



Ziccum AB (publ)

Year-end report

1 January – 31 December 2023



"2023 has been an amazing year, taking Ziccum forward on all fronts - establishing professional operations, implementing a new business model very successfully and getting an established, reputable name in international pharmaceutical industry."

Ann Gidner, CEO



Financial highlights

October - December in brief

- Operating income: SEK 1,575 (0) thousand.
- Result for the quarter: SEK -7,692 (-8,021) thousand.
- Earnings per share: SEK -0.56 (-0.58).
- Cash flow for the quarter: SEK -6,796 (-6,642) thousand.
- Cash at the end of the reporting period: SEK 2,994 (22,951) thousand.

January - December in brief

- Operating income: SEK 6,318 (17) thousand.
- Result: SEK -21,412 (-28,788) thousand.
- Earnings per share: SEK -1.55 (-2.09).
- Cash flow: SEK -19,957 (10,678) thousand.
- Cash at the end of the year: SEK 2,994 (22,951) thousand.

Financial summary

	Q4	Q4	Jan-Dec	Jan-Dec
KSEK	2023	2022	2023	2022
Operating income	1,575	-	6,318	17
Operating result	-7,662	-8,067	-21,560	-28,955
Result	-7,692	-8,021	-21,412	-28,788
Balance sheet total	14,972	33,285	14,972	33,285
Cash flow	-6,796	-6,642	-19,956	10,678
Cash and cash equivalents	2,994	22,951	2,994	22,951
Equity ratio %	57	88	57	88

Per share data (SEK)

Number of shares	13,806,142	13,806,142	13,806,142	13,806,142
Result per share before and after dilution*	-0.56	-0.58	-1.55	-2.09
Cash flow per share	-0.49	-0.48	-1.45	0.78
Equity per share	0.62	2.12	0.62	2.12

* Dilution effects is not calculated when the result is negative



Significant events during the Quarter

- **Collaboration agreement with University of Copenhagen**

On December 4th, the company announced that it had signed a Collaboration Agreement for a project jointly with the Department of Pharmacy, University of Copenhagen (UCPH), on the engineering of inhalable solid dosage forms of mRNA vaccines which will include in-vivo studies of mRNA/LNP materials formulated and dried using Ziccum's unique LaminarPace.

- **Certified Adviser**

On November 30th, Ziccum announced it had a changed Certified Adviser from Erik Penser Bank AB to Carnegie Investment Bank AB (publ).

- **Agreement with US Biomanufacturing corporation**

On November 7th, Ziccum announced it has signed a Material Transfer and Evaluation Agreement for a Vaccine Evaluation project with one of the most important technology-focused Biomanufacturing corporations in the US. The project is funded and will focus on evaluating the potential for new dry, thermostable forms of an advanced viral vaccine, using Ziccum's unique formulation and drying technology LaminarPace.

- **Validated data confirming mRNA activity in-vitro**

On October 23rd, Ziccum announced that it had received data from external contract research (CRO) partner Truly Labs, confirming high activity levels in mRNA/LNP materials dried by LaminarPace, after continued internal confirmations. The in-vitro data validate the ability of Ziccum's LaminarPace technology to transform delicate mRNA/LNP solution into stable, bioactive dry powder with excellent in-vitro characteristics.

Significant events after the Quarter

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

On January 10th, 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.

The assessment concluded that the resulting dry powder material demonstrated excellent mRNA activity when reconstituted and tested in in-vitro cell studies. The assessment also concluded that the LaminarPace treatment resulted in well-preserved mRNA content in LNP particles with adequate encapsulation efficiency. Furthermore, the treatment resulted in well-preserved lipid nanoparticles with good particle size and preserved size distribution. Finally, the partner assessment confirmed the consistent Ziccum findings, that LaminarPace-treated material can be reconstituted (dissolved back into liquid) very quickly and smoothly, with no foaming, precipitation, or other practical issues.



Financing secured through directed share issue and rights issue

On January 22nd, the company announced that it has carried out a directed share issue of 622,371 shares of approximately SEK 4.2 million to the American professional investor Global Corporate Finance (GCF). The subscription price in the Private Placement was set at SEK 6.80 per share through arm's length negotiations between the Company and GCF and corresponds to a 7.36 per cent discount to the Company's volume weighted average price on Nasdaq First North Growth Market during the last five trading days.

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, totalling approximately SEK 28 million over the next thirty months.

The Board of Directors of Ziccum has also, based on the existing authorisation from the Annual General Meeting, decided to carry out a rights issue of units of a maximum of SEK 10.4 million. The subscription price per Unit in the Rights Issue amounts to SEK 6.80 and each Unit consists of one share and one free warrant of series TO5, which means that the subscription price per share in the Rights Issue corresponds to the subscription price per share in the Directed New Share Issue.

The Directed New Share Issue and the Rights Issue are carried out in combination to effectively secure working capital for continued intensive business and technical development. Considering the Directed New Share Issue, and provided that the Rights Issue is fully subscribed, Ziccum will receive initial proceeds totalling approximately SEK 13.5 million, after deduction of issue costs totalling approximately SEK 1 million.

Furthermore, the company has revenue generating evaluation agreements in place, which are estimated to bring in SEK 5 million during Q1 2024. The company was granted a Eurostars grant and expected payments from this during 2024 are SEK 872 thousand. The board and company management are assessing options for further soft funding opportunities on an ongoing basis.

** Volume-Weighted Average Price, VWAP, is calculated by totalling the SEK traded for every transaction (price multiplied by the volume) and then dividing by the total shares traded.*

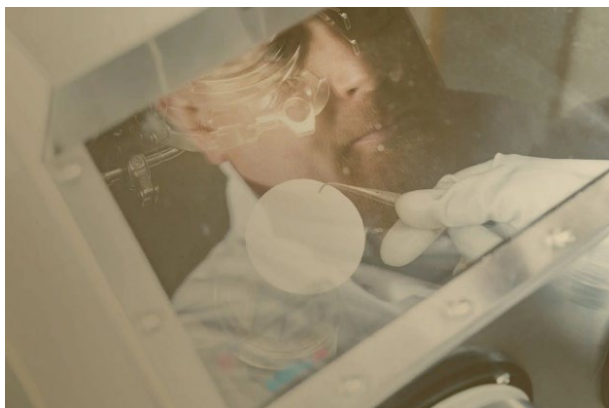
Significant events in previous Quarters

Q3 2023 - Significant events

- On July 17th the company announced it has signed an evaluation agreement with a major global Pharmaceutical Corporation. The agreement is to perform a funded feasibility study aiming to develop thermostable dry powder formulations in the partner mRNA/LNP projects, with a planned extension for stability testing and an option to license the LaminarPace technology.
- On September 5th the company announced that Xavier Turon has been appointed as Chief Operating Officer and he will assume his position on October 9th, 2023.

Q3 2023 - Other events

- On July 26-28, Ziccum participated at the 3rd Annual mRNA Summit in Boston. CEO Ann Gidner gave a presentation to an audience of senior pharmaceutical industry decision makers, scientists, and key opinion leaders. Ziccum also presented a Scientific poster ('A Novel Unit Operation Successfully Drying mRNA/LNP by Mass Transfer') - the first scientific poster Ziccum has delivered at a major event.
- On September 6, Ziccum participated in the conference New Updates in Drug Formulation and Bioavailability in Copenhagen.



Q2 2023 - Significant events

- On May 9, Ziccum announced that it had signed a revenue generating Evaluation Agreement with a leading biopharma company to commence a Feasibility study regarding LaminarPace for drying of mRNA/LNP materials and/or mRNA vaccine(s).
- The Annual General Meeting (AGM) held on May 24, 2023, re-elected Fredrik Sjövall, Mikaela Bruhammar and Andreas Pettersson Rohman and elected Per Gerde as new board member. Fredrik Sjövall was re-elected as the chairman of the Board of Directors. The AGM 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.

- On June 2, the company announced that Johny Humaloja was appointed as new CFO for the company, and he started his assignment in June.
- On June 5, the company announced that it had received a notification from CEPI (the Coalition for Epidemic Preparedness), that its joint Expression of Interest has not been selected for the next stage of application work.

Q2 2023 - Other events

- On May 2, the company announced it had filed three patent applications as part of new, expanded strategy to strengthen patent protection. The new, expanded IP strategy will provide multi-layered protection to the company's unique drying technology LaminarPace, turning liquid biopharmaceuticals into thermostable dry powders by mass transfer.

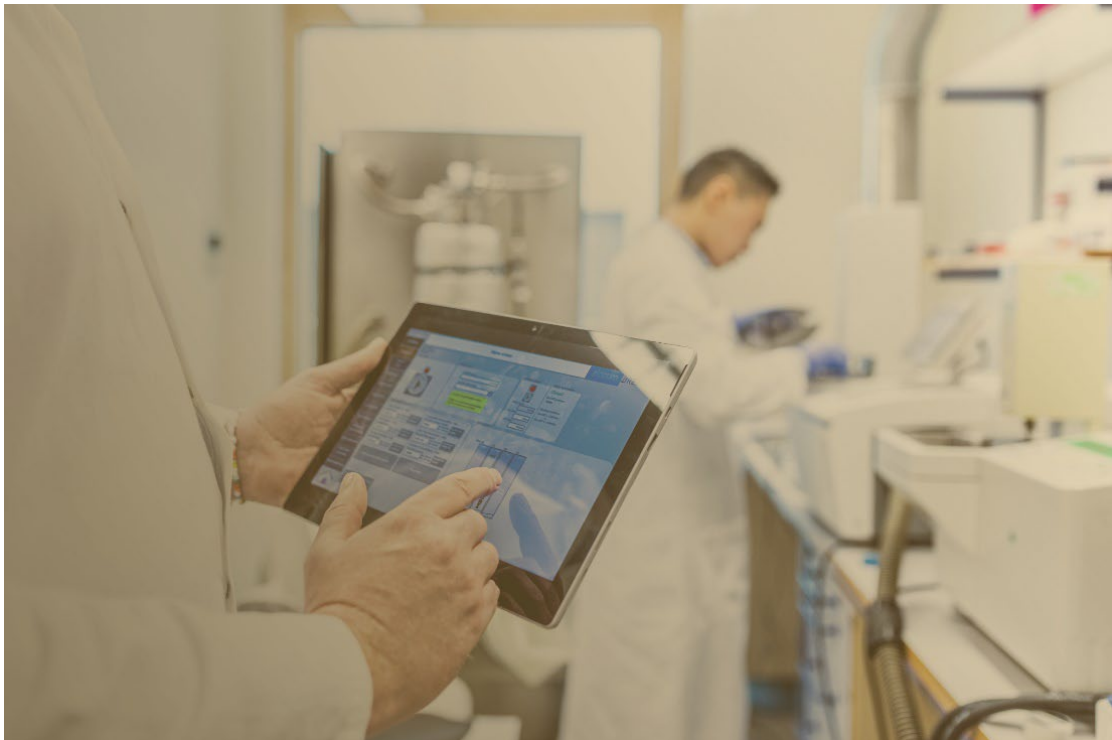
Q1 2023 - Significant events

- 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.
- On March 20, Ziccum announced an update of the latest stage of its ongoing in-house mRNA/LNP project, last reported in October 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.



CEO statement

Taking Ziccum ahead towards new achievements, delivering milestones at a high pace

2023 has been an amazing year, taking Ziccum forward on all fronts - establishing professional operations, implementing a new business model very successfully and getting an established, reputable name in international pharmaceutical industry in general and in mRNA development forums more specifically.

Now we are looking forward to further milestones, getting readouts from partnered studies and further data points for our technology during 2024 - already starting in January with a very exciting partner readout, where all mRNA/LNP data were perfectly confirmed – as well as taking LaminarPace to optimal performance.

It is a privilege to take this unique technology forward, seeing the potential to greatly improve so many aspects of current vaccine management, as well as enabling entirely new treatments for unmet patient needs.



Executing on partnered projects and striking a third deal with a world-leader

The Biotech mRNA feasibility study was successfully completed during fourth quarter, with excellent, close collaborative efforts, and the outcome was rapidly assessed by our partner. As presented on January 9th all readouts matched very closely, all parameters gave good results, and the all-important mRNA activity was preserved on excellent levels. This is a fantastic, broad validation of the applicability for Laminar Pace for fragile and valuable mRNA/LNP compositions – it confirms the vast possibility to enable new, better, more cost-efficient and far more sustainable patient treatments thanks to LaminarPace.

The Ziccum team took up the Big Pharma study work, which is ongoing with efficient performance of trials, generating a lot of relevant data. If the initial feasibility testing is satisfactory, the next step of Stability testing has already been scoped out with the Big Pharma partner. We are expecting this go/no-go decision in mid-spring 2024.

On top of these two collaborations, we announced a third agreement signed in fourth quarter, and we have a pipeline of serious dialogues with Pharma and Biotech corporations discussing LaminarPace applications. Ziccum is very actively taking part in licensing partnering conferences as well as vaccine and mRNA top level summits, where we are becoming a name to reckon with.

Delivering on a high value, high level business model to demanding partners

Considering how LaminarPace technology was rather new to industry and that all aspects of a high value licensing model had to be established, it is highly satisfying how we could sign agreements already during 2023 with the best possible partners. These large players, leading the race towards new vaccines and highly innovative RNA treatments, are offered interesting collaborations from numerous companies, regularly, so it is significant for Ziccum to be selected.

One still needs to be aware of the risk of bureaucracy, delays, and strategic reassessments due to the nature of these large organizations. There are no guarantees that these first partnered studies will immediately proceed to next stages, but Ziccum is well positioned and well equipped to take further collaborations ahead. We keep running an active business development pipeline of industry dialogues to ensure successful partnering for the technology.

The licensing business model offers the highest possible value for Ziccum taking LaminarPace to market, and the challenges of addressing highly demanding counterparts, reaching into strategic decision-making levels in the organizations and selling the technology while it is still in development have all been overcome, as nicely proven by the deals already signed. Having a Technology platform, we will be able to offer licenses structured by application – with a large number of potential license deals possible.

Continued mRNA/LNP data generation

The Ziccum team has taken both partnered studies and the internal Masterplan project forward very efficiently. The increase in trial productivity has enabled us to deliver strongly to our partners, testing a number of parameters already in the feasibility stage. Then there is of course room for further improvement of results in next step optimization in application studies, once that stage is reached. For mRNA/LNP, the rewarding in-vitro potency results, showing that the mRNA is keeping its genetic code and activity level when given to cells after LaminarPace treatment, now are followed by our internal Masterplan trials to prove sufficient mRNA activity in animal testing, so called in-vivo trials, in mice.

Taking LaminarPace forward, developing unique components for our technology

In fourth quarter, we were delighted to welcome our new Chief Operating Officer, the engineering manager Xavier Turon joining Ziccum from Barcelona. He indeed had to hit the road running, as we were in the midst of intense equipment development for LaminarPace. The Masterplan project contains the development of key components for LaminarPace, and after selecting several new international engineering partners during the year, we have made great progress in this area. The nebulizer development has reached a mature stage. The largest on-going effort is now the product outtake, to design efficient operation for sufficient capacity. The characteristics of these key components then go straight into the 3D-simulation work, LaPaSim, our on-going effort jointly with Zurich partners.

The successful technology development is made possible thanks to strong team efforts, combining our Ziccum expertise with excellent input from engineering partners as well as our Board of Directors. It is an iterative process, where trial readouts help us finetune component design for optimal performance. During 2023, we also have integrated proper quality and regulatory assurance, to ensure our work and its documentation are fulfilling pharmaceutical standards.

An exciting 2024 lies ahead

We have exciting times ahead, with continued execution on our partnership studies as well as taking interesting business dialogues and the technology optimization forward. Efficiently securing additional funding, both having a strong new investor on-board and allowing our existing shareholders to take part in a well-supported rights issue, together with income from industrial partners, will make it possible to keep up the high-paced development, deliver on all-important partnerships, generate further data and make the most of our unique technology.

Let me thank the Ziccum team as well as collaboration partners for excellent efforts, and our owners for continued, important support and engaged dialogues.

Lund, January 26, 2024
Ann Gidner, CEO

Ziccum in brief

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 application.

History

LaminarPace was developed by Inhalation Sciences Sweden AB (publ) to generate small amounts of

micronized material for aerosolization. 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 mid-2017 has been developing and commercializing the technology on its own.

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.

Several patented technologies and concepts

Large values lie in the scientific knowledge, the developed process and the technology built by Ziccum. The Company has a well-developed IP strategy that works broadly to protect this value and by protecting the Company's position in the market from competitors and competing technologies. The Company has filed 3 patent applications during 2023.



Platform technology - Technical description

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 2% of absolute humidity is left inside LaminarPace's drying column.

Ziccum has its own inhouse 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.

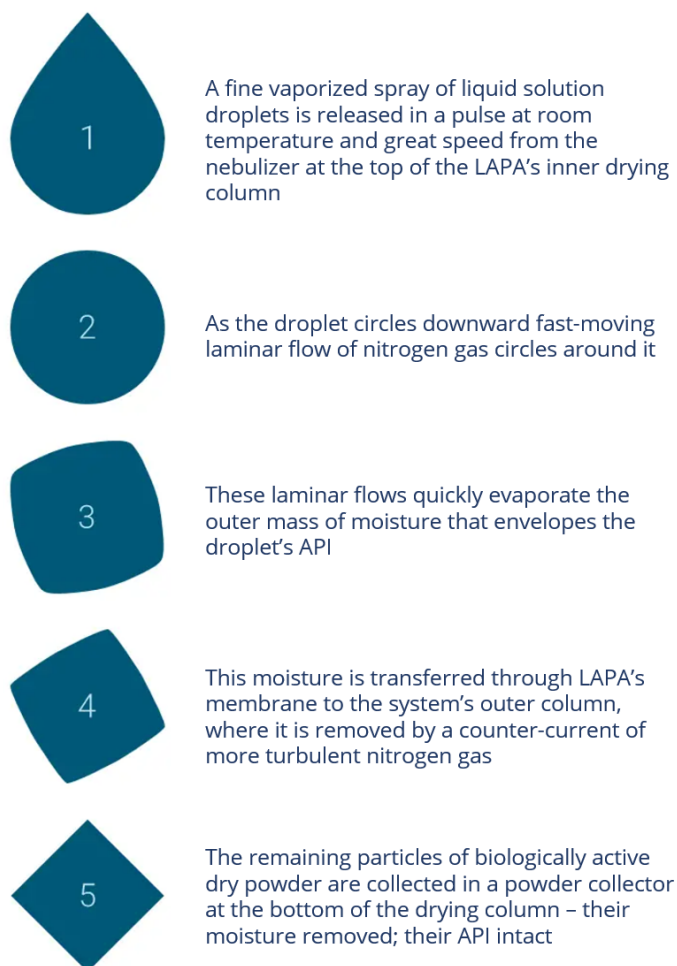


Illustration LaminarPace drying process of a single droplet of biomolecules in solution.

Outlook

Ziccum's project portfolio is based on the 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

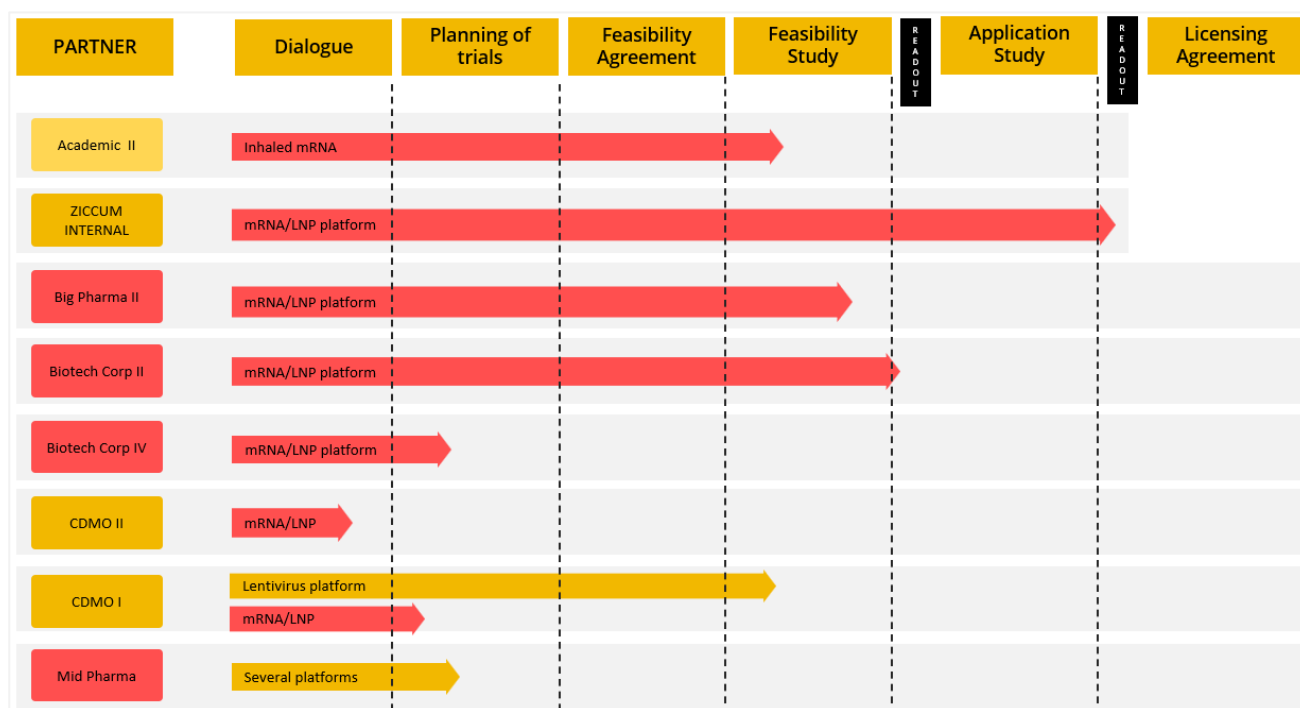
design, exploring optimal capacity loads and increasing the repeatability of outcomes. It will be a valuable enabler of tech transfer and integration into existing pharmaceutical production chains. Another priority area is applications for external and non-dilutive funding for further development of the technology. Ziccum actively monitors announcements that suit the Company's area of operation and technical phase.

Ziccum 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.

Project portfolio overview as of December 31st, 2023



The text in the arrow represents the technology platform

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.

Ziccum technology licensing business model

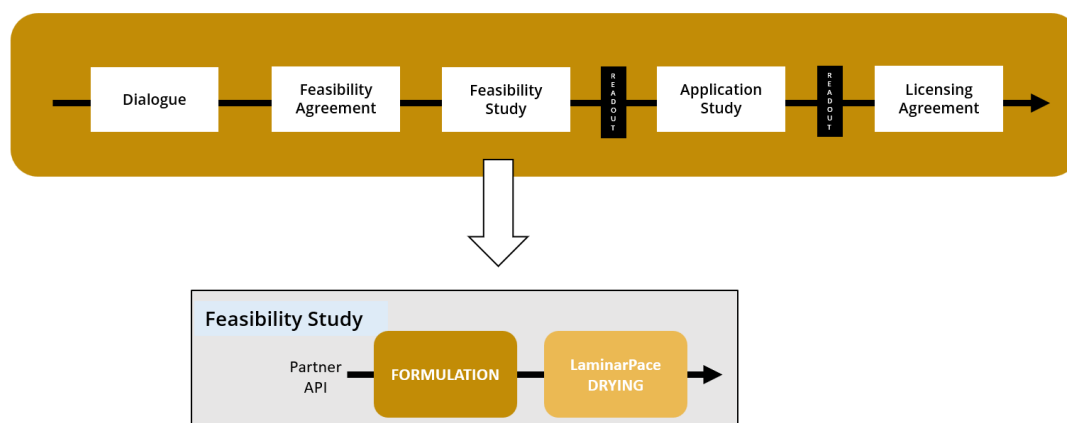
In the early project phases revenues are generated by paid feasibility studies, agreement signing fees, milestone payments for R&D activities and license fees for exclusive evaluation periods. At a mature

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 IP position. The IP strategy rests on two pillars: Patents and Trade secrets.

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.

Trade secrets are well defined pieces of operational knowledge, such as the optimal drying conditions for each specific product.



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 organisations 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.

The LaminarPace technology lends itself to biopharmaceutical ingredients in general, but as of now the company has decided to focus on vaccines, and three specific vaccine platforms:

- mRNA/LNP vaccine platform
- Viral vector (adenovirus) platform
- Subunit vaccine (adjuvanted) platform



For the total vaccine Western world sales market value, estimates for the top vaccine indications are as follows; In 2023 predicted to \$63 billion, also after a slight decrease from record Covid-19 numbers; to be followed by \$58-72 billion per year in 2024-2027, then rising towards \$79 billion in 2028*.

The corresponding annual market value for our three focus vaccine platforms are \$38-52 billion for the years 2024-28. With a licensing business model, estimates of the addressable market size for our three focus vaccine platforms, considering a 1% royalty on entire vaccine sales can be made. Based on this, the total drying technology licensing market size may be predicted to \$380 – 520 million*.

*Estimates based on the Global Data Intelligence platform
May 2023

Financial overview

Comprehensive result

Comprehensive result for the quarter was SEK -7,692 (-8,021) thousand, which corresponds to an improvement of SEK 329 thousand. Earnings per share, based on number of shares at end of the quarter, totalled SEK -0.55 (-0.58).

For the year, the comprehensive result was SEK 21,412 (-28,788) thousand, which corresponds to an improvement of SEK 7,376 thousand. Earnings per share, based on number of shares at end of the year, totalled SEK -1.55 (-2.09).

Revenue & other income

Revenue for the quarter amounted to SEK 919 (0) thousand, and other income totalled SEK 656 (5). Total revenue and other income amounted to SEK 1,575 (5) thousand.

Revenue for the year amounted to SEK 3,747 (0) thousand, and other income totalled SEK 2,571 (17). Total revenue and other income for the year amounted to SEK 6,318 (17) thousand. The revenue comes from feasibility studies performed for major biotech and pharma companies during the year. Other income relates mainly to the Vinnova grant that the Company has received.

Expenses

Operating expenses for the quarter totalled SEK 9,237 (8,072) thousand, an increase of SEK 1,165 thousand. Other external costs decreased by SEK 642 thousand and amounted to SEK 4,506 (5,148) thousand. Personnel costs increased by SEK 1,843 thousand compared to the previous year, this due to implementation of a long-term incentive programs (LTI2023:1), hiring of staff and related recruiting costs, and amounted to SEK 4,425 (2,582) thousand.

Operating expenses for the year amounted to SEK 27,878 (28,972) thousand, a decrease of SEK 1,094 thousand. Other external costs amounted to SEK 13,143 (16,323) thousand, a decrease of SEK 3,180 thousand. Personnel costs increased by SEK 2,241 thousand and amounted to SEK 13,517 (11,276) thousand.

Investments

The company's net capital expenditure during the quarter amounted to SEK 0 (409) thousand.

Net capital expenditure during the year amounted to SEK 136 (3,898) thousand, attributable to plant and equipment.

Cash flow

Total shareholders' equity at end of the year was SEK 8,584 (29,301) thousand 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

year was SEK 0.62 (2.12). The company's equity ratio at the end of the quarter was 57 (88) percent.

Cash and cash equivalents at the end of the year amounted to SEK 2,994 (22,951) thousand.

Cash flow for the quarter was SEK -6,796 (-6,642) thousand. Cash flow from financing activities totalled SEK 0 (0) thousand.

Cash flow for the full year amounted to SEK -19,957 (10,678) thousand. Cash flow from financing activities during the period amounted to SEK 0 (27,967) thousand.

Organization

The number of employees at the end of the year was 9 (7) and the average number full time employees for the year was 8 (7).

Share capital

Share capital at the end of the quarter was SEK 2,301,023 and the total number of shares was 13,806,142 with a par value of SEK 0.17.

Other information

Risks factors

A pharmaceutical development company 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. The risks to which the Company is exposed in its current phase and the risk that the necessary financing cannot be secured. During the quarter no significant changes with respect to these risks or uncertainty factors have arisen. Ziccum is in the 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's cash and cash equivalents at the end of the quarter amounted to SEK 2,994 thousand. The company has revenue generating evaluation agreements in place, which are estimated to bring in SEK 5 million during Q1 2024. The company was granted a Eurostars grant and expected payments during 2024 are equal to SEK 872 thousand.

On January 22nd, 2024, the company carried out a directed share issue of 622,371 shares of approximately SEK 4.2 million to American Global Corporate Finance (GCF). The directed share Issue is part of a long-term financing agreement with GCF where Ziccum has a unilateral right to call for additional investments of approximately SEK 28 million over the next thirty months. The board of Ziccum has also, with the support of the existing authorization from the annual general meeting, decided to carry out a preferential rights issue of units for a maximum of SEK 10.4 million. Each Unit consists of one share and one free warrant of series TO5. The subscription price per Unit will be 6.8 SEK. Subscription period is set to January 31st to February 14th. Through this agreement, and the preferential rights issue, the continued operation is financed and secured for the whole of 2024.

The board and company management are assessing the capital situation and alternatives to secure the company's long-term capital requirement on an ongoing basis.

The share

The number of shares at the end of the year amounts to 13,806,142. All shares are of the same class and have the same voting right. 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. The share is 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 biotech field, associated with risk and uncertainty. Considering this, actual outcomes may differ substantially from what is described in this report.

Transactions with related parties

During the year fees charged by related parties were invoiced as follows: The Chairman of the Board, Fredrik Sjövall, has through Axelero AB, invoiced fees amounting to 422 KSEK for business development. Ziccum purchased analytical services from Viskär AB, a company owned by board member Per Gerde, totalling 21 KSEK. All related party transactions took place on market terms. Board fees have been paid in accordance with resolutions at the Annual General Meeting.

Financial calendar

- Annual Report 2023: 15 April 2024
- Q1 Report 2024: 29 April 2024
- Annual General Meeting: date will be announced later
- Interim Report Q2 2024: 30 July 2024
- Interim Report Q3 2024: 29 October 2024
- Year-end Report Q4 2024: 29 January 2025

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

Certified Adviser

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Certification by the Board of Directors and 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, January 26, 2024

Fredrik Sjövall
Chairman of the board

Mikaela Bruhammar
Board member

Andreas Pettersson Rohman
Board member

Per Gerde
Board member

Ann Gidner
CEO

Financial statements

Income statement in summary

SEK (000)	Q4 2023	Q4 2022	Jan-Dec 2023	Jan-Dec 2022
Net sales	919	0	3,747	0
Other income	656	5	2,571	17
Operating income	1,575	5	6,318	17
<i>Operating Expenses</i>				
Other external costs	-4,506	-5,148	-13,143	-16,323
Personnel costs	-4,425	-2,582	-13,517	-11,276
Depreciation of tangible and intangible assets	-306	-342	-1,218	-1,373
Operating result	-7,662	-8,067	-21,560	-28,955
Result from financial items				
Financial net	-30	46	148	167
Result after financial items	-7,692	-8,021	-21,412	-28,788
RESULT FOR THE PERIOD	-7,692	-8,021	-21,412	-28,788
Earnings per share before and after dilution (SEK)	-0,56	-0.58	-1,55	-2.09

Balance sheet

SEK (000)	Not	Dec 2023	Dec 2022
ASSETS			
<i>Non-current assets</i>			
<i>Intangible assets</i>			
Patents, licenses, trademarks, and similar rights		369	624
<i>Tangible assets</i>			
Equipment & tools		7,420	8,246
Total non-current assets		7,789	8,870
<i>Current assets</i>			
Short-term receivables			
Other receivables		3,239	496
Prepaid expenses & accrued income		950	968
Total short-term receivables		4,189	1,464
Cash & cash equivalents		2,994	22,951
Total current assets		7,183	24,415
TOTAL ASSETS		14,972	33,285
EQUITY AND LIABILITIES			
Equity			
<i>Restricted equity</i>			
Share capital	3	2,301	2,301
Total restricted equity		2,301	2,301
<i>Unrestricted equity</i>			
Share premium fund		105,400	105,400
Retained earnings		-77,705	-49,612
Result of the period		-21,412	-28,788
Total unrestricted capital		6,283	27,000
Total equity		8,584	29,301
Liabilities			
<i>Long-term liabilities</i>			
Loans		286	857
<i>Short-term liabilities</i>			
Account payables		853	978
Short-term loans		571	571
Other short-term debt		725	416
Accrued expenses and deferred income		3,953	1,162
Total short-term debt		6,102	3,127
TOTAL EQUITY & LIABILITIES		14,972	33,285

Change in equity

SEK (000)	Restricted equity	Unrestricted equity	Retained earnings	Result of the period	Total equity
	Share capital	Share premium fund			
Opening balance 2022-01-01	1,834	77,900	-28,867	-21,136	29,731
Appropriations of net result			-21,136	21,136	0
Result of the period				-28,788	-28,788
<i>Transactions with shareholders</i>					
Share issue	467	27,584			28,051
Share issue costs		-84			-84
Share related remunerations			391		391
Closing balance 2022-12-31	2,301	105,400	-49,612	-28,788	29,301
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>					
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

Cash flow statement

SEK (000)	Q4 2023	Q4 2022	Full year 2023	Full year 2022
Operating result	-7,662	-8,067	-21,560	-28,955
Interest received	37	70	302	163
Paid interest	-21	-25	-97	-94
Adjustments for items that is not included in the cash flow				
Share related remunerations	375	124	695	392
Currency exchange	-46	56	-58	99
Depreciations & disposals	306	2,706	1,218	5,409
Cash flow from operating activities before changes in working capital	-7,011	-5,136	-19,500	-22,986
Cash flow from changes in working capital				
Changes in operating receivables	-311	304	-2,725	12,781
Changes in operating debt	526	-1,401	2,404	-3,186
Cash flow from operating activities	-6,796	-6,233	-19,821	-13,391
Investing activities	0	-409	-136	-3,898
Cash flow after investing activities	-6,796	-409	-19,957	-3,898
Financing activities				
Share issue (LTI 2018/21)	0	0	0	0
Warrants (LTI 2021/24)	0	0	0	0
Share issue	0	0	0	28,051
Share issue costs	0	0	0	-84
Cash flow from financing activities	0	-31	0	27,967
Change in cash and cash equivalents	-6,796	-6,642	-19,957	10,678
Cash and cash equivalents at the beginning of the period	9,790	29,593	22,951	12,273
CASH & CASH EQUIVALENTS AT THE END OF THE PERIOD	2,994	22,951	2,994	22,951

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	Dec 2023	Dec 2022
Company mortgages	2,000	2,000

Note | 3 Changes in equity

Date	Transaction	Number of series B	Share capital	Quota value	Subscription 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
Total		13,806,142	2,301,023			116,761,059

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 December 31, 2023, the company has four 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 entail 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 2021/24

The exercise price per share for LTI 2021/2024 amounts to SEK 28.8 and subscription can take place during the period from 1 May 2024 to 31 May 2024. The incentive program means that participants are offered to subscribe warrants at market value calculated according to the Black-Scholes valuation model.

A prerequisite for participation in the incentive program is that the participant has entered into a pre-purchase agreement with Ziccum, whereby Ziccum, with certain exceptions, reserves the right to repurchase warrants if the board member's assignment in Ziccum ends or if the participant wishes to transfer the options before the warrants can be exercised.

The Board was offered to acquire a maximum of 9 200 warrants each and all chose to acquire the maximum number, which resulted in a total of 46 000 warrants being issued.



LTI 2021:1

LTI 2021:1 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 2021:1 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 2022	35,728
Reversed	-16,364
Ending balance 31 Dec 2022	19,364
Opening balance 1 Jan 2023	19,364
Reversed	-4,545

Ending balance 31 Dec 2023 **14,819**

During 2023, LTI 2021:1 have affected the result with totally 114 KSEK in costs, of which 24 KSEK relates to social security contributions.

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 2022	0	0	0
Issued	165,000	226,000	391,000
Ending balance 31 Dec 2022	165,000	226,000	391,000
Opening balance 1 Jan 2023	165,000	226,000	391,000
Reversed	-66,000	-15,000	-81,000
Ending balance 31 Dec 2023	99,000	211,000	310,000

During 2023, LTI 2022:1 and LTI 2022:2 have affected result with totally 1,163 KSEK in costs, of which 355 KSEK relates to social security contributions.

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

During 2023, LTI 2023:1 have affected the reporting period result with totally 647 KSEK in costs, of which costs of 162 KSEK relates to social security contributions.

Note | 5 Definitions of key figures

	Q4	Q4	Full year	Full year
	2023	2022	2023	2022
Cash flow per share				
Cash flow from the period, KSEK	-6,796	-6,642	-19,957	10,678
Average number of shares	13,806,142	13,806,142	13,806,142	13,675,727
Cash flow per share (SEK)	-0.49	-0.48	-1.45	0.78

Cash flow per share is the amount of net cash flows 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	8,584	29,301	8,584	29,301
Number of shares at the end of the period	13,806,142	13,806,142	13,806,142	13,806,142
Equity per share (SEK)	0.62	2.12	0.62	2.12

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	8,584	29,301	8,584	29,301
Total equity & debt, KSEK	14,972	33,285	14,972	33,285
Equity ratio %	57	88	57	88

Equity Ratio is the ratio of Equity to Total Assets.



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