

revolutionizing sample processing



aiming at improving bioreactor culturing





Showcasing our innovative solutions for automated sample preparation for cell therapy and cytometry at CYTO, BIO and ISCT conferences



INTERIM REPORT JANUARY 1 – JUNE 30, 2024 ACOUSORT AB (PUBL)

# Summary of the interim report

#### SIGNIFICANT EVENTS DURING THE SECOND QUARTER

- On April 3, AcouSort announces that the Company restructures its North American sales operation.
- On April 26, AcouSort announces that the Company has initiated two AcouWash lease collaborations with potential OEM partners, one in Europe and one in the US.
- On April 29, AcouSort announces that the Company and GenSensor enter collaboration aiming at improving bioreactor culturing.
- On May 2, AcouSort announces that the Company will exhibit and present at CYTO 2024 demonstrating the benefits of acoustic sample preparation for flow cytometry applications.
- On May 24, AcouSort announces that the Company is selected by EIC for participation in BIO 2024 for the third time and invited to showcase its solutions in ISCT's Innovation Zone.
- On June 5, AcouSort announces that the Company is participating in a pioneering project to release the potential in extracellular vesicles research.

#### SIGNIFICANT EVENTS AFTER THE END OF THE PERIOD

- On July 12, AcouSort announces that the Company and GenSensor will collaborate to combine AcouSort's acoustofluidics technology with GenSensor's Biology First Process Analytical Technology to accelerate bioprocess design and improve monitoring systems for bioreactor culturing.
- On July 23, AcouSort announces that the Company has been selected to present on the latest new developments in acoustic trapping and acoustic separations at two upcoming conferences – the Gordon Research Conference on Extracellular Vesicles and the Acoustofluidics 2024 conference.
- On July 29, AcouSort announces that the Company enters collaboration with US based cell therapy company.
- On August 5, AcouSort announces that the Company enters its third collaboration within flow cytometry, now with one of the leading manufacturers of flow cytometers in Europe with the aim to evaluate the acoustic separation technology together with the partnering company's equipment.
- On August 27, AcouSort announces that the leading diagnostics company Werfen launches groundbreaking point-of-care system with integrated acoustofluidic technology.

#### FINANCIAL SUMMARY

The "Company" or "AcouSort" refers to AcouSort AB (publ) with corporate registration number 556824–1037.

#### Second quarter 2024 for the Group

- Net sales amounted to TSEK 961 (1,816)
- Result before tax amounted to TSEK -4,714 (-3,193)
- Result per share\* was SEK -0.32 (-0.24)
- Equity ratio\*\* amounted to 61% (58%) on June 30, 2024

#### Second quarter 2024 for the Parent company

- Net sales amounted to TSEK 960 (1,816)
- Result before tax amounted to TSEK -4,326 (-2,406)
- Result per share\* was SEK -0.29 (-0.18)
- Equity ratio\*\* amounted to 68% (63%) on June 30, 2024
- Earnings/loss per share: Profit/loss for the period divided by 14,934,140 shares. In the previous year, the number was 13,202,285 shares.
- \*\* Equity ratio: Equity divided by total capital.

#### NOTE TO THE READER

Amounts in parentheses refer to corresponding period of the previous year.

This document is essentially a translation of the Swedish language version. In the event of any discrepancies between this translation and the original Swedish document, the latter shall be deemed correct.



# AcouSort at a glance

AcouSort is an innovative medical technology company developing critical components for instrumentation used in the diagnostics, analytics, and cell therapy processing markets. AcouSort's components allow for automated refinement of biological samples such as blood or cell preparations, providing instrumentation manufacturers with a state-of-the-art ability to integrate sample processing steps that traditionally have to be performed manually.

#### **OUR VISION & MISSION**

Our vision is to improve healthcare impact and save lives across the globe by enabling more and better healthcare, faster! Our mission is to lead and drive the development and implementation of a new gold standard for automated sample preparation in clinical research, diagnostics and therapeutics. By providing solutions that radically change the way healthcare is provided today, we remove the bottlenecks for tomorrow's standard of care.

#### To realize our vision, AcouSort's main goals are:

- Support biomarker discovery and diagnostic assay development for critically ill patients with high sense of urgency
- Enable significant growth of the point-of-care market across healthcare sectors
- Streamline and automate cell processing to allow cell therapeutics to become broadly accessible
- Stay in the forefront of the acoustofluidics technology by continuously engaging in R&D activities

By pursuing these goals, AcouSort aims to become the leading supplier of acoustofluidic sample preparation solutions for the healthcare market.

#### **OUR STRATEGY & BUSINESS CONCEPT**

AcouSort's strategy is to use our innovative technology to revolutionize today's healthcare by providing a solution to automate and integrate sample processing steps, allowing for a new generation of medical devices to be developed. Through collaborations with leading Life Science companies our integrated technology will eliminate manual handling steps while saving time, money, and ultimately – lives.

Our commercialization strategy builds on our validated OEM business model offering sample preparation modules and solutions to providers of Life Science research instrumentation, diagnostic equipment, and therapeutic systems. Through close collaborations we develop customized solutions tailored to our partner's needs. AcouSort holds an ISO13485 certificate for the design, development, and manufacturing of components for the Medical Device industry.

To simplify evaluation of the technology, we have integrated our OEM components into user-friendly benchtop systems serving as innovation platforms for our partners. The systems are also used for sample preparation within research and assay development.

#### **OUR TECHNOLOGY**

AcouSort's core technology is acoustofluidics – a combination of sound waves (acousto) and microfluidics. Microfluidics allow for precise control of liquids while acoustics gives us the ability to move particles of different biophysical properties. By combining the two technologies, we have the unique ability to move target cell types from one liquid to another. This allows us to fractionate the different components in a blood sample, isolate extracellular vesicles or wash cells to remove contaminants, without having any physical contact with the sample. As the technology is gentle and rapid, it provides a competitive alternative to conventional processing techniques such as centrifugation or filtration. By using acoustofluidics, AcouSort can streamline sample processing for a wide range of applications – from biomarker discovery in basic research, to preparation of clinical blood samples prior to analysis, or sample purification in cell therapy manufacturing.

AcouSort's core technology builds on more than 20 years of acoustofluidic research and development headed by Thomas Laurell, professor at Lund University at the Department of Biomedical Engineering and co-founder and board member of AcouSort.

#### AcouSort through the years

· AcouSort is founded Transformed from a · Listed at Aktietorget · Distribution and license · First systems placed in Changed trading venue · AcouWash 2 launched Increased commercial · EUR 12.5M in EU funding to Nasdag First North project-based company (now Spotlight) agreement with IL/ Japan and Korea • First OEM product focus targeting the cell for the AcouSome to a fully functional Growth Market therapy market project AcouPlasmaOntical organization Received ISO13485 · AcouSort Inc. founded launched AcouTrap 3 launched certification · AcouWash launched First regulatory AcouTrap 2 launched approved system containing acustofluidic technology

#### **CEO COMMENTS**

# Substantial progress along all frontiers

In the second quarter of 2024, we continued to make progress in all our focus areas. The highlight in the Diagnostics field was Werfen's launch of a groundbreaking POC diagnostics system with patented acoustofluidic technology jointly developed with AcouSort. During the quarter, two new collaborations within the cell therapy field have been initiated — one with a US based company and one with a European company. Our activity level remains high also in flow cytometry with two new collaborations. Total income in the quarter amounted to SEK 1,993 thousand (3,362). For the first six months of the year, total income amounted to SEK 4,967 (7,209) million. It should be noted that our business is not evenly distributed over the year but can vary significantly from quarter to quarter.

# DIAGNOSTICS – WERFEN LAUNCHES ITS GROUNDBREAKING POC DIAGNOSTICS SYSTEM WITH PATENTED ACOUSTOFLUIDIC TECHNOLOGY JOINTLY DEVELOPED WITH ACOUSORT

In 2015, AcouSort and Werfen initiated a collaboration exploring the use of acoustofluidics technology to enable hemolysis detection in point-of-care (POC) diagnostic instruments. Using AcouSort background technology, Werfen and AcouSort have jointly developed the acoustofluidic technology now implemented in Werfen's groundbreaking GEM Premier 7000 system for point-of-care blood gas analysis. The new system was introduced at the 2024 Association for Laboratory Medicine (ADLM) Annual Meeting (formerly the American Association for Clinical Chemistry).

The lack of hemolysis detection in point-of-care blood gas testing has been widely recognized as a significant problem. The potential value of hemolysis detection is tremendous but has been viewed as an unsolvable challenge – until now.

The hemolysis detection in GEM Premier 7000 is based upon patented acoustofluidic technology for plasma separation, combined with photometric determination. In just 45 seconds, the GEM Premier 7000 detects hemolysis, while delivering a complete menu of results (pH, pO $_2$ , sodium, potassium, ionized calcium, chloride, glucose, lactate, hematocrit, total hemoglobin, total bilirubin and CO-oximetry).

At AcouSort, we are extremely proud of the outcome of our collaboration with Werfen and our contribution to the acousto-fluidic elements of the product. With the introduction of GEM Premier 7000, we now embark on the commercial phase of this collaboration. Since the acoustofluidic technology in the system is semi-disposable, we expect to see growth in revenue as the installed base of the system expands.

#### **CELL THERAPY - TWO NEW COLLABORATIONS**

During the quarter, we initiated two new collaborations within the cell therapy space – one with a US based company and one with a European company. Both collaborations will start out with three-month leases of the AcouWash system, allowing the partnering companies to evaluate the performance and applicability of the AcouWash technology in different steps of the cell therapy production process.

In January 2024, AcouSort signed a Statement of Work describing Phase 3 in the ongoing collaboration with a leading cell therapy company, securing revenues of SEK 480,000 in 2024. Due to a delay of glass chips from our sub-supplier, the first part of Phase 3 will take somewhat longer than originally planned, and is now expected to be finalized during H2, 2024.

The collaboration, which began in 2022, aims at demonstrating how AcouSort's acoustic separation technology can be adapted for industrial use and integrated as OEM components to automate



certain processing steps in the partnering company's future cell therapy products and instruments.

## OPPORTUNITIES WITHIN FLOW CYTOMETRY CONTINUE TO EMERGE

Efficient sample preparation is a challenge in flow cytometry and our technology's potential to establish swift and automated workflows in sample preparation is creating a growing interest from flow cytometry manufacturers, and our activity level in this field remains high. In the quarter, we participated in CYTO 2024 to present our innovative solutions for sample preparation and the vital role this can play to improve flow cytometry efficiency and outcome.

In April, our marketing activities resulted in a one-month rental of AcouWash to a US based company evaluating sample preparation and cell wash for cytometry-like applications. Future discussions about possible next steps will be initiated once our collaboration partner have a deeper understanding for how the technology works with their systems.

In August, we announced that AcouSort has entered a collaboration with one of the leading manufacturers of flow cytometers in Europe. The collaboration aims at evaluating the acoustic separation technology together with the partnering company's

equipment. As a first step in the collaboration, AcouSort will supply the partnering company a dedicated separation test module with associated software as well as an application support package. The revenues generated from this initial phase of the collaboration will be EUR 15,850.

#### **GROWING INTEREST FOR ACOUSORT'S TECHNOLOGY**

The growing interest for our technology is also reflected at scientific conferences. During the second quarter, we were invited to present the latest new developments in acoustic trapping and acoustic separations at two prestigious conferences – the Gordon Research Conference on Extracellular Vesicles and at Acoustofluidics 2024

During the quarter, we were also selected as a partner of the prestigious EVEREST project – a pioneering consortium in extracellular vesicle (EV) research, that recently received funding from the European union. The project brings together 22 institutions from 11 countries and is coordinated by University College Dublin. The interdisciplinary consortium is distinguished by an ambitious plan for over 285 months of staff exchanges, engaging at least 81 fellows.

In May, we announced that AcouSort was selected by the European Innovation Council (EIC) for participation in the European

Pavilion at BIO 2024 in San Diego, USA, after a competitive evaluation process. AcouSort is thereby one of only 15 European companies selected by the EU for full sponsorship at America's leading medical trade fair, which took place in San Diego in June 3-6. AcouSort was also invited to participate in the Innovation Zone of ISCT in Vancouver where the company showcased its innovative solutions.

#### OUTLOOK

In 2024, we will continue to build on our strategic advances within diagnostics and cell therapy. Our research-to-OEM strategy has proved to be successful, and we will increase our efforts to become a preferred supplier of automated sample processing solutions to partners within the diagnostic, cell therapy and flow cytometry spaces. Developing OEM partnerships is a process which requires time before a steady stream of revenue can be achieved. However, to strengthen our current cashflow, we have intensified our efforts to increase sales of our benchtop systems by establishing strategic collaborations with Key Opinion Leaders. We also aim to generate further external verifications of the AcouTrap system for exosome and extracellular vesicle processing.

Torsten Freltoft – CEO ACOUSORT AB

#### **STRATEGY**

# Growth through research and innovation collaborations

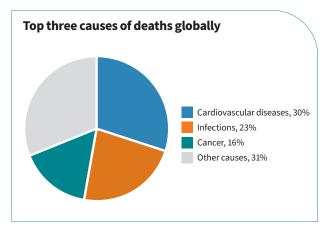


AcouSort's technology is perfectly placed to play a critical role in the healthcare of tomorrow. Cardiovascular diseases, infections, and cancer are the three deadliest diseases in the world. There is a great need for new and effective diagnostic and cell therapeutic solutions, but current sample processing and manufacturing workflows are facing significant challenges as they rely on a number of manual sample handling processes. Manual handling often entails a high risk of errors as well as bacterial contamination during the production process of cell therapeutics. This puts a high price tag on the therapy, thereby limiting the number of patients who can be offered a potentially life-saving treatment. It is clear that the industry is in great need of inventions in order to really take off.

## POTENTIAL FOR SIGNIFICANT IMPROVEMENTS IN CELL THERAPY AND DIAGNOSTICS

AcouSort's ambition is to address the challenges in cell therapy by introducing solutions that enable automated sample processing and integration to limit the need for manual handling in the manufacturing workflow. Our technology fits well in several steps in the process and has a fantastic potential to lower manufacturing cost.

Within diagnostics, our unique ability to automate and integrate sample processing steps will also allow for a new generation of medical devices. Patient samples can be analyzed directly at the point-of-care instead of at central laboratories, meaning that doctors and patients get the results immediately.



Source: WHO

#### **GROWTH THROUGH OUR RESEARCH-TO-OEM MODEL**

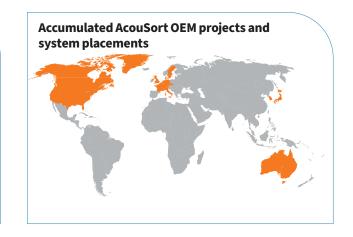
AcouSort's strategy focuses on our research-to-OEM model, which has the ambition to establish continuous revenues from sales of OEM modules to large Life Science companies. By establishing multiple partnerships in the cell and gene therapy and diagnostic markets, we aim to build a network of researchers and partners for joint developments to take us to a commercially matured technology. Recently, we substantially strengthened our commercial capacity, and we are currently targeting the North American market, the European market, and selected markets in Asia. Through collaborations with leading Life Science companies our technology will eliminate manual handling steps while saving time, money, and ultimately – lives.

# Cell & Gene Therapies Approved - World 25 September 10 10 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Source: ASGCT\_Citeline Q4 2022 Report

#### **INNOVATION WITH GREAT POTENTIAL**

In 2022, AcouSort and a group of partners received a grant of SEK 26 million by the EIC to develop an acoustofluidic thin film actuated chip for exosome separation from blood. Exosomes are nanoparticles that enable human cells to communicate vital information with each other. Thereby, exosome separation has the potential to open a completely new field within diagnostics and therapies. Of the SEK 26 million, SEK 12.2 million go directly to AcouSort, and the remainder of the funding is distributed to AcouSort's partners Lund University, DTU, and DayOne. The project will run for 36 months and is fully funded by the EU.



# Advancement within point-of-care testing requires automation of sample preparation



To fight the deadliest diseases in the world – cardiovascular, infectious, and cancer diseases – while the world's population in many countries is either growing or aging, faster and more efficient diagnostics are needed. One of the most important steps towards achieving this is to move diagnostic testing closer to the patient, thus being able to act immediately on the result. For most diagnostics tests, this will require integrated and automated sample processing, and AcouSort's advanced sample preparation modules provide an optimal solution to achieve this.

Today, almost all blood tests taken in the health care system are shipped to a central hospital or other laboratory facility. There, the samples are processed, and diagnostic assays are performed. For about 75% of the blood samples processed, the sample must be centrifuged to separate the blood cells from the blood plasma that is required to perform the requested tests. To implement most of today's blood-based diagnostic tests as point-of-care tests, the required blood-plasma separation must be seamlessly integrated into the point-of-care device. Depending on the specific diagnostic assay in question, AcouSort's OEM separation modules – AcouWash, AcouPlasmaOptical and AcouTrap – are optimal solutions to this challenge.

#### **MARKET**

The current trend in diagnostic testing aims to decentralize testing enabling faster and more accurate diagnostics. To provide the use of more advanced diagnostics outside of clinical laboratories, the interest in solutions for automated sample preparation is increasing. The global point-of-care testing (POCT) market size was accounted at USD 40.6 billion in 2021 and it is expected to reach around USD 103.2 billion by 2030¹ corresponding to an average annual growth of about 11%.

#### **OFFERING**

AcouSort works with providers of point-of-care diagnostic systems to customize our OEM modules to their future or next generation systems. AcouSort's modules are designed for integration into consumable or semi-consumable cartridges that our partners design to be used in their instruments. In this way, each separation module is used only for one patient or for a limited number of patients with a thorough decontamination step in between, ensuring sample integrity. When more and more system providers integrate our separation modules into their clinical diagnostic systems, AcouSort business model is highly scalable and with a significant revenue potential.

#### **FOCUS 2024**

In 2024, AcouSort will maintain its focus at reaching additional diagnostic customers by providing both the AcouPlasmaOptical and the AcouTrap units as evaluation test kits. The evaluation kits expand the possibilities for more potential collaboration partners to evaluate the products and to speed up the initial evaluation phases. In addition to this, the 2024 plans involve creating additional marketing materials showing the value provided by AcouPlasmaOptical when it comes to speeding up measurements of cells or plasma analytes directly in whole blood or other biofluids.

#### **Activities 2024**

#### Quarter 1

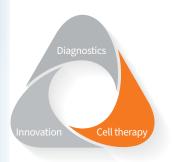
- Business development activities to reach new diagnostic partners
- Production of new OEM evaluation kits for partners exploring integration of AcouSort's technology

#### Quarter 2

- Participated in BIO 2024 in San Diego, USA, to promote AcouSort's OEM solutions within diagnostic sample preparation
- Successful proof-of-principle demo of blood plasma separation with a US based company active within pointof-care diagnostics opens for future collaboration

<sup>1</sup> https://www.precedenceresearch.com/point-of-care-testing-market

# Automated cell processing facilitates the cell therapy revolution



The world is facing a revolutionary increase in clinically approved cell therapies during the coming years. Unfortunately, the complex and expensive manufacturing process significantly limits the access to these treatments. All major Life Science instrumentation companies have active programs targeting automation of the cell therapy processing to manage cost and quality. AcouSort's automated cell separation and processing technology is well suited for providing new mainstream solutions for these novel cell therapies.

The number of clinically approved cell and gene therapies is rapidly increasing, with even more in the pipeline. Cell therapies can have price tags of up to USD 500,000 per treatment, a price level that is prohibitive for most health insurances or public health care plans. The reason for this currently very high cost is a combination of the need for sterile labs and the extensive manual handling required to produce the therapeutic cells.

#### **MARKET**

The global cell therapy market size was valued at USD 21.6 billion in 2022 and is expected to expand at a compound annual growth rate (CAGR) of 14.15% from 2023 to 2030¹, thus exceeding USD 60 billion in 2030. The market is constantly growing to include new cell types, which presents a significant opportunity for companies to strengthen their market positions. As a result, during the past few years, there has been a dramatic increase in the number of companies engaged in the development of cell therapies.

#### **OFFERING**

AcouSort has been approached by a handful of multinational Life Science companies seeking solutions to enclose and automate the cell therapeutics processing and eliminate the current manual processing. Our separation modules are well suited for this as they can automatically perform the cell wash, cell up-concentrations and separation of target cell types needed.

AcouSort's strategy is to develop and supply the automated cell processing modules as single use OEM components to our Life Science instrumentation partners. In this way, the AcouSort business model is both scalable and represents a significant revenue potential.

#### **FOCUS 2024**

In 2024, AcouSort will continue the development and marketing activities related to our cell wash, cell separation and cell up-concentration applications for automation of cell therapy sample preparation. An important element is the technical development of higher throughput units followed by the development of new marketing materials highlighting the benefits of these units. With more data and ready solutions, we are aiming to continue intensifying our market outreach during the year to interact with more potential partners active in the field of cell therapy development.

Another business opportunity opening up is the need for in-line monitoring of quality parameters in automated cell processing systems. Currently, lack of such methods is a significant bottleneck for the system developers. Consequently, an additional 2024 focus is to promote the AcouPlasmaOptical module for providing optical access to either cells or cell-free medium for this purpose.

#### **Activities 2024**

#### Quarter 1

- Initialized the third phase of the ongoing cell therapy project in collaboration with a global life science company
- Participated in Phacilitate Advanced Therapies Week in Miami meeting companies working on technologies for cell and gene therapy
- Visited a start-up company in France active within the cell therapy space

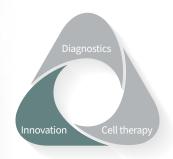
#### Quarter 2

- Participated in ISCT 2024 in Vancouver, Canada, showcasing our solutions to potential OEM partners within the cell therapy field
- Installation of AcouWash at a European cell therapy company for an application feasibility project
- Intense activities in the ongoing cell therapy project to further increase sample throughput in cell wash applications

<sup>1</sup> From https://www.grandviewresearch.com/industry-analysis/cell-therapy-market

**INNOVATION** 

# Driving the development and exploitation of automated sample processing



Through partnerships with leading universities and through our Research and Innovation platforms – AcouWash and Acou-Trap – AcouSort strives to continue driving the innovation of acoustofluidics for automated sample preparation and processing. Our innovation projects are to a large extent funded through public contributions from EIC/EU and from Vinnova.

AcouSort is constantly interacting with current and potential partners and customers through meetings and active participation in scientific conferences and tradeshows. The feedback from these interactions is used to direct our Research and Innovation activities.

## COMMERCIAL RESEARCH AND INNOVATION PLATFORMS

To enable the development of new or improved applications of our automated sample processing technology, we have developed two benchtop Research and Innovation platforms, the AcouWash and the AcouTrap. We provide these systems to researchers and key opinion leaders at universities and to our OEM collaboration partners in the Life Science industry. Through our academic research partners and their publications and presentations, we distribute information about our technology and its applications. And through the collaboration with the OEM partners, the systems enable access to the automated sample processing modules at a very early stage in their technical assay or system development process. The use of our Research and Innovation platforms by key opinion leaders contributes to broaden the application fields of the technology while promoting the use of our technology in general through their scientific publications.

#### THE ACOUSOME PROJECT

The AcouSome project is a fully funded EU transition project with two main commercial innovation goals. The most fundamental goal is to replace the currently glass-based and bulk piezo activated separation modules with modules made in plastic. If successful, this innovation will significantly reduce the production price of our separation modules, paving the way for single use applications of these in point-of-care diagnostics. However, the project also has the goal of developing a robust and simple-to-use device for isolating extracellular vesicles from whole blood samples.

The AcouSome project is funded 100% by the European Innovation Council (EIC) with EUR 2.5 million over 36 months (2023-2025). Our partners in this project are the Technical University of Denmark, Lund University and DayOne.

#### **FOCUS 2024**

The AcouSome project officially started January 1, 2023. During the first year the initial focus was to identify and start mitigating the largest challenges in the project. The focus within AcouSome in 2024 is to increase robustness and reproducibility of trapping of extracellular vesicles and exosomes as well as continue developing thin film-based actuation of the ultrasound and exploring the novel polymer-based components.

Focus for the AcouTrap Research and Innovation platform in 2024 will include internal and external performance evaluations and in-depth characterizations of the extracellular vesicles isolated in the AcouTrap. Commercial activities will be intensified to reach the research field working with extracellular vesicles, where the research community is still lacking reliable methods for isolating and processing nanoparticles.

#### **Activities 2024**

#### Quarter 1

- The innovation project AcouSome has made significant technical progress resulting in two novel patent applications
- Customer visits in Europe and Canada demonstrating the technology and exploring new research collaborations within the flow cytometry field

#### Quarter 2

- Participation in CYTO 2024 in Edinburgh, Scotland, showing the value of using AcouWash in dissociated tissue cleanup
- Installation of AcouWash at US based company active in the flowcytometry field for technology evaluation

# AcouSort's research collaborations

Sound is created when a vibration generates pressure waves that propagate through a medium. When the wave encounters a particle, the particle is moved by the acoustic forces generated by the wave. In acoustofluidics, the technology used by AcouSort, ultrasound is used to create standing acoustic waves in microfluidic channels. The standing wave typically focuses the particles

toward the pressure node, where the pressure variation is the lowest. The sound frequency is similar to diagnostic ultrasound and has been shown to be very gentle to biological samples, with no activation or decrease in viability. Acoustofluidics can be implemented in two different ways, acoustic separation, and acoustic trapping.

To stay at the forefront, AcouSort is continuously developing the acoustofluidic technology further together with universities and commercial partners.

Project	Sponsor	Goal	Partners	Duration	Status	AcouSort grant	Total project grant
AcouSome	European Innovation Council	Development of a miniaturized microfluidic module for exosome isolation directly from blood using ultrasound generated by thin films, to be used in research and diagnostics.	Lund University, DTU, DayOne	2023-2025	Ongoing	EUR 1,100,000	EUR 2,500,000
IndiCell	Vinnova	Development of a world leading innovation milieu for individualized induced pluripotent stem cell derived therapies, to lower the risks and overcome hurdles for the translation from basic science to innovations and further to clinical applications.	Lund University, Karolinska Institute, KTH, Lab-On-A-Bead AB, Skåne University Hospital, BioLamina AB, Karolinska University Hospital	2021-2026	Ongoing	EUR 110,000	EUR 3,520,000*
Blue4Therapy	Eureka, Vinnova, Innovation Fund Denmark	Development of a platform for specific stem cell isolation from autologous adipose tissue for effective regenerative therapy, together with universities and commercial partners.	Blue Cell Therapeutics, University of Southern Denmark, Novozymes A/S	2020-2023	Completed April 2023	EUR 300,000	EUR 800,000
AcouPlast	Eureka, Vinnova, Innovation Fund Denmark	Development of polymer chips to make acoustic separation even more cost efficient and easy to integrate into diagnostic and analytical systems.	DTU, Ortofon A/S, Lund University	2019-2023	Completed Mar 2023	EUR 400,000	EUR 1,000,000
BioWings	EU Horizon 2020	Development of thin films generating the ultrasound used for cell processing to make acoustofluidic chips more efficient and easier to manufacture.	Weizmann Institute of Science, EPFL, PIEMACS, DTU, Lund Univeristy	2018-2022	Completed Nov 2022	EUR 180,000	EUR 3,000,000

 $<sup>^\</sup>star\text{Currency}$  conversion from SEK, i.e. the total project grant in EUR is approximate.



# AcouSort's products

#### **OEM COMPONENTS**

AcouSort's main strategy is to develop and commercialize Original Equipment Manufacturer (OEM) components for sample preparation and processing. The OEM solutions enable integration of our technology into analytical, diagnostic, and therapeutic systems, providing automated sample preparation. The customer base for the OEM components are instrument manufacturers within the Life Science industry.

AcouSort intends to expand the portfolio of OEM components to cover a wide range of applications for clinical analysis and handling of biological samples. The Company expects the acoustic separation components to be critical components, essential for development of novel point-of-care testing devices where access to blood plasma or other fractions of blood is required. This also applies for biological sample processing systems in therapeutic settings for e.g., personalized medicine.

#### AcouPlasmaOptical

Integrated blood plasma separation. AcouPlasmaOptical is an OEM component designed for integration into diagnostic instruments as a semi-consumable. It enables automated and rapid access to plasma for optical measurements of blood analytes in point-of-care diagnostic devices. The technology uses gentle acoustic forces in combination with microfluidics to create a plasma window for optical access in whole blood samples without the need for prior centrifugation. Centrifugation often requires manual intervention that may have negative effects on sample quality, making AcouPlasmaOptical a competitive alternative.

Custom made solutions for interfacing of sample flow and electronic connection are available. Design, development and manufacturing of AcouPlasmaOptical is ISO13485 certified.

AcouSort offers evaluation kits to partners interested in exploring integration of the component into their systems.

#### RESEARCH AND INNOVATION SYSTEMS

AcouSort has developed two benchtop systems, the AcouTrap and the AcouWash, to offer the Company's core acoustofluidic techniques, i.e., trapping and separation techniques, in an easy-to-use format. The instruments serve as Research and Innovation platforms, providing easy access to the technology for instrument manufacturers interested in integrating acoustofluidic OEM components into their systems. With user-friendly hardware and software, the instruments enable automated handling of biological samples, supporting academic researchers and product development teams working with new biomarker identification and diagnostic assay development.

#### AcouTrap

Handling of cells and extracellular vesicles. AcouTrap is a benchtop research instrument for automated enrichment, washing and staining of biological samples. AcouTrap provides a solution for gentle and rapid sample preparation of biological particles of various sizes. The AcouTrap system is excellent for sample preparation of precious cell samples, where traditional methods are ill-suited as they can dramatically decrease recovery and viability. The AcouTrap efficiently automate common sample preparation

steps such as up-concentration, high recovery washing and labelling of low cell number samples. The system also facilitates handling of nanoparticles, including bacteria, viruses, and extracellular vesicles. These particles are very small, often less than one micrometer in size, and are found in complex biological liquids such as blood plasma. The small size and the complexity of the liquid makes isolation through conventional techniques challenging. With AcouTrap, isolation is automated and manages samples with smaller volumes than the competing technologies. This enables research studies with biobank samples that often contain minute fluid volumes.

#### AcouWash

Automated cell separation. AcouWash is a benchtop research instrument for label-free separation of target cells from a variety of sample types. The system provides automated processing and is designed to perform sensitive separations and handle fragile cells without any impact on viability. The acoustic forces used in the AcouWash provides samples with very high quality and with minimal sample to sample variation.

With the AcouWash system, a variety of applications aimed at separation of blood cells can be automated. Common applications comprise gentle and highly efficient cell wash, label-free separation of mononuclear cells from whole blood, isolation of platelets, rare cell isolation (e.g., circulating tumor cell, CTC) as well as blood-plasma separation for diagnostic applications.

# Income statement – Group

	4/1/2024	4/1/2023	1/1/2024	1/1/2023	1/1/2023
(SEK thousand)	6/30/2024	6/30/2023	6/30/2024	6/30/2023	12/31/2023
Operating income					
Net sales	961	1,816	2,318	4,413	5,534
Other income	1,033	1,546	2,649	2,796	5,017
Total income	1,993	3,362	4,967	7,209	10,551
Operating expenses					
Raw materials	0	-181	0	-1,116	-2,162
Other external expenses	-2,234	-2,457	-4,491	-3,854	-7,238
Personnel costs	-4,375	-4,447	-9,325	-8,903	-17,854
Depreciations	-60	-151	-126	-385	-783
Other operation expenses	-3	0	-3	0	0
Total expenses	-6,671	-7,236	-13,945	-14,258	-28,038
OPERATING RESULT	-4,678	-3,874	-8,978	-7,049	-17,487
Result from financial items					
Financial income	0	681	571	818	398
Financial expenses	-36	0	-36	-2	0
Result before taxes	-4,714	-3,193	-8,443	-6,233	-17,089
Tax on this year's result	0	0	0	0	0
Result for the period	-4,714	-3,193	-8,443	-6,233	-17,089
Result per share, SEK	-0.32	-0.24	-0.57	-0.47	-1.29

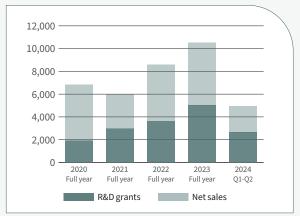
#### **Operating results**

For the second quarter of the year AcouSort Group reported net sales of TSEK 961 (1,816) which consisted of product sales of TSEK 117 (1,060), customer projects of TSEK 0 (756) and licence fees of TSEK 843 (0). Other operating income consists of grants amounting to TSEK 1,033 (1,546).

Raw materials amounted to TSEK 0 (-181). Other external expenses amounted to TSEK -2,234 (-2,457). Personnel costs amounted to TSEK -4,375 (-4,447). Depreciation amounted to TSEK -60 (-151).

For the second quarter of the year AcouSort Group's operating result totalled TSEK -4,678 (-3,874).

#### **Total income, SEK thousand**



AcouSort has been successful in applying for public R&D grants within Sweden and the EU. In total over the past four years, AcouSort has been awarded EUR 2.2 million corresponding to almost SEK 25 million in research and development grants.

Apparently incorrect sums are explained by rounding in the rows leading to the sum.

# Balance sheet - Group

ASSETS (SEK thousand)	6/30/2024	12/31/2023
Fixed assets		
Intangible assets	4,031	3,520
Tangible assets	146	218
Financial assets	12	24
Total fixed assets	4,190	3,762
Current assets		
Inventories	2,217	2,080
Account receivable	35	3,374
Other receivables	879	496
Prepaid expenses and accrued income	1,038	815
Cash and cash equivalents	16,683	23,986
Total current assets	20,853	30,751
TOTAL ASSETS	25,043	34,513

EQUITY AND LIABILITIES (SEK thousand)	6/30/2024	12/31/2023
Equity		
Share capital	1,493	1,490
Development expense fund	4,031	3,520
Share premium	99,556	99,278
Reserves	-4	170
Retained earnings	-81,337	-63,234
Profit/loss for the period	-8,443	-17,089
Total equity	15,297	24,135
Current liabilities		
Account payables	799	753
Tax liabilities	132	107
Other liabilities	472	493
Accrued expenses and deferred income	8,343	9,025
Total current liabilities	9,746	10,378
TOTAL EQUITY AND LIABILITIES	25,043	34,513

Apparently incorrect sums are explained by rounding in the rows leading to the sum.

#### **Financial Position**

On June 30, 2024, AcouSort Group's equity ratio was 61% (58). Equity amounted to TSEK 15,297 (12,734). Cash and cash equivalents amounted to TSEK 16,683 (11,889). Total assets for the Group amounted to TSEK 25,043 (22,035).

# Statement of changes in equity – Group

		Development			Retained	Loss for the	
(SEK thousand)	Share capital	expense fund	Share premium	Reserves	earnings	period	Total
Opening balance January 1, 2023	1,320	2,723	77,370	-65	-48,618	-13,780	18,949
Prior year´s result	0	0	0	0	-13,780	13,780	0
Conversion difference	0	0	0	235	-38	0	197
Development expense fund	0	797	0	0	-797	0	0
Warrants, Serie 2023/2026	0	0	211	0	0	0	211
Redemption Warrants 2020/2023	5	0	661	0	0	0	666
Rights issue	166	0	24,674	0	0	0	24,840
Costs, rights issue	0	0	-3,638	0	0	0	-3,638
Loss for the period	0	0	0	0	0	-17,089	-17,089
Equity December 31, 2023	1,490	3,520	99,278	170	-63,234	-17,089	24,135
Opening balance January 1, 2024	1,490	3,520	99,278	170	-63,234	-17,089	24,135
Prior year´s result	0	0	0	0	-17,089	17,089	0
Conversion difference	0	0	0	-174	-64	0	-238
Development expense fund	0	512	0	0	-512	0	0
Warrants, Serie 2023/2026	0	0	0	0	1	0	1
Redemption Warrants 2020/2023	0	0	0	0	-440	0	-440
Rights issue	3	0	437	0	0	0	440
Costs, rights issue	0	0	-158	0	0	0	-158
Loss for the period	0	0	0	0	0	-8,443	-8,443
Equity June 30, 2024	1,493	4,031	99,556	-4	-81,337	-8,443	15,297

 $\label{lem:parently incorrect sums are explained by rounding in the rows leading to the sum.$ 

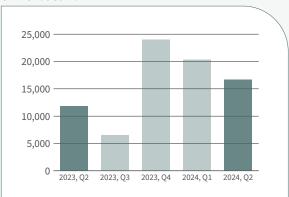
# Cash flow statement – Group

	4/1/2024	4/1/2023	1/1/2024	1/1/2023	1/1/2023
(SEK thousand)	6/30/2024	6/30/2023	6/30/2024	6/30/2023	12/31/2023
Operating activities					
Operating result	-4,678	-3,874	-8,978	-7,049	-17,487
Depreciations	60	151	126	385	783
Financial income	0	681	571	818	398
Financial expenses	-36	0	-36	-2	0
Cash flow from operating activities before changes					
in working capital	-4,654	-3,042	-8,316	-5,848	-16,306
Change in working capital					
Increase/decrease inventories	-113	-198	-137	-547	-471
Increase/decrease in receivables	-348	-2,418	2,732	-2,585	-2,619
Increase/decrease in current liabilities	1,657	-565	-631	-13,241	-12,163
Changes in working capital	1,195	-3,181	1,963	-16,373	-15,253
Cash flow from operating activities  Investing activities	-3,459	-6,223	-6,353	-22,221	-31,559
Increase/decrease of tangible assets	0	-214	0	-214	-213
Increase/decrease of intangible assets	-267	-77	-566	-96	-917
Increase/decrease of financial assets	0	0	12	-24	-24
Cash flow from investing activities	-267	-291	-554	-334	-1,155
Financing activities					
Rights issue	0	0	-158	0	21,868
Warrants	0	191	1	191	211
Increase/decrease of long-term liabilities	0	0	0	0	0
Cash flow from financing activities	0	191	-157	191	22,079
Change in cash and cash equivalents	-3,725	-6,323	-7,064	-22,364	-10,635
Cash and cash equivalents at the beginning of the period	20,377	18,377	23,986	34,426	34,426
Conversion difference and other adjustments	31	-165	-239	-173	195

#### **Cash flow and investments**

AcouSort Group's cash flow for the second quarter of the year was TSEK -3,725 (-6,323). Investments amounted to TSEK -267 (-291), of which TSEK -267 (-77) pertained to intangible assets and TSEK 0 (-214) to tangible assets.

# Cash and cash equivalents last five quarters, SEK thousand



At the end of the second quarter, the Group had cash and cash equivalents amounting to TSEK 16,683, a fund that allows us to complete our current plans during 2024.

Apparently incorrect sums are explained by rounding in the rows leading to the sum.

# Income statement – Parent company

	4/1/2024	4/1/2023	1/1/2024	1/1/2023	1/1/2023
(SEK thousand)	6/30/2024	6/30/2023	6/30/2024	6/30/2023	12/31/2023
Operating income					
Net sales	960	1,816	2,318	4,376	5,496
Other income	1,033	1,546	2,649	2,796	5,017
Total income	1,993	3,362	4,967	7,172	10,513
Operating expenses					
Raw materials	0	-181	0	-1,088	-2,133
Other external expenses	-2,135	-2,180	-4,303	-3,349	-6,426
Personnel costs	-4,085	-3,937	-8,486	-7,857	-15,687
Depreciations	-60	-151	-126	-385	-783
Other operation expenses	-3	0	-3	0	0
Total expenses	-6,283	-6,449	-12,918	-12,679	-25,029
OPERATING RESULT	-4,290	-3,087	-7,951	-5,507	-14,517
Result from financial items					
Financial income	0	681	571	818	565
Financial expenses	-36	0	-36	-2	0
Result before taxes	-4,326	-2,406	-7,415	-4,691	-13,952
Tax on this year's result	0	0	0	0	0
Result for the period	-4,326	-2,406	-7,415	-4,691	-13,952
Result per share, SEK	-0.29	-0.18	-0.50	-0.36	-1.05

#### **Operating results**

For the second quarter of the year, the parent company reported net sales of TSEK 960 (1,816). Other operating income consists of grants amounting to TSEK 1,033 (1,546). Raw materials for the period amounted to TSEK 0 (-181). Other external expenses for the period amounted to TSEK -2,135 (-2,180). Personnel costs for the period amounted to TSEK -4,085 (-3,937). Depreciation for the period amounted to TSEK -60 (-151).

The second quarter's operating result for the parent company totalled TSEK -4,290 (-3,087).

Apparently incorrect sums are explained by rounding in the rows leading to the sum.

# Balance sheet – Parent company

ASSETS (SEK thousand)	6/30/2024	12/31/2023
Fixed assets		
Intangible assets	4,031	3,520
Tangible assets	146	218
Financial assets	21	33
Total fixed assets	4,199	3,771
Current assets		
Inventories	2,217	2,080
Account receivables	35	3,374
Receivables from subsidiaries	5,879	4,393
Other receivables	879	496
Prepaid expenses and accrued income	917	815
Cash and cash equivalents	16,288	23,690
Total current assets	26,216	34,848
TOTAL ASSETS	30,414	38,619

EQUITY AND LIABILITIES (SEK thousand)	6/30/2024	12/31/2023
Equity		
Share capital	1,493	1,490
Development expense fund	4,031	3,520
Share premium	99,556	99,278
Retained earnings	-76,997	-62,095
Profit/loss for the period	-7,415	-13,952
Total equity	20,668	28,241
Current liabilities		
Account payables	799	753
Tax liabilities	132	107
Other liabilities	472	493
Accrued expenses and deferred income	8,343	9,025
Total current liabilities	9,746	10,378
TOTAL EQUITY AND LIABILITIES	30,414	38,619

Apparently incorrect sums are explained by rounding in the rows leading to the sum.

#### **Financial Position**

On June 30, 2024, the parent company's equity ratio was 68% (63). Equity amounted to TSEK 20,668 (15,614). Cash and cash equivalents amounted to TSEK 16,288 (11,705). Total assets amounted to TSEK 30,414 (24,858).

# Statement of changes in equity – Parent company

		Development		Retained	Loss for the	
(SEK thousand)	Share capital	expense fund	Share premium	earnings	period	Total
Opening balance January 1, 2023	1,320	2,723	77,370	-48,391	-12,908	20,114
Prior year´s result	0	0	0	-12,908	12,908	0
Development expense fund	0	797	0	-797	0	0
Warrants, Serie 2023/2026	0	0	211	0	0	211
Redemption Warrants 2020/2023	5	0	661	0	0	666
Rights issue	166	0	24,674	0	0	24,840
Costs, rights issue	0	0	-3,638	0	0	-3,638
Loss for the period	0	0	0	0	-13,952	-13,952
Equity December 31, 2023	1,490	3,520	99,278	-62,095	-13,952	28,241
Opening balance January 1, 2024	1,490	3,520	99,278	-62,095	-13,952	28,241
Prior year´s result	0	0	0	-13,952	13,952	0
Development expense fund	0	512	0	-512	0	0
Warrants, Serie 2023/2026	0	0	0	1	0	1
Redemption Warrants 2020/2023	0	0	0	-440	0	-440
Rights issue	3	0	437	0	0	440
Costs, rights issue	0	0	-158	0	0	-158
Loss for the period	0	0	0	0	-7,415	-7,415
Equity June 30, 2024	1,493	4,031	99,556	-76,997	-7,415	20,668

 $\label{lem:parently incorrect sums are explained by rounding in the rows leading to the sum.$ 

# Cash flow statement – Parent company

	4/1/2024	4/1/2023	1/1/2024	1/1/2023	1/1/2023
(SEK thousand)	6/30/2024	6/30/2023	6/30/2024	6/30/2023	12/31/2023
Operating activities					
Operating result	-4,290	-3,087	-7,951	-5,507	-14,517
Depreciations	60	151	126	385	783
Financial income	0	681	571	818	565
Financial expenses	-36	0	-36	-2	0
Cash flow from operating activities before changes					
in working capital	-4,266	-2,255	-7,289	-4,306	-13,169
Change in working capital					
Increase/decrease inventories	-113	-197	-137	-547	-472
Increase/decrease in receivables	-376	-3,012	1,368	-3,975	-5,405
Increase/decrease in current liabilities	1,657	-622	-632	-13,298	-12,163
Changes in working capital	1,167	-3,831	598	-17,820	-18,040
Cash flow from operating activities	-3,099	-6,086	-6,692	-22,126	-31,209
Investing activities					
Increase/decrease of tangible assets	0	-214	0	-214	-213
Increase/decrease of intangible assets	-267	-77	-566	-96	-917
Increase/decrease of financial assets	0	0	12	-24	-24
Cash flow from investing activities	-267	-291	-554	-334	-1,154
Financing activities					
Rights issue	0	0	-158	0	21,868
Warrants	0	191	1	191	211
Increase/decrease of long-term liabilities	0	0	0	0	0
Cash flow from financing activities	0	191	-157	191	22,079
Change in cash and cash equivalents	-3,365	-6,186	-7,402	-22,269	-10,284
Cash and cash equivalents at the beginning of the period	19,653	17,892	23,690	33,974	33,974
Cash and cash equivalents at the end of the period	16,288	11,705	16,288	11,705	23,690

#### **Cash flow and investments**

The parent company's cash flow for the second quarter was TSEK -3,365 (-6,186). Investments amounted to TSEK -267 (-291), of which TSEK -267 (-77) pertained to intangible assets and TSEK 0 (-214) to tangible assets.

Apparently incorrect sums are explained by rounding in the rows leading to the sum.

### **Other information**

#### **THE SHARE**

AcouSort's share was listed on Spotlight Stock Market January 9th, 2017. In December 2020 the share changed list to Nasdaq First North Growth Market, with December 14th as the first trading day. The ticker symbol of the share is "ACOU", and the ISIN-code is SE0009189608. First North Growth Market is an alternative marketplace run by NASDAQ OMX GROUP. Companies traded on First North Growth Market do not have to be compliant to the same rules as companies traded on a regulated market. Instead, the companies follow under less strict rules applied for growth companies. The risk of investing in a company traded on First North Growth Market may thus be greater than investing in a company traded on a regulated market. All companies with shares traded on First North Growth Market have a Certified Adviser that supervises the compliance of the rules. The stock exchange examines applications to be listed on the exchange. AcouSort's Certified Adviser on Nasdaq First North Growth Market is Carnegie Investment Bank AB (publ), +46 (0)73 856 42 65. As of June 30, 2024, the number of shares in AcouSort AB was 14,934,140 (13,202,285). The Company has one class of shares. Each share carries one (1) vote per share and carries equal rights to share in the Company's assets and earnings.

#### THE SUBSIDIARY ACOUSORT INC

AcouSort AB has a wholly owned subsidiary in the USA, AcouSort Inc. The Company's task is to carry out marketing and sales on the North American market.

#### **BUSINESS-RELATED RISKS AND UNCERTAINTIES**

In summary, the risks and uncertainties that AcouSort's operations are exposed to are related to, among other things, competition, technology development, market conditions, capital needs, currencies and interest rates. No significant changes in risk or uncertainty factors occurred during the current period. For more detailed reporting of risks and uncertainties, please refer to the Annual Report.

#### **UPCOMING FINANCIAL REPORTS**

- Q3 2024: November 27, 2024
- Q4 2024: February 26, 2025

#### **REVIEW BY AUDITORS**

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

## PRINCIPLES FOR THE INTERIM REPORT'S ESTABLISHMENT

The interim report has been prepared in accordance with the Swedish Accounting Standards Board's General Council 2012:1 Annual Report and Consolidated Accounts (K3) and the Annual Accounts Act.

	Jan - Jun 2024	Jan - Jun 2023	Jan - Dec 2023
Number of shares before dilution	14,934,140	13,202,285	14,903,958
Number of shares after dilution	15,486,138	13,202,285	15,455,956
Result per share before and after dilution	-0.29	-0.18	-1.05
Average number of shares before dilution	14,934,140	13,202,285	13,294,246
Average number of shares after dilution	15,486,138	13,202,285	13,846,244

# Declaration by the Board of Directors and the CEO







**Thomas Laurell** 



**Stefan Scheding** 

The Board of Directors and the Chief Executive Officer certify that the interim report provides a true and fair view of the Company's business, financial position, performance and describes material risks and uncertainties, to which the Company is exposed.

> The interim report has not been reviewed by the Company's auditors.

Lund, August 28, 2024



**Katherine Flagg** 



**Torsten Freltoft** 

**Martin Olin Thomas Laurell** Chairman Board member

**Stefan Scheding Katherine Flagg** Board member Board member

#### **Torsten Freltoft**

CEO

#### For further information, contact:

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