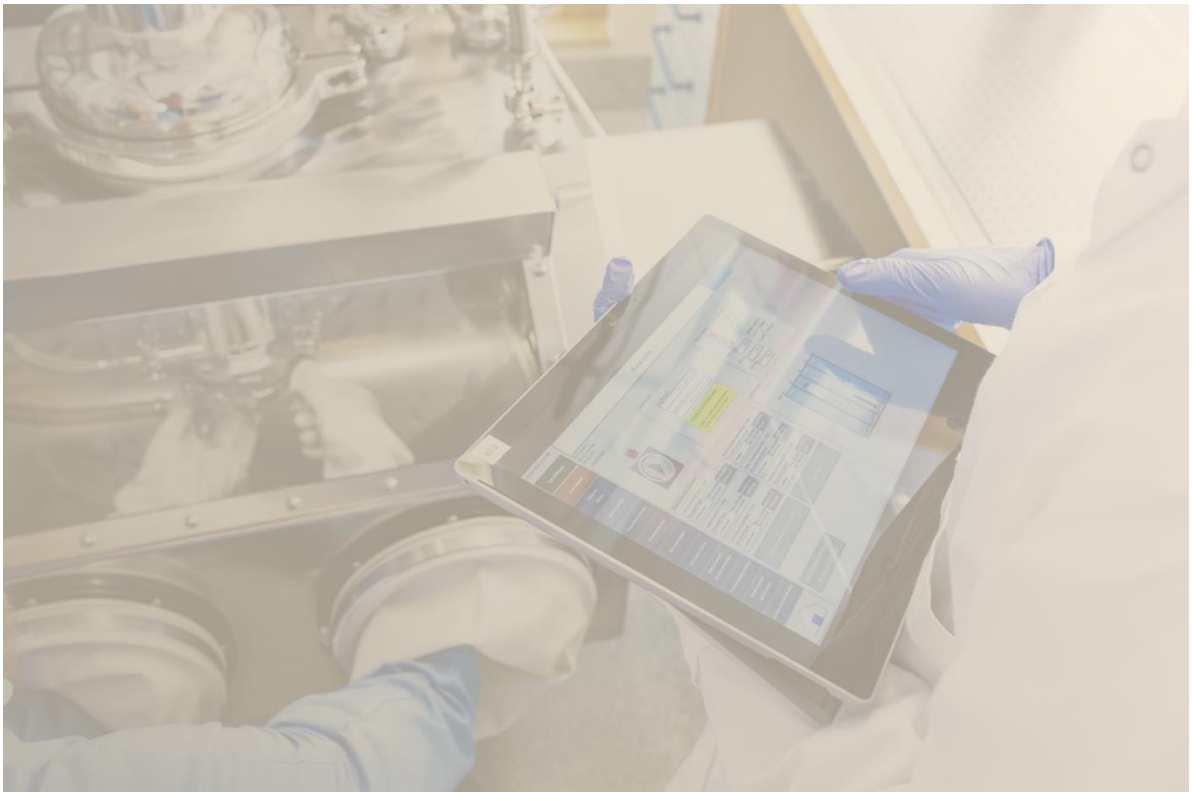


Ziccum AB (publ)

Interim report

1 January – 30 September 2024



***"Sharpening our focus and executing intensively
on new abilities"***

Ann Gidner, CEO

Financial highlights

July – September financial summary

- Operating income: kSEK 571 (2,329)
- Result for the quarter: kSEK -5,887 (-3,882)
- Earnings per share: SEK -0.37 (-0.28)
- Cash flow for the quarter: kSEK -2,985 (-4,793)
- Cash at the end of the reporting period: kSEK 1,107 (9,790)

Financial summary

kSEK	Jul-Sep 2024	Jul-Sep 2023	Jan-Sep 2024	Jan-Sep 2023	Jan-Dec 2023
Operating income	571	2,329	4,186	4,743	6,318
Operating result	-5,924	-3,899	-17,563	-13,857	-21,560
Result	-5,887	-3,882	-17,491	-13,720	-21,412
Balance sheet total	9,848	21,764	9,948	21,764	14,972
Cash flow	-2,985	-4,793	-1,887	-13,161	-19,956
Cash and cash equivalents	1,107	9,790	1,107	9,790	2,994
Equity ratio %	26	73	26	73	57
Per share data (SEK)					
Number of shares	15,958,775	13,806,142	15,958,775	13,806,142	13,806,142
Result per share before and after dilution*	-0.37	-0.28	-1.10	-0.99	-1.55
Cash flow per share	-0.19	-0.35	-0.12	-0.95	-1.45
Equity per share	0.16	1.51	0.16	1.51	0.62

* Dilution effect is not calculated when the result is negative

Significant events after Q3 2024

- **Ziccum intends to resolve on a rights issue of approximately SEK 30 million and raises a bridge loan**

On October 10, The Board of Directors of Ziccum AB (publ) ("Ziccum" or the "Company") announced its intention to carry out a new issue of shares and warrants ("Units") with pre-emption rights for the Company's shareholders (the "Rights Issue"). The Board of Directors intends to publish a notice to an extraordinary general meeting planned to be held on 8 November 2024, to grant the Board of Directors an authorization to resolve on the Rights Issue and for the adoption of new articles of association. Each Unit consists of one (1) share and one (1) warrant free of charge of series TO 6 ("Warrants"). Upon full subscription in the Rights issue, the Company will initially receive approximately SEK 30 million in issue proceeds before issue costs. In connection with the Rights Issue, the Company has received subscription and guarantee undertakings amounting up to a total of approximately SEK 11.6 million, corresponding up to approximately 39 percent of the Rights Issue. The issue proceeds will primarily be used to further the technological development of LaminarPace®. To secure the Company's liquidity needs until the completion of the Rights Issue, the Company has secured a SEK 6.5 million bridge loan from VIFC Nordic AB and Dariush Hosseinian.

Significant events during Q3 2024

- **Ziccum investigates significant increase in mRNA activity achieved with LaminarPace®**
On August 16, Ziccum AB (publ) announced important findings on an increase in mRNA drug activity after LaminarPace® treatment and the investigations of the potential mechanisms behind this effect, including the development of a new, unique analytical method to generate further proof for this effect.
- **Ziccum announces trademarking LaminarPace in the USA**
On 16 September, Ziccum announced that the appellation of its proprietary technology, LaminarPace, has been officially registered with the United States Patent and Trademark Office (USPTO) as a trademark since 23 July 2024. Obtaining trademark protection in the US, a market of primary importance to Ziccum, is a

significant step in light of Ziccum's growing industry presence, recognition as a commercial partner of choice, and Ziccum's continuous scientific progress.

- **Ziccum announces outcome of exercise of warrants of series TO5**
On September 17, Ziccum AB (publ) ("Ziccum" or the "Company") announces the outcome of the exercise of warrants of series TO5 (the "Warrants"), which were issued in connection with the Company's rights issue of units that ended in February 2024. In total, 23,880 Warrants, corresponding to approximately 2.53 percent of the number of outstanding Warrants, were exercised for subscription of 23,880 shares at an exercise price of SEK 4.91 per share. Through the exercise of the Warrants, Ziccum will receive approximately SEK 117,000 in issue proceeds before issue costs.
- **Ziccum announces change of Certified Adviser to Vator Securities**
On September 26, Ziccum announced that the company has retained Vator Securities AB ("Vator Securities") to serve as its Certified Adviser. The appointment of Vator Securities as Ziccum's Certified Adviser (CA) shall come into effect on September 27, 2024.

Significant events during Q2 2024

- **Ziccum strengthens and streamlines business and finance functions**
On April 3, the company announced that it is reorganizing its administrative functions, due to the increased amount of business dialogues and to perform financial reporting in a more streamlined fashion. Two new roles of Business & Project Manager and a business-oriented, junior Financial Manager are introduced while the CFO role is eliminated.
- **Ziccum CEO to present at first annual event for Biopharma/Biotech Disruptors hosted by major US bank in New York City**
On April 10, the company announced that on Tuesday May 14th, in New York City, Ziccum CEO Ann Gidner will present at the first event on high-value biotech and biopharma disruptor technologies to be hosted by CapitalOne, one of the US' largest bank corporations. She will present as part of an expert panel regarding mRNA and gene therapeutics.

- **Ziccum contracts RFR Solutions for GMP manufacturing in next phase of technology scale-out**

On April 26, the company announced that in addition to its existing network of high expertise suppliers and consultants, Ziccum has signed a long-term agreement with the GMP equipment specialist RFR Solutions, for the next phase in the industrialization and scale-out of the LaminarPace® equipment.

- **Ziccum AB strengthens patent portfolio with three solid data PCT applications according to expanded IP strategy**

On April 30, the company announced that they have filed three PCT with ample and significant data covering years of equipment development and refinement, process parameter knowledge gained, plus key biopharmaceutical formulation expertise established. These various perspectives provide multi-layered protection to the company's unique drying technology LaminarPace®.

- **Ziccum partners with Dagens Industri for Investor Relations program**

On May 28, the company announced that they partner with Dagens Industri, the largest Nordic business paper, to improve shareholders' access to news updates and raise broader awareness of its continuous scientific and commercial progress.

- **Exercise of employee stock options of series LTI 2021:1 at Ziccum AB (publ)**

On June 3, the company announced on 27 April 2021, the Annual General Meeting of Ziccum AB (publ) ("Ziccum" or the "Company") resolved on a directed issue of not more than 46,000 employee stock options of series LTI 2021:1 (the "Stock Options") to certain employees and consultants in the Company. Today, Ziccum announces that 14,819 warrants of series 2021/2024 (the "Warrants"), related to LTI 2021:1, have been exercised for subscription of 23,709 new shares in the Company.

- **Ziccum reports on developments in the portfolio of industry partner projects**

On June 11, the company announced that Ziccum is continuously engaged in business discussions with potential industrial partners. The status of Ziccum's project portfolio is presented quarterly in the company interim reports. There are currently further updates to report.

- **Ziccum signs Evaluation agreement with ReCode Therapeutics for LaminarPace® mRNA study**

On June 19, Ziccum AB signed an Evaluation

Agreement with ReCode Therapeutics, Inc. (ReCode), a US clinical-stage genetic medicines company using tissue-specific delivery to power the next wave of mRNA and gene correction therapeutics, for evaluation of LaminarPace® enabling dry powder forms of ReCode's proprietary therapeutic modalities.

- **Ziccum calls for a second investment tranche in accordance with its financing agreement with GCF**

On June 25, the board of directors of Ziccum AB (publ) ("Ziccum" or the "Company") called for a second investment tranche in accordance with the previously communicated financing agreement between the Company and Global Corporate Finance ("GCF"), and in connection therewith resolved to carry out a directed share issue.

Significant events during Q1 2024

- **Successful outcomes of LaminarPace® Feasibility study with Biotech partner**

On January 10, the company announced that, together with its Biotech Corporation collaboration partner, it has reviewed the outcomes of the LaminarPace®. Feasibility study of mRNA/LNP materials under the agreement signed on May 9th, 2023. The study was very successful, and both parties confirmed consistent, positive readouts in the Study's major parameters.

- **Financing secured through directed share issue and rights issue**

On January 22, the company announced that it has carried out a directed share issue of 622,371 shares of approximately MSEK 4.2 to the American professional investor Global Corporate Finance (GCF). The Directed New Share Issue is part of a long-term financing arrangement with GCF under which Ziccum has the unilateral right to call for additional investments from GCF, in exchange for newly issued shares, totaling approximately MSEK 28 over the next thirty months.

The Board of Directors of Ziccum has also, based on the existing authorization from the Annual General Meeting, decided to carry out a Rights Issue of units of a maximum of MSEK 10.4.

Considering the Directed New Share Issue, and provided that the Rights Issue is fully subscribed, Ziccum will receive initial proceeds totaling approximately MSEK 13.5.

- **Ziccum has proven excellent mRNA activity in animal study with LaminarPace® material**

On January 31, the company announced that it has performed an animal study, confirming excellent genetic activity of mRNA/LNP materials treated by

LaminarPace®. The in-vivo data confirms the ability of Ziccum's LaminarPace® technology to transform delicate mRNA/LNP liquid solution into stable dry powder form, now proving the preserved mRNA activity also in animal testing. Assessing the mRNA effect in animal trials is a significant step for Ziccum.

- **Ziccum's CEO Ann Gidner in Fireside Chat on mRNA development hosted by US Force Family Office**

On February 12, the company announced that based on the growing reputation that Ziccum is building in the international pharmaceutical industry, Ziccum CEO Ann Gidner has taken part in a recorded Fireside Chat reviewing the mRNA arena, its tremendous growth, and the shortcomings of the RNA/LNP technology which can be addressed by treatment with the Ziccum technology LaminarPace®.

- **Ziccum announces outcome in rights issue**

On February 16, the company announced the outcome of the rights issue of units, consisting of shares and warrants, which ended on 14 February 2024 (the "Rights Issue"). The Rights Issue has been subscribed to a total of approximately 61.5 percent, of which approximately 58.6 percent was subscribed with unit rights and approximately 2.9 percent was subscribed without unit rights. Through the Rights Issue, Ziccum thus receives approximately MSEK 6.4 before issuing costs.

- **Ziccum reports significant progress in 3D-modelling project with model completion**

On March 1, the company announced that Ziccum AB and project partner Zurich institute of Applied Sciences (ZHAW) have made a milestone review of the LaminarPace® simulation (LaPaSim) project progress and findings. The complex, dynamic model digitally replicating the LaminarPace® operation has been created and validated against comprehensive data sets created in physical trial runs and is now reaching a stage close to full completion. Ziccum can now perform trial runs in the 3D simulation environment, enabling the generation of vast amounts of data and in-depth understanding of optimal parameters and scale-out.

- **Ziccum inhalable mRNA/LNP project confirms excellent properties obtained by LaminarPace®**

On March 14, the company announced that it has generated very good findings in the first stages of its collaborative project to engineer inhalable mRNA/LNP together with the University of Copenhagen. The results demonstrate that LaminarPace® successfully produces inhalable particles with special, desirable properties. The project will continue with in-vivo studies comparing inhalation versus injection.

CEO statement

Sharpening our focus and executing intensively on new abilities

Based on the generation of strong, extensive data with LaminarPace for mRNA in lipid formulations, we have validated an excellent position for this top development target. With such clear results for this most fragile entity, we have a solid position to address all types of biopharmaceuticals with LaminarPace.

We have updated our strategic focus accordingly, to address biological therapeutics as well as vaccines. In this large field we zoom in on the complex, fragile RNAs, plus protein-based drugs and vaccines. The *therapeutic* applications of the revolutionary mRNA technology are advancing fast, and this offers perfect timing to get new technology introduced in early stages of drug development. Drug projects, so called therapies, are also a good fit with LaminarPace capacity. This focus on the highest possible value for Ziccum, is complemented with a continued focus for new and better *vaccines*.

Proving LaminarPace for mRNA/LNP – even making inhalation possible

After proving excellent mRNA activity, both in partnered client studies and in our first animal trials, we are currently progressing with a more specialized animal study - the testing of inhaled mRNA/LNP. This is the sharpest edge of LaminarPace performance; no other technology has created inhalable mRNA/LNP so far.

In addition to the on-going project, engineering inhalable mRNA/LNP together with world-leading expertise, where the animal trials are just being completed, Ziccum has been invited to a new collaboration. A leading European institution was considering inhaled mRNA/LNP impossible - until seeing Ziccum present. A large international consortium is now in the works, to develop several mucosal applications of mRNA/LNP. All such applications require dry powder drug forms – which may be enabled by Ziccum technology. We look forward to announcing this when formalized.

For the topic of increased mRNA activity, the interesting work to understand the cellular mechanisms behind it is continuing, and we are preparing to add further patent protection for the valuable findings currently being generated.

Adding more partner projects for key clients

The project execution for ReCode Therapeutics with a specific mRNA/LNP therapeutic entity is just completed at Ziccum's side. Resulting materials have been shipped to the client for assessment. As the potential benefits of dry powder forms of mRNA/LNP are significant for Recode, this client has asked Ziccum to present two more project offers – to ensure we evaluate the important potential. We are eager to look further into this.

Just after the quarter closing, we were happy to welcome a significant vaccine developer (Biotech Corp V) for a site visit in Lund, further assessing a collaboration and visiting our pilot facility. It is important to keep building the pipeline of dialogues. We are scheduling partnering meetings at the upcoming BIO-Europe conference for existing and new dialogues.

Executing on all the development projects, building intellectual property

The execution of Masterplan projects is continuously intense. In the recent period, the hardworking pilot team has generated LaminarPace materials for animal studies, process optimization work, nebulizer tests and the investigation of mRNA activity. This high capacity load is making it important to be careful about our client projects in parallel, selecting opportunities for the best near term and long term outcome.

The new expertise partnerships for optimizing the Ziccum-specific equipment components are rewarding, with good delivery of results while keeping strict budgets. The updated plan and new partner for the continuous processing project has enabled good savings on external costs. We will have a keen focus on this step in the Master plan in the quarter to come, and the 3D-modelling is a vital component.

The protection of immaterial rights is progressing, with an internal workshop for strategic planning held this quarter to ensure the best possible management. The international PCT patent families are taken forward and we are preparing for a next patent application based on new data.

Ensuring our solid progress ahead

To ensure the company's financial foundation for continued development plans, the board of directors decided to propose a rights issue during fourth quarter to best serve Ziccum value and shareholder interests. In the current stock market climate it is not an easy feat, but initial proceedings already have generated good interest and secured new investors. We know we are building fantastic company value. Ziccum has generated solid proof for the disruptive technology possibilities, addressing the highest value market segment, and is pursuing collaborations with world-leading partners. We have the most interesting journey to take forward.

I want to extend my warmest gratitude to everyone involved in lots of enjoyable efforts – the team, our clients and partners, our owners and new investors, thank you!

Lund, October 29th, 2024

Ann Gidner



mRNA Activity increase potential with LaminarPace®

In Ziccum's Master Plan work, several different lipid nanoparticle (LNP) formulations for mRNA have been tested for optimization during spring 2024. For certain lipid formulations a special effect has been observed, where the potency of the mRNA is not only preserved, but significantly increased after LaminarPace® treatment. The effect is studied by measuring protein expression in living cells treated with the mRNA samples.

The studies so far suggest that material produced with the LaminarPace® technology yields nanoparticles with certain structural properties that may be highly advantageous for mRNA uptake and translation. To understand the mechanism underlying the high potency of LaminarPace®-produced material, Ziccum has developed a specific, proprietary analytical method to study nanoparticle (mRNA/LNP) trafficking from the cellular uptake to protein expression.

This new analytical tool is now applied for continued investigation of the increase mechanism, with the aim of creating a clear explanation for the effect taking place.

It should be noted that the current effect is noted directly after LaminarPace® processing, while the long-term effects remain to be studied. Consequently, further stability testing is required.

The industrial value of increased mRNA activity as a consequence of LaminarPace® processing can potentially be significant for several reasons.

- **Cost:** If this increase in effectiveness can be translated into lower mRNA drug and vaccine doses, the consumption of very expensive mRNA substances can be reduced.
- **Dose barrier:** The current LNP formulations which have enabled vaccines and therapies based on mRNA have a limitation regarding mRNA content. With increased activity through LaminarPace® processing, it may be possible to break these barriers and create more efficient new treatments.

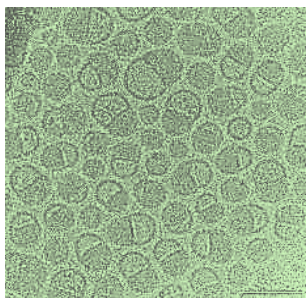


Figure 1: Cryogenic TEM microscopy picture of LaminarPace®-dried material

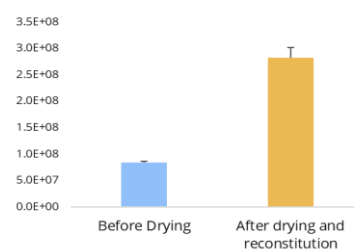


Figure 2: Protein expression by mRNA before and after LaminarPace® treatment

Ziccum at a glance

Ziccum is developing LaminarPace®, a unique formulation and drying technology for biopharmaceuticals and vaccines - based on mass transfer, not heat transfer.

The technology is offered by licensing to vaccine and biologics developers and manufacturers in the global pharmaceutical industry. By reducing drying stress to the active ingredient, in combination with specific formulation knowledge, LaminarPace® uniquely enables particle-engineered, thermostable dry powder biopharmaceuticals which can be easily handled and transported and are highly suitable for novel administration routes. The technology has been successfully applied to mRNA, peptides, proteins, antibodies, lipids and enzymes as well as excipients and adjuvants, and is well suited for industrial applications.

Value creation by LaminarPace®

Conversion of delicate biopharmaceuticals from liquid to solid state creates robust and easy-to-handle powders with high-quality properties, accounting for significant value creation potential not only by limiting costs, but also by creating entirely new avenues for revenue generation.

• Thermostability

Fragile biopharmaceuticals that require cryogenic handling can instead be handled at room or refrigerator temperature, resulting in very significant cost savings. Facilitated shipping and storage prevents the spoilage of otherwise perfectly viable vaccines or biologics and eliminates the need for excessively large-scale manufacturing.

• Sustainability

Avoiding complicated and energy-intensive cryogenic handling drastically reduces the carbon footprint of pharmaceutical products or vaccine campaigns.

• Product Yield

A gentler manufacturing process reduces production losses and ensures higher yields already in production.

• Operational expenses

LaminarPace® also reduces production costs significantly compared to alternative drying methods; it uses less energy as well as reducing staffing needs.

• Entirely new Biopharmaceuticals

The dramatic cost reductions enabled by the benefits described will enable addressing completely new patient indications where biopharmaceuticals previously were too costly.

• Novel drug administration

Well-defined, adequate powder characteristics and particle properties make new routes of administration such as inhalation possible.

• New intellectual property (IP)

Ziccum has built a substantial platform of immaterial rights, offering access to the LaminarPace® technology by licensing. By taking such license, a drug developing company is adding new IP to each drug or vaccine project. This can provide the license taker with increased patent time, protecting the drug/vaccine from generic competition for a period extended by the patent protection time for LaminarPace®. This patent extension represents very significant value in the pharmaceutical industry.

History

LaminarPace® was invented by Dr Per Gerde at Karolinska Institute, Stockholm. It was initially developed by Inhalation Sciences Sweden AB (publ) to generate small amounts of micronized material for inhalation purposes. However, the many additional high-potential areas the technology could be applied to soon became apparent, and for that reason, Inhalation Sciences carried out a spin-out of LaminarPace® into a subsidiary, Ziccum AB, which since 2017 has been developing and commercializing the technology independently.

Vision

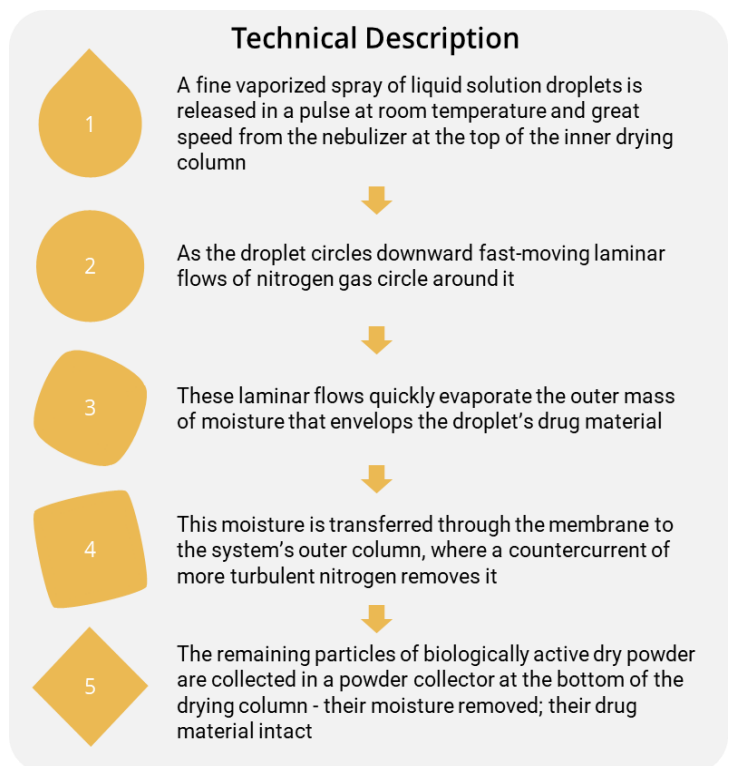
Ziccum's vision is to enable new biological treatments for patient needs globally, by making drug formulation, biopharmaceutical processing, product transport and patient administration efficient and functional enough for successful treatments.

Technical Description of LaminarPace®

Ziccum’s technology, LaminarPace®, creates an efficient drying process by generating mass transfer, rather than heat transfer. This happens directly after evaporation and removes the need for elevated temperatures. Mass transfer is a highly efficient drying method.

By reducing drying stress to the active ingredient, LaminarPace® uniquely enables particle-engineered, thermostable dry powder biopharmaceuticals which can be easily handled and transported and are highly suitable for novel administration routes. Our optimization tests demonstrate that following drying less than 1% of absolute humidity is left in the product.

Ziccum has its own in-house development and research ongoing within the area of thermostable, dry-formulated mRNA/LNPs. The company has made significant strategic investment in specialist mRNA/LNP systems and offers premium partnership and development opportunities based on the platform.



Outlook

Ziccum’s project portfolio is based on proprietary technology and methodology. The company’s overall objective is to enter into license agreements to industrialize and commercialize the technology in collaboration with pharmaceutical and biotechnology 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.

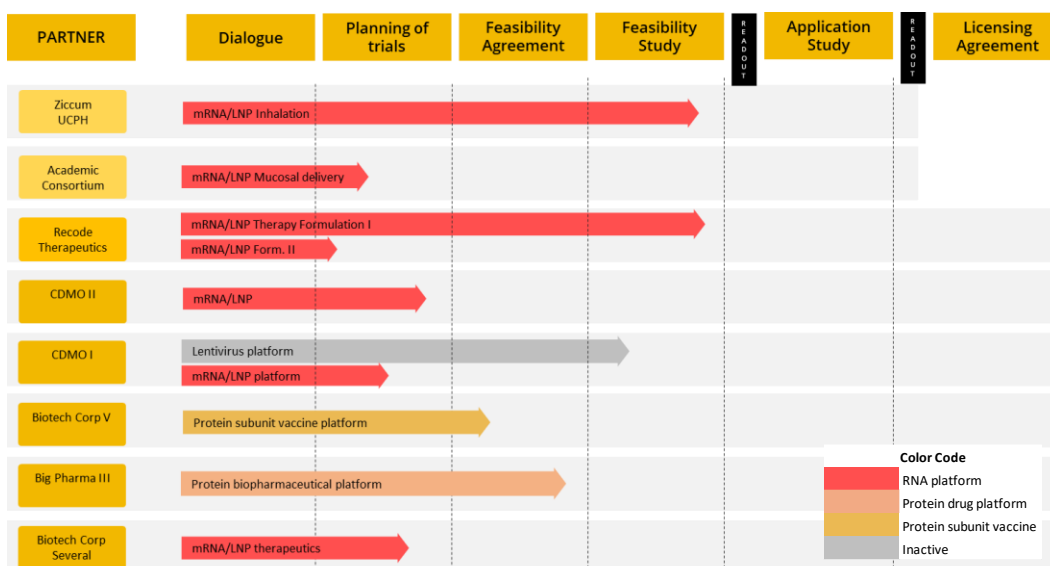
A prerequisite for being a relevant and attractive licensing partner is to be able to describe an industrial version of LaminarPace® and make it probable that the technology is suitable for upscaling and GMP production. Therefore, Ziccum conducts its own development projects where important components 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 Science’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

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 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, not displayed in the overview.



* Portfolio Overview as of 30 September 2024

Business Model

Ziccum’s business model is based on partnering and co-development with biotech and pharmaceutical companies. LaminarPace® is developed to be an integrated part of the commercial supply chain of biological pharmaceutical products, with a particular focus on vaccines and mRNA-based products.

The business model rests on the following focus areas:

- An active partnering agenda to create a substantial pipeline of industrial dialogues.
- Development responsibility for the LaminarPace® unit and process development.
- Development and optimization of quality attributes and scale-out.
- Continuous regulatory assessment to prepare for industrialization.

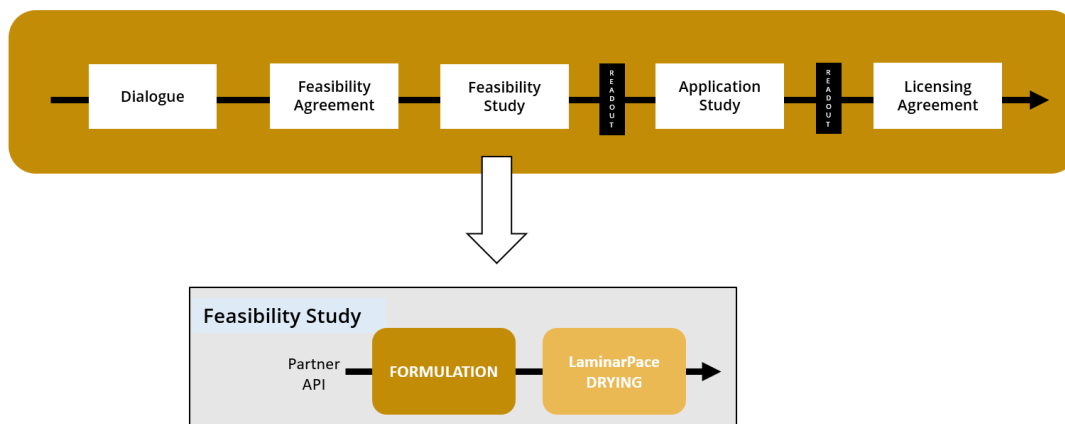
In the early project phases revenues are generated by paid feasibility studies, agreement signing fees, milestone payments for R&D activities and license fees for exclusive evaluation periods. At a mature commercial stage, revenues will primarily be earned

through royalty payments from licensees – a standard revenue model for pharmaceutical industry.

Ziccum’s business and revenue models are dependent on a strong Intellectual Property (IP) position. The IP strategy rests on three pillars: patents, know-how and trademarks.

The basic principles of LaminarPace® are protected by an approved patent family providing an important basis for customer interaction and R&D activities and a fundament for out-licensing. The patent portfolio is currently built to include several layers of patent protection, including general technical improvements and features as well as specific use areas and product classes, enabling a strong and long-term patent position supporting a long term out-licensing revenue stream.

Regarding trademarks, Ziccum has applied for trademark protection of ‘Ziccum’ and ‘LaminarPace’ in all relevant geographies globally, and in September 2024 these trademarks were officially registered with the United States Patent and Trademark Office.



Market and market targeting

The market for biologics and vaccine manufacturing is very significant and has a renewed emphasis with the Covid-19 pandemic, having created keen awareness of the importance of vaccines not only within research organizations and from healthcare authorities, but in every segment of the industry and in the public, globally. The Covid-19 pandemic created an enormous focus on developing a vaccine urgently and highlighted the need for worldwide distribution.

Thanks to very intense efforts from large industry players, it was possible to develop the new mRNA in LNP formulation for Covid-19 vaccination in a short timeframe. However, as now commonly known, these new mRNA vaccines require cryogenic handling all throughout the distribution chain, meaning storage and handling at -80°C. This poses a number of logistical and handling issues. In this situation, the Ziccum offering to enable powder-form thermostable biologics and vaccines should be of great interest.

The freeze-drying technique for drugs, established and developed since many decades, still has only succeeded in very limited trials to generate dry mRNA/LNP – and the product still requires special handling. Another technique gaining ground in pharmaceutical processing is spray-drying by heating – but there, no known attempts have succeeded in generating dry material from mRNA/LNP. Hence, the LaminarPace® ability to dry LNP formulations may be of great importance.

LaminarPace® lends itself to biologics in general, but the company has a strategic focus on the rapidly growing RNA area, including not only mRNA but also other RNA forms, and protein substances, including both therapeutics and vaccines.

- RNA/LNP drugs and vaccines
- Protein drugs and subunit vaccines
- Viral vector vaccines

Ziccum has successfully conducted mRNA studies with LaminarPace®, demonstrating its capabilities in this area. While these results show how effective the technology is for



mRNA, it can also be used for other biological products such as proteins, peptides, enzymes, antibodies, and various vaccines, exemplifying its broader application potential beyond mRNA and making it useful for handling and preserving several different types of biological material. This also enables inhalable solid formulations of mRNA and other vaccines of great interest to the pharmaceutical industry. Inhalable vaccines promise increased storage stability compared to liquid formulations, simplified and preferred patient treatments without the need for injection administration, and potential for stimulating the immune system in the mucous membranes.

A conservative estimate of the addressable licensing market for Ziccum's strategic platforms corresponds to a range between USD 600 and 1,800 million annually from 2024 to 2028. The estimate is based on 1-2 per cent royalties for technology utilization on the total mRNA and vaccine sales, USD 60-90 billion, over the coming years. The annual sales value of therapeutics and vaccines based on mRNA is estimated to be between USD 36 billion and USD 59 billion per year and the sales value of the additional vaccine platforms is expected to be between USD 20 and 30 billion per year during the same period.

*Estimates based on data obtained from **Global Data Intelligence** in May 2023.

Financial overview

Comprehensive result

Comprehensive result for the quarter was kSEK -5,887 (-3,882), which corresponds to a decrease of kSEK -2,005. Earnings per share, based on the number of shares at end of the quarter, totaled SEK -0.37 (-0.28).

In the period, the comprehensive result was kSEK -17,491 (-13,720), which corresponds to a decrease of kSEK 3,771. Earnings per share, based on number of shares at end of the period, totaled SEK -1.10 (-0.99).

Revenue & other income

Revenue from client projects consisting of paid Feasibility studies during the quarter amounted to kSEK 280 (1,690), and other income totaled kSEK 291 (639). Total revenue and other income thus amounted to kSEK 571 (2,329).

Revenue from client projects consisting of paid Feasibility studies during the period amounted to kSEK 3,227 (2,828), and other income totaled kSEK 959 (1,915). Total revenue and other income thus amounted to kSEK 4,186 (4,743).

Expenses

Operating expenses for the quarter totaled kSEK 6,495 (6,228), an increase of kSEK 267. Other external costs increased by kSEK 634 and amounted to kSEK 3,403 (2,769). Personnel costs decreased by kSEK 380 compared to the previous year and amounted to kSEK 2,774 (3,154).

Operating expenses for the period amounted to SEK 21,749 (18,600) thousand, an increase of kSEK 3,149. Other external costs amounted to kSEK 10,998 (8,596), an increase of kSEK 2,402. Personnel costs decreased by kSEK 89 and amounted to kSEK 9,813 (9,902).

Investments

The company's net capital expenditure during the quarter amounted to kSEK 0 (80).

Cash flow

Total shareholders' equity at end of the quarter was kSEK 2,521 (15,900) after taking the result for the quarter into account. Equity per share (basic and diluted) based on the number of outstanding shares at the end of the quarter was SEK 0.16 (1.51). The company's equity ratio at the end of the quarter was 26 (73) percent.

Cash and cash equivalents at the end of the quarter amounted to kSEK 1,107 (9,790).

Cash flow for the quarter was kSEK -2,985 (-4,793). Cash flow from financing activities totaled kSEK 75 (0).

Cash flow for the period amounted to kSEK -1,887 (-13,161). Cash flow from financing activities during the period amounted to kSEK 11,036 (0).

Organization

The number of employees at the end of the quarter was 10 (9).

Share capital

Share capital at the end of the quarter was SEK 2,659,795 and the total number of shares was 15,958,775 with a par value of SEK 0.17.



Other information

Risks factors

A developing company in the pharmaceutical field such as Ziccum is exposed to significant operational and financial risk. Ziccum's significant risk and uncertainty factors include business-related risks as well as risks related to market and technology development, patents, competitors and future financing. The company's value is largely dependent on the success of the company's development projects and the ability to enter into partnerships, and that LaminarPace® receives broad market acceptance. Many factors can have a negative impact on the probability of commercial success, including the risk entailed by the company's current development stage and risk of capital shortfall. During the quarter no significant changes with respect to these risks or uncertainty factors have arisen. Ziccum is in a commercialization phase and there is a risk that the company will not reach sufficient profitability. As the company is in growth stage and working to achieve a positive cash flow, the company needs access to capital before its cash flow becomes positive.

Auditor's review

This report has not been reviewed by the Company's auditor.

Liquidity and financing

The company has generated kSEK 3,227 in revenue since the beginning of the year and is about to receive kSEK 1,555 over the course of 2024 from client projects and grants. The company's cash and cash equivalents at the end of the third quarter amounted to kSEK 1,107.

On 10 October 2024, Ziccum's board of directors announced its proposal to carry out a rights issue, comprised of shares and warrants, which would result in up to 30 MSEK upon full subscription before accounting for costs related to the issue. Additionally, the company has secured a MSEK 6,5 bridge loan until the transaction is completed.

The board of directors has concluded that it is in the shareholders' best interests to secure a moderate capital infusion to secure the company's capital needs ahead. The share subscription facility agreement concluded with the US professional investor GCF January 2024 remains at Ziccum's disposal, where the company can unilaterally call for tranches of USD 100,000 until July 2026.

The company's board and management are continuously assessing the capital needs and options to secure the company's financing for shareholders' best interests.

Share count

The number of shares at the end of the quarter amounts to 15,958,775. All shares are of the same class and have the same voting rights. In October 2018, the share was listed on the Spotlight Stock Market, and on December 1, 2020, the company moved and was listed on Nasdaq First North Growth Market. Ziccum's shares are traded under the ticker symbol ZICC and ISIN code SE0011415595. First North is Nasdaq's European emerging market intended for small, growing businesses, with a less extensive rulebook than the main market.

Legal disclaimer

This report contains forward-looking statements that constitute subjective estimates and forecasts about the future. Assessments about the future are only valid on the date they are made and are, by their nature, similar to research and development work in the biotechnology field, associated with risk and uncertainty. Considering this, actual outcomes may differ substantially from what is described in this report.

Financial calendar

- Year-end Report Q4 2024: 29 January 2025

Financial reports are available on Ziccum's website:
<https://ziccum.com/investors/financial-reports>

Certified Adviser

Ziccum's Certified Adviser on First North is Vator Securities AB.

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Jonas Ekblom

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Certification by the Board of Directors and the Chief Executive Officer

The Board of Directors and the Chief Executive Officer of Ziccum AB (publ) provide their assurance that this interim report provides a true and fair overview of the development of the Company's business activities, financial position and results of operations and describes significant risks and uncertainties facing the Company.

Lund, October 29, 2024

Jonas Ekblom
Chairman of the board

Mikaela Bruhammar
Board member

Andreas Pettersson Rohman
Board member

Per Gerde
Board member

Valentina Screpanti Sundquist
Board member

Ann Gidner
CEO

Financial statements

Income statement

	Jul-Sep	Jul-Sep	Jan-Sep	Jan-Sep	Jan-Dec
SEK (000)	2024	2023	2024	2023	2023
Net sales	280	1,690	3,227	2,828	3,747
Other income	291	639	959	1,915	2,571
Operating income	571	2,329	4,186	4,743	6,318
Operating Expenses					
Other external costs	-3,403	-2,769	-10,998	-8,596	-13,143
Personnel costs	-2,774	-3,154	-9,813	-9,092	-13,517
Depreciation of tangible and intangible assets	-318	-305	-938	-912	-1,218
Operating result	-5,924	-3,899	-17,563	-13,857	-21,560
Result from financial items					
Financial net	37	17	72	137	148
Result after financial items	-5,887	-3,882	-17,491	-13,720	-21,412
RESULT FOR THE PERIOD	-5,887	-3,882	-17,491	-13,720	-21,412
Earnings per share before and after dilution (SEK)	-0.37	-0.28	-1.10	-0.99	-1.55

Balance sheet

SEK (000)	Sep 2024	Sep 2023	Dec 2023
ASSETS			
<i>Non-current assets</i>			
<i>Intangible assets</i>			
Patents, licenses, trademarks, and similar rights	177	433	369
<i>Tangible assets</i>			
Equipment & tools	7,024	7,662	7,420
Total non-current assets	7,201	8,095	7,789
<i>Current assets</i>			
<i>Short-term receivables</i>			
Other receivables	604	1,398	3,239
Prepaid expenses & accrued income	936	2,481	950
Total short-term receivables	1,540	3,879	4,189
Cash & cash equivalents	1,107	9,790	2,994
Total current assets	2,647	13,669	7,183
TOTAL ASSETS	9,848	21,764	14,972
EQUITY AND LIABILITIES			
Equity			
<i>Restricted equity</i>			
Share capital	3	2,660	2,301
Total restricted equity	2,660	2,301	2,301
<i>Unrestricted equity</i>			
Share premium fund	116,077	105,400	105,400
Retained earnings	-98,725	-78,281	-77,705
Result of the period	-17,491	-13,720	-21,412
Total unrestricted capital	-139	13,599	6,283
Total equity	2,521	15,900	8,584
Liabilities			
<i>Long-term liabilities</i>			
Loans	0	429	286
<i>Short-term liabilities</i>			
Account payables	2,817	1,533	853
Short-term loans	429	571	571
Other short-term debt	825	339	725
Accrued expenses and deferred income	3,256	2,993	3,953
Total short-term debt	7,327	5,435	6,102
TOTAL EQUITY & LIABILITIES	9,848	21,764	14,972

Change in equity

SEK (000)	Restricted equity	Unrestricted equity	Retained earnings	Result of the period	Total equity
	Share capital	Share premium fund			
Opening balance 2023-01-01	2,301	105,400	-49,612	-28,788	29,301
Appropriations of net result			-28,788	28,788	0
Result of the period				-21,412	-21,412
<i>Transactions with shareholders</i>					0
Share issue					0
Share issue costs					0
Share related remunerations			695		695
Closing balance 2023-12-31	2,301	105,400	-77,705	-21,412	8,584
Opening balance 2024-01-01	2,301	105,400	-77,705	-21,412	8,584
Appropriations of net result			-21,412	21,412	0
Result of the period				-17,491	-17,491
<i>Transactions with shareholders</i>					
Share issue	359	13,063			13,422
Share issue costs		-2,386*			-2,386
Share related remunerations			392		392
Closing balance 2024-09-30	2,660	116,077	-98,725	-17,491	2,521

* The share issue costs include kSEK 1,243 in administration costs for issuing the shares and 1,097 kSEK corresponding to the value of the shares emitted as compensation for the facility commitment from GCF.

** The shares were registered on 10 July 2024 and 538,928 new shares were issued.

Cash flow statement

SEK (000)	Jul-Sep 2024	Jul-Sep 2023	Jan-Sep 2024	Jan-Sep 2023	Full year 2023
Operating result	-5,924	-3,899	-17,563	-13,720	-21,560
Interest received	6	84	59	264	302
Paid interest	-12	-23	-54	-76	-97
<i>Adjustments for items that is not included in the cash flow</i>					
Share related remunerations	167	100	392	319	695
Currency exchange	43	-43	67	-51	-58
Depreciations & disposals	318	305	938	912	1,218
Cash flow after operating activities before changes in working capital	-5,402	-3,477	-16,161	-12,488	-19,500
<i>Cash flow from changes in working capital</i>					
Changes in operating receivables	3,031	-2,252	3,039	-2,415	-2,725
Changes in operating debt	-689	1,016	549	1,879	2,404
Cash flow after operating activities	-3,060	-4,713	-12,573	-13,025	-19,821
Investing activities	0	-80	-350	136	-136
Cash flow after investing activities	-3,060	-4,793	-12,923	-13,161	-19,957
<i>Financing activities</i>					
Share issue	121	0	13,422	0	0
Share issue costs	-46	0	-2,386	0	0
Cash flow from financing activities	75	0	11,036	0	0
Change in cash and cash equivalents	-2,985	-4,793	-1,887	-13,161	-19,957
Cash and cash equivalents at the beginning of the period	4,092	14,583	2,994	22,951	22,951
CASH & CASH EQUIVALENTS AT THE END OF THE PERIOD	1,107	9,790	1,107	9,790	2,994

Notes

Note | 1 Accounting standards

Ziccum AB (publ) reports in accordance with the Swedish Annual Accounts Act and the Swedish Accounting Standards Board's general advice BFNAR 2012:1 (K3). The company's accounting principles are described in the company's annual report for 2022. Amounts are expressed in kSEK, which in this report refers to thousands of Swedish kronor. Amounts in parentheses refer to comparative figures from the previous year, if nothing else is stated.

Revenue is recognized based on the percentage of work/service completion of which indicates that revenue from performance obligations recognized over a period should be based on the percentage of completion. The method recognizes revenues in proportion to the completeness of the contracted project.

Note | 2 Pledged assets and contingent liabilities

Pledged assets	September 2024	September 2023
Company mortgages	2,000	2,000

Note | 3 Changes in equity

Date	Transaction	Number of series B	Share capital	Quota value	Sub- scription price	Total invested capital (SEK)
5 Apr 2017	Formation	500	50,000	1.00	1.00	50,000
29 May 2017	Share issue	500	50,000	1.00	1.00	50,000
31 Dec 2017	Conditional shareholder contribution*	-	-	-	-	1,996,622
25 Apr 2018	Bond issue	-	400,000	1.00	-	-
27 Apr 2018	Split	2,999,000	-	0.17	-	-
19 Oct 2018	Share issue	3,000,000	500,000	0.17	5.26	15,776,962
14 Jan 2020	Share issue	1,389,385	231,564	0.17	10.00	13,893,850
6 Jul 2020	Share issue	2,216,815	369,469	0.17	17.50	38,794,263
15 Jun 2021	Share issue (LTI 2018/21)	200,000	33,334	0.17	11.00	2,200,000
21 Dec 2021	Share issue	1,199,856	199,976	0.17	11.00	13,198,416
18 Jan 2022	Share issue	2,800,086	466,680	0.17	11.00	30,800,946
22 Jan 2024	Share issues	622,371	103,729	0.17	6.80	4,232,122
27 Feb 2024	Share issues	943,745	157,291	0.17	6.80	6,417,466
10 July 2024	Share Issue (LTI 2021/24)	23,709	4,030	0.17	0.17	4,030
10 July 2024	Share Issue	538,928	89,821	0.17	4.92	2,650,253
23 Sep 2024	Share issue	23,880	3,980	0.17	4.91	117,250
Total		15,958,775	2,301,023			130,182,180

In 2017, Inhalation Sciences AB provided a conditional shareholders contribution amounting to 1,996,622 SEK (cash 0.3MSEK and reverse loan arising in connection with the acquisition of intangible assets by the parent company to shareholders contribution amounting to 1.7MSEK)

Note | 4 Long term incentive programs

On September 30, 2024, the company has three ongoing option programs.

- At the Annual General Meeting on April 27, 2021, it was decided to introduce a long-term incentive program by issuing warrants to the Board of Directors (LTI 2021/2024), as well as a long-term incentive program for the company's employees consisting of employee stock options (LTI 2021:1).
- At the Annual General Meeting on April 28, 2022, it was decided to implement a long-term incentive program for the company's Board of Directors (LTI 2022:1) and employees (LTI 2022:2) consisting of employee stock options.

- The Annual General Meeting held on May 24, 2023, adopted an incentive program (LTI2023:1) of 324,000 employee stock options for certain employees and consultants. The LTI2023:1 program will be awarded during 2023. The AGM furthermore resolved on an issue of not more than 425,801 warrants to ensure delivery of shares to the participants and to hedge costs connected to the program

None of the options entails the right to a dividend.

Based on the existing number of shares and options that is registered in the company as of December 31, 2023, the dilution due to the incentive programs, assuming that all warrants are exercised for new subscription of shares, is approximately 3% of the number of shares and votes.

LTI 2022:1 & LTI 2022:2

LTI 2022:1 (for the Board of directors) and LTI 2022:2 (for the employees) runs for three years and means that participants are granted employee stock options free of charge that give the right to acquire shares in Ziccum at a subscription price corresponding to the share's quota value. Each employee stock option gives the right to subscribe for a new share in Ziccum, alternatively up to 40% of the number in synthetic options that give the right to cash compensation instead of shares. Each synthetic option entitles the participant to receive a cash payment corresponding to the value of a share at the time of payment. The options will be expensed as personnel costs over a period of three years, without affecting the company's cash flow. If employee stock options are exercised, LTI 2022:1 and LTI 2022:2 will also entail costs in the form of social security contributions. Social security contributions will be expensed in the income statement during a period of three years. The company intends to hedge the entire cost of social security contributions through an issue of warrants, which may be exercised by a financial intermediary in connection with the exercise of the employee stock options. If the company chooses to implement such hedging measures, the social security contributions will not affect the company's cash flow.

Number of employee stock options	2022:1	2022:2	Total
Opening balance 1 Jan 2023	165,000	226,000	391,000
Reversed	-66,000	-15,000	-81,000
Ending balance 31 Dec 2022	99,000	211,000	310,000
Opening balance 1 Jan 2024	99,000	211,000	310,000
Reversed		-33,000	-33,000
Ending balance 30 Sep 2024	99,000	178,000	277,000

*During 2024, LTI 2022:1 and LTI 2022:2 have affected result with totally -254 kSEK in costs, of which -209 kSEK relates to social security contributions. The revenue effect is due to stock price fluctuations.

LTI 2023:1

LTI 2023:1 runs for three years and means that participants are granted employee stock options free of charge that give the right to acquire shares in Ziccum at a subscription price corresponding to the share's quota value. Each employee stock option gives the right to subscribe for a new share in Ziccum, alternatively up to 40% of the number in synthetic options that give the right to cash compensation instead of shares. Each synthetic option entitles the participant to receive a cash payment corresponding to the value of a share at the time of payment. The options will be expensed as personnel costs over a period of three years, without affecting the company's cash flow. If employee stock options are exercised, LTI 2023:1 will also entail costs in the form of social security contributions. Social security contributions will be expensed in the income statement during a period of three years. The company intends to hedge the entire cost of social security contributions through an issue of warrants, which may be exercised by a financial intermediary in connection with the exercise of the employee stock options. If the company chooses to implement such hedging measures, the social security contributions will not affect the company's cash flow.

	Number of employee stock options
Opening balance 1 Jan 2023	0
Issued stock options	276,000
Ending balance 31 Dec 2023	276,000
Opening balance 1 Jan 2024	276,000
Ending balance 31 Mar 2024	276,000

*During 2024, LTI 2023:1 have affected the reporting period result with total 202 kSEK in costs, of which costs of -33 kSEK relates to social security contributions.

Note | 5 Definitions of key figures

	Jul-Sep 2024	Jul-Sep 2023	Jan-Sep 2024	Jan-Sep 2023	Full year 2023
Cash flow per share					
Cash flow from the period, KSEK	-2,985	-4,793	-1,887	-13,161	-19,957
Average number of shares	14,882,459	13,806,142	14,882,459	13,806,142	13,806,142
Cash flow per share (SEK)	-0.19	-0.35	-0.12	-0.95	-1.45

**Cash flow per Share is the amount of net cash flow allocated to each share outstanding and is a metric that measures the amount of cash flow generated by a company on a per-share basis.*

Equity per share					
Equity, KSEK	2,521	15,900	2,521	15,900	8,584
Number of shares at the end of the period	15,958,775	13,806,142	15,958,775	13,806,142	13,806,142
Equity per share (SEK)	0.16	1.51	0.16	1.51	0.62

**Equity per Share is the Company's shareholders' equity per common share outstanding Equity per share and represents the net-asset value backing up each share of the company's stock.*

Equity ratio					
Equity, KSEK	2,521	15,900	2,521	15,900	8,584
Total equity & debt, KSEK	9,848	21,763	9,948	21,763	14,972
Equity ratio %	26	73	26	73	57

**Equity Ratio is the ratio of Equity to Total Assets.*



ziccum

Expand what's possible

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