

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2023

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 000-56492

IR-MED, INC.

(Exact name of registrant as specified in its charter)

Nevada

State or other jurisdiction of
incorporation or organization

98-0583166

(I.R.S. Employer Identification No.)

ZHR Industrial Zone, Rosh Pina, Israel 1231400

(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: **972-4-655-5054**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
None	N/A	N/A

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, \$0.001 per share
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by checkmark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The registrant had 69,931,056 shares of common stock outstanding as of April 1, 2024. The aggregate market value of the common stock held by non-affiliates as of as of the last business day of the registrant's most recently completed second fiscal quarter was \$40,234,447, as computed by reference to the closing price of \$1.07 of such common stock on the OTC Markets on such date.

IR-MED, INC.
2023 FORM 10-K ANNUAL REPORT
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FORWARD-LOOKING STATEMENTS

This annual report on Form 10-K for the year ended December 31, 2023, or this Annual Report on Form 10-K, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve risks and uncertainties, principally in the sections entitled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” All statements other than statements of historical fact contained in this Annual Report on Form 10-K, including statements regarding future events, our future financial performance, expectations for growth and revenues, anticipated timing and amounts of milestone and other payments under collaboration agreements, business strategy and plans, objectives of management for future operations, timing and outcome of legal and other proceedings and our ability to finance our operations are forward-looking statements. We have attempted to identify forward-looking statements by terminology including “anticipates,” “approach,” “believes,” “can,” “contemplate,” “continue,” “look forward,” “ongoing,” “could,” “estimates,” “expects,” “intends,” “may,” “appears,” “suggests,” “future,” “likely,” “goal,” “plans,” “potential,” “possibly,” “projects,” “predicts,” “seek,” “should,” “target,” “would” or “will” and other similar words or expressions or the negative of these terms or other comparable terminology. Although we do not make forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. These statements are only predictions and involve known and unknown risks and uncertainties and other factors that may cause our or our industry’s actual results, levels of activity, performance or achievements expressed or implied by these forward-looking statements, to differ materially. The description of our Business set forth in Item 1, the Risk Factors set forth in Item 1A and our Management’s Discussion and Analysis of Financial Condition and Results of Operations set forth in Item 7 as well as other sections in this report, discuss some of the factors that could contribute to these differences. These forward-looking statements include, among other things, statements about:

- *the accuracy of our estimates regarding expenses, future revenues, uses of cash, capital requirements and the need for additional financing;*
- *the initiation, cost, timing, progress and results of our development activities, usability studies, preclinical studies and any clinical trials that we may be required to undertake;*
- *the timing of and our ability to obtain and maintain regulatory approval of our existing product candidates, any product candidates that we may develop, and any related restrictions and/or limitations;*
- *our plans to research, develop and commercialize our current and future product candidates;*
- *our ability to attract collaborators with development, regulatory and commercialization expertise;*
- *our ability to obtain and maintain intellectual property protection for our product candidates;*
- *our ability to successfully commercialize our product candidates;*
- *the size and growth of the markets for our product candidates and our ability to serve those markets;*
- *the rate and degree of market acceptance of any future products;*
- *the success of competing devices that are or may become available;*
- *regulatory developments in the United States and other countries;*

- *the performance of our third-party suppliers and manufacturers and our ability to obtain alternative sources of raw materials;*
- *the impact of global inflationary pressures;*
- *our ability to obtain additional financing;*
- *our use of the proceeds from our securities offerings;*
- *any restrictions on our ability to use our net operating loss carry-forwards;*
- *the impact of the Israel-Hamas war on our results, including potential economic restrictions imposed on and political and military instability in Israel; and*
- *our ability to attract and retain key personnel.*

Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time, and it is neither possible for us to predict all risk factors nor address the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause our actual results to differ materially from those contained in any forward-looking statements. Actual results could differ materially from our forward-looking statements due to a number of factors, including the early stage of our product candidates presently under development; our ability to obtain and, if obtained, maintain regulatory approval of our current product candidates and any of our other future product candidates; our need for substantial additional funds in order to continue our operations and the uncertainty of whether we will be able to obtain the funding we need; our future financial performance; our ability to retain or hire key scientific or management personnel; our ability to protect our intellectual property rights that are valuable to our business, including patent and other intellectual property rights; our dependence on third-party manufacturers, suppliers, research organizations, testing laboratories and other potential collaborators; the success of our collaborations with third parties; the size and growth of the potential markets for any of our approved product candidates and the rate and degree of market acceptance of any of our approved product candidates; competition in our industry; regulatory developments in the United States and foreign countries, including the U.S. Food and Drug Administration, or FDA; and the expected impact of new accounting standards.

You should not place undue reliance on any forward-looking statement, each of which applies only as of the date of this Annual Report on Form 10-K. Before you invest in our securities, you should be aware that the occurrence of the events described in the section entitled “Risk Factors” and elsewhere in this Annual Report on Form 10-K could negatively affect our business, operating results, financial condition and stock price. All forward-looking statements included in this document are based on information available to us on the date hereof, and except as required by law, we undertake no obligation to update or revise publicly any of the forward-looking statements after the date of this Annual Report on Form 10-K to conform our statements to actual results or changed expectations.

As used in this Annual Report on Form 10-K, unless the context indicates or otherwise requires, “our Company”, “the Company”, “IR-Med”, “we”, “us” and “our” refer to IR-Med, Inc., a Nevada corporation, and its consolidated subsidiary, IR. Med Ltd., a company organized under the laws of Israel.

PART I

ITEM 1. BUSINESS

Corporate History

General

We were incorporated in the State of Nevada in April 2007 under the name “Monster Motors, Inc.” We began operating the business of IR. Med Ltd., an Israeli company, through a reverse acquisition on December 24, 2020. IR. Med Ltd. (an Israeli company which was founded in 2013) continues to operate as our operating subsidiary, and we are the sole stockholder of IR. Med Ltd.

Our corporate headquarters and research facilities are located at ZHR Industrial Zone, Rosh Pina, Israel.

Business Overview

On February 28, 2024, following financial difficulties our Board of Directors resolved that the Company’s operations will be limited only to critical actions in order to save funds. Accordingly, the following description of our three product candidates’ development and commercialization plans are currently on hold and are subject to us being able to raise additional funds to support our operations and to further develop and commercialize our products, which are in various stages of design and development.

We are in the process of developing a cutting-edge infrared spectroscopy and artificial intelligence (AI) analysis technology platform, as a basis for point-of-care decision support devices. The infrared spectroscopy technology allows harmless and non-invasive gathering of bio-information from a patient’s blood and tissue. Bioinformation is then analyzed using our AI process to provide healthcare professionals with decision support in the detection and monitoring of various disease conditions.

PressureSafe, our first product based on this platform, is a handheld device designed to revolutionize early detection of pressure injuries (PIs) affecting skin and underlying tissue. PIs in the U.S. alone account for \$26.8 billion in healthcare spending and result in 60,000 deaths annually. *PressureSafe* is expected to contribute to early detection of PIs, regardless of patient skin tone. This will drive equitable healthcare and help reduce the toll and cost of PIs. We plan to launch *PressureSafe* as a decision support system (DSS) tool for care givers in hospitals, nursing homes and home-care companies. We are currently working on completing the development of the commercial version of the *PressureSafe* device, planned to be launched during 2024, following registration and listing under the U.S. Food and Drug Administration.

Similarities in physiological development of pressure injuries and Diabetic Foot Ulcers under the skin surface allow the IRMED device to be adopted to early detect diabetic foot ulcers among diabetic patients.

Based on data published by the Diabetes Research Institute:

- Diabetes is increasing at an alarming rate in the U.S. According to the Centers for Disease Control’s (CDC) National Diabetes Statistics Report for 2022, cases of diabetes have risen to an estimated 37.3 million people, or 11.3% of the U.S. population. An estimated 28.7 million people have diagnosed diabetes, while approximately 8.6 million people have diabetes but have not yet been diagnosed.
- In 2019, 283,000 children and adolescents younger than 20 years had diagnosed diabetes. This includes 244,000 with type 1 diabetes.

Incidence of Diabetes Complications

- Diabetes can affect many parts of the body and is associated with serious complications, such as heart disease, stroke, blindness, kidney failure and lower-limb amputation, among other conditions.
- Risks associated with diabetes in the U.S. vary. Studies suggest that the lifetime risk of developing a diabetic foot ulcer, or DFU, is between 19% and 34% of diabetic patients. Infection develops in 50%–60% of ulcers and is a principal cause of damage in diabetic feet. Approximately 20% of moderate or severe diabetic foot infections result in lower extremity amputations.

Early detection of DFU is crucial. Signs of redness (which is especially difficult to detect among darker-skin patients), blisters and minor injuries are very important to detect. Our technology platform for early detection of PIs is being adjusted to detect incipient DFUs. Applying our unique AI technology with an appropriate optical design allows different foot measurements and is expected to provide patients and caregivers an alert of potentially developing DFU in its early stages.

Our novel technology platform will enable direct assessment of the development of a DFU before it becomes an open wound that may lead to a limb amputation. The Israeli Innovation Authority, or IIA, has approved our plan to develop a diabetic foot ulcer device for early detection of DFU. On January 25, 2024, the Israel Innovation Authority (the "IIA") approved a program to develop a device for the early detection of diabetic foot ulcers among diabetic patients, with a project budget of NIS 3,761,978 (approximately US\$ 1,030,000) which includes an amount equal to 50% grant of the total budget provided at the time of the grant, disbursed in installments over the course of 13 months, in accordance with the project's progress. In consideration for the grant by the IIA, the subsidiary is required to pay royalties at the rate of 3%-5% from the total sales until the repayment date of the full amount of the grant, plus annual interest at the SOFR rate. In addition, the IIA must approve any arrangement whereby the Company seeks to transfer the technology relating to the project, or its development, from Israel.

We plan to commence a clinical trial in the center of Israel's leading diabetes clinic.

We are also in the preliminary stage of research and development of an innovative otoscope, *Nobiotics*, to support physicians with an immediate indication as to whether mid-ear infection (otitis media), a common malady in children, is of a bacterial origin and thus requiring antibiotic treatment, or of a viral origin that consequently does not require antibiotic treatment.

Our technology platform utilizes AI. AI is a broad term generally used to describe conditions where a machine mimics "cognitive" functions associated with human intelligence, such as "learning" and "problem solving." Basic AI includes machine learning, where a machine uses algorithms to parse data, learn from it, and then suggest a determination or prediction about a given phenomenon. The machine is "trained" using large amounts of data and algorithms that provide it with the ability to learn how to perform various tasks.

The global diagnostics market is driven in large by solutions that can be applied in healthcare settings, as these tools will drive decisions regarding specific treatments and the associated outlays. However, despite advances in medical imaging and other diagnostic tools, misdiagnosis remains a common occurrence.

Our initial focus is on the development of decision support system solutions utilizing our proprietary platform for the pre-emptive diagnosis of PIs, diabetic foot ulcers, and mid-ear infections detection. Our current business plan focuses on three principal medical devices currently in development:

1. *PressureSafe*, a handheld optical monitoring device that is being developed to support early detection of PIs to the skin and underlying tissue, primarily caused by prolonged pressure associated with bed confinement;
2. *DiaSafe*, a handheld optical monitoring device that is being developed to support early detection of DFUs in lower limb skin and underlying tissue, primarily caused by prolonged pressure on the sole of the foot and diabetes; and
3. *Nobiotics*, an innovative otoscope designed to support physicians with an immediate indication as to whether a mid-ear infection (otitis media), a common malady in children, is of a bacterial origin and thus requiring antibiotic treatment, or of a viral origin that does not require antibiotic treatment.

Our product candidates are in various stages of development. The *PressureSafe* device is in an advanced stage of development and is planned to be our first go-to-market product, while the *DiaSafe* and *Nobiotics* devices are in the initial stages of research and development.

We have completed the development of the first generation *PressureSafe* prototype in the second quarter of 2022. In June 2022, IR. Med Ltd., our wholly owned subsidiary, entered into a study agreement with Beit Rivka, a large geriatric hospital in Israel associated with Clalit, the largest Health Maintenance Organization (HMO) in Israel and second largest globally, to conduct a usability study of *PressureSafe*.

On July 17, 2023, we published our interim report of usability study performed in Israel in leading medical centers with the following results: *PressureSafe* demonstrated very high efficacy in noninvasively detecting the presence and absence of PIs below the skin's surface. *PressureSafe* accurately detected the presence of a PI in 96% of cases. In addition, *PressureSafe* correctly determined that no wound was present in 91% of cases. The study was conducted at two medical centers owned by Clalit, namely Beit Rivka Hospital and Rabin Medical Center, both in Petah Tikva, where 370 *PressureSafe* scans were performed on 25 patients who had Stage 1 PIs or deep tissue injuries. No device related safety issues were reported in the total of 44 patients evaluated for safety.

On September 26, 2023, we announced that we signed a Clinical Trial Agreement with the Methodist Healthcare System of San Antonio to conduct a usability study titled "Safety and Efficacy of the *PressureSafe* Device for Early Detection of Pressure Injury in People with Various Skin Tones, Including Dark Skin Tones." Methodist Healthcare is recognized as the most respected healthcare provider in its region. With a network of 85 hospitals, 9 of which are acute care facilities, Methodist Healthcare employs more than 11,000 people, including 2,700 physicians. Approximately 50% of subjects recruited for the upcoming study will have dark skin tone, thus producing comparative data on *PressureSafe's* accuracy as a decision support device in detecting early-stage PIs in people of darker and lighter skin tones. Early-stage PIs can be more difficult to see on dark skin tones using the current standard of care for the detection of PIs, which is visual skin inspection.

We are currently working on completing the development of the commercial version of the *PressureSafe* device, planned to be launched during 2024, following registration and listing with the U.S. Food and Drug Administration.

Overview of Target Market and our Solutions

Pressure Injury Market

Populations are aging due to improvements in healthcare. However, there are increased rates of obesity, diabetes and cardiovascular diseases. This combination of an increasingly aging population and such diseases has resulted in more people with decreased mobility needing assistance with activities of daily living. A major morbidity of decreased mobility is development of PIs. PIs develop as a result of a combination of physiologic events and external conditions. Along with localized ischemia and reperfusion injury to tissues, impaired lymphatic drainage and mechanical deformation of tissue cells have been shown to contribute to injury.

Compression prevents lymph fluid drainage and leads to deterioration in tissue cell normal activities, which causes increased interstitial fluid and waste build up, contributing to the development of PIs. The time required to develop PIs depends on many factors, including the patient's physiology and the degree of pressure and shear force placed on the tissue. PIs occur over predictable pressure points where bony protuberances are more likely to compress tissues when the patient is in prolonged contact with hard surfaces. Studies show that the heel area is the second most frequent location for a pressure ulcer, with the most prevalent being the sacrum. The heel accounts for between 23% and 28% of all pressure ulcers.¹

¹ Smith, S., Ashby, S., Thomas, L. and Williams, F., 2017. Evaluation of a multifactorial approach to reduce the prevalence of pressure injuries in regional Australian acute inpatient care settings. *International Wound Journal*, 15(1), pp.95-105.

While the overall number of Hospital Acquired Conditions (HAC) have decreased by 8%,² pressure injuries have resisted improvement efforts and continue to grow by 10% annually. PIs are both costly and deadly. The U.S. Agency for Healthcare Research and Quality (AHRQ) reports that PIs add \$10.2 billion to annual U.S. healthcare costs.³ Furthermore, these are associated with over 45% of the 63,619 HAC related deaths in the U.S., making it the leading HAC related death.

PIs impose a tremendous healthcare burden. As stated in the National Pressure Injury Advisory Panel fact sheet for 2023, 60,000 patients die every year as a direct result of pressure injuries. Acute care attributable to hospital-acquired PIs reaches \$26.8 billion, and 2.5 million patients per year develop a PI. Patient care costs per PI range from \$20,900 up to \$151,700. PIs are among one of the five most common harms experienced by patients and the second most common claim for lawsuits, after wrongful death. PIs occur across the healthcare industry, including in 10% of acute care patients, 25% of long-term acute care patients, 12% of nursing home patients and 12% of rehabilitation center patients.

The most common method used to detect early PIs is a visual assessment by a professional caregiver focusing on areas where PIs most frequently develop. This visual assessment is subjective, unreliable, untimely (as PIs often occur suddenly without visual cues), ineffective and only effective to detect PIs once they are visible. Technology-based methods for detecting and monitoring have been developed, but as far as we know, none have succeeded in providing an effective solution.

Pressure Injuries Background

Currently, PIs are discovered only as they begin to appear on the skin, after they have been festering underneath the skin layers. Nurses regularly assess patients at high risk by evaluating them according to accepted scores (e.g., Braden or Norton Scales). Hospitals can then get the patient onto a different type of mattress that wicks away moisture and reduces pressure and impose orders for the individual to be turned every 2 hours, for example. The risk of a PI among ICU patients ranges between 18-40% of patients.⁴

Intrinsic risk factors such as diabetes, malnutrition and smoking also increase the overall risk for pressure injuries. The spinal cord injury patient population is at the highest risk (25-66%) of developing a PI due to the combination of immobility and decreased sensation. A prospective study of spinal cord patients not only found that sacral and ischial PIs were very common (43% and 15%, respectively), as might be expected, but also noted that the second most common location was on the heel (19%).⁵

Nursing home patients have PI prevalence of 11%⁶ and are most likely to develop PIs on the sacrum or heels. Nursing home patients were also found to have contractures at a prevalence of 55%. Contractures are caused by decreased elasticity of the tissue surrounding major joints, and the resulting lack of full mobility in the affected extremities significantly increases the risk of PI information.

A significant market is the home healthcare market, which is anticipated to be worth \$645 billion by 2025 (CAGR 8.7%).⁷ It is estimated that by 2030, seniors aged 65 and over will represent 20% of the U.S. population, and over 19 million seniors are estimated to need homecare services. Homecare companies have a strong incentive to prevent PIs as they are rated and carry part of the cost treating those patients.

According to a survey published in 2000 by UCLA School of Medicine,⁸ in a total sample of 3,048 patients, 9.12% had PIs, and of these, 37.4% had more than one PI, and 14% had three or more. Considering the worst PIs for each subject, 40.3% had Stage II and 27% had Stage III or IV injuries.

² AP News. 2019. *Pressure Ulcers Cost U.S. Healthcare \$10.2 Billion and Contribute to Nearly 29,000 Hospital Deaths Each Year.*

³ Boyko, T., Longaker, M. and Yang, G., 2018. Review of the Current Management of Pressure Ulcers. *Advances in Wound Care*, 7(2), pp.57-67.

⁴ Fowler, E., Scott-Williams, S. and McGuire, J., 2008. Practice Recommendations for Preventing Heel Pressure Ulcers. *Ostomy Wound Management*, 54(10), pp.42-57.

⁵ Delmore, B., Lebovits, S., Suggs, B., Rolnitzky, L. and Ayello, E., 2015. Risk Factors Associated with Heel Pressure Ulcers in Hospitalized Patients. *Journal of Wound, Ostomy & Continence Nursing*, 42(3), pp.242-248.

⁶ Palese, A., Zammattio, E., Zuttion, R., Ferrario, B., Ponta, S., Gonella, S. and Comoretto, R., 2020. Avoidable and Unavoidable Pressure Injuries Among Residents Living in Nursing Homes. *Journal of Wound, Ostomy & Continence Nursing*, 47(3), pp.230-235.

Brandeis, G., Morris, J. and Nash, D., 1990. The Epidemiology and Natural History of Pressure Ulcers in Elderly Nursing Home Residents. *JAMA: The Journal of the American Medical Association*, 264(22), p.2905.

⁷ Ferrell, B., Josephson, K., Norvid, P. and Alcorn, H., 2015. Pressure Ulcers Among Patients Admitted to Home Care. *Journal of the American Geriatrics Society*, 48(9), pp.1042-1047.

⁸ Ferrell, B., Josephson, K., Norvid, P. and Alcorn, H., 2000. Pressure Ulcers Among Patients Admitted to Home Care. *Journal of the American Geriatrics Society*, 48(9), pp.1042-1047.

The Agency for Healthcare Research and Quality (AHRQ) has identified several basic principles for PI prevention: (a) use a validated tool to assess risk such as the Braden Scale and Norton Scale; (b) implement a preventive plan for residents at risk, which should focus on avoiding friction and sheer trauma to at-risk skin regions, as well as an individualized plan to reduce pressure, such as frequent repositioning; and (c) daily inspection of the skin for high-risk residents, as deep tissue damage can occur in as little as two hours. The most common method used to detect early pressure injuries is a visual assessment by a professional caregiver focusing on areas where PIs most frequently develop. This visual assessment is subjective, unreliable, untimely and ineffective as PIs develop under the skin before becoming visible to the naked eye. Technology-based methods for detecting and monitoring PIs have been developed, but none have succeeded in providing an effective solution. These include ulcer detection based on skin conductivity which has relatively low resolution and is influenced by different topical skin conditions (e.g., moisture, urine or feces). Other system solution methods such as electronic medical record programs, which prompt providers to document results of PI screening every shift or day, are of great importance in diagnosing PIs early and preventing progression. Pads designed to specifically cover pressure points such as the sacrum and heels, as well as foam pads designed to wrap around at-risk body parts, are common products. However, it is important to note that some pads can actually be detrimental; for example, supports with cut-outs can have increased pressure at their edges. Hospital-acquired PI rates are increasing while all other hospital-acquired conditions are decreasing (AHRQ, 2019).

PressureSafe

Over the past six years, we have been designing and developing *PressureSafe*, a novel device that has the potential to provide a reliable method of monitoring and recording patients, providing additional information to healthcare providers as to where and when a pressure injury may occur. The technology platform is designed to record information relating to each patient. The core technologies underlying the *PressureSafe* device are patent protected (US Patent No. US 10,709,365 and US Patent No. US10,772,541). Our technology is based on the fact that tissues of the human body absorb and reflect the light that surrounds it in different wave lengths (from the UV through visual light to infra-red light), and the light is reflected and scattered back from inside the body through the skin. During this process, the reflected and scattered light through a damaged area changes its properties in comparison to light reflection and scattering from normal healthy tissue. The *PressureSafe* device is being designed to capture, analyze and identify tissue status to make early PI diagnoses using Spectrographic Analysis, while AI learning software is planned to improve diagnostic accuracy. The *PressureSafe* device will illuminate the skin with a miniature LEDs for a few seconds. The emitted light photons from the device will be absorbed, scattered and reflected back. The device will then measure the absorption and reflectance, and using algorithms, will process the signals to identify and diagnose the scanned area.

As every person's skin properties are unique, the diagnosing physician must calibrate the device to the specific patient's skin, a process that takes merely a few seconds and allows personalized diagnosis, improving diagnostic process effectiveness, as the *PressureSafe* device is designed to measure regardless of skin color. Our technology is being developed to enable the assessment of different subdermal layers by scanning through these skin layers, thus improving the identification of the damage, assessing the subdermal damaged tissue volume and assisting with additional information to allow better treatment efficacy. Measuring the differences of subdermal fluid content and other bio-signals has been developed to detect early formation of PIs and to "raise a flag" to allow the caregivers intervene and prevent their appearance. The bio-signals that our algorithm detects occur in the early inflammatory process, as soon as local subcutaneous tissue function is disturbed, and cells begin to be damaged.

PressureSafe is a hand-held scanner designed to provide additional information as a decision support system (DSS), to support the care giver effectively with the main diagnostic ability to identify PIs and to differentiate between deep tissue PIs (before they become visible) and Stage 1 PIs. Deep tissue PIs are serious, hospital-acquired deep PIs that form under intact skin, spread in deep tissues and eventually present themselves as full thickness wounds. The *PressureSafe* is composed of: (a) a handheld optic probe device, which utilizes harmless infra-red light that is placed for a few seconds on suspected areas for performing measurements; (b) a disposable probe tip component, changed between patients to avoid cross-contamination; (c) a software component containing machine learning algorithm for analyzing the collected data; and (d) software for connectivity and downloading the collected data and measurements results to the EMR/EHR systems used by the medical center or homecare company.

PressureSafe is a non-invasive real-time optical monitoring device to support early intervention in PI treatment prior to skin breakage. The device performs a reflectance spectroscopy scan to generate information for the decision maker, while collecting data of subdermal physiological changes together with other bio-signals typical of early formation of PIs in the three skin layers, thus detecting the appearance of life risking pressure injuries. *PressureSafe* is designed to detect changes at a depth of 1-5 mm in the skin, regardless of skin tone, by measuring differences of subdermal fluid content and bio-signals. As soon as local subcutaneous tissue function is disturbed and cells begin to disintegrate by pressure exerted upon the body area, our scanner is designed to be able to detect this very early inflammatory process. The technology will allow patient monitoring and immediate reading in a non-invasive way. It has the potential to help to reduce the number of PIs dramatically through early detection, making it attractive for public and private healthcare systems worldwide.

PressureSafe Studies

Our product candidates are in various stages of development. The *PressureSafe* device is in an advanced stage of development and is planned to be our first go-to-market product. The *Nobiotics* device is in the initial stage of research and development.

We have completed the development of the first generation *PressureSafe* prototype in the second quarter of 2022. In June 2022, IR. Med Ltd., our wholly owned subsidiary, entered into a study agreement with Beit Rivka, a large geriatric hospital in Israel associated with Clalit, the largest Health Maintenance Organization (HMO) in Israel, to conduct a usability study of *PressureSafe*.

On July 17, 2023, we published our interim report of usability study performed in Israel in leading medical centers with the following results: *PressureSafe* demonstrated very high efficacy in noninvasively detecting the presence and absence of PIs below the skin's surface. *PressureSafe* accurately detected the presence of a PI in 96% of cases. In addition, *PressureSafe* correctly determined that no wound was present in 91% of cases. The study was conducted at two medical centers owned by Clalit, the world's second largest health maintenance organization (HMO) and the largest in Israel, namely Beit Rivka Hospital and Rabin Medical Center both in Petah Tikva, where 370 *PressureSafe* scans were performed on 25 patients who had Stage 1 PIs or deep tissue injuries. No device related safety issues were reported in the total of 44 patients evaluated for safety.

On September 26, 2023, we announced that we signed a Clinical Trial Agreement with the Methodist Healthcare System of San Antonio to conduct a usability study titled "Safety and Efficacy of the *PressureSafe* Device for Early Detection of Pressure Injury in People with Various Skin Tones, Including Dark Skin Tones." Methodist Healthcare is recognized as the most respected healthcare provider in its region. With a network of 85 hospitals, 9 of which are acute care facilities, Methodist Healthcare employs more than 11,000 people, including 2,700 physicians. Approximately 50% of subjects recruited for the upcoming study will have a dark skin tone, thus producing comparative data on *PressureSafe's* accuracy as a decision support device in detecting early-stage PIs in people of darker and lighter skin tones. Early-stage PIs can be more difficult to see on dark skin tones with the current standard of care for the detection of PIs, which is visual skin inspection.

We are currently working on completing the development of the commercial version of the *PressureSafe* device, planned to be launched during 2024, following listing with the FDA.

DiaSafe Market Potential

We are now in the development stages of the Software/Hardware, algorithms and optics to allow early detection of incipient DFU in the lower limbs. An adjustment to the *PressureSafe* proven technology allows us to reduce the development period and approach the relevant markets faster. We plan to initiate a clinical study in Clalit, Israel's largest HMO, to train the developed algorithm and test patients. Following the Israeli trial, we aim to conduct an American based trial, potentially during the first half of 2025.

DFU Market Potential

About 5% of patients with diabetes mellitus develop foot ulcers, and approximately 1% end up with an amputation.

The lifetime risk of a person with diabetes developing a foot ulcer ranges between 19% to 34%. These ulcers are the leading cause of non-traumatic amputations in the U.S. and are responsible for more hospital admissions than any other diabetic complication.

Ear Infection Market

Reducing the consumption of antibiotics is a major goal of health authorities around the world. Doctors all over the world are rushing to keep up with infections that are becoming increasingly good at resisting antibiotic treatment, including gonorrhea, tuberculosis, bacterial pneumonia and others.

Antibiotics either kill bacteria or keep them from multiplying. By definition, they work only against bacterial illnesses, yet research shows they are often needlessly prescribed for viral illnesses like the flu and common colds. That is a waste of resources and may also contribute to antibiotic resistance. Bacteria is developing better resistance to drugs each time they encounter them. The result is the creation of super bugs that are resistant to that antibiotic.

In 2019 the World Health Organization described antimicrobial resistance-pathogens' ability to evade medical interventions-one of the 10 largest threats to global health.⁹

According to the CDC, 35,000 people die each year in the U.S. due to antibiotic-resistant infections. A recent study published in the BMJ points to one major propagator of the problem: doctors are incorrectly prescribing antibiotics, and up to 43% of U.S. antibiotic prescriptions may be inappropriate.

Studies conducted by the University of Utah¹⁰ showed that in 2016, 30% of outpatient oral antibiotic prescriptions may have been inappropriate. For example, 1 in every 5.4 urgent care visits, which represents 18.5% of such visits, resulted in an antibiotic prescription. Of these, 37% were for ear infections which turned out to be viral infections.

The health community is already seeing the consequences of these improper prescriptions. In addition to the deaths detailed in the CDC's recent report, an estimated 2.8 million Americans contract and survive antibiotic-resistant infections each year. As illnesses get more and more difficult to treat, patients may suffer longer, and doctors might be forced to turn to increasingly powerful drugs, often with harmful side effects.

The antibiotic taken by children kills bacteria in their body, even the good bacteria, changing gut microbiome with toddlers, possibly leading to other problems, like *clostridium difficile* (C. difficile infection).

Nearly 70,000 children end up in emergency rooms every year after experiencing adverse reactions to antibiotic drugs, according to the CDC.¹¹ Most of these incidents were due to an allergy, and most were mild reactions (such as a rash), although some were more serious (such as anaphylaxis). Children under the age of 2 made up the largest share of the ER visits.

There are several long-term problems associated with children's consumption of antibiotics. For example, studies have found that children receiving more rounds of the drugs because of early infections are more likely to be obese as adolescents and adults, and the earlier children are exposed to the drugs, the more likely their metabolism is to be affected.¹²

Each year in the U.S., approximately 9 million children, ages 0-17, are reported to have ear infections or otitis media.¹³ Of those children, 8 million visited a physician or obtained a prescription drug to treat the condition.

However, the number of children complaining of ear pain and undergoing examination by otoscope is many times these figures, and they represent IR-MED's target market.

Medical spending to treat otitis media totals over \$2.8 billion, with the average annual expenditure of more than \$350 per person. More than one-third of ear infection prescription medications expenditures were paid from out of pocket.

⁹ Lewis, R., 1995. The Rise of Antibiotic-Resistant Infections. *FDA Consumer magazine*.

¹⁰ Fleming-Dutra, K., Hersh, A., Shapiro, D., Bartoces, M., Enns, E., File, T., Finkelstein, J., Gerber, J., Hyun, D., Linder, J., Lynfield, R., Margolis, D., May, L., Merenstein, D., Metlay, J., Newland, J., Piccirillo, J., Roberts, R., Sanchez, G., Suda, K., Thomas, A., Woo, T., Zetts, R. and Hicks, L., 2016. Prevalence of Inappropriate Antibiotic Prescriptions Among US Ambulatory Care Visits, 2010-2011. *JAMA*, 315(17), pp.1864-1873.

¹¹ Hirsh, J., 2018. *Antibiotic Side Effects in Children: What Every Parent Should Know*.

¹² Park, A., 2015. *How This Common Drug Can Have Lasting Effects on Kids*.

¹³ Soni, a., 2008. *STATISTICAL BRIEF #228: Ear Infections (Otitis Media) in Children (0-17): Use and Expenditures, 2006*.

The market is being driven by the rise in risk factors, increasing awareness regarding the severity of untreated ear infection, development of healthcare, technological development in diagnostic devices and surgery segment, especially the advancements in minimally invasive surgery, and so on. Market restraints include the complications of surgery, high cost of treatment and the emergence of bacterial resistance.

Ear Infection Background

An ear infection is an inflammation of the middle ear, usually caused by bacteria or a virus, which occurs together with fluid builds up behind the eardrum. Three out of four children will have at least one ear infection by their third birthday.¹⁵ In fact, ear infections are the most common reason parents bring their child to a doctor.

The presence of middle ear fluid is the key diagnostic marker for the two most common pediatric ear diseases, acute otitis media (AOM) and otitis media with effusion (OME).¹⁶

AOM, known commonly as an “ear infection,” is characterized by the presence of infected fluid in the middle ear and results in symptoms of fever and ear pain.

It is a leading cause of pediatric healthcare visits, and although many cases can resolve without antibiotics, complications may include eardrum perforation, mastoiditis, facial nerve palsy or meningitis.

OME is the presence of middle ear fluid without signs of an acute infection and affects up to 80% of children. Although OME has few overt symptoms, making diagnosis more difficult, it is associated with speech delay, sleep disruption, poor school performance, balance issues and a higher likelihood of developing AOM.

The simplest way for a doctor to diagnose an ear infection is by using an otoscope, a lighted instrument, to view and assess the eardrum. A red, bulging eardrum indicates an infection.

Other methods a doctor can use include: (i) Pneumatic otoscope, which blows a puff of air into the ear canal, this allows the doctor to observe the eardrum movement. A normal eardrum will move back and forth more easily than an eardrum with fluid behind it; and (ii) Tympanometry, which is soft plug that contains a miniature microphone and speaker as well as a device that varies air pressure in the ear, measuring how flexible the eardrum is at different pressures.

Many doctors will prescribe an antibiotic, such as amoxicillin, to be taken over seven to 10 days. The doctor also may recommend over-the-counter pain relievers such as acetaminophen or ibuprofen and eardrops, to help with fever and pain.

If the doctor is not able to make a definite diagnosis of OME and the child does not have severe ear pain or a fever, the doctor may suggest waiting a day or so to see if the earache goes away. Today, when a child has ear pain, the doctor will check the ear, but unless there is a clear visible need, he/she will probably not give any treatment besides pain relief due to simple fact that he/she cannot determine if the infection is viral, for which no antibiotic should be given, or bacterial, which will require antibiotic treatment.

¹⁵ Thomas, J., Berner, R., Zahnert, T. and Dazert, S., 2014. Acute Otitis Media. *Deutsches Aerzteblatt Online*.

¹⁶ Thomas, J., Berner, R., Zahnert, T. and Dazert, S., 2014. Acute Otitis Media. *Deutsches Aerzteblatt Online*.

The American Academy of Pediatrics¹⁷ issued guidelines in 2013 that encourage doctors to observe and closely follow those children with ear infections that cannot be definitively diagnosed, especially those between the ages of six months to two years. If there is no improvement within 48 to 72 hours from when symptoms began, the guidelines recommend doctors start antibiotic therapy. Reducing the consumption of antibiotics is a major goal of health authorities around the world.

Nobiotics

The *Nobiotics* device is planned to be an otoscope for supporting noninvasive detection of otitis media (ear infection). The device is in initial stages of development as an ear examination device that will give the physician an immediate indication if the infection is from a viral or bacterial source, and then the physician will make a decision to prescribe an antibiotic or not. The device works on a similar IR-spectrographic analysis method as being developed in the *PressureSafe* device. The *Nobiotics* otoscope is based on infrared light reflection and absorption by the effluents behind the ear drum. Oscopes are considered a required device by any physicians performing physical diagnoses. Target customers for the *Nobiotics* device are general practitioners (GPs), pediatricians and ear nose and throat (ENT) specialists.

Our Strategy

Our goal over the next five years is to establish our technology and related products as the gold standard for the targeted sectors. The key elements of our strategy are as follows:

Develop and expand a balanced and diverse pipeline of products and product candidates. Our core platform technologies will include innovative spectrographic analysis tools for diagnostic aid, AI, devices and product candidates in various development and clinical stages. We plan to add products and product candidates to our pipeline by expanding our technologies being developed to additional indications and through investing in new technologies, products and product candidates. By maintaining this multi-product approach, we aim to provide a broad and comprehensive product offering, which we believe will result in multiple value inflection events, reduced risks to our potential business associated with a particular product or product candidate and increased return on investment. Furthermore, product candidates that we develop may create attractive collaboration opportunities with pharma, diagnostics, medical devices and medical supplies companies.

Target large and growing patient populations with significant unmet medical needs. PIs and ear infections are medical conditions afflicting large and growing global patient populations, each with significant unmet medical needs such as requiring earlier and more accurate diagnosis, reducing the widespread reliance on antibiotics and optimizing the delivery of medical services, thereby improving the efficacy and safety of treatment.

Maintain a global, diverse network of specialists to accelerate knowledge synergies and innovation. We plan to utilize a global network of specialists to identify large and growing patient populations with significant unmet medical needs, evaluate and prioritize potential technologies, assist in designing development plans and diagnostic protocols and determine potential indications of our platform technologies to our target patient populations in various territories. We believe that maintaining this diverse network of industry specialists will allow us to continue to maximize knowledge and cost synergies, utilize shared commercial infrastructure across products, reduce risks of development and commercialization delays to our overall business and leverage our current and future platform technologies and technologies for additional products and product candidates.

¹⁷ Rosenfeld, R., Schwartz, S., Cannon, C., Roland, P., Simon, G., Kumar, K., Huang, W., Haskell, H. and Robertson, P., 2014. Clinical Practice Guideline. *Otolaryngology-Head and Neck Surgery*, 150(1_suppl), pp. S1-S24.

Establish distribution channels to maximize the commercial potential of our products. We plan to seek out collaborative arrangements with major healthcare providers to facilitate market adoption of our product candidates. In this respect, we have entered into a distribution agreement covering the United States. See below “*Distribution Agreement*”. We believe that such institutions are well-positioned to directly benefit from improvements in accurate diagnosis and reduction of cost of care associated with the use of our product candidates. We also believe that the marginal cost of our product candidates compared to potential savings will make it economical for healthcare institutions to adopt our products, regardless of whether or not additional costs of purchase of these products will be covered by third-party payors, such as government healthcare programs and commercial insurance companies. Through cooperation with healthcare providers, we aim to develop and prove an economic model beneficial to them. Thereafter, we plan to engage with private insurance plans to develop reimbursement programs encouraging the use of our product candidates. We expect that adoption rates of our product candidates will increase if hospitals and other medical institutions are compensated, in full or in part, for additional costs incurred when purchasing our products.

Disposable unit/Pay Per Use (PPU) business model - Our developing business model will be based on disposable need to be changed per each patient examined. This will allow potential customers to pay only per use of the device, with minimal investing in equipment, and have great potential to generate substantial revenues to the company. This is especially important following the COVID-19 pandemic, where cross contamination of any kind is forbidden. As we develop large, accumulated databases, we plan to offer software as a service (SAAS) to our customers.

R&D and New Product Development

We believe our strong research and development (R&D) capabilities are one of our principal competitive strengths. Our R&D activities are conducted at our subsidiary’s facility in Israel. Our team of employees and sub-contractors is comprised of current and future dedicated research and development employees, system architects, algorithm developer engineers, software engineers, electronics and electro-optics engineers, quality engineers and regulatory and health experts, who are responsible for the R&D, development and testing of our technologies and product candidates.

We plan to increase our R&D team as necessary to meet our product development goals and milestones and deliver the products in the right time to market and in the required quality.

Distribution Agreement

On October 7, 2022, we entered into an exclusive Distribution and License Agreement, or the Distribution Agreement, with PI Prevention Care LLC, a Delaware limited liability company, or the Distributor, pursuant to which the Distributor received exclusive royalty bearing rights to promote, market and sell solely in the United States our *PressureSafe* monitoring device.

The Distributor is a recently formed Delaware entity comprised of persons and other entities including Company shareholders, who are active in the markets relating to senior care facilities, hospitals, home care centers, hospital equipment distributors, among others, throughout the United States and who are familiar with and have wide experience in addressing and responding to the needs of these medical care organizations.

Under the Distribution Agreement, the Distributor is solely responsible for the distribution, marketing and sales of the *PressureSafe* and its accompanying components and agreed undertake all commercially reasonable efforts to establish the necessary distribution and sales network for the Products by not later than the date on which the Company shall have received all regulatory and other clearance required to launch the commercialization of the *PressureSafe* Solution (such Date being the “Commercial Launch Date”). Prior to the Commercial Launch Date, the Distributor is to invest such resources as is reasonable such that upon the occurrence of the Commercial Launch Date there will be a commercially reasonable distribution network in place for the immediate marketing of the Product.

The Distribution Agreement provides for the payment of annual licensing fees. The Distribution Agreement also specifies the prices of each component of the Products payable to the Company and also provides for minimum annual purchase requirements of Product components in order to maintain exclusivity. If for whatever reason the Distributor does not comply with the minimum purchase requirements in any year, the Distributor can continue to have a non-exclusive license and distribution rights in the United States if the Distributor pays the annual license fee.

Subject to the compliance by the Distributor of its obligation under the Distribution Agreement, including the purchase by the Distributor of minimum annual purchase requirements of the components of the Products, the Distribution Agreement continues in effect for a term of 13 years following the Commercial Launch Date. At the end of the initial three- and eight-year periods, the parties are to enter into good faith negotiations as to the pricing of the Products and the minimum purchase quantities for the subsequent period. The Distributor also agreed to not distribute any products that compete with the Products.

Intellectual Property

General

We rely on a combination of patents, trade secrets, non-disclosure agreements and other intellectual property to protect the proprietary technologies that we believe are important to our business. Our success will depend in part on our ability to obtain and maintain patent and other proprietary protection for commercially important inventions and know-how, defend and enforce our patents, maintain our licenses, preserve our trade secrets and operate without infringing valid and enforceable patents and other proprietary rights of third parties. We also rely on continuing technological innovation to develop, strengthen and maintain our proprietary position in the field of diagnostic decision support software devices.

The IR based core technologies underlying the *PressureSafe* device are covered by patent issued (US Patent No. US 10,709,365 and US Patent No. US10,772,541) issued on July 14, 2020, and September 15, 2020, respectively. All our patents are marked under “system and method for noninvasive analysis of subcutaneous tissue”. Such patents are owned by IR. Med Ltd. and are valid through August 2034.

These patents are based on physical phenomena of light reflection from the surface of the skin. The *PressureSafe* device irradiates the surface of tissue with harmless infrared and visual light radiation. The reflected light from the tissue changes its physical properties according to the level of injury in the sub dermal tissue (under the skin). Comparing the reflected light from a healthy tissue and reflected light from a suspected injured tissue allows early detection of sub dermal PIs.

During 2022, we applied for two new provisional patents in the US. and European Union, one for the *PressureSafe* device and one for *Nobiotics*.

During 2023, we applied for two patents in the U.S. protecting different configurations of our devices and new technological developments. We also applied for two design patents covering our unique design of our devices and accessories.

During 2023, we were granted one patent from the Israeli Patent Office supporting the American patents already approved.

As of the date of this report, a significant portion of our granted U.S. patent applications and pending patent applications in foreign jurisdictions is directed to enhance both the *PressureSafe* device and other future applications. However, some of these patent applications may not result in issued patents, and not all issued patents may be maintained in force for their entire term.

Competition

We operate in highly competitive segments of the medical device markets. We face competition from many different sources, including commercial medical device enterprises, academic institutions, government agencies and private and public research institutions. Many of our competitors have significantly greater financial, product development, manufacturing and marketing resources than us. Large medical device companies have extensive experience in clinical testing and obtaining regulatory approval for medical devices. We also may compete with these organizations to recruit scientists and clinical development personnel. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

We expect *PressureSafe*, if and when commercially available, to compete directly with Bruin’s Biometrics Provizio SEM Scanner, which is currently commercially available in the U.S., U.K. and the E.U. As we intend with the *PressureSafe* device, the Bruin scanner is marketed to senior care facilities, as well as other health care centers. Bruin’s product is based on electro-resistance measurement of the skin’s moisture, a method that is significantly different from the approach contained in the *PressureSafe* device, which utilizes real-time optical monitoring device combined with AI-based capabilities for pre-emptive detection of PIs in different settings. In addition, new developments, including the development of other medical device technologies and methods of preventing PIs, occur in the medical device industry at a rapid pace.

Diabetic foot ulcer assessment is a process composed of collecting a patient's background data and point of care measurements, such as lower limbs data (pulse quality, level of neuropathy, etc.). The collected information allows rough assessment of a DFU to develop. Since there is no way to measure direct biomarkers to associated with DFU, we are developing the technology and a device that will measure direct biomarkers demonstrating development of subdermal DFU.

We expect *Nobiotics*, if completed, to compete with other otoscopes which are in development or other products in development for the purpose of assisting with assessment of otitis media for distinguishing between virus and bacteria origin.

Manufacturing

We do not own or operate manufacturing facilities. While we plan to depend on third-party contract manufacturers for device manufacturing, we plan to perform the final assembly, quality control and release of finished goods in our facilities.

Manufacturers of our products are required, among other things, to comply with applicable FDA/EMA manufacturing requirements contained in the FDA/EMA's Quality System Regulation (QSR). The QSR requires manufacturing quality assurance and quality control as well as the corresponding maintenance of records and documentation.

Major changes to the device generally require regulatory approval before being implemented (e.g., adding new indications and additional labeling claims, etc.).

Under FDA Medical Device Reporting (MDR) regulations, medical device manufacturers are required to report to the FDA information that a device has or may have caused or contributed to a death or serious injury or has malfunctioned in a way that would likely cause or contribute to death or serious injury if the malfunction of the device or one of our similar devices were to recur. Discovery of problems with a product after product release may result in restriction on a product or manufacturer, including withdrawal of the product from the market.

We do not have any current contractual relationships for the manufacture of commercial supplies of any of our product candidates if they are approved. We intend to enter into contract manufacturing agreements and one or more back-up manufacturers for the commercial production of our product candidates when they are near potential approval.

Distribution and Revenue Generation

We intend to establish sales and marketing structures and strategic partnerships in the United States, U.K. and Europe to support all of our product candidates.

The target market for our *PressureSafe* device is relevant healthcare settings (*i.e.*, hospitals, senior care facilities, homecare companies, etc.), nursing homes and a growing segment of long-term homecare givers. Towards that end, in the third quarter of 2022, we began preparations in anticipation of commercialization of *PressureSafe* in the United States during 2024, pending regulatory approvals, which have been delayed. A distribution agreement was entered into with PI Prevention Care LLC, a newly formed entity focused on marketing to the senior care facility, hospital and homecare markets. The Distributor, which received exclusive rights for *PressureSafe* distribution across the United States, includes personnel who have many years' experiences in addressing and responding to the needs of these types of organizations. Under the terms of the Agreement which were publicly disclosed, to maintain exclusivity, the Distributor is obligated to comply with minimum purchase requirements of the device and accompanying disposables.

Once we receive the appropriate sales approvals, we expect the marketing will be done with local partners who have the relevant abilities and connections in each territory where the company will ask to sell the products. Since each country has its own specific healthcare system, a local partner (one or more) will be chosen to address the specific market needs in terms of regulation, technical support, etc. Pricing will be determined by the local partner, taking into account all overhead expected costs, regulation requirements and reimbursement methods.

The *DiaSafe* once developed, will be marketed pending our receipt of the appropriate sales approvals. We expect the marketing will be done with local partners who have the relevant abilities and connections per each relevant distribution territory. Since each country has its own specific healthcare system, a local partner (one or more) will be chosen to address the specific market needs in terms of regulations and technical support. Pricing will be determined by the local partner, taking into account all overhead expected costs, regulation requirements and reimbursement methods.

Nobiotics' target users will be pediatricians, family doctors and Ear, Nose and Throat (ENT) doctors. The distribution of the *Nobiotics* is expected to be carried out by companies who supply devices and disposables to the target audience.

In both the *PressureSafe* and the *Nobiotics* devices, the revenue stream is expected to be generated mainly from the disposables and *PressureSafe* solution as a service (PSaaS) that are needed for the proper operation of the device, while the device itself likely be given under lease agreements. It is envisioned that the disposable component will be mass produced.

It is expected that market penetration will be achieved through original equipment manufacturing agreements with one of several large medical device companies already selling to the target market. At the current time, we have no commitments from any such distributors or original equipment manufacturing partners.

Facilities

Our subsidiary occupies approximately 130 square meters of facilities located in Rosh Pinna industrial zone, Israel, under an agreement for shared office space and services that expires upon 90 days' notice by either our subsidiary or the landlord. Through December 31, 2023, we were paying a monthly rent of 24,750 New Israeli Shekels, or NIS, per month (approximately \$6,780).

Government Regulation and Product Approval

Government authorities in the United States, at the federal, state and local levels, as well as other countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of products such as those we are developing.

Government Regulations

Before we can market our product candidates to the public in the U.S., we believe the products will need to obtain clearance for commercial sales. Our devices will be subject to ongoing regulation by the FDA in the U.S. and other federal, state, and local regulatory bodies.

FDA regulations govern, among other things, product design and development, manufacturing, labeling, pre-clinical and clinical trials, post-market adverse event reporting, post-market surveillance, complaint handling, repair or recall of products, product storage, record keeping, pre-market clearance, advertising and promotion and sales and distribution.

Unless an exemption applies, each medical device, such as our *PressureSafe* and *Nobiotics* that are intended to be commercially distributed in the United States, requires 510(k) clearance from the FDA. Based on the FDA guidance documents that we have reviewed, we expect to be subject to the shorter and more streamlined 510(k) process for *PressureSafe*, which typically involves less risk of uncertainty and the submission of less supporting documentation, without the costly clinical trials (though of course no prior guarantee can be provided as to such regulatory treatment). Generally, gaining 510(k) clearance for a product depends on demonstrating that the subject product is "substantially equivalent" to a previously cleared 510(k) device.

For the *PressureSafe* device, we are working closely with our FDA regulatory consultants to complete our pre-market notification to the FDA for 510(k) clearance and all other necessary design and manufacturing processes. We intend to pursue approximately the same regulatory track for the *Nobiotics* device.

Failure to comply with applicable regulatory requirements can result in enforcement actions by the FDA and other regulatory agencies, which may include any of the following sanctions: untitled letters or warning letters, fines, injunctions, consent decrees, civil or criminal penalties, recall or seizure of our current or future products, operating restrictions, partial suspension or total shutdown of production, refusal of or delay in granting 510(k) clearance of new products or modified products or rescission of previously granted 510(k) clearances. Any of these sanctions could result in higher than anticipated costs and have a material adverse effect on our reputation, business and financial condition. See "Risk Factor - Government Regulation," above.

The FDA can delay, limit or deny clearance of our proposed devices for many reasons, including:

- our inability to demonstrate that our product is safe and effective for its intended users;
- our inability to demonstrate that our product is the “substantial equivalent” of a previously cleared device;
- the data from clinical studies that we undertake may be insufficient to support clearance; and
- failure of the manufacturing process or facilities we use to meet applicable requirements.

In addition, the FDA may change its pre-market policies, adopt additional regulations, revise existing regulations or take other actions which may prevent or delay clearance of our devices.

Any delay in or failure to receive or maintain regulatory compliance prior to marketing our devices could prevent us from generating revenue therefrom or achieving profitability.

Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries or other increased scrutiny on us could dissuade some customers from using our proposed product and adversely affect our reputation and the perceived safety and efficacy of our proposed devices. If the FDA requires us to go through a more rigorous examination for our proposed product than we currently expect, such as requiring additional testing further verification or other procedures, we may require substantial additional funding sooner than anticipated and/or our product could be severely delayed. Being subject to an extended period of scrutiny or being required to conduct expensive clinical trials would be particularly harmful to our business because our proposed devices currently constitute our only products.

Ongoing Regulation by FDA.

Placing the *PressureSafe* device on the market requires in addition:

- Establishment registration and device listing;
- Quality system regulation, which requires manufacturers, including third-party manufacturers, to follow stringent design, testing, control, documentation and other quality assurance procedures during all aspects of the manufacturing process;
- Labeling regulations and FDA prohibitions against the promotion of products for uncleared, unapproved or “off-label” uses, and other requirements related to advertising and promotional activities;
- Medical device reporting (MDR) regulations, which require that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur;
- Corrections and removals reporting regulations, which require that manufacturers report to the FDA field corrections and product recalls or removals if undertaken to reduce a risk to health posed by the device or to remedy a violation of the 1938 Federal Food, Drug, and Cosmetic Act (FDCA), that may present a risk to health;
- Labelling and Unique Device Identification (UDI) regulations; and
- Post-market surveillance regulations, which apply when necessary to protect the public health or to provide additional safety and effectiveness data for the device. (Refer to the section below)

Post-Approval Requirements

Although premarket clinical trials provide important information on a device’s safety and effectiveness, it is possible that new safety concerns will emerge once the device is on the market. As a result, the FDA continues to monitor device performance after a device has been approved. FDA officials conduct routine inspections of medical device manufacturing facilities across the United States. Manufacturers may be informed of inspections in advance, or the inspections may be unannounced. Inspections may be routine or caused by a particular problem. The purpose of these inspections is to make sure developers are following good manufacturing practices. Furthermore, the FDA can shut down a manufacturing facility if required standards are not met.

Usability Studies

We have completed the development of the first generation *PressureSafe* prototype in the second quarter of 2022. In June 2022, IR. Med Ltd., our wholly owned subsidiary, entered into a study agreement with Beit Rivka, a large geriatric hospital in Israel associated with Clalit, the largest Health Maintenance Organization (HMO) in Israel, to conduct a usability study of *PressureSafe*.

In February 2023, our subsidiary IR. Med Ltd. entered into an agreement with Rabin Medical Center in Israel to perform a usability study, as an additional study center to the current study that we have been performing at Beit-Rivka, a large geriatric hospital in Israel. The agreement is to conduct a usability study of our proprietary and patent protected “*PressureSafe*” device, which we plan to launch as a decision support system (DSS) tool for care givers in hospitals, nursing homes and homecare companies.

On July 17, 2023, we published our interim report of usability study performed in Israel in leading medical centers with the following results: *PressureSafe* demonstrated very high efficacy in noninvasively detecting the presence and absence of PIs below the skin’s surface. *PressureSafe* accurately detected the presence of a PI in 96% of cases. In addition, *PressureSafe* correctly determined that no wound was present in 91% of cases. The study was conducted at two medical centers owned by Clalit, the world’s second largest health maintenance organization (HMO) and the largest in Israel, namely Beit Rivka Hospital and Rabin Medical Center, both in Petah Tikva, where 370 *PressureSafe* scans were performed on 25 patients who had Stage 1 PIs or deep tissue injuries. No device related safety issues were reported in the total of 44 patients evaluated for safety.

On September 26, 2023, we announced that we signed a Clinical Trial Agreement with the Methodist Healthcare System of San Antonio to conduct a usability study titled “Safety and Efficacy of the *PressureSafe* Device for Early Detection of Pressure Injury in People with Various Skin Tones, Including Dark Skin Tones.” Methodist Healthcare is recognized as the most respected healthcare provider in its region. With a network of 85 hospitals, 9 of which are acute care facilities, Methodist Healthcare employs more than 11,000 people, including 2,700 physicians. Approximately 50% of subjects recruited for the upcoming study will have dark skin tone, thus producing comparative data on *PressureSafe*’s accuracy as a decision support device in detecting early-stage PIs in people of darker and lighter skin tones. Early-stage PIs can be more difficult to see on dark skin tones using the current standard of care for the detection of PIs, which is visual skin inspection.

In addition, we plan to conduct usability studies in the U.S. or other countries on the *PressureSafe* and on the *DiaSafe*. Additional regulations govern the approval, initiation, conduct, documentation and reporting of clinical studies to regulatory agencies in the countries or regions in which they are conducted. Such investigational use is generally also regulated by local and institutional requirements and policies which usually include review by an ethics committee or institutional review board (IRB). Failure to comply with all regulations governing such studies could subject the company to significant enforcement actions and sanctions, including halting of the study, seizure of investigational devices or data, sanctions against investigators, civil or criminal penalties and other actions. Without the data from one or more clinical studies, it may not be possible for us to secure the data necessary to support certain regulatory submissions, to secure reimbursement or demonstrate other requirements. We cannot assure that access to clinical investigators, sites and subjects, documentation and data will be available on the terms and timeframes necessary.

Reimbursement

Our current go-to-market strategy does not contemplate or rely upon governmental or third-party payor reimbursement. However, in the future we plan to seek reimbursement for product candidates as a means to expand the adoption of products and broaden our customer base.

To the extent that we adopt a market strategy which is in whole or in part reliant on third-party reimbursement, commercial sales of our future products will depend in part on the availability of reimbursement from such third-party payors, including government health administrative authorities, managed care providers, private health insurers and other organizations. Each third-party payor may have its own policy regarding which products it will cover, the conditions under which it will cover such products, and how much it will pay for such products. Third-party payors are increasingly examining the medical necessity and cost effectiveness of medical products and services in addition to safety and efficacy and, accordingly, significant uncertainty exists as to the reimbursement status of newly approved devices. Further, healthcare policy and payment reform models and medical cost containment models are being considered and/or adopted in the United States and other countries. Legislative and/or administrative reforms to applicable reimbursement systems may significantly reduce reimbursement for the services in which our products are used or result in the denial of coverage for such services outright. As a result, third-party reimbursement adequate to enable us to realize an appropriate return on our investment in research and product development may not be available for our products.

Other Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration), other divisions of the United States Department of Health and Human Services (*e.g.*, the Office of Inspector General), the United States Department of Justice and individual United States Attorney offices within the Department of Justice, and state and local governments.

Anti-Kickback Statutes in the United States

The U.S. federal anti-kickback statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing, arranging for or recommending of a good or service, for which payment may be made in whole or in part under a U.S. federal healthcare program such as the Medicare and Medicaid programs. The definition of “remuneration” has been broadly interpreted to include anything of value, including gifts, discounts, the furnishing of supplies or equipment, payments of cash and waivers of payments. Several courts have interpreted the statute’s intent requirement to mean that, if any one purpose of an arrangement involving remuneration is to induce referrals or otherwise generate business involving goods or services reimbursed in whole or in part under U.S. federal healthcare programs, the statute has been violated. Penalties for violations include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other U.S. federal healthcare programs. The reach of the federal anti-kickback statute was broadened by the Affordable Care Act (ACA), which, among other things, amends the intent requirement of the federal anti-kickback statute. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. The ACA further provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the U.S. False Claims Act or the Civil Monetary Penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

The U.S. federal anti-kickback statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Recognizing that the statute is broad and may technically prohibit many innocuous or beneficial arrangements, the Office of Inspector General (OIG) of the Department of Health and Human Services, has issued a series of regulations, known as “safe harbors.” These safe harbors set forth provisions that, if all their applicable requirements are met, will assure healthcare providers and other parties that they will not be prosecuted under the anti-kickback statute. The failure of a transaction or arrangement to fit precisely within one or more safe harbors does not necessarily mean that it is illegal or that prosecution will be pursued. However, conduct and business arrangements that do not fully satisfy an applicable safe harbor may result in increased scrutiny by government enforcement authorities such as the OIG or the U.S. Department of Justice.

Many states have adopted laws similar to the U.S. federal anti-kickback statute. Some of these state prohibitions are broader than the U.S. federal statute and apply to the referral of patients and recommendations for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs. Government officials have focused certain enforcement efforts on marketing of healthcare items and services, among other activities, and have brought cases against individuals or entities with sales personnel who allegedly offered unlawful inducements to potential or existing physician users in an attempt to procure their business.

U.S. Health Insurance Portability and Accountability Act of 1996 (HIPAA)

HIPAA imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, including private payors, or making false statements relating to healthcare matters. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, which governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information, can impose civil or criminal liability for violations of its provisions.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by HITECH and its implementing regulations, imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates"— independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

International Regulation

The European Commission is the legislative body responsible for the EU MDR (Medical Device Regulation) with which manufacturers selling medical products in the European Union and the European Economic Area, or EEA, must comply. The European Union has adopted regulations of the design, manufacture, labeling, clinical studies, post-market clinical follow-up, post-market surveillance and vigilance for medical devices. Devices that comply with the requirements of a relevant EU MDR will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable regulations and, accordingly, can be marketed throughout the European Union and EEA, after being certified by a Notified Body. The centralized procedure provides for the grant of a single marketing authorization that is valid for all European Union member states.

In addition to regulations in the United States, there are a variety of foreign regulations governing clinical trials and commercial sales and distribution of any product candidates. The approval process varies from country to country, and the time may be longer or shorter than that required for bringing the product to the U.S. market.

Employees & Consultants

As of April 1, 2024, we had 6 employees and 1 service provider, on a full-time basis, with 3 on a part time basis, engaged in product research and development at IR. Med Ltd.

During February 2024, as a result of financial difficulties, we notified 10 of our 11 employees, including our then-Chief Executive Officer, of the termination of their employment. The effective termination dates vary based on contractual notice periods, which range between March 22, 2024, and April 22, 2024. During March 2024 following the approval of the IIA plan, we canceled the termination notice of two employees.

Israeli labor laws govern the length of the workday, minimum wages for employees, procedures for hiring and dismissing employees, determination of severance pay, annual leave, sick days, advance notice of termination of employment, equal opportunity and anti-discrimination laws and other conditions of employment. Subject to specified exceptions, Israeli law generally requires severance pay upon the retirement, death or dismissal of an employee, and requires us and our employees to make payments to the National Insurance Institute, which is similar to the U.S. Social Security Administration. Our employees have defined benefit pension plans that comply with the applicable Israeli legal requirements. Our employees are not represented by a labor union. We consider our relationship with our employees to be good. To date, we have not experienced any work stoppages.

Corporate Values and Ethics

We strongly believe that our success depends on all of our employees identifying with our company's purpose and understanding how their work contributes to the Company's overall strategy. To this end, we engaged in an inclusive all-company process to develop our company purpose, vision, mission and values.

Our corporate culture and values, along with our employees are our most valuable. These values, are:

- Passion,
- Integrity,
- Excellence,
- Responsibility,
- Innovation, and
- Spirit of Collaboration.

These values form part of our goal setting and review process to ensure accountability to these values at all levels. In order to further ensure that we live our values, and our culture stays unique and strong, our Board of Directors and executive management team put significant focus on our human capital resources.

We utilize a variety of channels to facilitate open and direct communication, including: (i) monthly all-hands staff meetings, (ii) regular open learning forums to promote peer learning or town hall meetings with executives; (iii) regular ongoing update communications; and (iv) employee surveys beyond the annual engagement survey referenced above on an as-needed basis.

Employee Compensation and Benefits

Our compensation programs are designed to align the compensation of our employees with the Company's performance and to provide the proper incentives to attract, retain and motivate employees to achieve superior results. The structure of our compensation programs balances incentive earnings for both short-term and long-term performance. Specifically:

- We provide employee base salaries that are competitive and consistent with employee positions, skill levels, experience, knowledge and geographic location.
- To foster a stronger sense of ownership and align the interests of employees with those of our shareholders, we offer both a stock option program and employee stock purchase program to eligible employees under our broad-based equity incentive plans.
- Annual increases and incentive compensation are based on merit, which is communicated to employees at the time of hiring and documented through our talent management process as part of our annual review procedures and upon internal transfer and/or promotion.

Diversity and Inclusion

Ingrained in our culture is the philosophy that each individual offers diverse perspectives, backgrounds and experiences that create great outcomes when we are united as a team. We respect our people and embrace our differences. We welcome everyone and value the ideas generated by our collective uniqueness. We aspire that all of our teammates reach their full potential, and we encourage them to be confident in their differences.

Employee Development and Training

We invest significant resources in developing and retaining the talent needed to achieve our business goals. To support our employees in reaching their full potential, we offer internal and promote external learning and development opportunities. Education assistance is offered to financially support employees who seek to expand their knowledge and skill base.

Corporate and Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to those reports are available free of charge through our website (<http://www.irmedical.com>) as soon as practicable after such material is electronically filed with, or furnished to, the Securities and Exchange Commission (the "SEC"). Except as otherwise stated in these documents, the information contained on our website or available by hyperlink from our website is not incorporated by reference into this report or any other documents we file, with or furnish to, the SEC.

Our common stock is listed and traded on the over-the-counter market OTCQB under the symbol "IRME."

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, together with the other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes, before making any decision to invest in shares of our common stock. This Annual Report on Form 10-K contains forward-looking statements. If any of the events discussed in the risk factors below occurs, our business, prospects, results of operations, financial condition and cash flows could be materially harmed. If that were to happen, the trading price of our common stock could decline, and you could lose all or part of your investment. The risks and uncertainties described below are not the only ones we face. Additional risks not currently known to us, or other factors not perceived by us to present significant risks to our business at this time also may impair our business operations.

Summary of Risk Factors

Below is a summary of the principal factors that make an investment in our common stock speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below under the heading "Risk Factors" and should be carefully considered, together with other information in this Annual Report on Form 10-K and our other filings with the SEC, before making an investment decision regarding our common stock.

- We are a development stage medical device company and have a history of significant operating losses; we expect to continue to incur operating losses, and we may never achieve or maintain profitability.
- We will need substantial additional funding to continue our operations, which could result in significant dilution or restrictions on our business activities. We may not be able to raise capital when needed, if at all, which would force us to delay, reduce or eliminate our product development programs or commercialization efforts and could cause our business to fail.
- Our independent registered public accounting firm has included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited financial statements included in this report. Our audited financial statements on December 31, 2023, were prepared assuming that we will continue as a going concern.
- Medical device development involves a lengthy and expensive process with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any product.
- We currently have no products that are approved for commercial sale. If we are unable to successfully develop, receive commercial sale approval from the regulatory authorities as applicable and commercialize initially our *PressureSafe* device under development, or if we experience significant delays in doing so, our business will be adversely affected.
- The size and future growth in the market for our planned devices under development has not been established with precision and may be smaller than we estimate, possibly materially. If our estimates and projections overestimate the size of this market, our sales growth may be adversely affected.
- Any product candidates we may advance into clinical trials (assuming the FDA so requires) may be subject to extensive regulation, which can be costly and time consuming, cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates, all of which can adversely affect our business.
- We may be subject to numerous and varying privacy and security laws, and our failure to comply could result in penalties and reputational damage.
- If we are unable to establish sales and marketing capabilities or fail to enter into agreements with third parties to market and sell any products we may successfully develop, we may not be able to effectively market and sell any such products and generate product revenue.
- Failure to manage our growth effectively could increase our expenses, decrease our revenue and prevent us from implementing our business strategy.
- Failure to secure or retain coverage or adequate reimbursement for our planned products in development by third-party payors could adversely affect our business, financial condition and operating results.
- If we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate to protect our technology, our competitors could develop and commercialize technology similar to ours, and our competitive position could be harmed.
- Our technology development is headquartered in Israel and, therefore, our results may be adversely affected by economic restrictions imposed on, and political and military instability in Israel, including the Israel-Hamas war.

Risk Factors

An investment in our common stock involves a number of very significant risks. You should carefully consider the following risks and uncertainties in addition to other information in this report in evaluating our company and its business before purchasing shares of our company's common stock. Our business, operating results and financial condition could be seriously harmed due to any of the following risks. You could lose all or part of your investment due to any of these risks.

Risks Related to Our Business, Financial Position, Capital Requirements, Managing our Growth and Other Legal Compliance Matters

We are a development stage medical device company and have a history of significant operating losses; we expect to continue to incur operating losses, and we may never achieve or maintain profitability.

As a development stage company, we do not currently have revenues to generate cash flows to cover operating expenses. Since our inception, we have incurred operating losses in each year due to costs incurred in connection with research and development activities, marketing and general and administrative expenses associated with our operations. For the years ended December 31, 2023, and 2022, we incurred net losses of approximately \$4,909,000 and \$4,734,000, respectively. As of December 31, 2023, and 2022, we had an accumulated deficit of \$14,839,000 and \$9,930,000, respectively.

We expect to incur losses for the foreseeable future as we continue the development of, and seek regulatory clearance and approvals for, our *PressureSafe* device-in-development initially (for pre-emptive diagnosis of PIs on the skin surface), *DiaSafe* and thereafter, for the *Nobiotics* device (for detecting the ear infections in children). If we fail to generate revenue and eventually become profitable, or if we are unable to fund our continuing losses, our shareholders could lose all or a substantial part of their investment.

We will need substantial additional funding to complete subsequent phases of our medical devices and to operate our business and such funding may not be available or, if it is available, such financing is likely to substantially dilute our existing shareholders.

The discovery, development and commercialization of new medical devices (such as our *PressureSafe* and *Nobiotics* devices) entails significant costs. As we are in the early stage of the engineering, electronics, algorithm and mechanical aspects of our prototypes, we still must develop, modify, refine and finalize them. To enable us to accomplish these and other related items and continue to operate our business, we will need to raise substantial additional capital or enter into strategic partnerships to enable us to:

- fund clinical studies and seek regulatory approvals/clearance prior to performing clinical trials (if needed);
- build or access manufacturing and commercialization capabilities;
- develop, test and receive regulatory commercial sale approval to market our products;
- acquire or license additional internal systems and other infrastructure; and
- hire and support additional management, engineering and scientific personnel.

We will need substantial additional funding to continue our operations, which could result in significant dilution or restrictions on our business activities. We may not be able to raise capital when needed, if at all, which would force us to delay, reduce or eliminate our product development programs or commercialization efforts and could cause our business to fail.

Our operations have consumed substantial amounts of cash since inception. We expect to need substantial additional funding to pursue the clinical development of our drug candidates and launch and commercialize any drug candidates for which we receive regulatory approval.

In 2021 and 2022, we raised aggregate gross proceeds of \$5,830,000 and \$3,625,000, respectively, from sales of our equity and equity linked securities. In addition, on June 12, 2023, we raised aggregate gross proceeds of \$1,000,000 from sales of our shares of common stock and warrants to purchase shares of common stock.

Nonetheless, we will require additional capital for the further development and commercialization of our three product candidates (which are in various stages of design and development) and may need to raise additional funds sooner if we choose to and are able to expand more rapidly than we currently anticipate. Further, we expect our expenses to increase in connection with our ongoing activities. In addition, if we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to regulatory requirements, product manufacturing, marketing, sales and distribution.

Furthermore, we expect to incur additional costs associated with operating as a public company. We may also encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may increase our capital needs and/or cause us to spend our cash resources faster than we expect. Accordingly, we will need to obtain substantial additional funding in order to continue our operations.

To date, we have financed our operations through a mix of equity investments from private investors, the incurrence of debt, grant funding and technology licensing revenues, and we expect to continue to utilize such means of financing for the foreseeable future. Additional funding from those or other sources may not be available when or in the amounts needed, on acceptable terms, or at all.

If we raise capital through the sale of equity, or securities convertible into equity, it will result in dilution to our then existing stockholders, which could be significant depending on the price at which we may be able to sell our securities.

If we raise additional capital through the incurrence of indebtedness, we may become subject to covenants restricting our business activities, and holders of debt instruments may have rights and privileges senior to those of our equity investors. In addition, servicing the interest and principal repayment obligations under debt facilities could divert funds that would otherwise be available to support research and development or commercialization activities.

If we are unable to raise capital when needed on commercially reasonable terms, we could be forced to delay, reduce or eliminate our research and development for our product candidates or any future commercialization efforts or ultimately cease operations. Any of these events could significantly harm our business, financial condition and prospects.

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never achieve, we expect to finance our cash needs primarily through public or private equity offerings, debt financings or through the establishment of possible strategic alliances. We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are not able to secure additional equity funding when needed, we may have to delay, reduce the scope of, or eliminate one or more of our clinical studies, development programs or future commercialization initiatives.

In addition, any additional equity funding that we do obtain will dilute the ownership held by our existing security holders. The amount of this dilution may be substantially increased if the trading price of our common stock is lower at the time of any financing. Regardless, the economic dilution to shareholders will be significant if our stock price does not increase significantly, or if the effective price of any sale is below the price paid by a particular shareholder. Any debt financing that we obtain in the future could involve substantial restrictions on activities and creditors could seek a pledge of some or all of our assets. We have not identified potential sources for such financing that we will require, and we do not have commitments from any third parties to provide any future debt financing. If we fail to obtain funding as needed, we may be forced to cease or scale back operations, and our results, financial condition and stock price would be adversely affected.

Our independent registered public accounting firm has included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited financial statements included in this report. Our audited financial statements on December 31, 2023, were prepared assuming that we will continue as a going concern.

Primarily as a result of our losses and limited cash balances and cash flows, the report of our independent registered public accounting firm for the fiscal year ended December 31, 2023, contains an explanatory paragraph on our financial statements stating that the Company has not generated sufficient revenues to cover operating expenses and will need additional capital to service its debt obligations. While the Company raised proceeds of \$1,000,000 during the year ended December 31, 2023, by way of private placement offerings to accredited investors, it does not believe its resources will be sufficient to meet its operating and capital needs beyond the second quarter of 2024. The Company expects it will require additional capital to fully implement the scope of its proposed business operations, which raises substantial doubt about its ability to continue as a going concern. The Company will have to continue to rely on equity and debt financing, and/or continued support from its officers and directors. There can be no assurance that financing, whether debt or equity, will be available to the Company in the amount required at any particular time or for any particular period or, if available, that it can be obtained on favorable terms.

If we are unable to secure additional capital, we may be required to curtail our clinical and research and development initiatives and take additional measures to reduce costs in order to conserve our cash in amounts sufficient to sustain operations and meet our obligations. These measures could cause significant delays in our clinical and regulatory efforts, which is critical to the realization of our business plan. The accompanying financial statements do not include any adjustments that may be necessary should we be unable to continue as a going concern. It is not possible for us to predict at this time the potential success of our business. The revenue and income potential of our proposed business and operations are currently unknown. If we cannot continue as a viable entity, you may lose some or all of your investment.

Our limited operating history as a development stage company may hinder our ability to successfully meet our objectives.

We were formed in 2013, and since that time our focus has been on our three leading product candidates, which are the *PressureSafe* device, *DiaSafe* device and the *Nobiotics* device. We have limited experience with development stage operations, including manufacturing and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the medical device support systems arena. In addition, the early-stage nature of our development operations can only provide limited operating results upon which investors can evaluate our business and prospects.

Our limited operating history may adversely affect our ability to implement our business strategy and achieve our business goals, which include, among others, the following activities:

- developing our product candidates using unproven technologies;
- undertaking preclinical development and clinical trials as well as formulating and manufacturing products;
- obtaining the human, financial and other resources necessary to develop, test, manufacture, commercialize and market our product candidates;
- engaging collaborators to assist in developing, testing, manufacturing and marketing our product candidates;
- continuing to build and maintain an intellectual property portfolio covering our technology and product candidates;
- achieving acceptance and use by the medical community of our Anticalin platform and drug candidates after they receive regulatory approvals;
- maintaining, growing and managing our internal teams as and to the extent we increase our operations and develop new segments of our business;
- developing and maintaining successful collaboration, strategic and other relationships for the development and commercialization of our product candidates that receive regulatory approvals with existing and new partners; and
- managing our cash flows and any growth we may experience in an environment where costs and expenses relating to clinical studies, regulatory approvals and commercialization continue to increase.

If we are unsuccessful in accomplishing any or all of these objectives, we may not be able to raise capital, expand our business, develop our drug candidates or continue our operations.

We may never achieve profitability.

Because of the numerous risks and uncertainties associated with the development and commercialization of medical device solutions, we are unable to accurately predict the timing or amount of future revenue or expenses or when, or if, we will be able to achieve profitability. We have financed our operations primarily through issuance and sale of equity and equity linked securities. The size of our future net losses will depend, in part, on the rate of growth or contraction of our expenses and the level and rate of growth, if any, of our revenues. We expect to continue to expend substantial financial and other resources on, among other things:

- investments to expand and enhance our platform and technology infrastructure, make improvements to the scalability, availability and security of our platform, and develop new products;
- sales and marketing, including expanding our indirect sales organization and marketing programs;
- planning and conducting clinical trials to obtain regulatory approval/clearance for the commercialization of our products;
- expansion of our operations and infrastructure, both domestically and internationally; and
- general administration, including legal, accounting and other expenses related to being a public company.

If we are unable to successfully commercialize our products or if revenue from any of our products that receives marketing approval is insufficient, we will not achieve profitability. Furthermore, even if we successfully commercialize our products, our planned investments may not result in increased revenue or growth of our business. We may not be able to generate net revenues sufficient to offset our expected cost increases and planned investments in our business and platform. As a result, we may incur significant losses for the foreseeable future, and may not be able to achieve and sustain profitability. If we fail to achieve and sustain profitability, then we may not be able to achieve our business plan, fund our business or continue as a going concern.

Our quarterly results may fluctuate significantly, and period-to-period comparisons of our results may not be meaningful.

Our quarterly results, including the levels of future revenue, if any, our operating expenses and other costs, and our operating margins, may fluctuate significantly in the future, and period-to-period comparisons of our results may not be meaningful. This may be especially true to the extent that we do not successfully establish our business model. Accordingly, the results of any one period should not be relied upon as an indication of our future performance. In addition, our quarterly results may not fully reflect the underlying performance of our business. Factors that may cause fluctuations in our quarterly results include, but are not limited to:

- the timing of regulatory commercial sale approvals for our products in various stages of development;
- our ability to successfully establish our business model;
- our ability to attract and retain distribution networks, customers and to expand our business;
- enacted or pending legislation effecting the healthcare industry;
- changes in our pricing policies or those of our competitors;
- the timing of our recognition of revenue and the mix of our revenues during the period;
- the amount and timing of operating expenses and other costs related to the maintenance and expansion of our business, infrastructure and operations;
- the amount and timing of operating expenses and other costs related to the development or acquisition of businesses, services, technologies or intellectual property rights;
- the timing and costs associated with legal or regulatory actions;
- changes in the competitive dynamics of our industry, including consolidation among competitors or customers;
- loss of our executive officers or other key employees
- industry conditions and trends that are specific to the vertical markets in which we sell or intend to sell our devices; and
- general economic and market conditions.

Fluctuations in quarterly results may negatively impact the value of our common stock, regardless of whether they impact or reflect the overall performance of our business. If our quarterly results fall below the expectations of investors or any securities analysts who follow our shares, or below any guidance we may provide, the price of our ordinary shares could decline substantially.

Currency exchange rate fluctuations affect our results of operations, as reported in our financial statements.

We incur expenses in U.S. Dollars and in NIS, but our functional currency is the U.S. dollar. However, a significant portion of our headcount related expenses, consisting principally of salaries and related personnel expenses as well as R&D consulting services, leases and certain other operating expenses, are denominated in NIS. This foreign currency exposure gives rise to market risk associated with exchange rate movements of the U.S. dollar against the NIS. Furthermore, we anticipate that a material portion of our expenses will continue to be denominated in NIS.

In addition, increased international sales in the future may result in greater foreign currency denominated sales, increasing our foreign currency risk. If we are not able to successfully hedge against the risks associated with currency fluctuations, our financial condition and results of operations could be adversely affected.

Medical device development involves a lengthy and expensive process with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any product.

Before the *PressureSafe*, *DiaSafe* and/ or the *Nobiotics* medical devices can be available for commercial sale the United States and in other countries, we must complete all regulatory requirements necessitated by the FDA and foreign health regulatory authorities and demonstrate the performance and safety of our technology. These activities will include performing clinical useability studies. While we currently plan to pursue 510(k) approval which does not require clinical trials, the FDA may require clinical trials in order to approve our product candidates. Clinical Trials are expensive, difficult to design and implement, can take years to complete and are inherently uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. Further, the outcomes of completed clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Clinical data is often susceptible to varying interpretations and analyses, and many companies that have believed their products performed satisfactorily in clinical trials have nonetheless failed to obtain marketing approval. We have limited resources to complete the expensive process of medical device development, and clinical trials, putting us at a disadvantage, particularly compared to some of our larger and established competitors, and we may not have sufficient resources to commercialize our products under development in a timely fashion, if ever.

We may experience numerous unforeseen events during or as a result of clinical trials that we may be required to perform that could delay or prevent our ability to receive marketing approval or commercialize our products, including:

- regulators may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- the failure to successfully complete clinical trials testing requirements required by the FDA and foreign health regulatory authorities;
- we may experience delays in reaching agreement (or fail in reaching agreement) on acceptable clinical trial contracts with third parties or acceptable clinical trial protocols with prospective trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among trial sites;
- clinical trials of the technology underlying *PressureSafe*, *DiaSafe* or the *Nobiotics* devices may produce negative or inconclusive results, including failure to demonstrate statistical significance, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon our development programs;
- the number of people with the necessary disorders required for clinical trials may be larger than we anticipate. Enrollment in these clinical trials may be slower than we anticipate. People may drop out of these clinical trials or fail to return for follow-up at a higher rate than we anticipate;
- our third-party contractors conducting the clinical trials may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- the cost of clinical trials of our products may be greater than we anticipate;
- the supply or quality of our products or other materials necessary to conduct clinical trials of our products may be insufficient or inadequate; and
- delays from our suppliers and manufacturers could impact clinical trial completion and impact future revenue.

If we are required to conduct clinical trials or other testing of our proposed devices under development beyond those that we contemplate or if the results of these trials or tests are not favorable or if there are safety concerns, we may:

- not obtain commercial sale approvals at all;
- be delayed in obtaining commercial sale approvals for our planned products under development in a jurisdiction; or
- be subject to additional testing requirements.

Our development costs will also increase if we experience delays in testing or commercial sale approval from regulatory authorities. We do not know whether any of our clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant clinical trial delays also could allow our competitors to bring innovative products to market before we do and impair our ability to successfully commercialize our products.

Changes in the configuration of the technology underlying our devices under development may result in additional costs or delay.

As products are developed through towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and configuration, are altered along the way in an effort to optimize processes and results. Any changes we make carry the risk that they will not achieve the intended objectives. Any of these changes could cause our products under development to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered device. Such changes may also require additional testing, regulatory notification or regulatory approval. This could delay completion of clinical trials, increase costs, delay approval of our future products and jeopardize our ability to commence sales and generate revenue.

We currently have no products that are approved for commercial sale. If we are unable to successfully develop, receive commercial sale approval from the regulatory authorities as applicable and commercialize initially our PressureSafe device under development, or if we experience significant delays in doing so, our business will be adversely affected.

We currently have no products that are approved for commercial sale. We initially plan to seek commercial sale approval from the regulatory authority (FDA) to commercialize our *PressureSafe* under development and we may seek approval to commercialize in selected international geographies. Our ability to generate revenue from our developed products, if any, will depend heavily on their successful development, commercial sale approval and eventual commercialization. The success of any product that we develop will depend on several factors, including:

- receipt of timely FDA clearance of our planned regulatory pathway
- receipt of timely approval from foreign health regulatory authorities (if we seek approval in any jurisdiction outside the United States);
- successful completion of all necessary bench testing, and clinical trials, if necessary;
- our ability to procure and maintain suppliers and manufacturers of the components of the technology underlying *PressureSafe* and future versions;
- launching commercial sales of our devices, if approved for commercial sale;
- market acceptance of our devices under development, if approved, by the medical community and third-party payers;
- our ability to obtain extensive coverage and reimbursement for use of our devices;
- the perceived advantages, cost, safety, convenience and accuracy of alternative diagnostic methods;
- obtaining and maintaining patent, trademark and trade secret protection and regulatory exclusivity for our technology and otherwise protecting our rights in our intellectual property portfolio; and
- maintaining compliance with regulatory requirements, including current good manufacturing practices.

Whether commercial sale approval initially for the *PressureSafe* device will be granted is unpredictable and may depend upon several factors, including the substantial discretion of the regulatory authorities. We may need to perform clinical trials, and the FDA (and as we seek to commercialize in selected international geographies, other foreign regulatory authorities) may require that we conduct additional bench testing, and/or clinical trials, provide additional data, take additional manufacturing steps, or require other conditions, before they will let us to market our device. If the FDA or other foreign regulatory authority will require additional clinical trials or data, we would incur increased costs and delays in the access to market, which may require us to expend more resources than we have available.

In cases where we are successful in obtaining commercial sale approval to market one or more of our products, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain commercial sale approval, the accepted price for the product, the ability to obtain coverage and reimbursement, and whether we own the commercial rights for that territory. If the number of people we target is not as significant as we estimate or the treatment population is narrowed by competition, physician choice or diagnostic guidelines, we may not generate significant revenue from sales of such products, even if they are available on the market.

Commercial sale approval in the United States by the FDA does not guarantee approval by other regulatory authority in other countries or jurisdictions or ensure approval for the same conditions of use. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other country. Approval processes vary between countries and can involve additional product testing and validation and additional administrative review periods. It is possible that no product we develop will ever obtain commercial sale approval in the United States or any other jurisdiction, even if we expend substantial time and resources seeking such approval. If we do not achieve one or more of these approvals in a timely manner or at all, we could experience significant delays or an inability to fully commercialize any product and achieve profitability.

Both before and after a product is commercially released, we will have ongoing responsibilities under U.S. and corresponding foreign regulations, as applicable. We will also be subject to periodic inspections by the FDA and other foreign regulatory authorities as applicable, to determine compliance with U.S. regulatory requirements, such as the Quality System Regulation (QSR), the medical device reporting (MDR), the reporting of adverse events and recalls, the regulations regarding notification on changes and other corresponding regulations of other foreign regulatory authorities, as applicable. These inspections can result in observations or reports, warning letters or other similar notices or forms of enforcement action. If the FDA, or any other foreign authority as applicable, concludes that we are not in compliance with applicable laws or regulations, or that any of our products are ineffective or pose an unreasonable health risk, such authority could ban these products, suspend or cancel our marketing authorizations, impose “stop-sale” and “stop-import” orders, refuse to issue export certificates, detain or seize adulterated or misbranded products, order a recall, repair, replacement, correction or refund of such products, or require us to notify health providers and others that the products present unreasonable risks of substantial harm to the public health. Discovery of previously unknown problems with our product’s design or manufacture may result in restrictions on use, restrictions placed on us or our suppliers, or withdrawal of an existing commercial sale approval. The FDA or comparable foreign authority may also impose operating restrictions, enjoin and restrain certain violations of applicable law pertaining to medical devices, assess civil or criminal penalties against our officers, employees or us, or recommend criminal prosecution of our Company. Adverse regulatory action may restrict us from effectively marketing and selling our products. In addition, negative publicity and product liability claims resulting from any adverse regulatory action could have a material adverse effect on our business, financial condition and operating results.

Foreign governmental regulations have become increasingly stringent and more extensive, and we may become subject to even more rigorous regulation by foreign governmental authorities in the future. Penalties for a company’s non-compliance with foreign governmental regulation could be severe, including revocation or suspension of a company’s business license and civil or criminal sanctions.

Our success depends on our ability to complete development, commercialize and gain market acceptance initially for PressureSafe and thereafter for any other device.

Our current business strategy is highly dependent on developing and commercially launching one product initially, our *PressureSafe* device and achieving and maintaining market acceptance. We may face challenges convincing physicians, many of whom have extensive experience with competitors’ products and established relationships with other companies, to appreciate the benefits of initially *PressureSafe* in a way that is superior to and differentiated from currently available technology or know-how and adopt it for supporting diagnostics for their patients.

Moreover, healthcare providers tend to be slow to change their medical treatment practices because of perceived liability risks arising from the use of new products and the uncertainty of third-party reimbursement.

If we are unable to achieve the support of caregivers and healthcare providers or widespread market acceptance for our devices, then our sales potential, strategic objectives and profitability could be negatively impacted, which would adversely affect our business, financial condition and operating results.

We depend on the knowledge and skills of our senior management and our Board of Directors.

We have benefited substantially from the leadership and performance of our senior management. Our success will depend on our ability to retain our current management and recruit additional management personnel. Competition for senior management in our industry is intense, and we cannot guarantee that we will be able to retain our personnel or recruit additional personnel. The loss of the services of certain members of our senior management could prevent or delay the implementation and completion of our strategic objectives or divert management's attention to seeking qualified replacements. On February 22, 2024, as a result of financial difficulties, we notified seven of our 10 employees, including Mr. Di-Cori, who acted as our Chief Executive Officer, of the termination of their employment. The effective termination dates vary based on contractual notice periods, which range between March 22, 2024, and April 22, 2024. In addition, our Board of Directors has determined to limit our operations until such time as sufficient funds that can support our operations have been identified.

It may be difficult to enforce a U.S. judgment against us, our officers and directors and the foreign persons named in this registration statement in the United States or in foreign countries, or to assert U.S. securities laws claims in foreign countries or serve process on our officers and directors and these experts.

While we are incorporated in the State of Nevada, currently a majority of our directors and executive officers are not residents of the United States. The majority of our assets are located outside the United States. Therefore, it may be difficult for an investor, or any other person or entity, to enforce a U.S. court judgment based upon the civil liability provisions of the U.S. federal securities laws against us or any of these persons in a U.S. or foreign court, or to effect service of process upon these persons in the United States. Additionally, it may be difficult for an investor, or any other person or entity, to assert U.S. securities law claims in original actions instituted in foreign countries. Foreign courts may refuse to hear a claim based on a violation of U.S. securities laws on the grounds that foreign countries are not necessary the most appropriate forum in which to bring such a claim. Even if a foreign court agrees to hear a claim, it may determine that foreign law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by foreign countries' law. There is little binding case law in foreign countries addressing the matters described above.

The size and future growth in the market for our planned devices under development has not been established with precision and may be smaller than we estimate, possibly materially. If our estimates and projections overestimate the size of this market, our sales growth may be adversely affected.

Our estimates of the size and future growth in the market for our intended devices under development, including the number of people who may benefit from and be amenable to using our devices for diagnosis, is based on a number of internal and third-party studies, reports and estimates. In addition, our internal estimates are based in large part on current diagnostic patterns by healthcare providers using current generation technology, and our belief is that the incidence of misdiagnosed skin pressure injuries and ear infections in children in the United States and worldwide is increasing. While we believe these factors have historically provided and may continue to provide us with effective tools in estimating the total market for our intended products under development, these estimates may not be correct, and the conditions supporting our estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors. The actual incidence of these phenomenon, and the actual demand for our products or competitive products, could differ materially from our projections if our assumptions are incorrect. As a result, our estimates of the size and future growth in the market for our intended products may prove to be incorrect, it may impair our projected sales growth and have an adverse impact on our business.

Undetected errors or defects in our planned medical devices under development or future versions thereof could harm our reputation, decrease the market acceptance of PressureSafe and Nobiotics.

The technology underlying *PressureSafe* and *Nobiotics* may contain undetected errors or defects. Disruptions or other performance problems with devices may delay development, prevent regulatory clearance or harm our reputation. If that occurs, we may incur significant costs, the attention of our key personnel could be diverted, or other significant customer relations problems may arise. We may also be subject to warranty and liability claims for damages related to errors or defects in the *PressureSafe* and *Nobiotics* devices or future versions thereof. A material liability claims or other occurrence that harms our reputation or decreases market acceptance of our planned products could harm our business and operating results. This risk exists even if a device is available for commercial sale and manufactured.

Any product candidates we may advance into clinical trials (assuming the FDA so requires) may be subject to extensive regulation, which can be costly and time consuming, cause unanticipated delays or prevent the receipt of the required approvals to commercialize our product candidates, all of which can adversely affect our business.

Before we can market a new medical device, such as our proposed products, we must first receive clearance under Section 510(k) of the FDA. In the 510(k) clearance process, before a device may be marketed in the US, the FDA must determine that such proposed device is “substantially equivalent” to a legally-marketed “predicate” device, which includes a device that has been previously cleared through the 510(k) process, a device that was legally marketed prior to May 28, 1976 (pre-amendments device), a device that was originally on the U.S. market pursuant to an approved pre-market approval (“PMA”) and later down-classified, or a 510(k)-exempt device. To be “substantially equivalent,” the proposed device must have the same intended use as the predicate device and either have the same technological characteristics as the predicate device or have different technological characteristics and not raise different questions of safety or effectiveness than the predicate device.

The 510(k) clearance process can be expensive, lengthy and uncertain. The FDA’s 510(k) clearance process usually takes from three to 12 months but can last longer. Despite the time, effort and cost, a device may not be cleared by the FDA. Any delay or failure to obtain necessary regulatory clearances could harm our business, including our ability to commercialize our product and our shareholders could lose their entire investment. Furthermore, even if we are granted the required regulatory clearances, such clearances may be subject to significant limitations on the indicated uses for the device, which may limit the market for our product.

As noted, our regulatory approval plan is to obtain 510(K) clearance; however, no assurance can be granted that we will so succeed. If the 510(k) clearance is not granted to us, the device testing, clinical trials, manufacturing, labeling, storage, record-keeping, advertising, promotion, import, export, marketing and distribution of our product candidates are subject to extensive regulation by the FDA in the United States and by comparable health authorities in foreign markets.

Despite the time and expense invested in clinical trials of product candidates, commercial sale approval from applicable regulatory authority is never guaranteed.

FDA or and other regulatory agency can delay, limit or deny approval of a product candidate for many reasons, including:

- the FDA or other foreign regulatory authority as applicable may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA that a product candidate is safe and effective for any indication;
- the FDA may not accept the clinical data from trials which are conducted by individual investigators in countries where the standard of care is potentially different from the United States;
- the results of clinical trials may not meet the level of statistical significance required by the FDA for clearance;
- the FDA may disagree with our interpretation of data from the bench testing or clinical trials;
- the FDA may fail to approve the manufacturing processes or facilities of third-party manufacturers with which we or our collaborators contract for clinical and commercial supplies; or
- the approval policies or regulations of the FDA may significantly be changed in a manner rendering our clinical data insufficient for approval.

In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions, which may prevent or delay approval or clearance of our products or impact our ability to modify our products after clearance on a timely basis. Such policy or regulatory changes could impose additional requirements upon us that could delay our ability to obtain clearance for our devices, increase the costs of compliance or restrict our ability to maintain products after clearance. For example, as part of the Food and Drug Administration Safety and Innovation Act, or FDASIA, enacted in 2012, Congress reauthorized the Medical Device User Fee Amendments with various FDA performance goal commitments and enacted several “Medical Device Regulatory Improvements” and miscellaneous reforms, which are further intended to clarify and improve medical device regulation both pre- and post-clearance. Some of these proposals and reforms could impose additional regulatory requirements upon us that could delay our ability to obtain new clearance, increase the costs of compliance or restrict our ability to maintain any commercial sale approval we are able to obtain.

With respect to foreign markets, approval procedures vary among countries and can involve additional product testing and administrative review periods. Any delay in obtaining, or an inability to obtain, applicable regulatory approvals would prevent us from commercializing our product candidates.

Significant disruptions of information technology systems or security breaches could adversely affect our business.

We are increasingly dependent upon information technology systems, infrastructure and data to operate our business. In the ordinary course of business, we collect, store and transmit large amounts of confidential information (including, among other things, trade secrets or other intellectual property, proprietary business information and personal information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party vendors who may or could have access to our confidential information. The size and complexity of our information technology systems, and those of third-party vendors with whom we contract, and the large amounts of confidential information stored on those systems, make such systems vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees, third-party vendors and/or business partners, or to cyber-attacks by malicious third parties. Cyber-attacks are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. Cyber-attacks could include the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information.

Significant disruptions of our information technology systems, or those of our third-party vendors or business partners, or security breaches could adversely affect our business operations and/or result in the loss, misappropriation and/or unauthorized access, use or disclosure of, or the prevention of access to, confidential information, including, among other things, trade secrets or other intellectual property, proprietary business information and personal information, and could result in financial, legal, business and reputational harm to us. For example, any such event that leads to unauthorized access, use or disclosure of personal information, including personal information regarding our patients or employees, could harm our reputation, require us to comply with federal and/or state breach notification laws and foreign law equivalents, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, including the imposition of significant fines, penalties, or other liability for any noncompliance with certain privacy and data security laws. Security breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. While we have implemented security measures to protect our information technology systems and infrastructure, there can be no assurance that such measures will prevent service interruptions or security breaches that could adversely affect our business. In addition, our liability insurance may not be sufficient in type or amount to cover us against costs of or claims related to security breaches, cyber-attacks and other related breaches. A cybersecurity breach could adversely affect our reputation and could result in other negative consequences, including disruption of our internal operations, increased cybersecurity protection costs, lost revenue, or litigation. See “Item C1. Cybersecurity” for additional information.

We may be subject to numerous and varying privacy and security laws, and our failure to comply could result in penalties and reputational damage.

We are subject to laws and regulations covering data privacy and the protection of personal information, including health information. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing focus on privacy and data protection issues which may affect our business. In the U.S., numerous federal and state laws and regulations, including state security breach notification laws, state health information privacy laws, and federal and state consumer protection laws, govern the collection, use, disclosure, and protection of personal information. Each of these laws is subject to varying interpretations by courts and government agencies, creating complex compliance issues for us. If we fail to comply with applicable laws and regulations, we could be subject to penalties or sanctions, including criminal penalties if we knowingly obtain or disclose individually identifiable health information from a covered entity in a manner that is not authorized or permitted by the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health Act.

Other countries have, or are developing, laws governing the collection, use and transmission of personal information as well. The EU and other jurisdictions have adopted data protection laws and regulations, which impose significant compliance obligations. In the EU, for example, effective May 25, 2018, the General Data Protection Regulation (GDPR) replaced the prior EU Data Protection Directive (95/46) that governed the processing of personal data in the European Union. The GDPR imposes significant obligations on controllers and processors of personal data, including, as compared to the prior directive, higher standards for obtaining consent from individuals to process their personal data, more robust notification requirements to individuals about the processing of their personal data, a strengthened individual data rights regime, mandatory data breach notifications, limitations on the retention of personal data and increased requirements pertaining to health data, and strict rules and restrictions on the transfer of personal data outside of the EU, including to the U.S. The GDPR also imposes additional obligations on, and required contractual provisions to be included in, contracts between companies subject to the GDPR and their third-party processors that relate to the processing of personal data. The GDPR allows EU member states to make additional laws and regulations further limiting the processing of genetic, biometric or health data.

Any failure to comply with the requirements of GDPR and applicable national data protection laws of EU member states could lead to regulatory enforcement actions and significant administrative and/or financial penalties against us (including fines of up to €20,000,000 or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher), and could adversely affect our business, financial condition, cash flows and results of operations.

If we or our third-party manufacturers fail to comply with the FDA's Quality System Regulation, or QSR, our manufacturing operations could be interrupted.

In the US, we and our future contract manufacturers are required to comply with the FDA's QSR requirements which cover the methods and documentation of the design, testing, production, quality control, labeling, packaging, storage shipping and distribution of our products. In other foreign countries International Organization for Standardization (ISO) 13485 standard is used to show compliance with the design and manufacturing requirements. We and our suppliers are also subject to the regulations of foreign jurisdictions regarding the manufacturing process if we or our distributors market our products abroad. We continue to monitor our quality management in order to improve our overall level of compliance. Our facilities will be subject to periodic and unannounced inspection by U.S. and other foreign regulatory agencies as applicable to audit compliance with the regulations. If our facilities or those of our suppliers are found to be in violation of applicable laws and regulations, or if we or our suppliers fail to take satisfactory corrective action in response to an adverse inspection, the regulatory authority could take enforcement action, including any of the following sanctions:

- untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- customer notifications or repair, replacement or refunds;
- operating restrictions or partial suspension or total shutdown of production;
- recalls, withdrawals, or administrative detention or seizure of our products;
- refusing or delaying requests for 510(k) marketing clearance applications relating to new products or modified products;
- withdrawing the product from the market;
- refusing to provide Certificates for Foreign Government;
- refusing to grant export approval for our products; or
- pursuing criminal prosecution.

Any of these sanctions could impair our ability to produce *PressureSafe* or *Nobiotics* in a cost-effective and timely manner in order to meet our customers' demands and could have a material adverse effect on our reputation, business, results of operations and financial condition. We may also be required to bear other costs or take other actions that may have a negative impact on our future sales and our ability to generate profits.

We intend to rely on third parties to conduct clinical trials (if needed). If these third parties do not meet our deadlines or otherwise conduct the trials as required, our clinical trials programs could be delayed or unsuccessful and we may not be able to obtain regulatory approval for or commercialize our product candidates when expected or at all.

We do not have the ability to conduct all aspects of our clinical trials ourselves. We intend to use Contract Research Organizations (CROs) to conduct clinical trials that we may be required to conduct and will rely upon medical institutions, clinical investigators and CRO's and consultants to conduct these trials in accordance with our clinical protocols. Our future CROs, investigators and other third parties play a significant role in the conduct of these trials and the subsequent collection and analysis of data from the clinical trials.

There is no guarantee that any CROs, investigators and other third parties upon which we rely for administration and conduct of clinical trials will devote adequate time and resources to such trials or perform as contractually required. If any of these third parties fail to meet expected deadlines, fail to adhere to our clinical protocols or otherwise perform in a substandard manner, our clinical trials may be extended, delayed or terminated. If any of these clinical trial sites terminate for any reason, we may experience the loss of follow-up information on patients enrolled in our ongoing clinical trials unless we are able to transfer the care of those patients to another qualified clinical trial site. In addition, principal investigators for any clinical trials we conduct may serve as scientific advisors or consultants to us from time to time and receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, the integrity of the data generated at the applicable clinical trial site may be jeopardized.

If our competitors develop tools for the target indications of our product candidates that are approved more quickly, marketed more successfully or demonstrated to be more effective or accurate than our product candidates, our commercial opportunity will be reduced or eliminated.

We operate in highly competitive segments of the medical device markets. We face competition from many different sources, including commercial medical device enterprises, academic institutions, government agencies and private and public research institutions. Our product candidates, if successfully developed and approved, will compete with established methods, as well as new diagnostic technologies that may be introduced by our competitors. Our competitors may have significantly greater financial, product development, manufacturing and marketing resources than us. Large medical device companies have extensive experience in clinical testing and obtaining regulatory approval for medical devices. We also may compete with these organizations to recruit management, scientists and clinical development personnel. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. New developments, including the development of other medical device technologies and methods of pressure injuries and ear infections diagnostics, may occur in the medical device industries at a rapid pace. Developments by competitors may render our product candidates obsolete or non-competitive. We will also face competition from these third parties in recruiting and retaining qualified personnel, establishing clinical trial sites and patient registration for clinical trials and in identifying and in-licensing new product candidates.

If we or our U.S. Distributor are unable to establish sales and marketing capabilities or fail to enter into agreements with third parties to market and sell any products we may successfully develop, we may not be able to effectively market and sell any such products and generate product revenue.

In October 2022, we entered into a distribution agreement covering the U.S. pursuant to which, among other things, the distributor is to assist us in setting up a distribution network in the U.S. The establishment and development of a sales force, either by us or jointly with distributor, or the establishment of a contract sales force to market any products we may develop will be expensive and time-consuming and could delay any product launch. If we, or our development partners, are unable to establish sales and marketing capability or any other non-technical capabilities necessary to commercialize any products we may successfully develop, we will need to contract with third parties to market and sell such products. We may not be able to establish arrangements with third parties on acceptable terms, if at all.

If we are not able to develop a strong brand and/ or increase market awareness for our product candidates, then our business, results of operations and financial condition may be adversely affected.

We believe that the success of our product candidates will depend in part on our ability to develop a strong brand identity for our company and products, and to increase the market awareness of our product and their capabilities, once these products are commercially launched. The successful promotion of our brand will depend largely on our continued marketing efforts and our ability to offer high quality AI capabilities with our products and ensure that our technology provides the expected benefits. Our brand promotion and thought leadership activities may not be successful or produce revenue. In addition, independent industry analysts may provide reviews of our products and of competing products and services, which may significantly influence the perception of our products in the marketplace. If these reviews are negative or not as positive as reviews of our competitors' products and services, then our brand may be harmed.

The promotion of our brand also requires us to make substantial expenditures, and we anticipate that these expenditures will increase as our industry becomes more competitive and as we seek to expand into new markets. These higher expenditures may not result in any increased revenue or in revenue that is sufficient to offset the higher expense levels. If we do not successfully maintain and enhance our brand, then our business may not grow, we may see our pricing power reduced relative to competitors and we may lose customers, all of which would adversely affect our business, results of operations and financial condition.

Failure to manage our growth effectively could increase our expenses, decrease our revenue and prevent us from implementing our business strategy.

We expect that our ability to generate revenues and achieve profitability will require substantial growth in our business, which will put a strain on our management and financial resources. To manage this and our anticipated future growth effectively, including as we expand into new clinical areas and geographic regions, we must continue to maintain and enhance our information technology infrastructure, as well as our financial and accounting systems and controls. We also must attract, train and retain a significant number of qualified software and hardware developers and engineers, technical and management personnel, sales and marketing personnel and customer and channel partner support personnel. Failure to effectively manage our rapid growth could lead us to over-invest or under-invest in development and operations, result in weaknesses in our systems or controls, give rise to operational mistakes, losses, loss of productivity or business opportunities and result in loss of employees and reduced productivity of remaining employees. Our growth could require significant capital expenditures and might divert financial resources from other projects such as the development of new products and services. If our management is unable to effectively manage our growth, our expenses might increase more than expected, our revenue could decline or grow more slowly than expected, and we might be unable to implement our business strategy. The quality of our products and services might suffer, which could negatively affect our reputation and harm our ability to retain and attract channel partners or customers.

Failure to secure or retain coverage or adequate reimbursement for our planned products in development by third-party payors could adversely affect our business, financial condition and operating results.

We plan to derive nearly all of our revenue from sales, initially, of our *PressureSafe* device under development, if approved for commercial sale, in the United States and potentially in selected international geographies, and expect to do so for the next several years. We anticipate a substantial portion of the purchase price of our product and disposables will be paid for by third-party payors, including private insurance companies, preferred provider organizations and other managed care providers. Patients who receive services for their medical conditions and their healthcare providers generally rely on third-party payors to reimburse all or part of the costs associated with their medical treatment and diagnosis, including healthcare providers' services. Coverage and adequate reimbursement from third-party payors, including governmental healthcare programs, such as Medicare and Medicaid, and commercial payors, is critical to new product acceptance. Future sales of our *PressureSafe* device initially will be limited unless healthcare providers can rely on third-party payors to pay for all or part of the cost to purchase/lease our devices and then pay for the disposable components. Access to adequate coverage and reimbursement by third-party payors is essential to the market acceptance of our products.

In the United States, a third-party payor's decision to provide coverage for our products does not imply that an adequate reimbursement rate will be obtained. Further, one third-party payor's decision to cover our products does not assure that other payors will also provide coverage for the products or will provide coverage at an adequate reimbursement rate. Healthcare providers may choose not to order a product and/or disposables unless third-party payors pay a substantial portion of the product and disposables. Within and outside the United States, reimbursement is obtained from a variety of sources, including government-sponsored and private health insurance plans. These third-party payors determine whether to provide coverage and reimbursement for specific products and procedures. Coverage determinations and reimbursement levels of our products are critical to the commercial success of our product, and if we are not able to secure positive coverage determinations and reimbursement levels for our products, our business would be materially adversely affected.

In addition, there may be significant delays in obtaining reimbursement, and coverage may be more limited than the purposes for which the product received commercial sale approval from the FDA or other foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Payment rates may vary according to the use of the product and the clinical setting in which it is used, may be based on payments allowed for lower cost products that are already reimbursed, and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or third-party payors and by any future relaxation of laws that presently restrict imports of products from countries where they may be sold at lower prices than in the United States.

Third-party payors, whether foreign or domestic, governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In addition, in the United States, no uniform policy of coverage and reimbursement for medical device products and services exists among third-party payors. Therefore, coverage and reimbursement for medical device products and services can differ significantly from payor to payor. In addition, payors continually review new technologies for possible coverage and can, without notice, deny coverage for these new products and procedures. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained or maintained if obtained.

Reimbursement systems in international markets vary significantly by country and by region within some countries, and reimbursement approvals must be obtained on a country-by-country basis. In many international markets, a product must be approved for reimbursement before it can be approved for sale in that country. Further, many international markets have government-managed healthcare systems that control reimbursement for new devices and procedures. In most markets there are private insurance systems as well as government-managed systems. If sufficient coverage and reimbursement is not available for any product we develop, in either the United States or internationally, the demand for our products and our revenues will be adversely affected.

If we fail to attract and retain key management and R&D personnel, we may be unable to successfully develop or commercialize our product candidates.

As stated above, on February 22, 2024, as a result of financial difficulties, we notified seven of our 10 employees of the termination of their employment. We will need to expand and effectively manage our managerial, operational, financial and other resources in order to successfully pursue our product development and commercialization efforts. As a company with a limited number of personnel, we are highly dependent on the development, regulatory, commercial and financial expertise of the members of our senior management. The loss of such individuals or the services of any of our other senior management could delay or prevent the further development and potential commercialization of our product candidates and, if we are not successful in finding suitable replacements, could harm our business. Our success also depends on our continued ability to attract, retain and motivate highly qualified management and scientific personnel and we may not be able to do so in the future due to the intense competition for qualified personnel among biotechnology, medical device and high-technology and companies, as well as universities and research organizations. If we are not able to attract and retain the necessary personnel, we may experience significant impediments to our ability to implement our business strategy.

We may seek to grow our business through acquisitions of complementary products or technologies, and the failure to manage acquisitions, or the failure to integrate them with our existing business, could have a material adverse effect on our business, financial condition and operating results.

From time to time, we may consider opportunities to acquire other products or technologies that may enhance our products, platform or technology, expand the breadth of our markets or customer base, or advance our business strategies. Potential acquisitions involve numerous risks, including:

- problems assimilating the acquired products or technologies;
- issues maintaining uniform standards, procedures, controls and policies;
- unanticipated costs associated with acquisitions;
- diversion of management's attention from our existing business;
- risks associated with entering new markets in which we have limited or no experience; and
- increased legal and accounting costs relating to the acquisitions or compliance with regulatory matters.

We have no current commitments with respect to any acquisition. We do not know if we will be able to identify suitable acquisitions, whether we will be able to successfully complete any such acquisitions on favorable terms or at all, or whether we will be able to successfully integrate any acquired products or technologies. Our potential inability to integrate any acquired products or technologies effectively may adversely affect our business, operating results and financial condition.

Risks Related to our Intellectual Property

If we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate to protect our technology, our competitors could develop and commercialize technology similar to ours, and our competitive position could be harmed.

We rely on a combination of patent and trademark laws in the United States and other countries, trade secret protection, confidentiality agreements and other contractual arrangements with our employees, consultants and others to maintain our competitive position. In particular, our success depends, in part, on our ability to maintain patent protection for our products, technologies and inventions, maintain the confidentiality of our trade secrets and know-how, operate without infringing upon the proprietary rights of others and prevent others from infringing upon our proprietary rights. Despite our efforts to protect our proprietary rights, it is possible that competitors or other unauthorized third parties may obtain, copy, use or disclose our technologies, inventions, processes or improvements. Moreover, other parties may independently develop similar or competing technology, methods, know-how or design around any patents that may be issued to or held by us. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary. We cannot assure you that our existing or any future patents or other intellectual property rights will not be challenged, invalidated or circumvented, or will otherwise provide us with meaningful protection. If our patents and other intellectual property do not adequately protect our technology, our competitors may be able to offer products similar to ours. Our competitors may also be able to develop similar technology independently or design around any patent(s) granted to us, and we may not be able to detect the unauthorized use of our proprietary technology or take appropriate steps to prevent such use.

Any such activities by our competitors that circumvent our intellectual property protection could subvert our competitive advantage and have an adverse effect on our results of operations.

Furthermore, filing, prosecuting, maintaining and defending patents on our solutions in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States are less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Also, it may not be possible to effectively enforce intellectual property rights in some foreign countries at all or to the same extent as in the United States and other countries. Consequently, we may be unable to prevent third parties from using our inventions in all countries, or from selling or importing products made using our inventions in the jurisdictions in which we do not have (or are unable to effectively enforce) patent protection. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop, market or otherwise commercialize their own products, and we may be unable to prevent those competitors from importing those infringing products into territories where we have patent protection, but enforcement is not as strong as in the United States.

We may be sued by third parties for alleged infringement of their proprietary rights, which could adversely affect our business, results of operations and financial condition.

There is often litigation between competing companies relying on their respective technologies based on allegations of infringement or other violations of intellectual property rights. Our future success depends, in part, on not infringing the intellectual property rights of others. We may be unaware of the intellectual property rights of others that may cover some or all of our technology. Any such claims or litigation could cause us to incur significant expenses and, if successfully asserted against us, could require that we pay substantial damages or ongoing royalty payments, prevent us from offering some portion of our products, or require that we comply with other unfavorable terms. We may also be obligated to indemnify our customers or channel partners in connection with any such litigation and to obtain licenses or modify our products, which could further exhaust our resources. Patent infringement, trademark infringement, trade secret misappropriation and other intellectual property claims and proceedings brought against us, whether successful or not, could harm our brand, business, results of operations and financial condition. Litigation is inherently uncertain, and any judgment or injunctive relief entered against us, or any adverse settlement could negatively affect our business, results of operations and financial condition. In addition, litigation can involve significant management time and attention and be expensive, regardless of the outcome. During the course of litigation, there may be announcements of the results of hearings and motions and other interim developments related to the litigation. If securities analysts or investors regard these announcements as negative, the trading price of our ordinary shares may decline.

We may become involved in lawsuits to protect or enforce our patents, which could be expensive, time-consuming and ultimately unsuccessful.

If we attempt enforcement of our patents or other intellectual property rights, we may be subject or party to claims, negotiations or complex, protracted litigation. These claims and any resulting lawsuits, if resolved adversely to us, could subject us to significant liability for damages, impose temporary or permanent injunctions against our solutions or business operations, or invalidate or render unenforceable our intellectual property.

Intellectual property disputes and litigation, regardless of merit, can be costly and disruptive to our business operations by diverting attention and energies of management and key technical personnel, and by increasing our costs of doing business. Such litigation, regardless of its success, could seriously harm our reputation with our channel partners, business partners and patients and in the industry at large. Some of our competitors may be able to sustain the costs of complex patent or intellectual property litigation more effectively than we can because they have substantially greater resources. Any of the foregoing could adversely affect our operating results.

Risks Relating to Our Israel Operations

Our technology development personnel headquartered in Israel and, therefore, our results may be adversely affected by economic restrictions imposed on, and political and military instability in, Israel.

Our technology development headquarters, which houses substantially all of our research and development team, including engineers, machinists, researchers, and clinical and regulatory personnel as well as the facility of our contract manufacturer and final assembly are located in Israel. Our employees, service providers, directors and officers are residents of Israel. Accordingly, political, economic and military conditions in Israel and the surrounding region may directly affect our business. Any hostilities involving Israel or the interruption or curtailment of trade within Israel or between Israel and its trading partners could materially and adversely affect our business, financial condition and results of operations and could make it more difficult for us to raise capital. Although we plan to maintain inventory in the United States and Germany, an extended interruption could materially and adversely affect our business, financial condition and results of operations.

In October 2023, Hamas terrorists infiltrated Israel's southern border from the Gaza Strip and conducted a series of attacks on civilian and military targets. Hamas also launched extensive rocket attacks on Israeli population and industrial centers located along Israel's border with the Gaza Strip and in other areas within the State of Israel. These attacks resulted in extensive deaths, injuries and kidnapping of civilians and soldiers. Following the attack, Israel's security cabinet declared war against Hamas, and a military campaign against these terrorist organizations commenced in parallel to their continued rocket and terror attacks.

The intensity and duration of Israel's current war against Hamas is difficult to predict, as are such war's economic implications on the Company's business and operations and on Israel's economy in general. These events may be intertwined with wider macroeconomic indications of a deterioration of Israel's economic standing, which may have a material adverse effect on the Company and its ability to effectively conduct some of its operations.

Our commercial insurance does not cover losses that may occur as a result of events associated with war and terrorism. Following the attack by Hamas on Israel's southern border, Hezbollah in Lebanon has also launched missile, rocket and shooting attacks against Israeli military sites, troops, and Israeli towns in northern Israel. In response to these attacks, the Israeli army has carried out a number of targeted strikes on sites belonging to Hezbollah in southern Lebanon. It is possible that other terrorist organizations, including Palestinian military organizations in the West Bank, as well as other hostile countries, such as Iran, will join the hostilities. Such hostilities may include terror and missile attacks. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations. Any armed conflicts, terrorist activities or political instability in the region could materially and adversely affect our business, financial condition and results of operations.

Our operations and the operations of our contract manufacturer may be disrupted as a result of the obligation of Israeli citizens to perform military service.

Many Israeli citizens are obligated to perform one month, and in some cases more, of annual military reserve duty until they reach the age of 45 (or older, for reservists with certain occupations) and may be called to active duty. In connection with the Israeli security cabinet's declaration of war against Hamas and possible hostilities with other organizations, several hundred thousand Israeli military reservists were drafted to perform immediate military service. One of our employees and consultants (and their spouses or partners) in Israel have been called, and additional employees (or their spouses or partners) may be called, for service in the current or future wars or other armed conflicts with Hamas, and such persons may be absent for an extended period of time. As a result, our operations in Israel may be disrupted by such absences, which disruption may materially and adversely affect our business, prospects, financial condition and results of operations.

Our sales may be adversely affected by boycotts of Israel.

Several countries, principally in the Middle East, restrict doing business with Israel and Israeli companies, and additional countries may impose restrictions on doing business with Israel and Israeli companies whether as a result of hostilities in the region or otherwise, and specifically following the Israel- Hamas war. In addition, there have been increased efforts by activists to cause companies and consumers to boycott Israeli goods based on Israeli government policies. Such actions, particularly if they become more widespread, may adversely impact our ability to sell our products.

Our subsidiary has received Israeli government grants for certain of our research and development activities and we may receive additional grants in the future. The terms of those grants restrict our ability to transfer technologies outside of Israel, and we may be required to pay penalties in such cases or upon the sale of our company.

Our subsidiary, IR. Med Ltd., received a total of \$509,000 from the Israel Innovation Authority (IIA). We may in the future apply to receive additional grants from the IIA to support our research and development activities. With respect to such grants, we are committed to pay royalties at a rate of 3.0% to 3.5% on sales proceeds up to the total amount of grants received, linked to the U.S. dollar and bearing interest at an annual rate of LIBOR applicable to dollar deposits. Until October 25, 2023, the interest was calculated at a rate based on 12-month LIBOR applicable to U.S. Dollar deposits. However, on October 25, 2023, the IIA published a directive concerning changes in royalties to address the expiration of the LIBOR. Under such directive, regarding IIA grants approved by the IIA prior to January 1, 2024 but which are outstanding thereafter, as of January 1, 2024 the annual interest is calculated at a rate based on 12-month SOFR, or at an alternative rate published by the Bank of Israel plus 0.71513%; and, for grants approved on or following January 1, 2024, the annual interest shall be the higher of (i) the 12 months SOFR interest rate, plus 1%, or (ii) a fixed annual interest rate of 4%. Even after payment in full of these amounts, we will still be required to comply with the requirements of the Israeli Encouragement of Industrial Research, Development and Technological Innovation Law, 1984, or the R&D Law, and related regulations, with respect to those past grants. When a company develops know-how, technology or products using IIA grants, the terms of these grants and the R&D Law restrict the transfer outside of Israel of such know-how, and of the manufacturing or manufacturing rights of such products, technologies or know-how, without the prior approval of the IIA. Therefore, if aspects of our technologies are deemed to have been developed with IIA funding, the discretionary approval of an IIA committee would be required for any transfer to third parties outside of Israel of know-how or manufacturing or manufacturing rights related to those aspects of such technologies. Furthermore, the IIA may impose certain conditions on any arrangement under which it permits us to transfer technology or development out of Israel or may not grant such approvals at all.

Furthermore, the consideration available to our shareholders in a future transaction involving the transfer outside of Israel of technology or know-how developed with IIA funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay to the IIA. Any such mergers require IIA approval to avoid penalties.

In addition to the above, any non-Israeli citizen, resident or entity that, among other things, (i) becomes a holder of 5% or more of our share capital or voting rights, (ii) is entitled to appoint one or more of our directors or our chief executive officer or (iii) serves as one of our directors or as our chief executive officer (including holders of 25% or more of the voting power, equity or the right to nominate directors in such direct holder, if applicable) is required to notify the IIA and undertake to comply with the rules and regulations applicable to the grant programs of the IIA, including the restrictions on transfer described above. Such notification will be required in connection with the investment being made by an investor.

Risks Related to the Ownership of our Common Stock

There is not now, and there may never be, an active, liquid and orderly trading market for our common stock, which may make it difficult for you to sell your shares of our common stock.

There is not now, nor has there been since our inception, an orderly and liquid market for shares of our common stock, and an active trading market for our shares may never develop or be sustained after this offering. As a result, investors in our common stock must bear the economic risk of holding those shares for an indefinite period of time. Our common stock is quoted on the OTCQB-tier of the OTC Markets, an over-the-counter quotation system. An active market for our common stock may never develop or be sustained. If an active market for our common stock does not develop, it may be difficult for you to sell the shares you purchase in this offering without depressing the market price for the shares or at all. Further, an inactive market may also impair our ability to raise capital by selling additional equity in the future and may impair our ability to enter into strategic partnerships or acquire companies or products by using shares of our common stock as consideration.

Directors, executive officers, principal stockholders and affiliated entities own a significant percentage of our capital stock, and they may make decisions that our stockholders do not consider to be in their best interests.

Currently, our directors, executive officers, principal stockholders and affiliated entities beneficially own, in the aggregate, approximately 50% of our outstanding voting securities. This concentration of ownership may have the effect of delaying or preventing a change in control of our company that may be favored by other stockholders. This could prevent transactions in which stockholders might otherwise recover a premium for their shares over current market prices. This concentration of ownership and influence in management and board decision-making could also harm the price of our capital stock by, among other things, discouraging a potential acquirer from seeking to acquire shares of our capital stock (whether by making a tender offer or otherwise) or otherwise attempting to obtain control of our company.

Sale of our common stock by our stockholders could encourage short sales by third parties, which could contribute to the further decline of our stock price.

The significant downward pressure on the price of our common stock caused by the sale of material amounts of common stock could encourage short sales by third parties. Such an event could place further downward pressure on the price of our common stock.

Our common stock has been thinly traded and we cannot predict the extent to which an active trading market will develop.

Our common stock is traded on the OTCQB-tier of OTC Markets. Our common stock is thinly traded when compared to larger more widely known companies. Thinly traded common stock can be more volatile than common stock trading in an active public market. We cannot predict the extent to which an active public market for our common stock will develop or be sustained after this offering.

Our share price is expected to be volatile and may be influenced by numerous factors, some of which are beyond our control.

Market prices for shares of biotechnology and medical device companies such as ours are often volatile, and the quoted price of our common stock is therefore likely to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed in this “Risk Factors” section and elsewhere in this report, these factors include:

- the product candidates we seek to pursue and our ability to obtain rights to develop, commercialize and market those candidates;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- actual or anticipated adverse results or delays in our clinical trials;
- our failure to commercialize our product candidates, if approved;
- unanticipated serious safety concerns related to the use of any of our product candidates;
- adverse regulatory decisions;
- additions or departures of key scientific or management personnel;
- changes in laws or regulations applicable to our product candidates, including without limitation clinical trial requirements for approvals;
- disputes or other developments relating to patents and other proprietary rights and our ability to obtain patent protection for our product candidates;

- actual or anticipated variations in quarterly operating results;
- failure to meet or exceed the estimates and projections of the investment community;
- overall performance of the equity markets and other factors that may be unrelated to our operating performance or the operating performance of our competitors, including changes in market valuations of similar companies;
- conditions or trends in the biotechnology and medical device industries;
- introduction of new products offered by us or our competitors;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- our ability to maintain an adequate rate of growth and manage such growth;
- issuances of debt or equity securities;
- sales of our common stock by us or our stockholders in the future, or the perception that such sales could occur;
- trading volume of our common stock;
- ineffectiveness of our internal control over financial reporting or disclosure controls and procedures;
- general political and economic conditions;
- effects of natural or man-made catastrophic events; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the stocks of small-cap biotechnology and medical device companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. In addition, other biotechnology and medical device companies or our competitors' programs could have positive or negative results that impact their stock prices, and their results or stock fluctuations could have a positive or negative impact on our stock price regardless of whether such impact is direct or not. The realization of any of the above risks or any of a broad range of other risks, including those described in these "Risk Factors," could have a dramatic and material adverse impact on the market price of our common stock.

Our common stock is subject to the "penny stock" rules of the SEC and the trading market in the securities is limited, which makes transactions in the stock cumbersome and may reduce the value of an investment in the stock.

Rule 15g-9 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require: (i) that a broker or dealer approve a person's account for transactions in penny stocks in accordance with the provisions of Rule 15g-9; and (ii) the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased, provided that any such purchase shall not be effected less than two business days after the broker or dealer sends such written agreement to the investor.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must: (i) obtain financial information, investment experience and investment objectives of the person and (ii) make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be reasonably expected to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the SEC relating to the penny stock market, which: (i) sets forth the basis on which the broker or dealer made the suitability determination; and (ii) in highlight form, confirms that the broker or dealer received a signed, written agreement from the investor prior to the transaction. Generally, brokers may be less willing to execute transactions in securities subject to the “penny stock” rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our common stock.

Disclosure also must be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker or dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements must be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks. As a result, it may be more difficult to execute trades of our common stock which may have an adverse effect on the liquidity of our common stock and your investment.

If securities or industry analysts do not publish, or cease publishing, research or publish inaccurate or unfavorable research about our business or our market, or if they change their recommendations regarding our stock adversely, our stock price and any trading volume could decline.

Any trading market for our common stock that may develop will depend in part on the research and reports that securities or industry analysts publish about us or our business, markets or competitors. Securities and industry analysts do not currently, and may never, publish research on us or our business. If no securities or industry analysts commence coverage of our company, the trading price for our stock would be negatively affected. If securities or industry analysts initiate coverage, and one or more of those analysts downgrade our stock or publish inaccurate or unfavorable research about our business or our market, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and any trading volume to decline.

We may have become exposed to material liabilities that were not discovered before, and have not been discovered since, due to the closing of the Acquisition.

As a result of the Acquisition, we are responsible for any liabilities incurred by IR. Med Ltd. IR. Med Ltd. may have material liabilities that have not been discovered or asserted. We could experience losses as a result of any such undisclosed liabilities that are discovered in the future, which could materially harm our business and financial condition. As a result, our current and future stockholders will bear some, or all, of the risks relating to any such unknown or undisclosed liabilities, if any.

We are exposed to additional risks as a result of “going public” by means of a reverse acquisition transaction.

We are exposed to additional risks because the business of IR. Med Ltd. has become a public company through a “reverse acquisition” transaction, or the Acquisition. There has been increased focus in recent years by government agencies on transactions such as the Acquisition, and we may be subject to increased scrutiny by the SEC or other government agencies and holders of our securities as a result of the completion of that transaction. Further, as a result of our existence as a “shell company” under applicable rules of the SEC prior to the closing of the Acquisition, we are subject to certain restrictions and limitations for certain specified periods of time relating to potential future issuances of our securities and compliance with applicable SEC rules and regulations. Additionally, our “going public” by means of a reverse acquisition transaction may make it more difficult for us to obtain coverage from securities analysts of major brokerage firms following the Acquisition because there may be little incentive to those brokerage firms to recommend the purchase of our common stock. Further, investment banks may be less likely to agree to underwrite secondary offerings on our behalf than they might if we became a public reporting company by means of an initial public offering (IPO), because they may be less familiar with our company as a result of more limited coverage by analysts and the media, and because we became public at an early stage in our development. The failure to receive research coverage or support in the market for our shares will have an adverse effect on our ability to develop a liquid market for our common stock. The occurrence of any such event could cause our business or stock price to suffer.

If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and investors' views of us.

We are required to comply with Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, subject to certain exceptions. Section 404 of the Sarbanes-Oxley Act requires public companies to conduct an annual review and evaluation of their internal controls and to obtain attestations of the effectiveness of internal controls by independent auditors. As a private company, IR-Med Operations was not subject to requirements to establish, and did not establish, internal control over financial reporting and disclosure controls and procedures prior to the Acquisition. Our management team and Board of Directors will need to devote significant efforts to maintaining adequate and effective disclosure controls and procedures and internal control over financial reporting in order to comply with applicable regulations, which may include hiring additional legal, financial reporting and other finance and accounting staff. Additionally, any of our efforts to improve our internal controls and design, implement and maintain an adequate system of disclosure controls may not be successful and will require that we expend significant cash and other resources.

Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that will need to be evaluated frequently. Our failure to maintain the effectiveness of our internal controls in accordance with the requirements of the Sarbanes-Oxley Act could have a material adverse effect on the tradability of our common stock, which in turn would negatively impact our business. We could lose investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on the price of our common stock. In addition, if our efforts to comply with new or changed laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us, and our business may be harmed.

If material weaknesses or deficiencies in our internal controls exist and go undetected or unremedied, our financial statements could contain material misstatements that, when discovered in the future, could cause us to fail to meet our future reporting obligations and cause the price of our common stock to decline.

Shares of our common stock that have not been registered under federal securities laws are subject to resale restrictions imposed by Rule 144, including those set forth in Rule 144(i) which apply to a former "shell company."

We were previously deemed a "shell company" under applicable SEC rules and regulations, prior to the reverse merger transaction in which we became a public company, because we had no or nominal operations and either no or nominal assets, assets consisting solely of cash and cash equivalents, or assets consisting of any amount of cash and cash equivalents and nominal other assets. Pursuant to Rule 144 of the Securities Act, sales of the securities of a former shell company, such as us, are not permitted unless at the time of a proposed sale, (i) we are subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act; and (ii) we have filed all reports and other materials required to be filed by Section 13 or 15(d) of the Exchange Act, as applicable, during the preceding 12 months, other than current reports on Form 8-K. Additionally, our previous status as a shell company could also limit our use of our securities to pay for any acquisitions we may seek to pursue in the future. The lack of liquidity of our securities as a result of the inability to sell under Rule 144 for a longer period of time than a non-former shell company could cause the market price of our securities to decline. Additionally, our previous status as a shell company could also limit our use of our securities to pay for any acquisitions we may seek to pursue in the future (although none are currently planned). The lack of liquidity of our securities as a result of the inability to sell under Rule 144 for a longer period of time than a non-former shell company could cause the market price of our securities to decline.

If we issue additional shares of our capital stock in the future, our existing stockholders will be diluted.

Our Amended and Restated Articles of Incorporation authorizes the issuance of up to 250,000,000 shares of our common stock. Possible business and financial uses for our authorized capital stock include, without limitation, equity financing, such as future stock splits, acquiring other companies, businesses or products in exchange for shares of our capital stock, issuing shares of our capital stock to partners or other collaborators in connection with strategic alliances, attracting and retaining employees by the issuance of additional securities under our equity compensation plan, or other transactions and corporate purposes that our Board of Directors deems are in the interests of our company. Additionally, issuances of shares of our capital stock could have the effect of delaying or preventing changes in control or our management. Any future issuances of shares of our capital stock may not be made on favorable terms or at all; they may have rights, preferences and privileges that are superior to those of our common stock and may have an adverse effect on our business or the trading price of our common stock. The issuance of any additional shares of our common stock will reduce the book value per share and may contribute to a reduction in the market price of the outstanding shares of our common stock.

Sales of a substantial number of shares of our common stock in the public market, or the perception that such sales could occur, could cause our stock price to fall.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market, the trading price of our common stock could decline. As of the date of this report, a total of 69,931,056 shares of our common stock are outstanding. Of those shares, approximately 20,442,611 are currently freely tradable, without restriction, in the public market, and 14,230,259 shares are issuable upon exercise of warrants which are registered for resale under the Securities Act. Any sales of those shares or any perception in the market that such sales may occur could cause the trading price of our common stock to decline.

Anti-takeover provisions in our organizational documents could delay or prevent a change of control.

Provisions of our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws may have an anti-takeover effect and may delay, defer or prevent a merger, acquisition, tender offer, takeover attempt or other change of control transaction that a stockholder might consider to be in its interests, including attempts that might result in a premium over the market price for the shares held by our stockholders.

These provisions provide, among other things:

- a classified Board of Directors with staggered three-year terms;
- advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at stockholder meetings;
- certain limitations on convening special stockholder meetings and the prohibition of stockholder action by written consent; and
- directors may only be removed for cause and only by the affirmative vote of the holders of at least eighty percent (80%) of the voting power of all of the then-outstanding shares of our capital stock entitled to vote at an election of directors, voting together as a single class.

These anti-takeover provisions, including those noted above, could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares. See "Description of Securities."

Article XI of our Second Amended and Restated Articles of Incorporation designates the Eighth Judicial District Court of Clark County, Nevada as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our shareholders and therefore may limit our shareholders' ability to choose a forum for disputes with us or our directors, officers, employees, or agents.

Article XI of our Second Amended and Restated Articles of Incorporation provides that, to the fullest extent permitted by law, and unless we consent to the selection of an alternative forum, the Eighth Judicial District Court of Clark County, Nevada shall be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of the Company, (b) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any director or officer of the Company to the Company or the Company's shareholders, (c) any action or proceeding asserting a claim against the Company arising pursuant to any provision of the Nevada Revised Statutes or the Company's amended and restated articles of incorporation or Second Amended and Restated Bylaws (as either might be amended from time to time), or (d) any action or proceeding asserting a claim against the Company governed by the internal affairs doctrine. This exclusive forum provision is not applicable to any action brought under the Securities Act of 1933, as amended or The Securities Exchange Act of 1934, as amended.

We believe the choice-of-forum provision in our Second and Restated Articles of Incorporation provide for the orderly, efficient, and cost-effective resolution of Nevada-law issues affecting us by designating courts located in the State of Nevada (our state of incorporation) as the exclusive forum for cases involving such issues. However, this provision may limit a shareholder's ability to bring a claim in a judicial forum that it believes to be favorable for disputes with us or our directors, officers, employees or agents, which may discourage such actions against us and our directors, officers, employees and agents. While there is no Nevada case law addressing the enforceability of this type of provision, Nevada courts have on prior occasion found persuasive authority in Delaware case law in the absence of Nevada statutory or case law specifically addressing an issue of corporate law. The Court of Chancery of the State of Delaware ruled in June 2013 that choice-of-forum provisions of a type similar to those included in our Second Amended and Restated Articles of Incorporation are not facially invalid under corporate law and constitute valid and enforceable contractual forum selection clauses. However, if a court were to find the choice-of-forum provision in our Second Amended and Restated Articles of Incorporation prove inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

The elimination of personal liability of our directors and officers under Nevada law and the existence of indemnification rights held by our directors, officers and employees may result in substantial expenses.

Our Second Amended and Restated Articles of Incorporation and our Amended and Restated Bylaws eliminate to the furthest extent permitted under Nevada law the personal liability of our directors and officers to us, our stockholders and creditors for damages as a result of any act or failure to act in his or her capacity as a director or officer. Furthermore, our Amended and Restated Articles of Incorporation, our Amended and Restated Bylaws and individual indemnification agreements that we have entered with each of our directors and officers provide that we are obligated to indemnify, subject to certain exceptions, each of our directors or officers to the fullest extent authorized by Nevada law and, subject to certain conditions, to advance the expenses incurred by any director or officer in defending any action, suit or proceeding prior to its final disposition. Those indemnification obligations could expose us to substantial expenditures to cover the cost of settlement or damage awards against our directors or officers, which we may be unable to afford. Further, those provisions and resulting costs may discourage us or our stockholders from bringing a lawsuit against any of our current or former directors or officers for such damages, even if such actions might otherwise benefit our stockholders.

We do not intend to pay cash dividends on our capital stock in the foreseeable future.

We have never declared or paid any cash dividends on our common stock and do not anticipate paying any dividends in the foreseeable future. We currently intend to retain all future earnings to fund the development of our products.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Our Board of Directors and management recognize the critical importance of maintaining the trust and confidence of our customers, clients, business partners and employees. In general, we seek to address cybersecurity risks through a cross-functional approach that is focused on preserving the confidentiality, security and availability of the information that we collect and store by identifying, preventing and mitigating cybersecurity threats and effectively responding to cybersecurity incidents when they occur.

Our cybersecurity risk management efforts include:

- risk assessments designed to help identify material cybersecurity risks to our critical systems, information, products, services and our broader enterprise IT environment;
- an IT team principally responsible for managing (1) our cybersecurity risk assessment processes, (2) our security controls, and (3) our response to cybersecurity incidents; and
- a cybersecurity incident response plan that includes procedures for responding to cybersecurity incidents.

Cybersecurity Governance

Our Board of Directors considers cybersecurity risks as part of its risk oversight function and oversees management's implementation of our cybersecurity risk management efforts. Management updates our Board of Directors, as necessary, regarding any material cybersecurity incidents, as well as any incidents with lesser impact potential.

Our CEO and CFO are responsible for assessing and managing our material risks from cybersecurity threats and our overall cybersecurity risk management efforts and supervising both our internal cybersecurity personnel and our retained external cybersecurity consultants. Our CEO and CFO supervise the efforts to prevent, detect, mitigate and remediate cybersecurity risks and incidents through various means, which include ensuring routine briefings from internal security personnel, obtaining threat intelligence and other information obtained from governmental, public or private sources, including external consultants engaged by us, and providing Company personnel with alerts and reports produced by security tools deployed in the IT environment.

ITEM 2. PROPERTIES

We do not own any real property. We occupy approximately 130 square meters of facilities located in Rosh Pina industrial zone, Israel, under an agreement for shared office space and services that expires upon 90 days' notice by either our subsidiary or the landlord. Through December 31, 2021, we were paying a monthly rent of 12,500 NIS (approximately, \$4,000). On November 17, 2021, the agreement was amended to increase the monthly rental amount to 15,000 NIS per month (approximately \$4,273) starting from January 2022, and on July 10, 2023, the agreement was amended to increase the monthly rental amount to 24,750 NIS per month (approximately \$6,780) to service and support our expanded personnel. See also "Related Transactions".

We believe that our facilities are generally in good condition and suitable to carry on our business. We also believe that, if required, suitable alternative or additional space will be available to us on commercially reasonable terms.

ITEM 3. LEGAL PROCEEDINGS

On May 29, 2023, a lawsuit was filed against the Company, the Subsidiary and Mr. Aharon Klein, or the Plaintiff, a Company Director and the Company's Chief Technology Officer in the Tel Aviv District Court of Israel by an individual who provided, on a part time basis, certain consulting services to the Subsidiary between October 2015 through October 2016, prior to the acquisition of the Subsidiary by the Company. The lawsuit alleges breach of contract by the defendants based on non-payment of amounts purportedly owed to the Plaintiff in respect of the services rendered, including the market value of the Company's common stock that the Plaintiff alleges should have been issued to him in respect of his services. The suit seeks declaratory judgment that the defendants breached certain agreements with the Plaintiff and claimed damages in the aggregate amount of approximately \$2.1 million based on the current exchange rate between the U.S. Dollar and the Israeli NIS.

The Company believes that the allegations are baseless and without merit. The Company intends to vigorously defend its rights.

Other than as set forth above, the Company is not currently involved in any legal proceedings. However, from time to time we may become involved in various legal proceedings that arise in the ordinary course of business, including actions related to our intellectual property. Although the outcomes of these legal proceedings cannot be predicted with certainty, we are currently not aware of any such legal proceedings that arise in the ordinary course of business, including actions related to our intellectual property. Although the outcomes of these legal proceedings cannot be predicted with certainty, we are currently not aware of any such legal proceedings or claims that we believe, either individually or in the aggregate, will have a material adverse effect on our business, financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock is currently quoted on the OTCQB-tier of OTC Markets under the symbol "IRME." We started being quoted on the OTCQB-tier of OTC Markets on February 1, 2022. As of April 1, 2024, we had 69,931,056 shares of our common stock outstanding. Any over-the-counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

As of April 1, 2024, there were 719 holders of record of our common stock, and the last reported sale price of our common stock on the OTCQB-tier of OTC Markets on March 28, 2024, was \$1.3.

Dividend Policy

To date, we have paid no dividends on our common stock and do not expect to pay cash dividends in the foreseeable future. We plan to retain all earnings to provide funds for the operations of our company. In the future, our Board of Directors will decide whether to declare and pay dividends based upon our earnings, financial condition, capital requirements and other factors that our Board of Directors may consider relevant. We are not under any contractual restriction as to present or future ability to pay dividends.

Unregistered Sales of Equity Securities

None

Issuer Purchases of Equity Securities

None

ITEM 6. RESERVED

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to provide information necessary to understand our audited consolidated financial statements for the fiscal years ended December 31, 2023 and December 31, 2022, and highlight certain other information which, in the opinion of management, will enhance a reader's understanding of our financial condition, changes in financial condition and results of operations. In particular, the discussion is intended to provide an analysis of significant trends and material changes in our financial position and the operating results of our business during the year ended December 31, 2023, as compared to the fiscal year ended December 31, 2022. This discussion should be read in conjunction with our consolidated financial statements for the fiscal years ended December 31, 2023, and December 31, 2022, and related notes included elsewhere in this Annual Report on Form 10-K. These historical financial statements may not be indicative of our future performance. This Management's Discussion and Analysis of Financial Condition and Results of Operations contains numerous forward-looking statements, all of which are based on our current expectations and could be affected by the uncertainties and risks described throughout this filing, particularly in "Item 1A. Risk Factors."

Key Financial Terms and Metrics

The following discussion summarizes the key factors our management believes are necessary for an understanding of our consolidated financial statements.

Revenues

We have not generated any revenues from product sales to date.

Research and Development Expenses

The process of researching and developing our product candidates is lengthy, unpredictable and subject to many risks. We expect to continue incurring substantial expenses for the next several years as we continue to develop our product candidates. We are unable, with any certainty, to estimate either the costs or the timelines in which those expenses will be incurred. Our current development plans focus on the development of our *PressureSafe*, *DiaSafe* and *Nobiotics* diagnostic devices. The design and development of these devices will consume a large proportion of our current, as well as projected, resources.

Our research and development costs are comprised of:

- internal recurring costs, such as personnel-related costs (salaries, employee benefits, equity compensation and other costs), materials and supplies, facilities and maintenance costs attributable to research and development functions; and
- fees paid to external parties who provide us with contract services, such as preclinical testing, manufacturing, related testing and clinical trial activities.

Marketing

Marketing expenses consist primarily of salaries, employee benefits, equity compensation and other personnel-related costs associated with executive and other support staff. Other significant marketing expenses include the costs associated with professional fees to develop our marketing strategy.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, employee benefits, equity compensation and other personnel-related costs associated with executive, administrative and other support staff. Other significant general and administrative expenses include the costs associated with professional fees for accounting, auditing, insurance costs, consulting and legal services, along with facility and maintenance costs attributable to general and administrative functions.

Financial Expenses

Financial expenses consist primarily impact of exchange rate derived from re-measurement of monetary balance sheet items denominated in non-dollar currencies. Other financial expenses include bank's fees and interest on stockholders' loans.

Comparison of the Year Ended December 31, 2023, to the Year Ended December 31, 2022.

Our financial results for the year ended December 31, 2023, are summarized as follows in comparison to the year ended December 31, 2022:

	Year Ended	
	December 31, 2023	December 31, 2022
	U.S. dollars (in thousands)	
Operating Expenses:		
Research and Development	2,061,000	1,885,000
Marketing	822,000	759,000
General and Administrative	2,028,000	2,118,000
Financing income, net	(2,000)	(28,000)
Loss for the year	4,909,000	4,734,000

Revenues. We have not recorded any revenues to date.

Research and Development Expenses. Research and development expenses increased from \$1,885,000 for the year ended December 31, 2022, to \$2,061,000 for the year ended December 31, 2023. The increase resulted primarily from increased use of third-party contractors for further research and development activities, and non-cash expenses recorded relating to stock-based compensation to employees.

Marketing Expenses. Marketing expenses increased from \$759,000 for the year ended December 31, 2022, to \$822,000 in the year ended December 31, 2023. The increase resulted primarily from non-cash expenses attributable to stock-based compensation to service providers. This increase was partially offset by a reduction in payroll expenses and reduction in professional services.

General and Administrative Expenses. General and administrative expenses decreased from \$2,118,000 for the year ended December 31, 2022, to \$2,028,000 in the year ended December 31, 2023. The decrease resulted primarily from a reduction in payroll expenses and a reduction in professional services. This decrease was partially offset by the increase in non-cash expenses attributable to stock-based compensation to our directors, officers and service providers.

Loss. Loss for the year ended December 31, 2023, was \$4,909,000 compared to \$4,734,000 for the year ended December 31, 2022, and is primarily attributable to the increase in non-cash expenses due to stock-based compensation to directors, officers and service providers, and utilization of third-party contractors for further research and development activities. These increases were partially offset by the reduction in professional services and payroll expenses related to marketing and general and administrative activities.

Liquidity and Capital Resources

We are subject to risks common to companies in the medical device industry, including but not limited to, the need for additional capital, the need to obtain marketing approval and reimbursement for any product candidate that we may identify and develop, the need to successfully commercialize and gain market acceptance of our product candidates, dependence on key personnel, protection of proprietary technology, compliance with government regulations, development of technological innovations by competitors, reliance on third-party manufacturers and the ability to transition from pilot-scale production to large-scale manufacturing of products.

From inception, we have funded our operations from a combination of loans and sales of equity instruments. In 2021 and 2022, we raised aggregate gross proceeds of \$5,830,000 and \$3,625,000, respectively, from sales of our equity and equity linked securities. In addition, on June 12, 2023, we raised aggregate gross proceeds of \$1,000,000 from sales of our shares of common stock and warrants to purchase shares of common stock.

As of December 31, 2023, we had a total of \$767,000 in cash resources and approximately \$634,000 of liabilities, consisting of \$473,000 of current liabilities from operations.

The following table provides a summary of operating, investing, and financing cash flows for the years ended December 31, 2023, and 2022 respectively (in thousands):

	Year ended	
	December 31, 2023	December 31, 2022
	US Dollars (In thousands)	
Net cash used in operating activities	(3,232)	(3,375)
Net cash used in investment activities	(2)	(59)
Net cash provided by financing activities	1,000	3,625

We have experienced operating losses since the Company's inception and had a total accumulated deficit of \$14,839,000 as of December 31, 2023. We expect to incur additional costs and require additional capital. We have incurred losses in nearly every year since inception and for the year ended December 31, 2023. These losses have resulted in significant cash used in operations. During the years ended December 31, 2023, and 2022, our cash used in operations was approximately \$3,232,000, and \$3,375,000, respectively. We need to continue and intensify our research and development efforts for our product candidates (which are in various stages of development), strengthen our patent portfolio, establish operations processes and pursue FDA clearance and international regulatory approvals. As we continue to conduct these activities, we expect the cash needed to fund operations to increase significantly over the next several years.

Under the private placement of our securities that we undertook between December 2020 and April 2021, we entered into a securities purchase agreement with certain accredited investors providing for the issuance and sale to such investors of an aggregate of 18,221,876 shares of our Common Stock and warrants for an additional 9,110,938 shares of our Common Stock, exercisable through December 24, 2023, at a per share exercise price of \$0.64. After deducting for offering related expenses, the aggregate net proceeds from the initial closing of the 2020 Private Placement were approximately \$5,446,000.

Under the private placement of our securities which we commenced in April 2022 through July 2022, we entered into a securities purchase agreement with six accredited investors providing for the issuance and sale to such investors of an aggregate of 4,119,321 shares of our common stock and warrants for an additional 4,119,321 shares of our common stock, exercisable through 2024, at a per share exercise price of \$1.10. The Company is entitled to expedite the warrant exercise period for all or a part of the then outstanding warrants by written notice to the holders if the publicly traded price of our common stock equals or exceeds \$2.50 per share (which amount may be adjusted for certain capital events, such as stock splits, as described herein) and the corresponding average daily trading volume during such period equals or exceed 75,000 shares, in each case for the forty (40) consecutive trading days. The aggregate gross proceeds from the private placement were approximately \$3,625,000.

In addition, on June 12, 2023, we raised aggregate gross proceeds of \$1,000,000 from sales of our shares of common stock and warrants to purchase shares of common stock.

We will need to obtain additional funding in order to pursue our business plans. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

We expect that our existing cash and cash equivalents will enable us to fund our operations and capital expenditure requirements through the second quarter of 2024. Our requirements for additional capital during this period will depend on many factors, including the following:

- the scope, rate of progress, results and cost of our development and engineering efforts to develop the *PressureSafe* and *Nobiotics* devices, clinical studies (to the extent necessary), preliminary testing activities and other related activities;
- the cost, timing and outcomes of regulatory related efforts for commercial sales approvals;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the timing, receipt and amount of sales, profit sharing or royalties, if any, from our potential products;
- the cost of preparing, filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; and
- the extent to which we acquire or invest in businesses, products or technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

For the year ended December 31, 2023, and as of the date of this report, we assessed our financial condition and concluded that based on our current and projected cash resources and commitments, as well as other factors mentioned above, there is a substantial doubt about our ability to continue as a going concern. We are planning to raise additional capital to continue our operations, as well as to explore additional avenues to increase revenues and reduce expenditures. We cannot be sure that future funding will be available to us on acceptable terms, or at all. Due to often volatile nature of the financial markets, equity and debt financing may be difficult to obtain.

We may seek to raise any necessary additional capital through a combination of private or public equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing and distribution arrangements. To the extent that we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights, future revenue streams, or product candidates or to grant licenses on terms that may not be favorable to us. If we raise additional capital through private or public equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Accounting for share-based compensation

We recognize all employee and nonemployee stock-based compensation as a cost in the consolidated financial statements. For awards with a graded vesting schedule, we use the graded vesting attribution approach to recognize compensation cost over the vesting period.

We estimated grant date fair value using the Black-Scholes-Merton option-pricing model and estimates the number of forfeitures expected to occur.

Smaller Reporting Company Status

Currently, we qualify as a smaller reporting company.

As a smaller reporting company, we are eligible and have taken advantage of certain exemptions from various reporting requirements that are not available to public reporting companies that do not qualify for this classification, including, but not limited to:

- An opportunity for reduced disclosure obligations regarding executive compensation in our periodic and annual reports, including without limitation exemption from the requirement to provide a compensation discussion and analysis describing compensation practices and procedures,
- An opportunity for reduced financial statement disclosure in registration statements and in annual reports on Form 10-K, which only requires two years of audited financial statements rather than the three years of audited financial statements that are required for other public companies,
- An opportunity for reduced audit and other compliance expenses as we are not subject to the requirement to obtain an auditor's report on internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act of 2002, and
- An opportunity to utilize the non-accelerated filer time-line requirements beginning with our annual report for the year ending December 31, 2023, and quarterly filings thereafter.

For as long as we continue to be a smaller reporting company, we expect that we will take advantage of both the reduced internal control audit requirements and the disclosure obligations available to us as a result of this classification.

JOBS Act Transition Period

Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to take advantage of the extended transition period to comply with new or revised accounting standards and to adopt certain of the reduced disclosure requirements available to emerging growth companies. As a result of the accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies which may make comparison of our financials to those of other public companies more difficult.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information called for by Item 8 is included following the "Index to Financial Statements" on page F-1 contained in this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

(a) Disclosure Controls and Procedures

We have performed an evaluation of the effectiveness of our disclosure controls and procedures that are designed to ensure that the material financial and non-financial information required to be disclosed to the SEC is recorded, processed, summarized and reported timely. Based on our evaluation, our management, including the Chief Executive Officer and Chief Financial Officer, has concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this report, were effective.

(b) Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) promulgated under the Exchange Act. Our internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of published financial statements for external purposes in accordance with generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Our management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation, pursuant to Rule 13a-15(c) promulgated under the Exchange Act, of the effectiveness, as of the end of the period covered by this Annual Report, of its internal control over financial reporting based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013). Based on the results of this evaluation, management concluded that as of December 31, 2023, our internal control over financial reporting was effective.

Notwithstanding the foregoing, there can be no assurance that our controls and procedures will detect or uncover all failures in our controls over measurement and disclosure in our financial statements or detect instances of fraud, if any.

(c) Changes in Internal Controls over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2023, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

On March 27, 2024, Yoram Drucker notified us of his resignation from the Board, effective immediately. The resignation of Mr. Drucker as a director was due to the current compensation of the Board.

During December 2024, the Company executed amendments and extensions of 6,210,938 of the Company's warrants issued between December 2020 to April 2021 such that such warrants were extended to expire on June 30, 2025.

Extension of the 2015 Loans: In 2015, certain of the Company's stockholders granted loans to the Company to finance its ongoing operation (the "2015 Loans"). These loans bear interest at an annual rate ranging in 2023 and 2022 from 2.90% to 2.42%. Under the original loan terms, the aggregate loan amount is payable to the lenders by the Company only upon the approval of the Company's board of directors that the Company's profits reached an amount of US\$500 thousand 0.5 million and upon such terms and in such installments as shall be determined by the Company's board of directors. In March 2020, the Company and the lender agreed to amend the terms of the 2015 Loan and the repayment date was extended to December 31, 2023. On March 1, 2024, the Company and the lender agreed to extend the repayment date to December 31, 2025.

Extension of the 2017 Loan: In 2017, one of the Company's shareholders provided the Company with a loan to finance its ongoing operation (the "2017 Loan"). This loan bears interest at annual rate ranging in 2023 and 2022 from 2.90% to 2.42% annually. Under the original loan terms, the aggregate loan amount was repayable by the Company upon the closing of an investment in the Company with proceeds greater than US\$ 500 thousand. In March 2020, the Company and the lender agreed to amend the terms of the 2017 Loan and the repayment date was extended to December 31, 2023. On March 1, 2024, the Company and the lender agreed to extend the repayment date to December 31, 2025.

Extension of Convertible Loan: On March 1, 2024, the Company and the lenders of a convertible bridge loan agreement, or the 2018 CLA, which was originally signed on March 6, 2018, agreed to extend the repayment date to December 31, 2025. In accordance with 2018 CLA, the loan bears interest at a rate per annum equal to three percent (3%) compounded and accrued annually, and was originally repayable on December 31, 2018, or later date as determined by the shareholders representing more than 80% of the Company's issued and outstanding shares who has also provided loans with terms similar to the terms of the agreement, unless earlier converted to shares. The 2018 CLA included certain scenarios in which the loan may be converted, and certain scenarios in which the loan is automatically converted. In March 2020, the Company and the lenders agreed to amend and restate the 2018 CLA pursuant to which the lenders waived any and all rights to convert their respective outstanding loan amounts, and the repayment date was set to December 31, 2023.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not Applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT AND CORPORATE GOVERNANCE

The Company's directors hold office until the next annual general meeting of the stockholders or until their successors are elected and qualified. The Company's officers are appointed by its board of directors and hold office until the earlier of their death, retirement, resignation, or removal.

The following table sets forth the names and ages of the members of the board of directors and the executive officers and the positions held by each as of April 1, 2024.

Name	Age	Positions
Oded Bashan	77	Chairperson of the Board of Directors
Aharon Klein	63	Interim Chief Executive Officer, Chief Technology Officer, Director
Sharon Levkoviz	50	Chief Financial Officer
Aharon Binur	60	Chief Development Officer
Yaniv Cohen	44	Director
Ohad Bashan	53	Director
Ron Mayron	60	Director

Business Experience

The following is a brief account of the education and business experience of our current directors and executive officers:

Oded Bashan, co-founded IR. Med Ltd. with Aharon Klein and, since September 2013 has been serving as Chairman of IR. Med Ltd. Upon the effectiveness of our acquisition in December 2020 of IR. Med Ltd. (the "Acquisition"), he was appointed to Board of Directors and on January 20, 2021, was appointed as Chairman of the Board, and on April 6, 2021, he was appointed Chief Executive Officer on an interim basis following the resignation of Ms. Davidson Mund. Mr. Bashan has over 35 years of experience in managing, building and running technology companies. He was Founder, CEO & chairman of OTI Ltd. from 1990 to 2013, a Nasdaq traded global technology leader with more than 250 employees. Since January 2013, together with his son Mr. Ohad Bashan, they have been managing several private companies engaged in biotech. Previously, Mr. Bashan served as the president of Electro-Galil from 1984 to 1990. He was awarded the Leading Businessman Award in Management, Business and Economics by the Israeli Institute of Public Opinion. Mr. Bashan holds both B.Sc. and M.Sc. in Economics and Business management from the Hebrew University of Jerusalem.

Mr. Aharon Klein was appointed as Interim Chief Executive Officer effective February 28, 2024. Mr. Klein co-founded IR. Med Ltd. in September 2013 and has served as a director of the Company since. He also served as the Company's Chief Operating Officer from September 2013 until December 2020. Since December 2020, Mr. Klein serves as the Company's Chief Technology Officer. Mr. Klein is a medical device and biotech expert, with a strong clinical background. Prior to founding the Company, from 2004 to 2007 Mr. Klein co-founded and served as Chief Executive Officer of Fertiligent, a start-up company focused on innovative fertility treatments, which was acquired by a United Kingdom based investment group in 2008. From 2008 to 2013, immediately prior to co-founding of the Company, he founded a medical device company developing infrared based diagnostic tools for diagnosing colon cancer without the need for biopsies (optical biopsies). Mr. Klein graduated from the Faculty of Engineering in the Technion - Israel Institute of Technology. Mr. Klein is experienced in initiating and running medical device start-up companies, including development, clinical trials and regulatory affairs.

Sharon Levkoviz. Mr. Levkoviz was appointed to Chief Financial Officer upon the effectiveness of the Acquisition. Mr. Levkoviz served from 2011-2021 in Achdut Israel Ltd., an Israeli company providing accounting and economic consulting services, as regional manager. Prior to that period, Mr. Levkoviz served as a Chief Controller at OTI, Nasdaq traded company, from 2005 through 2011. Mr. Levkoviz received his CPA from Ramat Gan College and a B.A. in Business Administration from Rupin College in Israel. In addition, Mr. Levkoviz served 10 years as a chairman of finance and human resource committee at Ohalo College. He also served five years as a director at the development company of Katzrin and eight years as a member of Katzrin plenum.

Aharon Binur. Mr. Aharon Binur was appointed as Chief Development Officer on April 29, 2021, to lead product development. Mr. Binur is an electronics engineer who graduated from the Technion in Haifa, Israel. He was an electronics engineer at OTI from November 1999 through February 2001 and became a development manager at a subsidiary of OTI in March 2001 and held several other positions at OTI through April 2013. Mr. Binur also served as CTO (August 2009 through November 2014) and VP of R&D (March 2017 through April 2021) at Lehavot, an advanced fire protection system company. Mr. Binur has extensive experience in multidisciplinary technological management, including software, hardware and mechanics, development of final systems and products for clients, while maintaining high quality and international standards. Mr. Binur has a unique and creative approach to technology management, including patents registered in his name.

Yaniv Cohen. Mr. Yaniv Cohen co-founded IR. Med Ltd. in September 2013 and has served as the R&D manager since then. Following the completion of the of IR. Med Ltd. by our company (the "Acquisition"), he was appointed to the Board. Mr. Cohen is an experienced electrical engineer with expertise in the fields of wave propagation and IR Spectroscopy for medical applications. Additionally, Mr. Cohen holds four patents in medical devices, has co-authored eight articles in scientific journals, and has spoken in conferences around the globe. From 2010 to 2013, Mr. Cohen served as R&D manager for PIMS, an Israeli medical device company, focusing on IR imaging and spectral analysis for non-invasive cancer detection and identification. From 2008 to 2009, Mr. Cohen worked for Cisco as a system engineer. From 2006 to 2008, he worked as a service engineer for Intel Israel. Mr. Cohen is a Candidate of Sciences in the doctoral program, Informatics and Computer Engineering in the National Research University Higher School of Economics, School of Electronic Engineering Institute of Electronics and Mathematics (MIEM HSE) in Moscow, Russia. Mr. Cohen holds a M.Sc. in Electrical Engineering from Holon Institute of Technology (2007). From 2009 to 2010, he attended the Ben-Gurion University of the Negev, Beer Sheva, Israel where he wrote a thesis in wave prorogation.

Ohad Bashan. Mr. Bashan joined the Board upon the completion of the Acquisition. Mr. Bashan is an entrepreneur, innovator and executive with a proven track record of more than 25 years of building, leading and running technology companies from startup to NASDAQ trade. He is an experienced director, after having served on the boards of private and publicly traded companies in the U.S., Israel, China, Poland and France. From 1998 to 2013, Mr. Bashan held several senior positions at OTI, which was acquired by Nyax Ltd. From 2013 to the present, Mr. Bashan has run a management services business. Mr. Bashan holds a B.A. in business from the College of Business Management, Tel Aviv, with specializations in marketing and finance, and an M.B.A. from Pepperdine University, California.

Ron Mayron. Mr. Mayron has extensive experience in the pharmaceutical and medical equipment industries and has held various, significant senior management positions, both local and global, within Teva Pharmaceutical Industries Ltd. (“Teva”) over the last 21 years. During his career at Teva, Mr. Mayron served in various VP positions. Most recently he was CEO of Teva Israel and VP Israel and Africa from June 2009 until September 2013. Mr. Mayron’s core expertise is in marketing, sales and distribution, mergers and acquisitions, business development, global operation and supply chain and strategic development. Mr. Mayron currently serves on the board of directors of Innocan Pharma Corporation (CSE: INNO), Nurexone Biologic Inc. (TSX: NRX), IceCure Medical Ltd. (NASDAQ: ICCM), BioLight Life Sciences Ltd. (TASE: BOLT), Entera Bio (NASDAQ: ENTX) and Kadimastem Ltd. (TASE: KDST). Mr. Mayron holds a B.Sc. in Industrial Engineering & Management from Ben Gurion University and M.B.A from Tel-Aviv University.

Family Relationships

Oded Bashan is the father of Ohad Bashan.

Term of Office of Directors

We currently have authorized six directors. In accordance with our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws, our Board of Directors is divided into three classes with staggered three-year terms. At each annual meeting of stockholders commencing with the meeting in 2021, the successors to the directors whose terms then expire will be elected to serve until the third annual meeting following the election. Our directors are divided among the three classes as follows:

- the Class I director is Yaniv Cohen. His term will expire at the annual meeting of stockholders to be held in 2025;
- the Class II directors are Ohad Bashan and Ron Mayron, and their terms will expire at the annual meeting of stockholders to be held in 2026; and
- the Class III directors are Oded Bashan and Aharon Klein, and their terms will expire at the annual meeting of stockholders to be held in 2024.

On February 18, 2024, Ms. Inna Martin notified the Board of Directors of her resignation from the Board, effective immediately. The resignation of Ms. Martin as a director was not related to any disagreement with the Company on any matter relating to the Company’s operations, policies or practices.

On March 27, 2024, Mr. Yoram Drucker notified the Board of Directors of his resignation from the Board, effective immediately. The resignation of Mr. Drucker as a director was due to the current compensation of the Board.

Committees of the Board of Directors

Our Board of Directors has established an audit committee which operates under a charter that has been approved by our board.

Our Board of Directors has determined that all of the members of our audit committee are independent as defined under the rules of the NASDAQ Capital Market. In addition, all members of the audit committee meet the independence requirements contemplated by Rule 10A-3 under the Exchange Act. We currently do not have a board member that qualifies as an “audit committee financial expert” as defined in Item 407(D)(5) of Regulation S-K.

We currently do not have a nominating or compensation committees or committees performing similar functions, nor does our Company have a written nominating or compensation charter. Our directors believe that it is not necessary to have such committees at this time because the director(s) can adequately perform the functions of such committees.

Audit Committee

The audit committee's main function is to oversee our accounting and financial reporting processes and the audits of our financial statements. This committee's responsibilities include, among other things:

- appointing our independent registered public accounting firm;
- evaluating the qualifications, independence and performance of our independent registered public accounting firm;
- approving the audit and non-audit services to be performed by our independent registered public accounting firm;
- reviewing the design, implementation, adequacy and effectiveness of our internal accounting controls and our critical accounting policies;
- discussing with management and the independent registered public accounting firm the results of our annual audit and the review of our quarterly unaudited financial statements;
- reviewing, overseeing and monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to financial statements or accounting matters;
- reviewing on a periodic basis, or as appropriate, any investment policy and recommending to our board any changes to such investment policy;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and approving any related party transactions and reviewing and monitoring compliance with our code of conduct and ethics; and
- reviewing and evaluating, at least annually, the performance of the audit committee and its members including compliance of the audit committee with its charter.

The member of our audit committee is Ron Mayron. The member of our audit committee meets the requirements for financial literacy under the applicable rules and regulations of the SEC and the NASDAQ Capital Market.

Nominations to the Board of Directors

Director candidates are considered based upon various criteria, including without limitation their broad-based business and professional skills and experiences, expertise in or knowledge of the life sciences industry and ability to add perspectives relating to that industry, concern for the long-term interests of our stockholders, diversity, and personal integrity and judgment. Our Board of Directors has a critical role in guiding our strategic direction and overseeing the management of our business, and accordingly, we seek to attract and retain highly qualified directors who have sufficient time to engage in the activities of our Board of Directors and to understand and enhance their knowledge of our industry and business plans.

ITEM 11. EXECUTIVE COMPENSATION

The following table summarizes the compensation earned in each of our fiscal years that ended December 31, 2023 and 2022 by our named executive officers, which consists of our chief executive officer and our two next most highly compensated executive officers who earned more than \$100,000 during the fiscal year ended December 31, 2023 and 2022 and were serving as executive officers as of such date and our former chief executive officers. We refer to the executive officers listed below as the Named Executive Officers.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$ (1))	All other compensation (\$ (2))	Total (\$)
Moshe Gerber, Chief Executive Officer (3)	2023	88,337		342,996	43,062	474,395
	2022	92,896		195,074	40,776	328,746
Oded Bashan, Executive Chairman	2023	-		273,728	-	273,728
	2022	95,163		299,730	-	394,893
Aharon Klein, Interim Chief Executive Officer and Chief Technology Officer	2023	90,657		-	10,417	101,074
	2022	124,954		3,442	16,500	144,896
Aharon Binur- Chief Development Officer	2023	114,558		92,268	45,845	252,671
	2022	126,528		48,553	51,180	226,262
Dr. Rom Eliaz, former Chief Executive Officer (4)	2023	-		-	-	-
	2022	111,038		7,795	51,321	170,153
Mr. Tzur Di Cori, former Chief Executive Officer (5)	2023	31,135		48,031	14,811	93,977

- In accordance with SEC rules, the amounts in this column reflect the fair value on the grant date of the option awards granted to the named executive, calculated in accordance with ASC Topic 718. Stock options were valued using the Black-Scholes model. The grant-date fair value does not necessarily reflect the value of shares which may be received in the future with respect to these awards. The grant-date fair value of the stock options in this column is a non-cash expense for us that reflects the fair value of the stock options on the grant date and therefore does not affect our cash balance. The fair value of the stock options will likely vary from the actual value the holder receives because the actual value depends on the number of options exercised and the market price of our Common Stock on the date of exercise. For a discussion of the assumptions made in the valuation of the stock options, see Note 9.C to the Annual Report on Form 10-K for the year ended December 31, 2023.
- For 2023 and 2022, represents the compensation as described under the caption "All Other Compensation" below.
- Mr. Gerber was appointed Chief Executive Officer on May 2, 2022, and resigned as Chief Executive Officer on May 21, 2023.
- Dr. Eliaz was appointed Chief Executive Officer on June 22, 2021, and resigned as Chief Executive Officer on August 31, 2022.
- Mr. Tzur Di-Cori was appointed Chief Executive Officer on October 15, 2023, and on February 22, 2024, the Board of Directors terminated his employment.

All Other Compensation

The following table provides information regarding each component of compensation for fiscal years 2023 and 2022 included in the "All Other Compensation" column in the "Summary Compensation Table" above. Represents amounts paid in New Israeli Shekels (NIS) and converted at average exchange rates for the year.

Name	Year	Automobile and Related Expenses \$ (1)	Social Benefits \$ (2)	Total \$
Moshe Gerber	2023	17,267	25,795	43,062
	2022	11,794	28,982	40,776
Aharon Klein	2023	10,417	-	10,417
	2022	16,500	-	16,500
Aharon Binur	2023	15,805	30,040	45,845
	2022	17,859	33,321	51,180
Dr. Rom Eliaz	2023	-	-	-
	2022	19,936	31,385	51,321
Tzur Di Cori	2023	5,755	9,056	14,811

1. Represents a leased automobile expense.
2. These are comprised of contributions by us to savings, health, severance, pension, disability and insurance plans generally provided in Israel, including health, education, managerial insurance funds, and redeemed vacation pay. This amount represents Israeli severance fund payments, managerial insurance funds, disability insurance, supplemental education fund contribution and social securities. See discussion below under “Narrative Disclosure to Summary Compensation Table.”

Outstanding Equity Awards on December 31, 2023

The following table sets forth information concerning equity awards held by each of our Named Executive Officers as of December 31, 2023.

Name	Grant Date	Number of Securities Underlying Options (#) Exercisable	Number of Securities Underlying Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Moshe Gerber	May 2, 2022	433,333	-	0.32	December 31, 3030
Oded Bashan	June 20, 2021	240,000	-	0.32	*
Oded Bashan	December 30, 2022	1,200,000	-	0.58	*
Aharon Klein	June 20, 2021	240,000	-	0.32	*
Aharon Binur	June 20, 2021	165,000	135,000	0.32	*
Aharon Binur	November 14, 2022	125,000	175,000	0.58	*
Dr. Rom Eliaz	June 20, 2021	150,000	-	0.32	July 31, 2027
Tzur Di Cori	September 27, 2023	-	1,000,000	0.58	*

* Options expiration date is ten (10) years from vesting

Narrative Disclosure to Summary Compensation Table

Our Board follows the following processes and procedures for the consideration and determination of executive and director compensation:

In establishing compensation amounts for executives, we seek to provide compensation that is competitive in light of current market conditions and industry practices. Accordingly, we will generally review market data, which is comprised of proxy-disclosed data from peer companies and information from nationally recognized published surveys for the biopharmaceutical industry, adjusted for size. The market data helps the committee gain perspective on the compensation levels and practices at the peer companies and to assess the relative competitiveness of the compensation paid to our executives. The market data thus guides us in its efforts to set executive compensation levels and program targets at competitive levels for comparable roles in the marketplace. We then consider other factors, such as the importance of each executive officer's role to the Company, individual expertise, experience, performance, retention concerns and relevant compensation trends in the marketplace, in making its final compensation determinations.

Elements of Compensation

In addition to each officer's base salary, our executive officer compensation program consists of a cash incentive bonus plan and discretionary stock option awards in addition to customary benefits. The amounts of compensation awarded for each element of the Company's compensation program (*i.e.*, base salary, bonuses and stock options) are reviewed in connection with the Company's performance.

Base Salary

Annual base salaries compensate our executive officers for fulfilling the requirements of their respective positions and provide them with a level of cash income predictability and stability with respect to a portion of their total compensation. We believe that the level of an executive officer's base salary should reflect the executive's performance, experience and breadth of responsibilities, our understanding of salaries for similar positions within our industry and any other factors relevant to that particular job.

Base salaries are typically negotiated at the outset of an executive's employment. Salary levels are considered annually as part of our performance review process, but also in cases including promotion or other changes in the job responsibilities of an executive officer. For named executive officers, initial base salaries generally are established in connection with negotiation of an offer of employment and employment agreement. Increases in base salary have several elements. In addition to promotion and increased responsibilities, merit and Company-wide general increases are also taken into consideration.

Stock-Based Awards

Historically, we have generally granted stock options to our employees, including our named executive officers, in connection with their initial employment with us. We also have historically granted stock options on an annual basis as part of annual performance reviews of our employees.

Our equity award program is the primary vehicle for offering long-term incentives to our executives. We do not have any equity ownership guidelines for our executives, which is consistent with other pre-commercial biotechnology companies that use stock options as the long-term incentive vehicle. Further, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. In addition, the vesting feature of our equity awards contributes to executive retention by providing an incentive for our executives to remain in our employment during the vesting period. We expect that our Board will continue to use annual equity awards to compensate our executive officers. We may also make additional discretionary grants, typically in connection with the promotion of an employee, to reward an employee, for retention purposes or in other circumstances as the Board deems appropriate.

Employment and Severance Arrangements

We consider it essential to the best interests of our stockholders to foster the continuous employment of our key management personnel. In this regard, we recognize that the possibility of a change in control may exist and that the uncertainty and questions that it may raise among management could result in the departure or distraction of management personnel to the detriment of the Company and our stockholders. In order to reinforce and encourage the continued attention and dedication of certain key members of management, we have entered into written employment agreements with certain of our named executive officers that, while at-will, contain certain change in control and severance provisions.

Employment Agreements

Moshe Gerber. The Company's subsidiary IR. Med Ltd. ("IR. Med Ltd.") entered into an Employment Agreement (the "Agreement") setting forth the terms of his employment and compensation. Under the Agreement, Mr. Gerber is entitled to an annual salary of the current New Israeli Shekel equivalent of approximately \$136,752, payable on monthly basis. Mr. Gerber is also provided with a leased automobile. Under the Agreement, Mr. Gerber is also entitled to the following: (i) Manager's Insurance under Israeli law to which IR. Med Ltd. contributes amounts equal to (a) 8-1/3 percent for severance payments, and 6.5%, or up to 7.5% (including disability insurance) designated for premium payment (and Mr. Gerber contributes an additional 6%) of each monthly salary payment, and (b) 7.5% of his salary (with Mr. Gerber contributing an additional 2.5%) to an education fund, a form of deferred compensation program established under Israeli law. If Mr. Gerber's employment is terminated by us without cause on or prior to the first anniversary of his employment, then we must pay Mr. Gerber (a) the accrued obligations earned through the date of termination, (b) a lump-sum payment of an amount equal to two month of his base salary at the time of his termination; if such termination occurs after such date, then we must pay to Mr. Gerber (a) the accrued obligations earned through the date of termination, (b) a lump-sum payment of an amount equal to three months of his base salary at the time of his termination. Under the Agreement, Mr. Gerber was awarded options under the Company's employee stock option plan for 1,300,000 shares of the Company's common stock at a per share price of \$0.32, vesting as follows: 25% of the option shares (i.e., 325,000 options shares) vest on the first anniversary of employment and the balance in six bi-annual instalments of 162,500 shares, beginning the first instalment on the bi-annual period ending October 31, 2023 and thereafter at the end of each subsequent six months, provided that Mr. Gerber is then in our employ.

The agreement contains (i) customary confidentiality obligations which are not limited by the term of the agreement, (ii) certain non-compete provisions during the term of the agreement and 12 months thereafter and (iii) certain non-solicitation provisions during the term of the agreement and for one year thereafter.

On May 21, 2023, the Company and Mr. Moshe Gerber, executed and delivered a termination and settlement agreement pursuant to which Mr. Gerber resigned from his role as Chief Executive Officer of the Companies. Mr. Gerber's resignation was not associated with or attributable to any disagreement with the Company or the Company's independent auditor, including without limitation, any matter relating to the Company's accounting principles or practices, financial statement disclosures, internal controls, management or operations.

Pursuant to the terms of the termination and settlement agreement, Mr. Gerber was available to the Company until August 19, 2023. Mr. Gerber continued to receive his salary and social benefits under his employment agreement with the Company through August 2023. In addition, the Company agreed that Mr. Gerber was entitled to accelerated vesting of certain of his options under the Company's 2020 Incentive Stock Option Plan; therefore, Mr. Gerber was entitled to purchase an aggregate of 433,333 shares of the Company's common stock through December 31, 2030, at the exercise price per share of \$0.32, which reflects the exercise price in the original grant. Additionally, subject to his compliance with the terms of the termination and settlement agreement, on August 19, 2023, Mr. Gerber received an additional 21,000 NIS (approximately \$5,780 at the current exchange rate).

Oded Bashan. On June 27, 2022, our subsidiary IR. Med Ltd. and Bashanti Ltd., a company that is owned by Oded Bashan, entered into consulting agreement. The Agreement provides for a continuous term and may be terminated by either party at any time with at least 12 months prior written notice. Pursuant to this agreement, Mr. Bashan's annual fee compensation is \$144,000 plus value added tax (VAT). On October 26, 2022, Mr. Bashan agreed to defer payment of his fee pending a capital raise. On December 12, 2022, Mr. Bashan was awarded options under the Company's employee stock option plan for 1,200,000 shares of the Company's common stock at a per share price of \$0.58, of which 600,000 were vested upon grant and the balance vest on December 30, 2023, subject to his continued service. The options are exercisable through the tenth anniversary of grant.

Aharon Klein. On December 24, 2020, our subsidiary IR. Med Ltd. and Mr. Klein entered into an amended and restated consulting agreement (the "Klein Service Agreement") replacing a service agreement dated October 1, 2019, between IR. Med Ltd. and the Company). The Klein Service Agreement provides for a continuous term and may be terminated by either party at any time, provided that if Mr. Klein resigns, he shall provide at least 30 days' prior written notice. Pursuance to this agreement, Mr. Klein's annual fee compensation was increased to \$144,000 plus VAT. On October 26, 2022, Mr. Klein agreed to defer 50% of his payment of his fee pending a capital raise. On October 19, 2023 the board of directors of the company decided to approve the payment pursuant to his original service agreement commencing October 2023. In addition, Mr. Klein is eligible to receive an automobile allowance of \$750 per month. If Mr. Klein's employment is terminated (i) by us without cause or (ii) by him for any, then we must pay Mr. Klein (a) the accrued obligations earned through the date of termination and (b) a lump-sum payment of an amount equal to one month of his base salary at the time of his termination.

The agreement contains (i) customary confidentiality obligations which are not limited by the term of the agreement, (ii) certain non-compete provisions during the term of the agreement and 12 months thereafter and (iii) certain non-solicitation provisions during the term of the agreement and for one year thereafter. Mr. Klein also agreed to assign certain intellectual property rights to IR. Med Ltd.

Aharon Binur. On March 2, 2021, IR. Med Ltd. and Aharon Binur entered into an employment agreement pursuant to which Mr. Binur oversees the development of our product candidates which are in various stages of development. Under the agreement with Mr. Binur, he is paid an annual salary of the current New Israeli Shekel equivalent of approximately \$120,170, payable on monthly basis. IR. Med Ltd. is authorized to terminate the employment agreement for any reason subject to payment of two months' salary. Under the terms of the employment agreement with him, Mr. Binur also receives Manager's Insurance under Israeli law for his to which IR. Med Ltd. contributes amounts equal to (a) 8-1/3 percent for severance payments, and 6.5%, or up to 7.5% (including disability insurance) designated for premium payment (and Mr. Binur contributes an additional 6%) of each monthly salary and (b) 7.5% of his salary (with Mr. Binur contributing an additional 2.5%) to an education fund, a form of deferred compensation program established under Israeli law. Mr. Binur is also provided with a leased automobile. On June 20, 2021, Mr. Binur was awarded options under the Company's employee stock option plan for 300,000 shares of the Company's common stock at a per share price of \$0.32, of which 15,000 were vested upon grant and the balance vest at the end of each calendar quarter at the rate of 15,000 shares per quarter, beginning with the quarter ended September 31, 2021, subject to his continued employment. The options are exercisable through the tenth anniversary of grant.

On November 14, 2022, Mr. Binur was awarded options under the Company's employee stock option plan for 300,000 shares of the Company's common stock at a per share price of \$0.58, vesting at the end of each calendar quarter at the rate of 25,000 shares per quarter, beginning with the quarter ended December 31, 2022, subject to his continued employment. The options are exercisable through the tenth anniversary of grant.

Dr. Rom Eliaz. On June 22, 2021, Dr. Rom Eliaz and IR. Med Ltd. entered into an employment agreement providing for the employment of Dr. Eliaz as Chief Executive Officer (the "Eliaz Employment Agreement"). Under the Eliaz Employment Agreement, Dr. Eliaz is entitled to an annual salary of the current New Israeli Shekel equivalent of approximately \$150,427, payable on a monthly basis. Mr. Eliaz is also provided with a leased automobile. Under the Eliaz Employment Agreement, Dr. Eliaz is also entitled to the following: (i) Manager's Insurance under Israeli law for the benefit of Dr. Rom Eliaz pursuant to which IR. Med Ltd. contributes amounts equal to (a) 8-1/3% for severance payments, and 6.5%, or up to 7.5% (including disability insurance) designated for premium payment (and Dr. Eliaz contributes an additional 6%) of each monthly salary payment, and (b) 7.5% of his salary (with Dr. Eliaz contributing an additional 2.5%) to an education fund, a form of deferred compensation program established under Israeli law. The Eliaz Employment Agreement provides that his annual salary will be increased to the New Israeli Shekel equivalent of approximately \$186,000 upon (i) the successful capital raise by the Company of at least \$5.0 million in net proceeds, (ii) the successful completion of a prototype of the *PressureSafe* device, as determined by the Company's board of directors and (iii) receipt by the Company of a letter of intent for the large scale commercial purchase/order of the *PressureSafe* device.

On April 25, 2022, Dr. Eliaz resigned from his position. In connection with his resignation, the Company agreed that Dr. Eliaz continued to receive his salary and benefits under his employment agreement through August 31, 2022. In addition, the Company agreed that Dr. Eliaz is entitled to the accelerated vesting of the next instalment of options (previously granted to in June 2021) which vested on June 30, 2022, for an aggregate total of options for 150,000 shares of the Company's common stock and that such options may be exercised through the original exercise expiration date of July 31, 2027, at an exercise price per share of \$0.32.

Tzur Di-Cori. On October 15, 2023, Mr. Di-Cori was appointed to serve as the Company's Chief Executive Officer. In conjunction with his appointment, the Company and Mr. Di-Cori entered into an employment agreement, pursuant to which he was subject to standard confidentiality, intellectual property assignment and non-compete provisions. In addition, in consideration of his service, Mr. Di-Cori received a monthly gross salary of NIS 45,000 (\$11,842 approximately) and options to purchase 1,000,000 shares of the Company's common stock at an exercise price of \$0.58 per share, subject to and in accordance with the terms and conditions of the Company's 2020 Incentive Stock Plan.

On February 22, 2024, as a result of financial difficulties, the Company notified Mr. Di-Cori, of the termination of his employment.

Potential Payments upon Change of Control or Termination following a Change of Control

Our agreements with our named executive officers provide incremental compensation in the event of termination, as described herein. Generally, we currently do not provide any severance specifically upon a change in control nor do we provide for accelerated vesting upon change in control. Termination of employment also impacts outstanding stock options.

Due to the factors that may affect the amount of any benefits provided upon the events described below, any actual amounts paid or payable may be different than those shown in this table. Factors that could affect these amounts include the basis for the termination, the date the termination event occurs, the base salary of an executive on the date of termination of employment and the price of our common stock when the termination event occurs.

The following table sets forth the compensation that would have been received by each of our executive officers had they been terminated as of December 31, 2023.

Name	Salary \$	Social benefits \$	Total \$
Oded Bashan	-	-	-
Aharon Klein	13,500	-	13,500
Aharon Binur	19,178	5,000	24,178
Tzur Di Cori	12,162	3,734	15,896

Director Compensation

The following table sets forth for each non-employee director that served as a director during the year ended December 31, 2023:

Year Ended December 31, 2023

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$) (1)	Non-Equity Incentive Plan Compensation (\$)	Non-Qualified Deferred Compensation Benefits (\$)	All Other compensation (\$)	Total (\$)
Inna Martin	15,696		86,649(5)	-	-	-	102,345
Ohad Bashan	-		-(2)	-	-	-	-
Ron Mayron	20,735		57,764(3) (4)	-	-	-	178,499

1. In accordance with SEC rules, the amounts in this column reflect the fair value on the grant date of the option awards granted to the named executive, calculated in accordance with ASC Topic 718. Stock options were valued using the Black-Scholes model. The grant-date fair value does not necessarily reflect the value of shares which may be received in the future with respect to these awards. The grant-date fair value of the stock options in this column is a non-cash expense for us that reflects the fair value of the stock options on the grant date and therefore does not affect our cash balance. The fair value of the stock options will likely vary from the actual value the holder receives because the actual value depends on the number of options exercised and the market price of our common stock on the date of exercise. For a discussion of the assumptions made in the valuation of the stock options, see Note 1. C (Stock Based Compensation) to our financial statements, which are included in this Annual Report on Form 10-K.
2. In respect of 240,000 options, all of which were vested.
3. In respect of 240,000 options, all of which were vested.
4. In respect of 160,000 options, all of which will vest as of September 30, 2024.
5. In respect of 240,000 options, all of which will vest as of September 30, 2024.

Compensation Policy for Non-Employee Directors.

In January 2021, the Board of Directors adopted an updated compensation policy for non-employee directors which replaced the previous non-employee director compensation terms, and which became effective January 2021. Under the policy, each director is to receive an annual cash compensation of \$5,000 and \$1,000 per meeting or \$500 for a virtual meeting. On October 26, 2022, the Board of Directors decided to freeze compensation for non-employee directors. On August 13, 2023, the Board of Directors decided to repay the independent directors for fees incurred in the fourth quarter of 2022 and the first half of 2023, and moving forward, to continue paying the independent directors board attendance fee.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of April 1, 2024 for (a) the executive officers named in the Summary Compensation Table of this annual report, (b) each of our directors, (c) all of our current directors and executive officers as a group and (d) each stockholder known by us to own beneficially more than 5% of our common stock. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. Under the rules of the SEC, a stockholder is deemed to be a beneficial owner of any security of which that stockholder has the right to acquire beneficial ownership in 60 days of April 1, 2024. Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them based on information provided to us by these stockholders. Percentage of ownership is based on 69,931,056 shares of common stock outstanding on April 1, 2024.

Name and Address of Beneficial Owner	Number of Shares beneficially owned	Percentage Beneficially owned
5% or more shareholders		
Yaakov Safren	6,156,120(1)	8.56%
Paul Coulson	5,625,000(2)	7.83%
Yoram Drucker	4,862,471(3)	6.87%
Third Eye Investors LLC	4,687,500(4)	6.56%
Isamar Margareten	8,721,307(5)	11.79%
Liat Electronics Ltd.	3,850,607	5.51%
Officers and Directors		
Oded Bashan	10,049,916(6)	14.08%
Aharon Klein	8,099,110(7)	11.54%
Yaniv Cohen	8,099,136(8)	11.54%
Ron Mayron	360,000(9)	*
Ohad Bashan	240,000(9)	*
Aharon Binur	330,000(9)	*
Sharon Levkoviz	367,768(9)	*
Officers and Directors as a Group (7 persons)	27,545,930	37.66%

* less than 1%

(1) Includes 2,006,119 shares issuable upon the exercise of stock options.

(2) Includes 1,875,000 shares issuable under a currently exercisable common stock warrant.

(3) Includes 812,471 shares issuable upon the exercise of stock options.

(4) Yitzchak Rokonsky, of Third Eye Investors LLC ("Third Eye") has sole voting and dispositive power over shares held by Third Eye. Includes 1,562,500 shares issuable under a currently exercisable common stock warrant.

(5) Includes 4,043,466 shares issuable under a currently exercisable common stock warrant.

(6) Represents (i) 8,609,916 shares owned by Med2Bwell Ltd. ("Med2Bwell"), of which Mr. Bashan has sole voting and dispositive power and (ii) 1,440,000 shares of common stock issuable upon the exercise of stock options.

(7) Includes 240,000 shares issuable upon the exercise of stock options

(8) Includes 240,000 shares issuable upon the exercise of stock options.

(9) Represents shares of common stock issuable upon the exercise of stock options.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Our Audit Committee Charter requires all future transactions between us and any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of them, or any other related persons, as defined in Item 404 of Regulation S-K, or their affiliates, in which the amount involved is equal to or greater than \$120,000, be approved in advance by our audit committee. Any request for such a transaction must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider all available information deemed relevant by the audit committee, including, but not limited to, the extent of the related person's interest in the transaction, and whether the transaction is on terms no less favorable to us than terms we could have generally obtained from an unaffiliated third party under the same or similar circumstances.

Related Party Transactions

Except as described below, there has not been, nor is there currently proposed, any transaction to which we are or were a party in which the amount involved exceeds the lesser of \$120,000 and 1% of the average of our total assets at year-end for the last two completed fiscal years, and in which any of our directors, executive officers, holders of more than 5% of any class of our voting securities or any of their respective affiliates or immediate family members, had, or will have, a direct or indirect material interest.

In 2015, our subsidiary IR. Med Ltd. received a loan from certain of the former IR-Med stockholders to fund its continuing operations. This loan bore interest at an annual rate ranging in 2023 and 2022, from 2.9%-2.42% annually. The aggregate loan amount was repayable only upon the approval of IR Med's board of directors and when the Company's profits reach an amount of NIS 1,500,000 (approximately \$414,000 as of December 31, 2023) and upon such terms and such installments as shall be determined by the Company's board of directors.

In 2017, our subsidiary IR. Med Ltd. received a loan from certain of the former IR-Med stockholder to fund its continuing operations. This loan bears interest at an annual rate ranging from 2.9%-2.42% annually in 2022 and 2023. The aggregate loan amount was repayable only upon the occurrence of an investment round greater than \$500,000.

In March 2020, IR. Med Ltd. and the lenders agreed to amend and restate the terms of the above referenced loans ("the Amended loan agreement") pursuant to which the lender waived all rights to convert their respective outstanding loan amounts, and the repayment date was set to December 31, 2023, or such later date to be agreed between IR. Med Ltd. and the lender. On March 1, 2024, the lenders agreed to extend the repayment date to December 31, 2025. As of December 31, 2023, and 2022 the carrying amounts of these loans were \$38 thousand.

On March 6, 2018, certain of IR. Med Ltd.'s shareholders advanced to it a convertible bridge loan in the principal amount of NIS 379,000 (\$104,000) (hereinafter, the "2018 CLA"), bearing a per annum interest rate of 3% compounded and accrued annually and, originally payable on December 31, 2018, or a later date agreed to by the then holders of 80% of the outstanding shares of IR. Med Ltd. Under the terms of the 2018 CLA, the loan is convertible by the holders under certain specified circumstances and is automatically convertible upon other terms. In an Exit event (as defined in the 2018 CLA), the loan is repayable at 200% the outstanding amount or converted, at the option of the majority lenders. In March 2020, the Company and the lenders agreed to amend and restate the 2018 CLA ("the Amended CLA"). According to the Amended CLA, the lenders waived any and all rights to convert their respective outstanding loan amounts, and the repayment date was set to December 31, 2023, or such later date to be agreed by IR. Med Ltd. and the lenders. On March 1, 2024, the lenders agreed to extend the repayment date to December 31, 2025. In addition, in case of an Exit event, as described in the Amended CLA, the loan and all accrued interest will be fully repaid immediately following the Exit event. As of December 31, 2023, and 2022, the carrying amounts of the loans were \$123,000 and \$124,000, respectively.

For the years ended December 31, 2023, and 2022, the Company paid to two directors and to an entity controlled by a shareholder of the Company an aggregate consideration of US\$161 thousand and US\$220 thousand, respectively, in respect of research and development services.

For the years ended December 31, 2023, and 2022 the Company paid to one shareholder of the Company and his relative an aggregate consideration of \$150 thousand and \$111 thousand, respectively in respect consulting services.

For the years ended December 31, 2023, and 2022, the Company paid to four of the Company non-employee directors an aggregate consideration of \$36 thousand and \$130 thousand respectively in respect of their services.

For the year ended December 31, 2023, the Company paid to four of its officers, salary and related expenses that totaled to \$439 thousand. For the year ended December 31, 2022, the Company paid to one director of the Company and four of its officers, salary and related expenses totaled to \$651 thousand, respectively, in respect thereof.

For the years ended December 31, 2023, and 2022, the Company paid a yearly amount of \$80 thousand and \$51 thousand to an entity controlled by two of the Company's directors for rent and office services, respectively.

Following the adoption of the 2020 incentive stock plan (hereinafter the "Plan") by the Company on December 23, 2020, and the adoption of the sub plan (the "Israeli appendix") on April 29, 2021, the Company granted during the years 2023 and 2022 to its directors, officers, and shareholder 1,636,000 and 5,200,000 options to purchase shares of Common Stock respectively.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents fees for professional audit services rendered by Somekh Chaikin, a member firm of KPMG International, located in Tel Aviv, Israel, (PCAOB ID 1057) for the audit of the Company's audited financial statements for the years ended December 31, 2023, and December 31, 2022, and fees billed for other services rendered by Somekh Chaikin during the period:

	<u>2023</u>	<u>2022</u>
Audit fees (1)	\$ 68,500	\$ 79,500
Tax fees (2)	\$ 1,400	\$ 1,400
Total:	\$ 69,900	\$ 80,900

(1) Audit fees consist of audit and review services, consents and review of documents filed with the SEC.

(2) Tax fees consist of preparation of federal and state tax returns, review of quarterly estimated tax payments and consultation concerning tax compliance issues.

Prior to engagement, the Audit Committee pre-approves each of these services by category of service. The fees are budgeted, and the Audit Committee requires our independent registered public accounting firm and management to report actual fees versus the budget at year end by category of service. During the year, circumstances may arise when it may become necessary to engage our independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, the Audit Committee requires pre-approval before engaging our independent registered public accounting firm. All of the services described above were pre-approved by our Audit Committee.

The Audit Committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the Audit Committee at its next scheduled meeting.

Our Board of Directors has appointed Somekh Chaikin, Tel Aviv, Israel (ID 1057), a member firm of KPMG, as our independent registered public accounting firm for the fiscal year ended December 31, 2023.

PART IV

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

(a)

c. Financial Statements

Our consolidated financial statements are set forth in Part II, Item 8 of this Annual Report on Form 10-K and are incorporated herein by reference.

d. Financial Statement Schedules

No financial statement schedules have been filed as part of this Annual Report on Form 10-K because they are not applicable or are not required or because the information is otherwise included herein.

e. Exhibits required by Regulation S-K

Exhibit Number	Description of Exhibit
2.1	<u>Stock Exchange Agreement dated as of December 24, 2021, by and among IR-Med, Inc., IR, Med Ltd. and the former stockholders of IR, Med Ltd. (incorporated by reference to Exhibit 2.1 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
3.1	<u>Amended and Restated Articles of Incorporation of IR-Med, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
3.3	<u>Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form 10-Q filed with the SEC on August 14, 2023)</u>
3.4	<u>Amendment to Amended and Restated Articles of Incorporation (incorporated by reference to Exhibit 3.4 to the Registrant's Amendment No. 3 to the Registration Statement on Form S-1 filed with the SEC on October 28, 2021)</u>
4.1	<u>Specimen of Stock Certificate (incorporated by reference to Exhibit 2.1 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
4.2	<u>Description of Registered Securities</u>
4.3	<u>Form of June 2023 Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form 10-Q filed with the SEC on August 14, 2023)</u>
10.1	<u>Convertible Bridge Loan Agreement dated March 6, 2018, among IR, Med Ltd. and the Lenders scheduled therein (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.2	<u>Amendment to the Convertible Bridge Loan Agreement referred in Exhibit 10.3 dated as of March 31, 2020 (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.3	<u>Second Amendment to the Convertible Bridge Loan Agreement referred in Exhibit 10.3 dated as of July 20, 2020 (incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.4@	<u>Loan Agreement between Yaniv Cohen and IR, Med Ltd. dated January 2015 (incorporated by reference to Exhibit 10.4 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.5@	<u>Loan Agreement between Aharon Klein and IR, Med Ltd. dated January 2015 (incorporated by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.6	<u>Clarification to the agreements referred to Exhibits 10.4 and 10.5 (incorporated by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.7@	<u>Form of Letter Engagement with Non-Employee Directors (incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.8@	<u>Form of Letter Agreement with Employee Director (incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.9@	<u>Amended and Restated Consulting Agreement dated as of December 24, 2020, between IR, Med Ltd. and Aharon Klein (incorporated by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.10@	<u>Employment Agreement dated as of April 1, 2021, IR, Med Ltd and Yoram Drucker (incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.11@	<u>Employment Agreement dated as of January 2021 between IR, Med Ltd. and Sharon Levkoviz (incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.12@	<u>Employment Agreement dated as of December 24, 2020, between IR, Med Ltd. Limor Davidson Mund (incorporated by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.14@	<u>Consulting Agreement dated November 19, 2019, between IR, Med Ltd. and Yaniv Cohen (incorporated by reference to Exhibit 10.14 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>
10.15@	<u>Employment Agreement dated as March 2, 2021, between IR, Med Ltd. and Aharon Binur (incorporated by reference to Exhibit 10.15 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021)</u>

- 10.16 [Form of Securities Purchase Agreement, dated December 24, 2021, by and among IR-Med, Inc. and the Purchasers \(incorporated by reference to Exhibit 10.16 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021\)](#)
- 10.17 [Form of Common Stock Purchase Warrants \(incorporated by reference to Exhibit 10.17 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021\)](#)
- 10.18@ [2020 Incentive Stock Plan \(incorporated by reference to Exhibit 10.18 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021\)](#)
- 10.19@ [Form of Stock Option Award Agreement under the 2020 Incentive Stock Plan \(incorporated by reference to Exhibit 10.19 to the Registrant's Registration Statement on Form S-1 filed with the SEC on May 7, 2021\)](#)
- 10.20@ [Employment Agreement dated as of June 22, 2021, between Dr. Rom Eliasz and IR Med Ltd. \(incorporated by reference to Exhibit 10.20 to the Registrant's Amendment No. 1 to Registration Statement on Form S-1 filed with the SEC on August 26, 2021\)](#)
- 10.21@ [Lease Agreement dated between IR, Med Ltd. and Algaenovation Ltd. dated as of February 1, 2020 \[English Language Translation\] \(incorporated by reference to Exhibit 10.20 to the Registrant's Amendment No. 1 to Registration Statement on Form S-1 filed with the SEC on August 26, 2021\)](#)
- 10.22 [Amendment to Lease Agreement \[English Language Translation\] \(incorporated by reference to Exhibit 10.20 to the Registrant's Amendment No. 1 to Registration Statement on Form S-1 filed with the SEC on August 26, 2021\)](#)
- 10.23@ [Employment agreement between IR Med Ltd. and Moshe Gerber dated as of May 22, 2022 \(incorporated by reference as Exhibit 10.1 to the report on Form 8-K filed on May 2, 2022\)](#)
- 10.24 [Distribution and License Agreement dated as of October 7, 2022, between IR Med Ltd. and PI Prevention Care LLC \(incorporated by reference as Exhibit 10.1 to the quarterly report on Form 10-Q for the quarter ended September 30, 2023 filed on November 14, 2022\)](#)
- 10.25 [Termination and Settlement Agreement, dated as of May 22, 2023, by and among IR-Med, Inc., IR, Med Ltd. and Moshe Gerber \(incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on May 24, 2023\)](#)
- 10.26 [Form of 2023 Subscription Agreement \(incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form 10-Q filed with the SEC on August 14, 2023\)](#)
- 10.27 [Form on Warrant Extension dated December 20, 2023, signed between the Company and certain warrant holders.](#)
- 10.28 [Amendment and Extension to 2015 Loan Agreement between the Company and Aharon Klein, dated March 1, 2024.](#)
- 10.29 [Amendment and Extension to 2015 Loan Agreement between the Company and Yaniv Cohan, dated March 1, 2024.](#)
- 10.30 [Amendment and Extension to 2017 Loan Agreement between the Company and Yaniv Cohan, dated March 1, 2024.](#)
- 10.31 [Amendment and Extension to Convertible Bridge Loan between the Company and certain investors, dated March 1, 2024.](#)
- 21.1 [List of Subsidiaries \(incorporated by reference to Exhibit 10.20 to the Registrant's Amendment No. 1 to Registration Statement on Form S-1 filed with the SEC on August 26, 2021\)](#)
- 31.1 [Certification of Chief Executive Officer \(Principal Executive Officer\), pursuant to Rule 13a-14\(a\) of the Securities Exchange Act of 1934](#)
- 31.2 [Certification of Chief Financial Officer \(Principal Financial and Accounting Officer\), pursuant to Rule 13a-14\(a\) of the Securities Exchange Act of 1934](#)
- 32.1 [Certification of Chief Executive Officer \(Principal Executive Officer\), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 32.2 [Certification of Chief Financial Officer \(Principal Financial and Accounting Officer\), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)

@ Management Contract or Compensatory Plan Arrangement

- 101.INS Inline XBRL Instance Document
- 101.SCH Inline XBRL Taxonomy Extension Schema Document
- 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document
- 104 Cover Page Interactive Data File (Embedded within the Inline XBRL document and included in Exhibit)

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

IR-MED, INC.

By: /s/ Aharon Klein

Aharon Klein
Interim Chief Executive Officer (Principal Executive Officer)

Date: April 1, 2024

By: /s/ Sharon Levkoviz

Sharon Levkoviz
Chief Financial Officer, Treasurer and Secretary
(Principal Financial and Accounting Officer)

Date: April 1, 2024

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Oded Bashan</u> Oded Bashan	Chairman of the Board	April 1, 2024
<u>/s/ Aharon Klein,</u> Aharon Klein	Chief Executive Officer, Chief Technology Officer, Director (Principal Executive Officer)	April 1, 2024
<u>/s/ Sharon Levkoviz</u> Sharon Levkoviz	Chief Financial Officer (Principal Financial and Accounting Officer)	April 1, 2024
<u>/s/ Ohad Bashan</u> Ohad Bashan	Director	April 1, 2024
<u>/s/ Ron Mayron</u> Ron Mayron	Director	April 1, 2024
<u>/s/ Yaniv Cohen</u> Yaniv Cohen	Director	April 1, 2024

IR-Med, INC.
and subsidiary

Consolidated Financial Statements
December 31, 2023

F-1

Consolidated Financial Statements as of December 31, 2023

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Somekh Chaikin
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**Report of Independent Registered Public Accounting Firm
To the Stockholders and the Board of Directors of IR Med, Inc.**

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of IR-Med, Inc. and subsidiary (the Company) as of December 31, 2023 and 2022, the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and 2022, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1b to the consolidated financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1b. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Somekh Chaikin
Member Firm of KPMG International

We have served as the Company's auditor since 2020.

Tel Aviv, Israel

March 29, 2024

KPMG Somekh Chaikin, an Israeli partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.

Consolidated Balance Sheets as of December 31

	Note	2023 US Dollars (In thousands)	2022
Assets			
Current assets			
Cash and cash equivalents	3	767	3,002
Accounts receivable	4	81	55
Total current assets		848	3,057
Non-current assets			
Long term restricted deposits	10	11	11
Right of use assets	6	84	155
Property and equipment, net	5	56	71
Total non-current assets		151	237
Total assets		999	3,294
Liabilities and stockholders' equity			
Current liabilities			
Trade and other payables	7	473	500
Stockholders' loans	8	-	162
Total current liabilities		473	662
Non-current liabilities			
Stockholders' loans	8	161	-
Long term lease liability	6	-	40
Total non-current liabilities		161	40
Total liabilities		634	702
Contingent liabilities and commitments	10		
Stockholders' equity			
Common stock, par value \$0.001 per share, 250,000,000 shares authorized: 69,931,056 and 68,808,970 issued and outstanding as of December 31, 2023, and 2022, respectively		69	68
Additional paid-in capital		15,135	12,454
Accumulated deficit		(14,839)	(9,930)
Total stockholders' equity		365	2,592
Total liabilities and stockholders' equity		999	3,294

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Operations

		For the year ended December 31, 2023	For the year ended December 31, 2022
	Note	US Dollars (In thousands)	
Research and development expenses	11	2,061	1,885
Marketing expenses	12	822	759
General and administrative expenses	13	2028	2,118
Total operating loss		4,911	4,762
Financial income, net	14	(2)	(28)
Loss for the year		4,909	4,734
Loss per share	15		
Basic and dilutive loss per common stock (in U.S. dollars)		(0.07)	(0.07)

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statement of Changes in Stockholders' Equity

	Common Stock		Additional paid-in Capital	Accumulated deficit	Total
	Number of Shares		US dollars (In Thousand)		
Balance as of January 1, 2023	68,808,970	68	12,454	(9,930)	2,592
Stock-based compensation	122,086	*	1,682	-	1,682
Private placement of common stock and warrants	1,000,000	1	999	-	1,000
Loss for the year				(4,909)	(4,909)
Balance as of December 31, 2023	69,931,056	69	15,135	(14,839)	365
Balance as of January 1, 2022	64,601,649	64	7,503	(5,196)	2,371
Stock-based compensation	88,000	*	1,330	-	1,330
Private placement of common stock and warrants	4,119,321	4	3,621	-	3,625
Loss for the year				(4,734)	(4,734)
Balance as of December 31, 2022	68,808,970	68	12,454	(9,930)	2,592

(*) Represents an amount less than US\$ 1 thousand

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statements of Cash Flows

	For the year ended December 31, 2023	For the year ended December 31, 2022
	US Dollars (In thousands)	
Cash flows from operating activities		
Loss for the year	(4,909)	(4,734)
Adjustments to reconcile loss for the year to net cash used in operating activities:		
Stock based compensation	1,682	1,330
Depreciation	17	10
Accrued financial income	(3)	(28)
Decrease (increase) in accounts receivable	(25)	12
Increase in trade and other payables	6	35
Net cash used in operating activities	(3,232)	(3,375)
Cash flows from investing activities		
Purchase of property and equipment	(2)	(50)
Increase in long term deposit	-	(9)
Net cash used in investing activities	(2)	(59)
Cash flows from financing activities		
Proceeds from private placement of common stock and warrants.	1,000	3,625
Net cash provided by financing activities	1,000	3,625
Effect of exchange rate changes on cash	(1)	(4)
Net (decrease) increase in cash and cash equivalents	(2,235)	187
Cash and cash equivalents as at the beginning of the year	3,002	2,815
Cash and cash equivalents as at the end of the year	767	3,002
Non-cash financing Activities:		
Increase in right of use assets against lease liability	-	155
Increase in right of use assets against long term restricted deposits	-	19

The accompanying notes are an integral part of the consolidated financial statements.

Notes to the Consolidated Financial Statements

Note 1 - General**A. Description of Business**

IR-Med, Inc. (OTC QB: IRME, hereinafter: the “Parent Company”) was incorporated in Nevada in 2007. IR-Med, Inc. was previously named International Display Advertising, Inc. and changed its name to IR-Med, Inc. in January 2021.

The registered office of IR-Med, Inc. and the corporate headquarters and research facility of IR. Med, Ltd. are located in Rosh Pina, Israel. The Parent Company and the Subsidiary are at times collectively referred to as the “Company”.

The Company is a development stage medical device company developing its technology through its Subsidiary and is utilizing Infra-Red-light spectroscopy (IR) combined with Artificial Intelligence (AI) technology platform to develop non-invasive devices for various medical indications, by detecting and measuring various biomarkers and molecules in the blood and in human tissue in real-time. The initial product candidates which are currently in various stages of development are non-invasive, user friendly and designed to address the medical needs of large and growing target patient groups by offering earlier and more accurate information for detection, which is expected to reduce healthcare expenses and reducing the widespread reliance on antibiotics administration, and other interventional options optimizing the delivery of the targeted medical services and, as a result, improving the efficacy and safety of administered treatments.

B. Going Concern

The Company is in its development stage and does not expect to generate significant revenue until such time as the Company shall have completed the design and development of its initial product candidate and obtained the requisite approvals to market the product. During the year ended December 31, 2023, the Company has incurred losses of US\$4,909 thousand and had a negative cash flow from operating activities of US\$ 3,232 thousand. The accumulated deficit as of December 31, 2023, is US\$ 14,839 thousand.

Management’s plans regarding these matters include continued development and marketing of the Company’s products, as well as seeking additional financing arrangements. Although management continues to pursue these plans, there is no assurance that the Company will be successful in raising the needed capital from revenues or financing on commercially acceptable terms. The Company will require additional liquidity to continue its operations over the next 12 months.

Following the brutal attacks on Israel, the mobilization of army reserves and the Israeli Government declaring a state of war (the “Iron Swords War”) in October 2023, there has been a decrease in Israel’s economic and business activity. The security situation has led, *inter alia*, to a disruption in the chain of supply and production, a decrease in the volume of national transportation, a shortage in manpower as well as a decrease in the value of financial assets and a rise in the exchange rate of foreign currencies in relation to the shekel.

Notes to the Consolidated Financial Statements

Note 1 - General (Cont'd)**B. Going Concern (cont'd)**

At this time, the Company has assessed, on the basis of the information it has as of the date of the approval of these financial statements, that the current events and the escalation in security in Israel, may have a material effect on the business plans of the Company in the short term. As a result of the movement and work restrictions in Israel, the Company has begun operating on a limited scale. These restrictions and the shortage in manpower may cause delays in the Company's research and development activities and in its marketing efforts. In addition, the situation has brought further difficulties in management's efforts to seek additional financing arrangements. Since this is an event that is not under the control of the Company, and matters such as the fighting continuing or stopping may affect the Company's assessments, as at the reporting date the Company is unable to assess the extent of the effect of the Iron Swords War on its business.

On June 12, 2023, the Company entered into a subscription agreement with one investor pursuant to which the Company issued 1,000,000 shares of its common stock at a per share price of \$1.00 and warrants to purchase up to an additional 1,000,000 shares of common stock at a per share exercise price of \$1.40. The warrants expire on the third anniversary from the date of the issuance of the warrants to the holder. The Company is entitled to accelerate the warrant exercise period for all or a part of the then outstanding warrants by written notice to the holder if the publicly traded price of the Company's common stock equals or exceeds \$2.50 per share (which amount may be adjusted for certain capital events, such as stock splits, as described herein) and the corresponding average daily trading volume during such period shall equal or exceed 75,000 shares, in each case for the preceding forty (40) consecutive trading days. The Company received aggregate proceeds of \$1,000,000 from this financing.

As a result of the Company's financial condition substantial doubt exists that the Company will be able to continue as a going concern for one year from the issuance date of this 2023 Annual Report. The consolidated financial statements do not include any adjustments to the carrying amounts and classification of assets, liabilities, and reported expenses that may be necessary if the Company is unable to continue as a going concern.

Note 2 - Summary of Significant Accounting Policies**A. Basis of Presentation**

The financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). These consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) assuming the Company will continue as a going concern. The going concern assumption contemplates the realization of assets and satisfaction of liabilities in the normal course of business. However, substantial doubt about the Company's ability to continue as a going concern exists.

Notes to the Consolidated Financial Statements

Note 2 - Summary of Significant Accounting Policies (Cont'd)**B. Functional Currency**

The Company finances its operations in U.S. dollars. While the majority of the Group's operations are currently conducted in Israel, a significant part of the Company's expenses is denominated and determined in U.S. dollars. Future revenues are expected to be earned in US dollars. The Company's management believes that the U.S. Dollar is the currency of the primary economic environment in which the Company operates and expects to continue to operate in the foreseeable future. Thus, the functional and reporting currency of the Company is the U.S. Dollar.

The Company's transactions and balances denominated in U.S. dollars are presented at their original amounts. Non-Dollar transactions and balances have been re-measured to U.S. Dollars in accordance with Accounting Standards Codification (ASC) 830, "Foreign Currency Matters", of the Financial Accounting Standards Board ("FASB"). All transaction gains and losses from re-measurement of monetary balance sheet items denominated in non-dollar currencies are reflected in the statements of operations as financial income or expenses, as appropriate.

C. Principles of Consolidation

The consolidated financial statements include the accounts of the Parent Company and its wholly owned Subsidiary, IR. Med, Ltd. Intercompany transactions and balances have been eliminated in consolidation.

D. Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of expenses during the reporting period. Significant items subject to such estimates and assumptions including fair value of share-based compensation and legal claims. Actual results could differ from those estimates.

E. Cash and Cash Equivalents

The Group considers all highly liquid investments with a maturity of three months or less at the date of purchase to be cash equivalents. Cash equivalents are stated at their carrying values, which approximates their fair values.

F. Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and accumulated impairment losses, if any. Maintenance and repair expenses are charged to operation as incurred. Depreciation is calculated on the straight-line method based on the estimated useful lives of the assets and commences once the assets are ready for their intended use. The cost of property and equipment include expenditure that is attributable to the acquisition of the assets.

Notes to the Consolidated Financial Statements

Note 2 - Summary of Significant Accounting Policies (Cont'd)

Annual rates at depreciation are as follows:

	%
Computers and electronics equipment	10-33
Laboratory equipment	15
Furniture and equipment	15
Leasehold improvements	10

G. Research and Development Expenses

Research and development expenses are expensed as incurred. Those expenses include payments to third party consultants, expenses related to conducting clinical and pre-clinical trials, salaries and related personnel expenses.

H. Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, including cash and cash equivalents, accounts receivables, trade and other accounts payable and stockholders' loans do not significantly vary from their fair values. Amounts from related parties' approximate fair value because of their short-term nature.

Fair value for the measurement of financial assets and liabilities is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. The Group utilizes a valuation hierarchy for disclosure of the inputs for fair value measurement. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities.

Notes to the Consolidated Financial Statements

Note 2 - Summary of Significant Accounting Policies (Cont'd)**H. Fair Value of Financial Instruments (cont'd)**

- Level 2 inputs are quoted prices for identical or similar assets or liabilities in less active markets or model derived valuations in which significant inputs are observable for the asset or liability, either directly or indirectly through market corroboration.
- Level 3 inputs are unobservable inputs based on the Company's assumptions used to measure assets and liabilities at fair value.

By distinguishing between inputs that are observable in the marketplace, and therefore more objective, and those that are unobservable and therefore more subjective, the hierarchy is designed to indicate the relative reliability of the fair value measurements. A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

I. Warrants

The Company assesses whether warrants issued require accounting as derivatives. The Company determined that the warrants were (1) indexed to the Company's own stock and (2) classified in stockholders' equity in accordance with FASB ASC Topic 815, Derivatives and Hedging. As such the Company has concluded the warrants meet the scope exception for determining whether the instruments require accounting as derivatives and should be classified in stockholders' equity

J. Commitments and Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigations, fines and penalties and other sources are recognized when it is probable that a liability has been incurred and the amount of the assessment can be reasonably estimated.

K. Accounting for Share-Based CompensationStock Option Plan

The Group recognizes all employee and nonemployee stock-based compensation as a cost in the consolidated financial statements. For awards with a graded vesting schedule, the Company uses the graded vesting attribution approach to recognize compensation cost over the vesting period.

The Group estimates grant date fair value using the Black-Scholes-Merton option-pricing model and estimates the number of forfeitures expected to occur.

L. Income taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. The Group records valuation allowances to reduce deferred income tax assets to the amount that is more likely than not to be realized.

Notes to the Consolidated Financial Statements

Note 2 - Summary of Significant Accounting Policies (Cont'd)**L. Income taxes(cont'd)**

The Group recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company accounts for interest and penalties related to an underpayment of income taxes as a component of income tax expense.

M. Concentrations of credit risks

Financial instruments that potentially subject the Group to concentrations of credit risk consist principally of cash and cash equivalents. Cash and cash equivalents are held in commercial banks in the U.S. and in Israel. Management believes that the financial institution that holds the Group investments have high credit ratings. The Group has no off-balance-sheet concentration of credit risk such as foreign exchange contracts, option contracts or other foreign hedging arrangements.

N. Employee benefits**Pension**

The Company's liability for severance pay for its Israeli employees is calculated pursuant to Israeli severance pay law based on the most recent salary of the employee multiplied by the number of years of employment, as of the balance sheet date. Those employees are entitled to one month's salary for each year of employment or a portion thereof.

The Group has a defined deposit plan in respect of the Company's obligation to pay the benefit component of provident funds as well as in respect of its employees to whom section 14 of the Dismissal Compensation Law applies. pursuant to the terms of Section 14 of the Israeli Severance Pay Law, 1963, according to which the current deposits in the pension fund and/or with the insurance company exempt the Company from any additional obligation to these employees for whom the said depository payments are made. During the years ended December 31, 2023, and 2022, the Company paid for severance pay for its Israeli employees amounts of NIS 415 thousand (approximately US\$113 thousand) and NIS 461 thousand (approximately US\$144 thousand), respectively.

Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided or upon the actual absence of the employee when the benefit is not accumulated (such as maternity leave).

The employee benefits are classified, for measurement purposes, as short-term benefits or as other long-term benefits depending on when the Group expects the benefits to be wholly settled.

O. Governments grants

The Company records grants received from the Israel Innovation Authority (the "IIA", formerly known as the Office of the Chief Scientist of the Israeli Ministry of Industry and Trade) as a liability, if it is probable that the Company will have to repay the grants received. If it is not probable that the grants will be repaid, the Company records the grants as a reduction to research and development expenses. Royalties paid to the IIA are recognized as a reduction of the above-mentioned liability.

Notes to the Consolidated Financial Statements

Note 2 - Summary of Significant Accounting Policies (Cont'd)**P. Leases**

The Subsidiary is a lessee in several noncancellable operating leases, primarily for transportation. The Company accounts for leases in accordance with Topic 842, Leases. The Company determines if an arrangement is or contains a lease at contract inception. The Company recognizes a right-of-use (ROU) asset and a lease liability at the lease commencement date. For operating leases, the lease liability is initially and subsequently measured at the present value of the unpaid lease payments at the lease commencement date.

Key estimates and judgments include how the Company determines (1) the discount rate it uses to discount the unpaid lease payments to present value, (2) lease term and (3) lease payments.

Operating leases are included in ROU assets and trade and other payables in the consolidated balance sheet.

Topic 842 requires a lessee to discount its unpaid lease payments using the interest rate implicit in the lease or, if that rate cannot be readily determined, its incremental borrowing rate. Generally, the Company cannot determine the interest rate implicit in the lease because it does not have access to the lessor's estimated residual value or the amount of the lessor's deferred initial direct costs. Therefore, the Company generally uses its incremental borrowing rate as the discount rate for the lease. The Company's incremental borrowing rate for a lease is the rate of interest it would have to pay on a collateralized basis to borrow an amount equal to the lease payments under similar terms. Because the Company does not generally borrow on a collateralized basis, it uses the interest rate it pays on its noncollateralized borrowings as an input to deriving an appropriate incremental borrowing rate, adjusted for the amount of the lease payments, the lease term, and the effect on that rate of designating specific collateral with a value equal to the unpaid lease payments for that lease.

Our subsidiary occupies approximately 130 square meters of facilities, under an agreement for shared office space and services that expires upon 90 days' notice by either our subsidiary or the landlord (See also note 18-B4).

Lease payments included in the measurement of the lease liability comprise of the following:

- Fixed payments, including in-substance fixed payments, owed over the lease term (which includes termination penalties the Company would owe if the lease term assumed the Company's exercise of a termination option);
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the lease commencement date.

The Right of Use (ROU) asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for lease payments made at or before the lease commencement date, plus any initial direct costs incurred less any lease incentives received.

Notes to the Consolidated Financial Statements

Note 2 - Summary of Significant Accounting Policies (Cont'd)**P. Leases (Cont'd)**

For operating leases, the ROU asset is subsequently measured throughout the lease term at the carrying amount of the lease liability, plus initial direct costs, plus (minus) any prepaid (accrued) lease payments, less the unamortized balance of lease incentives received. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Variable lease payments associated with the Company's leases are recognized when the event, activity, or circumstance in the lease agreement on which those payments are assessed occurs. Variable lease payments are presented as operating expense in the Company's consolidated statements of income in the same line item as expense arising from fixed lease payments (operating leases) or amortization of the ROU asset (finance leases).

The Company uses the long-lived assets impairment guidance in Accounting Standards Codification ("ASC") Subtopic 360-10, Property, Plant, and Equipment – Overall, to determine whether an ROU asset is impaired, and if so, the amount of the impairment loss to recognize. The Company monitors for events or changes in circumstances that require a reassessment of one of its leases. When a reassessment results in the remeasurement of a lease liability, a corresponding adjustment is made to the carrying amount of the corresponding ROU asset unless doing so would reduce the carrying amount of the ROU asset to an amount less than zero. In that case, the amount of the adjustment that would result in a negative ROU asset balance is recorded in profit or loss. Operating lease ROU assets are presented as operating lease right of use assets on the consolidated balance sheet. The current portion of operating lease liabilities is included in trade and other payables and the long-term portion is presented separately as operating lease liabilities on the consolidated balance sheet.

The Company recognizes the lease payments associated with its leases of motor vehicles as an expense on a straight-line basis over the lease term. Variable lease payments associated with these leases are recognized and presented in the same manner as for all other Company leases.

Q. Stockholders' loans

Shareholders' loans with terms that were amended after the reporting date are considered in determining the classification of debt at the reporting date. Due to agreements reached in 2024 between the shareholders and the Company regarding the repayment date of the loan (see note 8), the shareholders' loans at December 31, 2023 are classified as non-current liabilities.

Notes to the Consolidated Financial Statements
R. New Accounting Pronouncements

In December 2023, the FASB issued Accounting Standards Update No. 2023-09, Income Taxes (Topic 740) Improvements to Income Tax Disclosure. The standard requires to disclose additional information in tax rate reconciliation table about federal, state and foreign income taxes and to provide more details about the reconciling items in some categories. The standard will become effective for fiscal years beginning after December 15, 2024. The Company is currently assessing the impact of the adoption of this standard on its consolidated financial statements.

Note 3 - Cash and Cash Equivalents

	December 31 2023	December 31 2022
	US Dollars (In thousands)	
Cash - NIS	68	166
Cash - US dollars	699	2,836
	<u>767</u>	<u>3,002</u>

Note 4 - Accounts Receivable

	December 31 2023	December 31 2022
	US Dollars (In thousands)	
Prepaid expenses	30	12
Government institutions	40	40
Related parties	11	3
	<u>81</u>	<u>55</u>

Note 5 – Property and Equipment, net

	December 31 2023	December 31 2022
	US Dollars (In thousands)	
Computers and electronics' equipment	45	44
Laboratory equipment	19	18
Furniture and equipment	10	10
Leasehold improvement	19	19
	<u>93</u>	<u>91</u>
Less – accumulated depreciation	<u>(37)</u>	<u>(20)</u>
	<u>56</u>	<u>71</u>

Notes to the Consolidated Financial Statements**Note 6 - Leases**

The Company has six lease contracts for motor vehicles used in its operation. Leases of motor vehicles generally have lease terms of three years which are all classified as operating leases. The contracts expire on various dates, the latest of which is February 2025.

The above operating leases are included in “Right-of-use assets” on the Company’s Consolidated Balance Sheets as of December 31, 2023, and represent the Company’s right to use the underlying asset for the lease term. The Company’s obligations to pay lease payments are included as “Lease liability” on the Company’s Consolidated Balance Sheets as of December 31, 2023. Based on the present value of the lease payments for the remaining lease term of the Company’s existing lease agreements, the Company recognized operating right-of-use assets and operating lease liabilities of approximately US\$170 thousand on January 1, 2022. The Company uses its incremental borrowing yearly rate of 5.8% based on the information available at the commencement date to determine the present value of the lease payments.

During the years ended December 31, 2023, and 2022, the Company recognized expenses of US\$78 thousand and US\$101 thousand from leases of motor vehicles, respectively.

During the years ended December 31, 2023, and 2022, the Company recognized a decrease in right-of-use assets of US\$71 thousand and US\$15 thousand, respectively.

Maturities of lease liabilities under noncancellable leases as of December 31, 2023, are as follows: (US dollars in thousands):

2024	48
2025	2
Total future minimum lease payments	<u>50</u>
Less imputed interest:	<u>(11)</u>
Present value of operating lease liabilities	<u>39</u>

Notes to the Consolidated Financial Statements**Note 7 - Trade and Other Payables**

	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Trade payables	62	65
Accrued expenses	160	132
Payroll and related accruals	98	93
Advance from customer	50	50
Lease liability	39	74
Related Parties	64	83
Other	-	3
	<u>473</u>	<u>500</u>

Note 8 - Stockholders' Loans

- A. In 2015, certain of the Company's stockholders granted loans to the Company to finance its ongoing operation (hereinafter: the "2015 Loans"). These loans bear interest at an annual rate ranging in 2023 and 2022 from 2.90% to 2.42%. Under the original loan terms, the aggregate loan amount is payable to the lenders by the Company only upon the approval of the Company's board of directors that the Company's profits reached an amount of US\$500 thousand and upon such terms and in such installments as shall be determined by the Company's board of directors.

In March 2020, the Company and the lender agreed to amend the terms of the 2015 Loan and the repayment date was extended to December 31, 2023. On March 1, 2024, the Company and the lender agreed to extend the repayment date to December 31, 2025.

As of December 31, 2023, and 2022, the carrying amounts of the 2015 Loans were US\$34 thousand.

In 2017, one of the Company's shareholders provided the Company with a loan to finance its ongoing operation (hereinafter: the "2017 Loan"). This loan bears interest at annual rate ranging in 2023 and 2022 from 2.90% to 2.42% annually. Under the original loan terms, the aggregate loan amount was repayable by the Company upon the closing of an investment in the Company with proceeds greater than US\$500 thousand.

In March 2020, the Company and the lender agreed to amend the terms of the 2017 Loan and the repayment date was extended to December 31, 2023. On March 1, 2024, the Company and the lender agreed to extend the repayment date to December 31, 2025.

As of December 31, 2023, and 2022, the carrying amounts of the 2017 Loan were US\$4 thousand.

Note 8 - Stockholders' Loans (cont'd)**B. Convertible Loan**

On March 6, 2018, certain of the Company's shareholders entered with the Company into a convertible bridge loan agreement (the "2018 CLA").

In accordance with 2018 CLA, the loan bears interest at a rate per annum equal to three percent (3%) compounded and accrued annually, and was originally repayable on December 31, 2018, or later date as determined by the shareholders representing more than 80% of IR. Med, Ltd.'s issued and outstanding shares who has also provided loans with terms similar to the terms of the agreement ("Majority Lenders"), unless earlier converted to shares.

The CLA included certain scenarios in which the loan may be converted ("Optional conversion"), and certain scenarios in which the loan is automatically converted ("Mandatory conversion").

In case of an Exit event, as described in the 2018 CLA, the loan and all accrued interest will be either converted to shares or repaid at 200% of the outstanding amount all as per the Majority lenders decision.

The Company recorded the loan amount as a liability, applying the accounting guidance in ASC 835-30. The embedded derivatives identified by the Company relating to the Exit event and Optional conversion were estimated by the Company as immaterial amounts.

In late 2018, the Majority Lenders agreed to defer the repayment date of the loan to a later date, after December 31, 2019. During 2018 and 2019 the convertible loan was not converted into shares.

In March 2020, the Company and the lenders agreed to amend and restate the 2018 CLA ("the Amended CLA") pursuant to which the lenders waived any and all rights to convert their respective outstanding loan amounts, and the repayment date was set to December 31, 2023. In addition, in case of an Exit event, as described in the Amended CLA, the loan and all accrued interest will be fully repaid immediately following the exit event.

On March 1, 2024, the Company and the lenders agreed to extend the repayment date to December 31, 2025.

Financing expenses recorded in respect of the loan during 2023 and 2022 were US\$3 thousand and US\$5 thousand respectively.

As of December 31, 2023, and 2022, the carrying amounts of the loans were US\$123 thousand and US\$ 124 thousand, respectively.

Notes to the Consolidated Financial Statements

Note 9 - Stockholders' Equity**A. Common Stock**

As of December 31, 2023, the Company has 69,931,056 shares of Common Stock issued and outstanding.

Each share of IR-Med, Inc.'s common stock entitles its holder to one vote, and all shares rank equally as to voting and other matters.

Dividends may be declared and paid on the common stock from funds legally available therefor, if, as and when determined by the Board of Directors.

B. Financing round

- (I) During the first four months of 2021, the Company raised in the aggregate an additional \$3,525,000 net of issuance cost of \$223,000. According to the agreements, the Company shall issue to the Investors 5,507,813 units of its securities (hereinafter: "Unit" and collectively the "Units") at a price per Unit of \$0.64. Each Unit is comprised of two shares of IR-Med, Inc.'s common stock and one warrant to purchase an additional share of IR-Med, Inc.'s common stock, exercisable for a three-year period from the date of issuance at a per share exercise price of \$0.64, subject to certain limited adjustments.
- (II) Between April 2022 through July 2022, the Company entered into a securities purchase agreement with six accredited investors providing for the issuance and sale to such investors of an aggregate of 4,119,321 shares of the Company common stock and warrants for an additional 4,119,321 shares of the Company common stock, exercisable through 2024, at a per share exercise price of \$1.10, subject to certain limited adjustments. The aggregate gross proceeds from the private placement were approximately \$3,625,000.
- (III) On June 12, 2023, the Company entered into a subscription agreement with one investor pursuant to which the Company issued 1,000,000 shares of its common stock at a per share price of \$1.00 and warrants to purchase up to an additional 1,000,000 shares of common stock at a per share exercise price of \$1.40. The warrants expire on the third anniversary from the date of issuance of the warrants to the holder subject to certain limited adjustments. The aggregate gross proceeds from the private placement were approximately \$1,000,000.

Notes to the Consolidated Financial Statements

Note 9 - Stockholders' Equity (cont'd)
C. Share-based compensation

On December 23, 2020, the Group's board of directors approved, and the shareholders adopted a share-based compensation plan ("2020 Incentive Stock Plan") for future grants by the Parent Company. On September 27, 2023, our Board approved a further amendment to the 2020 Incentive Stock Plan to increase the number of shares authorized for issuance of awards under the 2020 Incentive Stock Plan from 16,000,000 shares to an aggregate of 17,500,000 shares of common stock. The holders of a majority of our voting stock approved such an increase.

As of December 31, 2023, the Parent Company awarded to its employees and service providers options to purchase up to 15,544,175 shares of common stock, of which options for 7,821,175 shares were at an exercise price of US\$0.32 per share, options for 7,043,000 shares were at an exercise price of US\$0.58 per share, options for 480,000 shares were at an exercise price of US\$0.01 per share and options for 200,000 shares were at an exercise price of US\$0.64 per share. As of December 31, 2023, options for 12,494,480 shares were vested with weighted average of exercise price of US\$ 0.4, and the remaining balance has a vesting period ranging between one to five years. The options are exercisable for periods ranging between three to 10 years from the vesting date.

Options awarded:

	2023	
	Weighted average of exercise price	Number of options
Outstanding as of beginning of year	\$ 0.4	13,943,842
Granted	\$ 0.58	2,467,000
Cancelled	\$ 0.32	(866,667)
Outstanding as of end of year	\$ 0.42	15,544,175

On June 12, 2022, the Parent Company entered into a consulting agreement for professional services. As part of this agreement, the parent company granted the consultant 2,272 shares at par value per month. As of December 31, 2023, the parent company granted the consultant 34,086 shares at par value.

On August 15, 2022, the Parent Company entered into a consulting agreement for professional services. As part of this agreement, the parent company granted the consultant 88,000 shares at par value.

Notes to the Consolidated Financial Statements

Note 9 - Stockholders' Equity (cont'd)**C. Share-based compensation (cont'd)**

On June 1, 2023, the Parent Company entered into a consulting agreement for professional services. As part of this agreement, the Parent Company will grant the consultant 176,000 shares at par value in four tranches. As of December 31, 2023, the Parent Company granted the consultant 88,000 shares at par value.

The grant was approved following the adoption of the 2020 Incentive Stock Plan by the Parent Company on December 23, 2020, and the adoption of the sub plan (the "Israeli appendix") on April 29, 2021. The Group recorded in the statement of operations a non-cash expense of US\$1,682 thousands and US\$1,330 thousands during the years ended December 31, 2023, and 2022, respectively. As of December 31, 2023, there was US\$ 534 thousand unrecognized compensation cost related to non-vested employees and consultants options. The cost is expected to be recognized over a period of three years.

The stock-based compensation expenses for the years ended December 31, 2023, and 2022 were recognized in the statements of operations as follows:

	Year ended December 31	
	2023	2022
	US Dollars (In thousands)	
Research and development expenses	158	111
Marketing expenses	659	472
General and administrative expenses	865	747
	<u>1,682</u>	<u>1,330</u>

The Company will not be allowed to claim as an expense for tax purposes the amounts charged as stock-based compensation expenses.

The following table sets forth information about the weighted-average fair value of options granted to employees and service providers during the year period ended December 31, 2023, using the Black-Scholes-Merton option-pricing model and the weighted-average assumptions used for such grants:

Notes to the Consolidated Financial Statements

Note 9 - Stockholders' Equity (cont'd)

C. Share-based compensation (cont'd)

	For the years ended	
	December 31 2023	December 31 2022
Dividend yields (see (I) below)	0.0%	0.0%
Share price (in U.S. dollar) (see (II) below)	0.53,0.64	0.53,0.26
Expected volatility (see (III) below)	116%-84%	82.77%-142.57%
Risk-free interest rates (see (IV) below)	3.61%-4.39%	0.18%-4%
Expected life (in years) (see (V) below)	1.5-14.79	1.5-14.79

- I. The Group used 0% as its expected dividend yield, based on historic policies and future plans.
- II. The Company's common stock is quoted on the OTCQB. However, the Company considers its share price as it is traded on OTCQB to not be an appropriate representation of fair value, since it is not traded on an active market. The Company determined that the market is inactive due to low level of activity of the Company's common stock, stale or non-current price quotes and price quotes that vary substantially either over time or among market makers. Consequently, the price of the Company's common stock has been determined based on private placement equity offerings conducted in April 2021, July 2022 and June 2023 consisting of units comprised of shares of common stock and warrants, at a per unit purchase price of \$0.64, \$0.88 and \$1.00, respectively. In order to evaluate the price per share, the warrant value has been deducted from the total unit price.
- III. As the Company is at its early stage of operation, there is not sufficient historical volatility for the expected term of the stock options. Therefore, the Group uses an average historical share price volatility based on an analysis of reported data for a peer group of comparable publicly traded companies which were selected based upon industry similarities.
- IV. The Company determined the risk-free interest rate by using a weighted-average equivalent to the expected term based on the U.S. Treasury yield curve in effect as of the date of grant.
- V. The expected life of the granted options was determined based on the estimated behavior of the grantees; since most of the grantees are executives, the Company assumed that the large majority of the options will be exercised prior to their expiration.

Notes to the Consolidated Financial Statements

Note 10 - Contingent Liabilities and Commitments**A. Israel Innovation Authority**

The Company operates within the framework of the Incubators Program (Directive No. 8.3 of the Ministry of Economy) (“The program”). As part of this plan, 60% of the approved program budget was financed by the IIA and 40% by the shareholders. In return for the participation of the IIA, the Company is required to pay royalties at the rate of 3.5% - 3% of the sales of the developed products linked to the dollar until the repayment date of the full amount of the grants, plus annual interest at the SOFR rate. In addition, the IIA may stipulate any arrangement whereby the Company will be able to transfer the technology or development from Israel.

As of December 31, 2023, the Company’s maximum possible future royalties commitment, subject to future sales of such products and based on grants received from the IIA and not yet repaid, is approximately \$376 thousand (including interest in the amount of approximately \$50 thousand).

For the years ending December 31, 2023, and 2022, no additional IIA grants were obtained.

B. Vehicle Leases

The Company has lease contracts for six motor vehicles used in its operations in Israel. Motor vehicle leases generally have lease terms of three years and require a deposit amount of three-monthly lease payment. As of December 31, 2023, the Company deposited an aggregate of NIS 83,520 (approximately US\$ 23,000) in respect of the vehicle leases.

C. Long term deposits

During 2021 the Company received a bank credit line in the amount of NIS 40,485 (Approximately US\$11,000) and pledged a security in the same amount.

D. Legal claims

On May 29, 2023, a lawsuit was filed against the Company, the Subsidiary and Mr. Aharon Klein (the “Plaintiff”), a Company Director and the Company’s Chief Technology Officer in the Tel Aviv District Court of Israel, by an individual who provided, on part time basis, certain consulting services to the Subsidiary between October 2015 and October 2016, before the acquisition of the Subsidiary by the Company. The suit alleges breach of contract by the defendants based on non-payment of amounts purportedly owed to the Plaintiff in respect of the services rendered, including the market value of the Company’s common stock that the Plaintiff alleges should have been issued to him in respect of services. The suit seeks declaratory judgment that the defendants breached certain agreements with the Plaintiff and claimed damages in the aggregate amount of approximately \$2.1 million based on the current exchange rate between the U.S. Dollar and the Israeli NIS.

The Company records a provision in its financial statements to the extent that it concludes that a contingent liability is probable, and the amount thereof is reasonably estimable. Based upon the status of the case described above, management’s assessments of the likelihood of damages, and the advice of counsel, no provisions have been made regarding the matter disclosed in this note. Litigation outcomes and contingencies are unpredictable, and excessive verdicts can occur.

Accordingly, management’s assessments involve complex judgments about future events and often rely heavily on estimates and assumptions.

Notes to the Consolidated Financial Statements
Note 11 - Research and Development Expenses

	For the years ended	
	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Salaries and related expenses	778	789
Subcontractors	947	824
Materials	55	61
Stock based compensation expenses	158	111
Other expenses	123	100
	<u>2,061</u>	<u>1,885</u>

Note 12 - Marketing Expenses

	For the years ended	
	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Salaries and related expenses	-	88
Professional expenses	153	178
Other expenses	10	21
Stock based compensation expenses	659	472
	<u>822</u>	<u>759</u>

Notes to the Consolidated Financial Statements
Note 13 - General and Administrative Expenses

	For the years ended	
	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Salaries and related expenses	242	360
Professional expenses	683	792
Rent and Maintenance	94	84
Depreciation	17	10
Other expenses	127	125
Stock based compensation expenses	865	747
	<u>2,028</u>	<u>2,118</u>
Total general and administrative expenses	<u>2,028</u>	<u>2,118</u>

Note 14 - Financial Expenses

	For the years ended	
	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Interest (income) expenses, net	(20)	6
Exchange rate loss (gain)	17	(35)
Other	1	1
	<u>(2)</u>	<u>(28)</u>
Total financial income, net	<u>(2)</u>	<u>(28)</u>

Notes to the Consolidated Financial Statements**Note 15 - Loss Per Share**

The calculation of basic and diluted losses per share for the year ended on December 31, 2023, and 2022 was based on the losses attributable to the Company's ordinary stockholders for the year divided by a weighted average number of ordinary shares outstanding. The calculation of basic and diluted losses per share for the years ended on December 31, 2023, and 2022 are as follows:

	For the years ended	
	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Loss attributable to shareholders (\$ in thousands)	(4,909)	(4,734)
Weighted average number of ordinary shares:		
Balance at beginning of year	68,808,970	64,601,649
Effect of shares issued during the year	595,381	2,976,085
Weighted-average shares – basic and dilutive as at end of year	69,404,351	67,577,734
Basic and dilutive loss per share (\$)	(0.07)	(0.07)

As of December 31, 2023, and 2022, options and warrants which were granted by the Group's board of directors were not included in the loss per share computation because all such securities have an anti-dilutive effect for the year. Such securities totaled to 29,774,434 and 27,391,493, respectively.

Note 16 – Income Taxes**A. Corporate income tax rate**

- a) The income tax rates relevant to the Parent company in Nevada for the years 2023 and 2022 was 21%.

The tax rates relevant to the Subsidiary for the years 2023 and 2022 was 23%.

Current taxes for the reported periods are calculated according to the enacted tax rates presented above.

- b) Tax benefits under the Israeli Law for the Encouragement of Capital Investments, 1959 (the "Investments Law").

The Israeli Investments Law applies to Preferred Income derived or accrued in 2011 and thereafter by a Preferred Company.

Notes to the Consolidated Financial Statements**Note 16 – Income Taxes (Cont’d)**

The law provides a uniform and reduced income tax rate for all the Subsidiary’s income entitled to the benefits (“Preferred Income”). Starting from tax year 2017, the tax rate on Preferred Income for a company operating in the same area as the Subsidiary is 7.5%, subject to terms as defined within the Investments law.

B. Deferred tax assets

The following is a summary of the significant components of deferred tax assets:

	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Operating loss carryforwards	1,678	1,118
Research and development costs capitalized for tax purposes	423	341
Payroll and related payables	7	4
Lease liability	9	26
Total deferred tax assets	2,117	1,489
Right of use asset- deferred tax liability	(19)	(35)
Total deferred tax assets, net	2,098	1,454
Valuation allowance for deferred tax assets	(2,098)	(1,454)
Deferred tax assets, net of valuation allowance	-	-

As of December 31, 2023, and 2022, the Company has provided full valuation allowance of US\$ 2,098 thousand and US\$ 1,454 thousand against its deferred tax assets given that it is not more likely than not that it will generate sufficient income for tax purposes to utilize the available deferred tax assets in the foreseeable future.

C. Accounting for uncertainty in income taxes

For the years ended December 31, 2023, 2022, the Company did not have any significant unrecognized tax benefits. In addition, the Company does not expect that the amount of unrecognized tax benefits will change significantly within the next 12 months.

The Company accounts for interest and penalties related to an underpayment of income taxes as a component of income tax expense. For the years ended December 31, 2023 and 2022, no interest and penalties related to income taxes have been accrued.

D. Operating losses carry forwards and valuation allowance

As of December 31, 2023, and 2022, the Company had operating loss carryforwards in the amount of US\$ 7,668 thousand and US\$ 4,825 thousand, respectively. The parent company and its subsidiary can reduce future taxable income with no limitation to the period of use.

Notes to the Consolidated Financial Statements

Note 16 – Income Taxes (Cont'd)

E. Composition of loss from continuing operations before income taxes:

	December 31 2023	December 31 2022
	US Dollars (In thousands)	
Loss from continuing operations before income taxes:		
US	346	283
Israel	4,563	4,451
	<u>4,909</u>	<u>4,734</u>

F. Income tax assessment

As of December 31, 2023, the Subsidiary has tax assessments that are considered as final in Israel due to lapse of statute of limitation period, through tax year 2018. The Parent Company has not been assessed for income tax purposes in the U.S. since its inception and is open to examination by the IRS from the tax year 2019.

G. Reconciliation of the statutory income tax expense (benefit) to actual income tax expense

Reconciliation between the theoretical income tax expense, assuming all income is taxed at the federal statutory income tax rate applicable to income of the Parent Company and the actual income tax expense as reported in the statements of operations is as follows:

	For the years ended	
	December 31 2023	December 31 2022
	US Dollars (In thousands)	
Loss before income taxes as reported in the statements of operations	(4,909)	(4,734)
Statutory tax rate	21%	21%
Theoretical income tax benefit on the above amount at the US federal statutory income tax rate	(1,031)	(994)

Notes to the Consolidated Financial Statements

Note 16 – Income Taxes (Cont'd)

G. Reconciliation of the statutory income tax expense (benefit) to actual income tax expense (cont'd)

Additional tax (tax savings) in respect of:		
Nondeductible expenses	389	332
Differences in tax rates between statutory tax and income tax of the Subsidiary*	(91)	(89)
Change in valuation allowance	644	553
Effect of currency exchange differences	87	121
Other	2	77
Actual taxes on income	-	-

(*) The Subsidiary operates in Israel in a tax jurisdiction with a corporate income tax rate of 23%.

H. Roll forward of valuation allowance

	<u>US Dollars (In thousands)</u>
Balance on January 1, 2022	901
Change in valuation allowance – income tax expenses	553
Balance on December 31, 2022	1,454
Change in valuation allowances - Income tax expense	644
Balance on December 31, 2023	<u>2,098</u>

Notes to the Consolidated Financial Statements**Note 17 - Related Parties Balances and Transactions**

The Group's related parties are seven directors, four officers, one shareholder and two entities controlled by three of the Company's shareholders.

A. Balances with related parties

	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Assets		
Other receivables	<u>11</u>	<u>2</u>
Liabilities		
Payables	22	60
Accrued expenses	31	7
Payroll and related	14	16
Stockholders' loans	161	162

B. Transactions with related parties

	For the years ended	
	December 31	December 31
	2023	2022
	US Dollars (In thousands)	
Subcontractors and professional expenses (1)	347	461
Salaries and related expenses (2)	439	651
Stock based compensation (3)	1459	1,105
Rent and Maintenance (4)	80	51
Interest expenses, see note 8	5	6

- (1) For the years ended December 31, 2023, and 2022, the Company paid to two directors and one shareholder of the Parent Company an aggregate consideration of US\$161 thousand and US\$220 thousand, respectively, in respect of research and development services.

For the years ended December 31, 2023, and 2022, the Company paid to one shareholder of the Parent Company and his relative an aggregate consideration of

Notes to the Consolidated Financial Statements

Note 17 - Related Parties Balances and Transactions (Cont'd)**B. Transactions with related parties (cont'd)**

US\$150 thousand and US\$111 thousand, respectively in respect to consulting services.

For the years ended December 31, 2023, and 2022, the Company paid to the Parent Company non-employee directors an aggregate consideration of US\$36 thousand and US\$130 thousand with respect of their services.

- (2) For the year ended December 31, 2023, the Company paid to four of its officers, salary and related expenses totaled to US\$439 thousand.

For the year ended December 31, 2022, the Company paid to one director of the Parent Company and four of its officers, salary and related expenses totaled to US\$651 thousand, respectively, in respect thereof.

- (3) Following the adoption of the 2020 Incentive Stock Plan by the Parent Company on December 23, 2020, and the adoption of the sub plan (the "Israeli appendix") on April 29, 2021, the Parent Company granted during the year 2023 to its officer and shareholder and his relative 1,636,000 options to purchase shares of Common Stock (See also note 9-C).

The Parent Company granted during the year 2022 to its directors, officers and a shareholder 5,200,000 options to purchase shares of Common Stock (See also note 9-C).

- (4) For the years ended December 31, 2023, and 2022, the Company paid a yearly amount of US\$80 thousand and US\$ 51 to an entity controlled by two of the Company's directors for rent and office services, respectively.

Note 18 – Subsequent Events

During February 2024, as a result of financial difficulties, the Company notified 10 of its 11 employees, including its then-Chief Executive Officer, of the termination of their employment. The effective termination dates vary based on contractual notice periods, which range between March 22, 2024, and April 22, 2024. In addition, the Board determined to limit its operations until such time as sufficient funds that can support the Company's operations have been identified. During March 2024 following the approval of the IIA plan, the company canceled the termination notice of two employees.

On January 25, 2024, the Israel Innovation Authority (the "IIA") approved a program to develop a device for the early detection of diabetic foot ulcers among diabetic patients, with a project budget of NIS 3,761,978 (approximately US\$ 1,030,000) which includes an amount equal to 50% grant of the total budget provided at the time of the grant, disbursed in installments over the course of 13 months, in accordance with the project's progress. In consideration for the grant by the IIA, the subsidiary is required to pay royalties at the rate of 3%-5% from the total sales until the repayment date of the full amount of the grant, plus annual interest at the SOFR rate. In addition, the IIA must approve any arrangement whereby the Company seeks to transfer the technology relating to the project, or its development, from Israel.

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

As of April 1, 2024, IR-Med, Inc. ("IR-Med," "we," "us" or the "Company") had one class of securities registered under Section 12(g) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): Common Stock, \$0.001 par value per share ("Common Stock"). Each of the Company's securities registered under Section 12(g) of the Exchange Act are quoted on the OTC Market tier, QB.

General

As of the date of this Annual Report on Form 10-K, our authorized capital stock consists of 250,000,000 shares of Common Stock. As of April 1, 2024, there were 69,931,056 shares of our common stock outstanding.

In addition, as of the date of this Annual Report on Form 10-K, we had issued and outstanding:

- options to purchase 15,544,175 shares of our Common Stock, at a weighted average exercise price of \$0.42 per share; and
- warrants to purchase 14,230,259 shares of our Common Stock, at a weighted average exercise price of \$0.82 per share.

The following summary description of our capital stock is based on the provisions of our certificate of incorporation and bylaws, the applicable provisions of applicable law, including the provision of Chapters 78 and 92A of the Nevada Revised Statutes or NRS.

Common Stock

Each share of Common Stock entitles the holder to one vote on all matters submitted to a vote of the stockholders including the election of directors. Except as otherwise required by law the holders of our Common Stock possess all voting power. According to our bylaws, when a quorum is present or represented at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall be sufficient to elect members of the Board of Directors or to decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the Certificate of Incorporation, a different vote is required in which case such express provision shall govern and control the decision of such question. Our bylaws provide that stockholders holding at least a majority of the shares entitled to vote, represented in person or by proxy, constitute a quorum at the meeting of our stockholders. Our bylaws also provide that any action which may be taken by the vote of the stockholders at a meeting may be taken without a meeting if authorized by the written consent of stockholders holding at least a majority of the voting power, unless the provisions of the statutes or of the Articles of Incorporation require a greater proportion of voting power to authorize such action in which case such greater proportion of written consents shall be required.

Our certificate of incorporation and bylaws do not provide for cumulative voting in the election of directors. Because the holders of our common stock do not have cumulative voting rights and directors are generally to be elected by a majority of the votes cast with respect to the directors at any meeting of our stockholders for the election of directors, holders of more than fifty percent, and in some cases less than 50%, of the issued and outstanding shares of our common stock can elect all of our directors.

Provisions of our Restated Certificate of Incorporation and Restated Bylaws

Classified board of directors. Our restated certificate of incorporation and restated bylaws provide that our board of directors is classified into three classes of directors, each with staggered three-year terms. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our restated bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions might also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Amendment of Bylaws. Our bylaws provide that our board of directors may amend our bylaws by a majority vote of our board of directors including any bylaws adopted by our stockholders, but our stockholders may from time to time specify particular provisions of these bylaws, which must not be amended by our board of directors. Our current bylaws were adopted by our board of directors. Therefore, our board of directors can amend our bylaws to make changes to the provisions relating to the quorum requirement and votes requirements to the extent permitted by Delaware Law.

Dividend Rights. The holders of our common stock are entitled to receive such dividends as may be declared by our board of directors out of funds legally available for dividends. Our board of directors is not obligated to declare a dividend. Any future dividends will be subject to the discretion of our board of directors and will depend upon, among other things, future earnings, the operating and financial condition of our company, its capital requirements, general business conditions and other pertinent factors. We do not anticipate that dividends will be paid in the foreseeable future.

Miscellaneous Rights and Provisions. In the event of our liquidation or dissolution, whether voluntary or involuntary, each share of our common stock is entitled to share ratably in any assets available for distribution to holders of our common stock after satisfaction of all liabilities.

Our common stock is not convertible or redeemable and has no preemptive, subscription or conversion rights. There are no conversions, redemption, sinking fund or similar provisions regarding our common stock.

Our common stock, after the fixed consideration thereof has been paid or performed, are not subject to assessment, and the holders of our common stock are not individually liable for the debts and liabilities of our company.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is VStock Transfer Company located at 18 Lafayette Pl, Woodmere, NY 11598.



**AMENDMENT NO. 1 TO
COMMON STOCK PURCHASE WARRANT**

This AMENDMENT NO. 1 TO COMMON STOCK PURCHASE WARRANT (this "Amendment") is entered into as of December 20, 2023, by and between IR-MED, INC., a corporation organized under the laws of the State of Nevada (the "Company"), and [] (the "Holder").

WHEREAS, the Holder is the holder of a Common Stock Purchase Warrant, issued as of [] to purchase [] shares of common stock of the Company, (the "Original Warrant");

WHEREAS, the Company and the Holder desire to amend the Original Warrant as set forth in this Amendment.

NOW, THEREFORE, in consideration of the mutual agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, the Company and the Holder hereby agree as follows:

1. Amendment to Expiration Date. The definition of Expiration Date in the Original Warrant is hereby amended to reflect that the Original Warrant's Expiration Date shall now be June 30, 2025.

2. No Further Amendment. Except as amended by this Amendment, the Original Warrant remains unaltered and shall remain in full force and effect.

3. Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Amendment shall be determined in accordance with the provisions of that certain Subscription Agreement dated as of [] between the Company and the Holder.

4. Counterparts. This Amendment may be executed in any number of counterparts, each of which will be deemed an original and all of which together will constitute one and the same instrument. Signatures delivered by facsimile, electronic mail (including as a PDF file) or other transmission method shall be deemed to be original signatures, shall be valid and binding, and, upon delivery, shall constitute due execution of this Amendment.

(Signature page follows)

Yahalom 20, Z.H.R Industrial Zone
PO Box 143, Rosh Pina, Israel 1231400
Tel: (+972) 04-6555054 Fax: (+972) 04-6104976 www.ir-medical.com

Confidential
Page 1 of 2



IN WITNESS WHEREOF, each of the Company and the Holder has caused this Amendment to be executed by its officer thereunto duly authorized as of the date first above indicated.

COMPANY

IR-Med, Inc.

By:

Name:

Title:

HOLDER

By:

Name:

Title:

Yahalom 20, Z.H.R Industrial Zone
PO Box 143, Rosh Pina, Israel 1231400
Tel: (+972) 04-6555054 Fax: (+972) 04-6104976 www.ir-medical.com

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Page 2 of 2

AMENDMENT TO LOAN AGREEMENT

This AMENDMENT TO THE LOAN AGREEMENT (this "Amendment") is made as of this 1st day of January 2024 (the "Effective Date"), by and between **IR. Med Ltd.** an Israeli company (the "Company") and the individual listed in Exhibit A of this Amendment (the "Lender"). *Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Original Loan Agreement (as hereinafter defined).*

WHEREAS, the Company and the Lender are parties to that certain loan agreement, dated as of January 21, 2015 (the "Original Loan Agreement"), pursuant to which the Lender agreed to make a certain loan (the "Loan") to the Company in the principal amount of NIS 9,951; and

WHEREAS, the Company and the Lender desire to amend the Original Loan Agreement on the terms and conditions set forth herein.

NOW, THEREFORE, it is agreed by and between the Company and the Lender as follows:

1. Loan Agreement Amendment. Section 2 of the Loan Agreement is hereby deleted in its entirety and replaced with the following:
 2. The Loan Amount and accrued and unpaid interest hereunder, if any, shall be payable on December 31, 2025, or such later date as may be agreed to in writing by the Company in the Lender (the "**Repayment Date**").
 2. Miscellaneous.
 - 2.1. This Amendment shall be governed by and construed in accordance with the laws of the State of Israel, excluding the body of law pertaining to conflict of law. Any disputes arising under or in relation to this Amendment shall be resolved exclusively by the competent courts of Tel-Aviv.
 - 2.2. Except as otherwise expressly limited herein, the provisions hereof shall be to the benefit of, and be binding upon, the successors, assigns, heirs, executors, and administrators of the parties hereto. None of the rights, privileges, or obligations set forth in, arising under, or created by this Amendment may be assigned or transferred by the Company without the prior consent in writing of the Lender.
 - 2.3. This Amendment constitutes the full and entire understanding and agreement between the parties with regard to the subject matter hereof and thereof, provided however that the Loan Agreement shall continue to be binding upon the parties' and be in full force and effect, subject to the changes herein.
 - 2.4. Any term of this Amendment may be amended, and the observance of any term hereof may be waived (either prospectively or retroactively and either generally or in a particular instance) only by the execution of a written amendment to this Amendment to be signed by the parties hereto.
-

2.5. All notices and other communications required or permitted hereunder to be given to a party to this Amendment shall be in writing and shall be faxed, emailed or mailed by registered or certified mail, postage prepaid, or otherwise delivered by hand or by messenger, to the following addresses, or such other address with respect to a party as such party shall notify each other party in writing as above provided: (i) if to the Lender, to the addresses set forth in the preamble, and (ii) if to the Company, ZHR Industrial Zone, Rosh Pina, Israel, Email: oded@bashanti.com. Any notice sent in accordance with this Section shall be effective (i) if mailed, five (5) business days after mailing, (ii) if sent by messenger, upon delivery, and (iii) if sent via fax or email, upon transmission and electronic confirmation of receipt or if transmitted and received on a non-business day, on the first business day following transmission and electronic confirmation of receipt.

2.6. No delay or omission to exercise any right, power, or remedy accruing to any party upon any breach or default under this Amendment, shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

2.7. If any provision of this Amendment is held by a court of competent jurisdiction to be unenforceable under applicable law, then such provision shall be excluded from this Amendment and the remainder of this Amendment shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms, provided, however, that in such event this Amendment shall be interpreted so as to give effect, to the greatest extent consistent with and permitted by applicable law, to the meaning and intention of the excluded provision as determined by such court of competent jurisdiction.

2.8. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original and enforceable against the parties actually executing such counterpart, and all of which together shall constitute one and the same instrument. Signatures by facsimile or signatures which have been scanned and transmitted by electronic mail shall be deemed valid and binding for all purposes.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed as of the day and year first above written.

Company:

IR. Med Ltd.

By: /s/ Sharon Levkoviz

Name: Sharon Levkoviz

Title: Chief Financial Officer

Lender:

Aharon Klein,

By: /s/ Aharon Klein

Name: Aharon Klein

Exhibit A

Name

ID

Address

Aharon Klein

058673815

AMENDMENT TO LOAN AGREEMENT

This AMENDMENT TO THE LOAN AGREEMENT (this "Amendment") is made as of this 1st day of January 2024 (the "Effective Date"), by and between **IR. Med Ltd.** an Israeli company (the "Company") and the individual listed in Exhibit A of this Amendment (the "Lender"). *Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Original Loan Agreement (as hereinafter defined).*

WHEREAS, the Company and the Lender are parties to that certain loan agreement, dated as of January 21, 2015 (the "Original Loan Agreement"), pursuant to which the Lender agreed to make a certain loan (the "Loan") to the Company in the principal amount of NIS 200,003; and

WHEREAS, the Company and the Lender desire to amend the Original Loan Agreement on the terms and conditions set forth herein.

NOW, THEREFORE, it is agreed by and between the Company and the Lender as follows:

1. Loan Agreement Amendment. Section 2 of the Loan Agreement is hereby deleted in its entirety and replaced with the following:
 2. The Loan Amount and accrued and unpaid interest hereunder, if any, shall be payable on December 31, 2025, or such later date as may be agreed to in writing by the Company in the Lender (the "**Repayment Date**").
 2. Miscellaneous.
 - 2.1. This Amendment shall be governed by and construed in accordance with the laws of the State of Israel, excluding the body of law pertaining to conflict of law. Any disputes arising under or in relation to this Amendment shall be resolved exclusively by the competent courts of Tel-Aviv.
 - 2.2. Except as otherwise expressly limited herein, the provisions hereof shall be to the benefit of, and be binding upon, the successors, assigns, heirs, executors, and administrators of the parties hereto. None of the rights, privileges, or obligations set forth in, arising under, or created by this Amendment may be assigned or transferred by the Company without the prior consent in writing of the Lender.
 - 2.3. This Amendment constitutes the full and entire understanding and agreement between the parties with regard to the subject matter hereof and thereof, provided however that the Loan Agreement shall continue to be binding upon the parties' and be in full force and effect, subject to the changes herein.
 - 2.4. Any term of this Amendment may be amended, and the observance of any term hereof may be waived (either prospectively or retroactively and either generally or in a particular instance) only by the execution of a written amendment to this Amendment to be signed by the parties hereto.
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2.5. All notices and other communications required or permitted hereunder to be given to a party to this Amendment shall be in writing and shall be faxed, emailed or mailed by registered or certified mail, postage prepaid, or otherwise delivered by hand or by messenger, to the following addresses, or such other address with respect to a party as such party shall notify each other party in writing as above provided: (i) if to the Lender, to the addresses set forth in the preamble, and (ii) if to the Company, ZHR Industrial Zone, Rosh Pina, Israel, Email: oded@bashanti.com. Any notice sent in accordance with this Section shall be effective (i) if mailed, five (5) business days after mailing, (ii) if sent by messenger, upon delivery, and (iii) if sent via fax or email, upon transmission and electronic confirmation of receipt or if transmitted and received on a non-business day, on the first business day following transmission and electronic confirmation of receipt.

2.6. No delay or omission to exercise any right, power, or remedy accruing to any party upon any breach or default under this Amendment, shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

2.7. If any provision of this Amendment is held by a court of competent jurisdiction to be unenforceable under applicable law, then such provision shall be excluded from this Amendment and the remainder of this Amendment shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms, provided, however, that in such event this Amendment shall be interpreted so as to give effect, to the greatest extent consistent with and permitted by applicable law, to the meaning and intention of the excluded provision as determined by such court of competent jurisdiction.

2.8. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original and enforceable against the parties actually executing such counterpart, and all of which together shall constitute one and the same instrument. Signatures by facsimile or signatures which have been scanned and transmitted by electronic mail shall be deemed valid and binding for all purposes.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed as of the day and year first above written.

Company:

IR. Med Ltd.

By: /s/ Sharon Levkoviz

Name: Sharon Levkoviz

Title: Chief Financial Officer

Lender:

Yaniv Cohen,

By: /s/ Yaniv Cohen

Name: Yaniv Cohen

Exhibit A

Name

ID

Address

Yaniv Cohen

AMENDMENT TO LOAN AGREEMENT

This AMENDMENT TO THE LOAN AGREEMENT (this "Amendment") is made as of this 1st day of January 2024 (the "Effective Date"), by and between **IR. Med Ltd.** an Israeli company (the "Company") and the individual listed in Exhibit A of this Amendment (the "Lender"). *Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Original Loan Agreement (as hereinafter defined).*

WHEREAS, the Company and the Lender are parties to that certain loan agreement, dated as of January 1, 2017 (the "Original Loan Agreement"), pursuant to which the Lender agreed to make a certain loan (the "Loan") to the Company in the principal amount of NIS 144,000; and

WHEREAS, the Company and the Lender desire to amend the Original Loan Agreement on the terms and conditions set forth herein.

NOW, THEREFORE, it is agreed by and between the Company and the Lender as follows:

1. Loan Agreement Amendment. Section 2 of the Loan Agreement is hereby deleted in its entirety and replaced with the following:
 2. The Loan Amount and accrued and unpaid interest hereunder, if any, shall be payable on December 31, 2025, or such later date as may be agreed to in writing by the Company in the Lender (the "**Repayment Date**").
 2. Miscellaneous.
 - 2.1. This Amendment shall be governed by and construed in accordance with the laws of the State of Israel, excluding the body of law pertaining to conflict of law. Any disputes arising under or in relation to this Amendment shall be resolved exclusively by the competent courts of Tel-Aviv.
 - 2.2. Except as otherwise expressly limited herein, the provisions hereof shall be to the benefit of, and be binding upon, the successors, assigns, heirs, executors, and administrators of the parties hereto. None of the rights, privileges, or obligations set forth in, arising under, or created by this Amendment may be assigned or transferred by the Company without the prior consent in writing of the Lender.
 - 2.3. This Amendment constitutes the full and entire understanding and agreement between the parties with regard to the subject matter hereof and thereof, provided however that the Loan Agreement shall continue to be binding upon the parties' and be in full force and effect, subject to the changes herein.
 - 2.4. Any term of this Amendment may be amended, and the observance of any term hereof may be waived (either prospectively or retroactively and either generally or in a particular instance) only by the execution of a written amendment to this Amendment to be signed by the parties hereto.
-

2.5. All notices and other communications required or permitted hereunder to be given to a party to this Amendment shall be in writing and shall be faxed, emailed or mailed by registered or certified mail, postage prepaid, or otherwise delivered by hand or by messenger, to the following addresses, or such other address with respect to a party as such party shall notify each other party in writing as above provided: (i) if to the Lender, to the addresses set forth in the preamble, and (ii) if to the Company, ZHR Industrial Zone, Rosh Pina, Israel, Email: oded@bashanti.com. Any notice sent in accordance with this Section shall be effective (i) if mailed, five (5) business days after mailing, (ii) if sent by messenger, upon delivery, and (iii) if sent via fax or email, upon transmission and electronic confirmation of receipt or if transmitted and received on a non-business day, on the first business day following transmission and electronic confirmation of receipt.

2.6. No delay or omission to exercise any right, power, or remedy accruing to any party upon any breach or default under this Amendment, shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

2.7. If any provision of this Amendment is held by a court of competent jurisdiction to be unenforceable under applicable law, then such provision shall be excluded from this Amendment and the remainder of this Amendment shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms, provided, however, that in such event this Amendment shall be interpreted so as to give effect, to the greatest extent consistent with and permitted by applicable law, to the meaning and intention of the excluded provision as determined by such court of competent jurisdiction.

2.8. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original and enforceable against the parties actually executing such counterpart, and all of which together shall constitute one and the same instrument. Signatures by facsimile or signatures which have been scanned and transmitted by electronic mail shall be deemed valid and binding for all purposes.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed as of the day and year first above written.

Company:

IR. Med Ltd.

By: /s/ Sharon Levkoviz

Name: Sharon Levkoviz

Title: Chief Financial Officer

Lender:

Yaniv Cohen,

By: /s/ Yaniv Cohen

Name: Yaniv Cohen

Exhibit A

Name

ID

Address

Yaniv Cohen

THIRD AMENDMENT TO LOAN AGREEMENT

This THIRD AMENDMENT TO THE SHARHOLDER LOAN AGREEMENT (this "Amendment") is made as of this 1st day of January 2024 (the "Effective Date"), by and between **IR. Med Ltd.** an Israeli company (the "Company") and the undersigned lenders (each a "Lender" and collectively, the "Lenders"). *Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Loan Agreement (as hereinafter defined).*

WHEREAS, the Company and the Lenders are parties to that certain convertible loan agreement, dated as of March 6, 2018 (the "Original Loan Agreement"), as amended by certain amendments to the Original Loan Agreement, dated March 31, 2020 and July 20, 2020 (collectively, the "Loan Agreement"), pursuant to which the Lenders agreed to make a certain loan (the "Loan") to the Company in the principal amount of NIS 378,896; and

WHEREAS, the Company and the Lenders desire to further amend the Loan Agreement on the terms and conditions set forth herein.

NOW, THEREFORE, it is agreed by and between the Company and the Lenders as follows:

1. Loan Agreement Amendment. Section 2.2 of the Loan Agreement is hereby deleted in its entirety and replaced with the following:

2.2 The Outstanding Loan Amount and accrued and unpaid interest hereunder, if any, shall be payable on December 31, 2025, or such later date as may be agreed to in writing by the Company in the Lenders (the "**Repayment Date**").

2. Miscellaneous.

2.1. This Amendment shall be governed by and construed in accordance with the laws of the State of Israel, excluding the body of law pertaining to conflict of law. Any disputes arising under or in relation to this Amendment shall be resolved exclusively by the competent courts of Tel-Aviv.

2.2. Except as otherwise expressly limited herein, the provisions hereof shall be to the benefit of, and be binding upon, the successors, assigns, heirs, executors, and administrators of the parties hereto. None of the rights, privileges, or obligations set forth in, arising under, or created by this Amendment may be assigned or transferred by the Company without the prior consent in writing of the Lender.

2.3. This Amendment constitutes the full and entire understanding and agreement between the parties with regard to the subject matter hereof and thereof, provided however that the Loan Agreement shall continue to be binding upon the parties' and be in full force and effect, subject to the changes herein.

2.4. Any term of this Amendment may be amended, and the observance of any term hereof may be waived (either prospectively or retroactively and either generally or in a particular instance) only by the execution of a written amendment to this Amendment to be signed by the parties hereto.

2.5. All notices and other communications required or permitted hereunder to be given to a party to this Amendment shall be in writing and shall be faxed, emailed or mailed by registered or certified mail, postage prepaid, or otherwise delivered by hand or by messenger, to the following addresses, or such other address with respect to a party as such party shall notify each other party in writing as above provided: (i) if to the Lender, to the addresses set forth in the preamble, and (ii) if to the Company, ZHR Industrial Zone, Rosh Pina, Israel, Email: oded@bashanti.com. Any notice sent in accordance with this Section shall be effective (i) if mailed, five (5) business days after mailing, (ii) if sent by messenger, upon delivery, and (iii) if sent via fax or email, upon transmission and electronic confirmation of receipt or if transmitted and received on a non-business day, on the first business day following transmission and electronic confirmation of receipt.

2.6. No delay or omission to exercise any right, power, or remedy accruing to any party upon any breach or default under this Amendment, shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

2.7. If any provision of this Amendment is held by a court of competent jurisdiction to be unenforceable under applicable law, then such provision shall be excluded from this Amendment and the remainder of this Amendment shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms, provided, however, that in such event this Amendment shall be interpreted so as to give effect, to the greatest extent consistent with and permitted by applicable law, to the meaning and intention of the excluded provision as determined by such court of competent jurisdiction.

2.8. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original and enforceable against the parties actually executing such counterpart, and all of which together shall constitute one and the same instrument. Signatures by facsimile or signatures which have been scanned and transmitted by electronic mail shall be deemed valid and binding for all purposes.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed as of the day and year first above written.

Company:

IR. Med Ltd.

By: /s/ Sharon Levkoviz

Name: Sharon Levkoviz

Title: Chief Financial Officer

[Signatures continue on the following page]

[Signature Page to Third Amendment to Loan Agreement]

Lenders:

Med2bwell Ltd.,

By: /s/ Med2bwell Ltd.

Name: Med2bwell Ltd.

Aharon Klein,

By: /s/ Aharon Klein

Name: Aharon Klein

Liat Electronics Ltd.,

By: /s/ David Levy

Name: David Levy

Title: Chief Executive Officer

Yaniv Cohen,

By: /s/ Yaniv Cohen

Name: Yaniv Cohen

[Signature Page to Third Amendment to Loan Agreement]

IR-Med, Inc.

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Aharon Klein, certify that:

1. I have reviewed this annual report on Form 10-K of IR-Med, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: */s/ Aharon Klein*

Aharon Klein, Interim Chief Executive Officer

Date: April 1, 2024

IR-Med, Inc.

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Sharon Levkoviz, certify that:

1. I have reviewed this annual report on Form 10-K of IR-Med, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the registrant's Board of Directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ Sharon Levkoviz

Sharon Levkoviz, Chief Financial Officer

Date: April 1, 2024

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Aharon Klein, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the annual report of IR-Med, Inc. on Form 10-K for the year ended December 31, 2023 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such annual report on Form 10-K fairly presents in all material respects the financial condition and results of operations of IR-Med, Inc. as of and for the year ended December 31, 2023. This written statement is being furnished to the Securities and Exchange Commission as an exhibit accompanying such annual report and shall not be deemed filed pursuant to the Securities Exchange Act of 1934.

By: /s/ Aharon Klein

Aharon Klein, Interim Chief Executive Officer

Date: April 1, 2024

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Sharon Levkoviz, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the annual report of IR-Med, Inc. on Form 10-K for the year ended December 31, 2023 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such annual report on Form 10-K fairly presents in all material respects the financial condition and results of operations of IR-Med, Inc. as of and for the year ended December 31, 2023. This written statement is being furnished to the Securities and Exchange Commission as an exhibit accompanying such annual report and shall not be deemed filed pursuant to the Securities Exchange Act of 1934.

By: /s/ Sharon Levkoviz

Sharon Levkoviz, Chief Financial Officer

Date: April 1, 2024
