



## Interim Report 230401-230630

Press Release, August 24, 2023

### Summary of Interim Report

	(SEK)			
Group Overview	2023-04-01	2022-04-01	2023-01-01	2022-01-01
	2023-06-30	2022-06-30	2023-06-30	2022-12-31
	3 mon	3 mon	6 mon	12 mon
Operating income	103 897		128 078	667 589
Earnings after financial items	-2 963 831		-7 064 470	-13 987 911
Balance Sheet total assets	117 598 027		117 598 027	119 816 255
Equity / Assets ratio	81%		81%	81%
Earnings per share	-0.08		-0.20	-0.42
Number of shares	34 979 248		34 979 248	33 183 461
<b>Parent Company Overview</b>	<b>2023-04-01</b>	<b>2022-04-01</b>	<b>2023-01-01</b>	<b>2022-01-01</b>
	<b>2023-06-30</b>	<b>2022-06-30</b>	<b>2023-06-30</b>	<b>2022-12-31</b>
	<b>3 mon</b>	<b>3 mon</b>	<b>6 mon</b>	<b>12 mon</b>
Operating income	103 897	685 380	128 078	667 589
Earnings after financial items	-2 828 951	-3 209 011	-6 748 689	-13 810 029
Balance Sheet total assets	111 626 572	112 891 049	111 626 572	111 229 225
Equity / Assets ratio	85%	93%	85%	88%
Earnings per share	-0.08	-0.10	-0.19	-0.42
Number of shares	34 979 248	33 183 461	34 979 248	33 183 461

### Revenue and Result

Scandinavian Real Heart is working with research and development and currently has no sales of any products. The income reported for the period consists mainly of foreign currency exchange gains. Research and development costs of Realheart® TAH were capitalized during Q2 with 3.5 MSEK. 1.2 MSEK for purchased services and other external costs and 2.3 MSEK for personnel. During the period, write-downs of capitalized costs for research and development were made by 0 MSEK.

The item other external costs of 2.9 MSEK consists of costs for purchased services of 0,7 MSEK and various other costs of 2.2 MSEK.

### Financial Position

During the period, the company has received cash of 3.8 MSEK from an extended loan from ALMI and 0,6 MSEK from received Grants. With a cash balance of 7,3 MSEK at the end of the

period together with the recently finalized share issue of 42.2 MSEK and the received R&D Tax credit from Australia of 7.2 MSEK, the company has funding that will last into the third quarter of 2024.

In order to solve the Company's longer-term financing needs, Realheart works continuously to evaluate alternatives for further capitalization of the Company.

### **Significant Events During the Second Quarter of the Year**

In April, it is announced that industry players and Realheart estimate the market potential for total artificial hearts (TAHs) to be over 200,000 units per year in Europe and the US. Realheart believes it is well positioned to take significant market share with its four-chamber artificial heart.

During April, the company announces that Joseph Bornoff's simulations of Realheart have been published in the Springer Nature journal Scientific Reports. Bornoff has developed an advanced CFD (Computational Fluid Dynamics) model of the Realheart® TAH (Total Artificial Heart) to study the blood flow in the pump and optimize its function.

Furthermore, it is communicated that results of Scandinavian Realheart's total artificial heart showing lower hemolysis are published in the journal Artificial Organs. The article summarizes the work done by an international research team led by Dr Ina Laura Perkins and Dr Azad Najar from Realheart, in collaboration with researchers at Swansea University Medical School in the UK.

May begins with researchers at Scandinavian Real Heart and the University of Bath publishing the world's first computer simulation method for dual mechanical heart valves in series. The article is the result of an international collaboration between researchers at Realheart and researchers at the University of Bath (UK) and was published in the scientific journal "Computer Methods in Biomechanics and Biomedical Engineering".

In mid-May, Realheart communicates decisions on new issues of up to 73 MSEK. May also includes a confirmation that Scandinavian Real Heart AB receives an initial investment from EIC Fund of up to 3.5 MEUR.

June begins with a board member resigning from Scandinavian Real Heart AB at his own request. After careful consideration, Patrick NJ Schnegelsberg took the decision to resign from the board of Realheart, as his work situation required his undivided attention and time.

In the beginning of June, Realheart announces that the company participates in a Vinnova collaboration for wireless TAH technology. The company Invivopower has been awarded a grant of 0.9 MSEK from Vinnova to further develop its patented technology for wireless energy transfer through the skin in collaboration with Scandinavian Real Heart AB. The project runs from June 2023 to May 2024.

In mid-June, cardiac surgeon Dilek Gürsoy speaks about Realheart's artificial heart at Impact LECH. Gürsoy, who is one of several first-class speakers, talks about artificial hearts in general and about Realheart's artificial heart specifically. She also participates in a panel discussion on "Man and machine in medicine".

During the second half of June, Realheart publishes a prospectus in connection with a rights issue of units of approximately 56 MSEK. The subscription period in the Rights Issue runs from June 20, 2023 to July 7, 2023.

At the end of June, Realheart communicates that the Company's Chief Medical Officer Dr. Ulf Kjellman has been interviewed by Trading Direkt Healthcare, on the theme of artificial hearts.

Among the last things to happen in June is the approved trademark registration of Realheart in key international markets, in addition to the protection that the brand already has in Sweden. This allows the brand to be developed to exclusively support the company's artificial heart.

## Significant Events After the End of the Period

In the first days of July, the Company communicates that Scandinavian Real Heart AB initiates a collaboration with Chief Physician and Professor Göran Dellgren at the Transplantation Center and Thorax Clinic at Sahlgrenska University Hospital. The collaboration is part of the preparations for the clinical studies with the Company's artificial heart.

July also begins with the German heart surgeon Professor Jan Schmitto, via a press release, estimating the market for companies that can provide a sufficiently good artificial heart is huge. He assesses Realheart's TAH as very promising, partly due to the pulsating blood flow similar to the human heart.

In the first week of July, after Almi's evaluation, it was announced that Scandinavian Real Heart AB would receive business development support totaling 0.85 MSEK. Realheart submitted four applications and all have been approved.

Further into July, Scandinavian Real Heart AB announces the outcome of the Company's rights issue.

At the end of July, a press release is published that Realheart conducts a directed new issue of units to guarantors and a directed issue to EIC in connection with the completed rights issue.

A few days into August, Realheart announces the last day of trading with BTU and the first day of trading with warrants of series TO2.

In the second week of August, Realheart communicates that Magnus Öhman is elected to the company's board of directors. Magnus Öhman has extensive experience from the medical technology industry, including as CEO of St. Jude Medical's Swedish subsidiary within Cardiac Rhythm Management.

## CEO Ina Laura Perkins has the Word

**A look back at the first quarter provides confidence in the development going forward, including the achievement of a significant milestone of four-day survival in animals. Confidence in the product and the company was strengthened, resulting in two prominent cardiac surgeons deciding to join our team; Professor Bart Meyns in our Medical Council and Dr. Ulf Kjellman as Medical Director.**

During the second quarter, the initial focus was on intensified marketing towards the medical community via three articles on Realheart® TAH, approved for publication in scientific journals. Later in the quarter, we increased awareness of our heart among our collaborating cardiac surgeons and the general public through a news broadcast at Trading Direkt Healthcare and through a conference presentation in Austria. As knowledge about artificial hearts as an alternative to heart transplants needs to be spread globally, these international articles and presentations play a key role.

As we establish an internationally recognized brand, it is of course important to ensure its protection. We are therefore delighted to announce that Realheart is registered in several key target markets, including the EU, US, Canada, Japan and Australia.

On the financing side, we got the go-ahead from the European Innovation Council to invest via a directed issue. This is a major success factor as few companies are privileged to be nominated for this type of investment of up to 15 MEUR. At the same time, we started a new share issue with a closing date of July 7, as the development of artificial hearts needs continuous financing, and the closer we get to the clinic, the more financing opportunities open up.

Another exciting news is the collaboration with the Swedish Invivopower for the development of wireless charging instead of power supply via a cable through the skin, which is the norm for all

heart pump manufacturers today. The Vinnova funding enables Invivopower to develop a first prototype for wireless charging completely tailored to our wishes. This is a great opportunity for us to start a future project in the present and thus potentially offer wireless charging earlier than planned. This would benefit both patients and doctors.

Our request to Sahlgrenska for collaboration to conduct the first clinical trial received a very positive response from Professor Göran Dellgren, an internationally recognized heart surgeon. The hospital is one of only two in Sweden authorized to perform heart transplants, so we are now working together towards the goal of offering our artificial heart to Swedish patients via the first clinical trial in Sweden.

## **Ina Laura Perkins**

VD, Scandinavian Real Heart AB

## **Scandinavian Real Heart AB**

**Swedish innovation power has given the world medical technology inventions such as the heart and lung machine, the pacemaker and the dialysis machine. The next big innovation is Realheart's artificial heart. A Swedish patented innovation that will save the lives of heart failure patients. Every year, 3,500 people die of heart failure in Sweden alone. Today, the only rescue is a heart transplant, but the number of donated hearts is only enough for 2% of those in need.**

The start-up of the company was initiated by the doctor Azad Najari in 1999 when he started sketching an artificial heart that completely mimics the biological. In 2007, Azad co-founded Scandinavian Real Heart with two partners. The original idea behind Realheart® TAH is based on flow analyzes made at KTH 2002-2005 and is based on constructing an artificial heart that mimics the biological. By imitating its basic principle, a pressure and flow is created that reduces the risk of blood clots and provides an energy-efficient blood flow. These factors are important to give the patient a good quality of life. The development of the product has progressed strongly over the years. Blood circulation, pump function, pressure, and pulse generation have been verified in ethically approved animal experiments. Today, research and development takes place in close collaboration with world-leading heart surgeons, researchers and engineers.

## **Patent Protection**

Realheart has granted patents in Sweden, Germany, the United Kingdom, the United States, China and India that protect the original pump principle in TAH. This patent also provides protection for future products: RealVAD® and PulsePump®.

Patent protection is also available on the latest version of Realheart® TAH in Sweden, USA, UK, Australia and Japan. The patent application for it has also been filed for Germany and Canada. The patents provide protection in the markets that are largest and most important for artificial hearts right now, with the exception of China and India which are considered important emerging markets. In addition to the patent protection described above, Realheart has also approved patents in Sweden, the USA and the United Kingdom for the future Sternal prosthesis product. The application is also submitted in Germany and France. In 2018, a new connection was designed for a simple and secure connection between Realheart® TAH and the body's circulatory system. The patent application for this has also been filed.

Finally, the patent application has been filed in two parts for the use of pressure sensors for the automatic control. Given the existing patents together with the new patent applications, the Board believes that the company has a strong patent situation and strong intellectual property protection.

## **Mission and Goal**

Realheart's mission is to use medical technology solutions to save as many heart failure patients as possible and to create the best conditions for a life-affirming continuation of life. The company's overall goal is for the artificial heart to be commercialized and become a full-fledged treatment alternative for patients with heart failure. The heart should have a better function than the solutions that are on the market today. It should be possible to use both as a bridge to transplantation and as final therapy.

## The Stock

Scandinavian Real Heart AB was listed on the Nasdaq First North Growth Market in December 2021. Nasdaq First North GM is a registered SME marketplace for growth companies that enables Nordic and international entrepreneurs to gain access to growth capital to develop and expand their operations. As of June 30, 2023, the number of shares in Scandinavian Real Heart was 34 979 248.

## Largest Shareholder in the Company per 2023-06-30

	Number of Shares	Votes (%)	Capital %
Najar Medical and Invention AB	3 272 635	9.4	9.4
Avanza Pension	1 659 941	4.8	4.8
Eskilstunahem Fastighets AB	1 650 006	4.7	4.7
Alandsbanken Abp (Finland), Svensk, Filial	659 863	1.9	1.9
Raux, Gilbert	611 000	1.8	1.8
Najar, Bilend	516 263	1.5	1.5
Forslund, Lars	489 474	1.4	1.4
Smartgroup Holding AB	417 316	1.2	1.2
Ewerth, Staffan	350 000	1.0	1.0
Mansson, Christer	314 994	0.9	0.9
Others	25 037 756	71.6	71.6
<b>Total</b>	<b>34 979 248</b>	<b>100.0</b>	<b>100.0</b>

## Principles for the Preparation of the Interim Report

The interim report has been prepared in accordance with the Annual Accounts Act and with the application of general advice, recommendations and statements from the Swedish Accounting Standards Board.

## Audit Review

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

## Upcoming Financial Reports

Interim Report Q3, 2023 2022-11-16

Year-end Report, 2023 2023-02-15

## Annual General Meeting

The company's annual general meeting is planned to be held Thursday, June 13th, 2024.

## Submission of Interim Report

Västerås, August 24, 2023

*The Board*

Scandinavian Real Heart AB

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*This disclosure contains information that Real Heart is obliged to make public pursuant to the EU Market Abuse Regulation (EU nr 596/2014). The information in this press release has been published through the agency of the contact persons set out below, at the time stated by Scandinavian Real Heart AB's news distributor Cision upon publication of this press release.*

Link to archive for financial reports: <http://realheart.se/sv/investerare/arkiv/>

*Scandinavian Real Heart AB develops a total artificial heart (TAH) for implantation in patients with life-threatening heart failure. Realheart® TAH has a patented design that resembles that of the natural human heart. The artificial heart consists of a four-chamber system (two atria and two ventricles) designed to generate a physiological blood flow pattern that mimics the body's natural circulation. A unique concept in the medical technology world.*