity loads and increasing the repeatability of outcomes. It will be a valuable enabler of tech transfer and integration into existing pharmaceutical production chains.

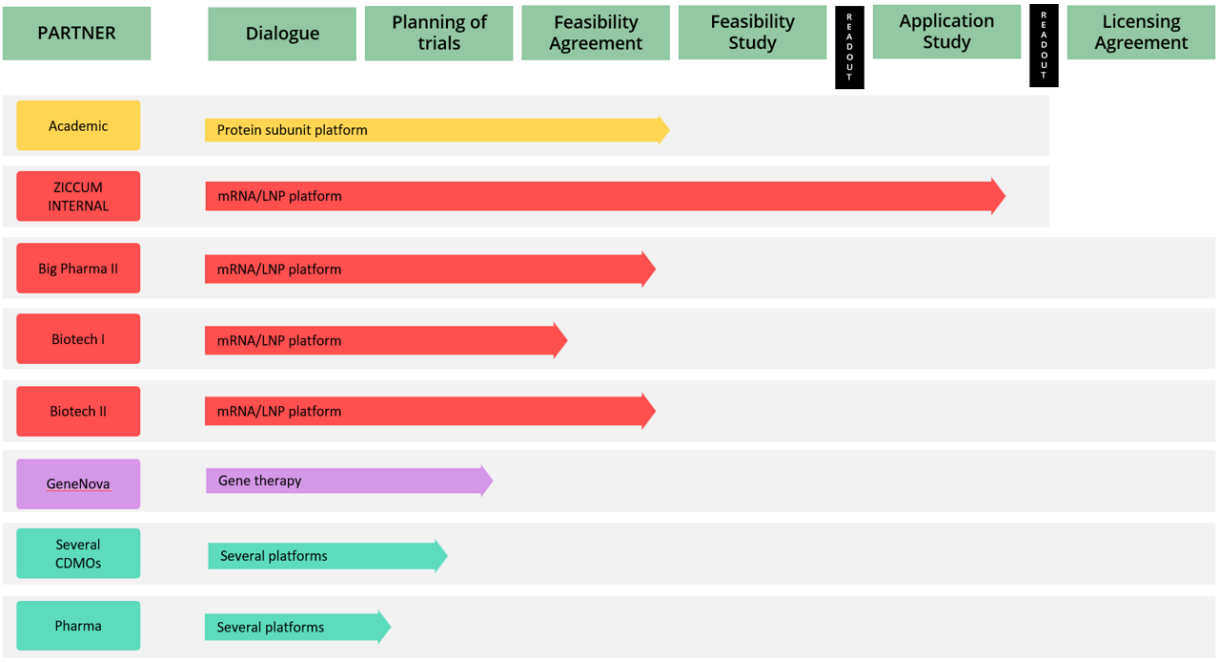
Another priority area is applications for external and non-dilutive funding for further development of the technology. Ziccum actively monitors announcements that suit the Company's area of operation and technical phase.

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 31 March, 2023

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