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

Form 20-F

□ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

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

For the fiscal year ended December 31, 2022

OR

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

OR

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

For the transition period from _____ to _____

Commission File No. 333-206723

P.V. NANO CELL LTD.
(Exact name of Registrant as specified in its charter)

N/A
(Translation of the Registrant's name into English)

State of Israel
(Jurisdiction of incorporation or organization)

8 Hamasger Street, Migdal Ha'Emek, Israel 2310102
(Address of principal executive offices)

Avi Magid
Chief Executive Officer
8 Hamasger Street
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Securities registered or to be registered pursuant to Section 12(b) of the Act: None.

Securities registered or to be registered pursuant to Section 12(g) of the Act: None.

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Ordinary Shares, nominal value NIS 0.01 per share

Indicate the number of outstanding ordinary shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report **147,134,792 ordinary shares, nominal value NIS 0.01 per share, as of December 31, 2022.**

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

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. **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 a 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). **Yes ☒ No ☐**

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

Large accelerated filer ☐	**Accelerated filer ☐**	**Non-accelerated filer ☒** **Emerging growth company ☐**

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark 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 which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☒	**International Financial Reporting Standards as issued by the International Accounting Standards Board ☐**	**Other ☐**

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the Registrant has elected to follow**: Item 17 ☐ Item 18 ☐**

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act)**. Yes ☐ No ☒**

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ABOUT THIS ANNUAL REPORT

All references to "we", "us", "our", "the Company", "PV Nano", "our company" and "our Company", in this Annual Report on Form 20-F, or our annual report, are to P.V. Nano Cell Ltd., unless the context otherwise requires. All references to "Group" in this annual report on Form 20-F, are to the Company and its direct and indirect subsidiaries, unless the context otherwise requires. All references to "shares", "ordinary shares" or "our ordinary shares" are to our ordinary shares, NIS 0.01 nominal value per share. All references to "Israel" are to the State of Israel. "U.S. GAAP" means the generally accepted accounting principles in the United States. Unless otherwise stated, all of our financial information presented in this annual report has been prepared in accordance with U.S. GAAP. Any discrepancies in any table between totals and sums of the amounts listed are due to rounding. Unless otherwise indicated, or the context otherwise requires, references in this annual report to financial and operational data for a particular year refer to the fiscal year of our company ended December 31 of that year.

Our reporting currency and financial currency is the U.S. dollar. In this annual report on Form 20-F, "NIS" means New Israeli Shekel, and "$," "US$" and "U.S. dollars" mean United States dollars. Unless stated otherwise, U.S. dollar translation of NIS amounts presented in this annual report are translated using the rate of $1.00 =NIS 3.519, the exchange rate published by the Bank of Israel on December 31, 2022.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report on Form 20-F contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that involve risks and uncertainties. All statements other than statements of historical facts contained in this annual report on Form 20-F are forward-looking statements. In some cases, you can identify forward-looking statements by words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "seek," "should," "will," "would," or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- the potential market opportunities for commercializing our current and planned products;
- our ability to raise the capital needed to realize exploit market opportunities;
- our going concern qualification in our consolidated financial statements for the year ended December 31, 2022 and its impact on our capital raising efforts;
- our expectations and beliefs regarding the technological advantages and potential market size for our current and planned products;
- estimates of our expenses, future revenue, capital requirements, and our needs for additional financing;
- our ability to develop and advance our current and planned products;
- the implementation of our business model and strategic plans for our business and products;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our current and planned products;
- our ability to maintain and establish collaborations or obtain additional funding;
- our financial performance; and
- developments and projections relating to our competitors and our industry.

Any forward-looking statements in this annual report on Form 20-F reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Item 3 D. — Risk Factors" and elsewhere in this annual report on Form 20-F. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This annual report on Form 20-F also contains estimates, projections, and other information concerning our industry, our business, and the markets for our products, including data regarding the estimated size of those markets. Information that is based on estimates, forecasts, projections, market research, or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from reports, research surveys, studies, and similar data prepared by market research firms and other third parties, industry and general publications, government data and similar sources.

PART I

ITEM 1. Identity of Directors, Senior Management and Advisers.

Not applicable.

ITEM 2. Offer Statistics and Expected Timetable.

Not applicable.

ITEM 3. Key Information.

A. [Reserved].

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Our business faces significant risks. You should carefully consider all of the information set forth in this annual report and in our other filings with the United States Securities and Exchange Commission (the "SEC"), including the following risk factors which we face and which are faced by our industry. Our business, financial condition and results of operations could be materially and adversely affected by any of these risks. In that event, the trading price of our ordinary shares would likely decline and you might lose all or part of your investment. This report also contains forward-looking statements that involve risks and uncertainties. Our results could materially differ from those anticipated in these forward-looking statements, as a result of certain important factors including the risks described below and elsewhere in this report and our other SEC filings. See "Cautionary Note Regarding Forward-Looking Statements" on page ii.

Risk Factors Summary

Risks Related to Our Financial Position and Capital Requirements

- We have a relatively limited operating history on which to assess our business, have incurred significant losses since our inception, and anticipate that we will continue to incur significant losses for the foreseeable future.
- Our history of net losses has raised substantial doubt regarding our ability to continue as a going concern. If we do not continue as a going concern, investors could lose their entire investment.
- We will need significant additional capital on an immediate basis, which we may be unable to obtain.

Risks Related to Our Business

- We have generated only minimal revenue from product sales and may never be profitable.
- Our failure to complete the development of our technology and introduce improved Sicrys™ ink and paste formulations, may adversely affect our ability to successfully commercialize our products and technologies.
- If our conductive inks and pastes fail to achieve and sustain sufficient market acceptance or if market penetration occurs more slowly than expected, our future revenues will be adversely affected.
- We believe that our future success depends on our ability to deliver products and services that meet changing technology and customer needs.
- We currently have minimal marketing and sales capabilities. If we are unable to establish significant sales and marketing capabilities or enter into agreements with third parties to market and sell our products once development of our technology for mass production is completed, we may be unable to generate significant revenue.
- Our ability to grow our business successfully depends, among other things, on our ability to develop and implement our production and operating infrastructure in a way that would effectively support our growth in our target markets.
- We are subject to a multitude of manufacturing risks, any of which could substantially increase our costs and limit supply of our products and technologies.

- We are subject to risks resulting from fluctuations in the price of silver and other raw materials.

- Our business involves the use of hazardous materials, and we must comply with environmental, health and safety laws and regulations, which can be expensive and restrict how we do business, and if we fail to comply with such laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

- We face competition in the markets in which we operate and the possibility that our competitors may develop products that are similar to, more advanced than, or more effective than ours, which may adversely affect our financial condition and our ability to successfully commercialize our products and technologies.

- International expansion of our business exposes us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of Israel.

- The health effects of nanotechnology are unknown.

- Our future success depends in part on our ability to retain our key management personnel and to attract, retain, and motivate other qualified personnel.

- We may not be successful in our efforts to identify, license, or discover additional products and technologies.

- Environmental, social and corporate governance ("ESG") issues, including those related to climate change and sustainability, may have an adverse effect on our business, financial condition and results of operations and damage our reputation.

- Our business, operating results and growth rates may be adversely affected by current or future unfavorable economic and market conditions and adverse developments with respect to financial institutions and associated liquidity risk.

- A pandemic, epidemic or outbreak of an infectious disease, such as COVID-19, may materially and adversely affect our business, financial condition and operating results.

Risks Related to Our Intellectual Property

- If we are unable to obtain and maintain effective patent rights for our products and technologies or any future products and technologies, we may not be able to compete effectively in our markets.

- If we are unable to maintain effective proprietary rights for our products and technologies or any future products and technologies, we may not be able to compete effectively in our markets.

- Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

- We may become subject to claims of intellectual property infringement by third parties or may be required to indemnify our distributors or other third parties against such claims, which, regardless of their merit, could result in litigation, distract our management and materially adversely affect our business, results of operations or financial condition.

- We may not be successful in obtaining or maintaining necessary rights to our products and technologies through intellectual property rights in-licenses.

- We may not be able to fully enforce covenants not to compete with our key employees, and therefore we may be unable to prevent our competitors from benefiting from the expertise of such employees.

- We may not be able to protect our intellectual property rights throughout the world.

Risks Related to Our Operations in Israel

- Our headquarters and other significant operations are located in Israel and, therefore, our results may be adversely affected by political, economic and military instability in Israel.

- The Israeli government grants we have received for research and development expenditures restrict our ability to manufacture products and transfer technologies outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received together with interest and penalties.

- Exchange rate fluctuations, primarily between the U.S. dollar and the NIS currencies, and inflation may negatively affect our results of operations.

- Provisions of Israeli law and our Amended and Restated Articles of Association ("Articles of Association"), may delay, prevent or make undesirable an acquisition of all or a significant portion of our shares or assets.

- The tax benefits that are available to us as a preferred enterprise require us to continue to meet various conditions and may be terminated or reduced in the future, which could increase our costs and taxes.

- It may be difficult to enforce a judgment of a United States court against us and our officers and directors and the Israeli experts named in this annual report on Form 20-F located in Israel or the United States, to assert United States securities laws claims in Israel or to serve process on our officers and directors and these experts.

Risks Related to Our Ordinary Shares

- Our U.S. investors may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

- Your rights and responsibilities as a shareholder will be governed by Israeli law which differs in some material respects from the rights and responsibilities of shareholders of U.S. companies.

- We have never paid cash dividends on our share capital, and we do not anticipate paying any cash dividends in the foreseeable future.

- Our major shareholders, directors and officers as a group have significant voting power and may take actions that may not be in the best interest of shareholders.

- We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

- We are a "foreign private issuer" and have disclosure obligations that are different from those of U.S. domestic reporting companies.

- Offers or availability for sale of a substantial number of our ordinary shares may cause the price of our ordinary shares to decline.

- Our management conducted an evaluation of the effectiveness of our internal control over financial reporting and concluded that our internal control over financial reporting was not effective as of December 31, 2022. If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting.

- The market price of our ordinary shares may fluctuate significantly.

- Because our ordinary shares are traded as a "penny stock," it may be more difficult for investors to sell our ordinary shares, and the market price of our ordinary shares may be adversely affected.

- Compliance with changing regulations concerning corporate governance and public disclosure may result in additional expenses.

Risks Related to Our Financial Position and Capital Requirements

We have a relatively limited operating history on which to assess our business, have incurred significant losses since our inception, and anticipate that we will continue to incur significant losses for the foreseeable future.

We have a limited operating history. We have incurred net losses since our inception in 2009, including a net loss of approximately $4.5 million for the year ended on December 31, 2022 and an accumulated deficit of approximately $40.6 million as of December 31, 2022. We are in default in repayment of our convertible notes which as of December 31, 2022 aggregated to approximately $1.5 million (including principal and interest). To date, we have financed our operations primarily through the issuance of equity instruments and convertible notes as well as through government grants. The amount of our future net losses will depend, in part, on the rate of our future expenditures and our ability to generate significant revenues via commercialization of our products or technologies. We do not know whether or when we will become profitable. Even if we do achieve profitability, we may not be able to sustain or increase profitability on an ongoing basis. Our inability to achieve and then maintain profitability would negatively affect our business, financial condition, results of operations and cash flows.

Our history of net losses has raised substantial doubt regarding our ability to continue as a going concern. If we do not continue as a going concern, investors could lose their entire investment.

We generated relatively limited revenues, which are not presently sufficient to sustain our operations. Our total revenues generated from sales were $603,359, $568,704 and $761,319 for the years ended December 31, 2022, 2021, and 2020, respectively. We have incurred net losses since our inception in 2009, including a net loss of approximately $4.5 million for the year ended December 31, 2022. In addition, we are in default in repayment of our convertible notes which as of December 31, 2022 aggregated to approximately $1.5 million (including principal and interest). As of December 31, 2022, and as of the date of the filing of this annual report on Form 20-F, we had limited cash resources.

Our history of net losses has raised substantial doubt about our ability to continue as a going concern, and as a result, our independent registered public accounting firm included an explanatory paragraph in its report on our consolidated financial statements as of and for the year ended December 31, 2022 with respect to this uncertainty. We believe that we will need to raise significant additional funds before we have significant cash flow from operations. Accordingly, our ability to continue as a going concern will require us to seek alternative financing to fund our operations. The substantial doubt about our ability to continue as a going concern could materially limit our ability to raise additional funds through the issuance of new debt or equity securities or otherwise. Future reports on our consolidated financial statements may include an explanatory paragraph with respect to our ability to continue as a going concern.

We will need significant additional capital on an immediate basis, which we may be unable to obtain.

As of December 31, 2022, we had cash balance of $362,609. We are in default in repayment of our convertible notes which as of December 31, 2022 aggregated to approximately $1.5 million (including principal and interest). As of the date of this annual report, we had sufficient cash to fund operations as presently maintained through June 2023. We will need to raise additional capital to continue our operations beyond such period. There can be no assurance that additional funds will be available when needed from any source or, if available, will be available on terms that are commercially acceptable to us. We may be required to pursue sources of additional capital through various means, including debt or equity financings. Future financing through equity investments is likely to be dilutive to existing shareholders. Furthermore, the terms of securities we may issue in future capital transactions may be more favorable for our new investors. Newly issued securities may include preferences, superior voting rights, the issuance of warrants or other derivative securities, and the issuance of incentive awards under equity employee incentive plans, which may have additional dilutive effects. Further, we may incur substantial costs in pursuing future capital and/or financing, including finder fees, investment banking fees, legal fees, accounting fees, printing and distribution expenses and other costs. We may also be required to recognize non-cash expenses in connection with certain securities we may issue, such as convertible notes and warrants, which will adversely impact our financial condition. Our ability to obtain needed financing may be impaired by such factors as our history of losses and capital market conditions, including inflation and rising interest rates across the global economy, which have resulted in, and may continue to result in, significant disruption of global financial markets and could impact the availability or cost of future financings. If the amount of capital we are able to raise from financing activities, together with our revenues from operations, is not sufficient to satisfy our capital needs, even to the extent that we reduce our operations accordingly, we may be required to cease operations.

Risks Related to Our Business

We have generated only minimal revenue from product sales and may never be profitable.

We have generated only minimal revenue in the past, primarily from limited sales of our Sicrys™ inks and pastes. Our ability to generate revenue and achieve profitability depends on (among other things) our ability to demonstrate the technological advantage and successfully commercialize our Sicrys™ inks and pastes and future products and technologies. There is no assurance that we will be successful in any of these endeavors.

Our ability to generate future revenue from product sales depends heavily on our success in many areas, including but not limited to:

- completing the development of our metallization solutions for the solar manufacturing market**;**
- obtaining market acceptance of our products and technologies;
- attracting, hiring, and retaining qualified personnel.
- developing ink and paste products compatible with commercially available printing technologies and print heads;

- expanding our distribution channels, including our ability to enter into cooperation arrangements with printing technologies manufacturers to be able to supply printers to our potential customers;

- ramping up our production capabilities if and when our sales volume increases;

- maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trade secrets, and know-how; and

- addressing any competing technological and market developments.

Our failure to complete the development of our technology and introduce improved Sicrys™ ink and paste formulations, may adversely affect our ability to successfully commercialize our products and technologies.

We need to continue to invest significant financial resources in the completion of the development of our Sicrys™ inks and pastes for commercialization in the solar manufacturing market. However, research and development activities are inherently uncertain, and we could encounter difficulties in commercializing our research results. We seek to continuously improve our products and processes. While we believe that we will be able to manage these uncertainties, we may encounter unanticipated challenges and there can be no guarantee that our significant research and development expenditures will produce corresponding benefits. If we are unable to achieve the necessary technological developments, our overall growth and financial performance and our operating results could be adversely impacted.

If our conductive inks and pastes fail to achieve and sustain sufficient market acceptance or if market penetration occurs more slowly than expected, our future revenues will be adversely affected.

Our success depends, among other things, on our ability to gain additional market acceptance of our Sicrys™ inks and pastes as a reliable and cost-saving alternative to existing production technologies. Compared to some competing technologies, our nano-metric conductive ink technology is relatively new, and most potential customers have limited knowledge of, or experience with, our conductive inks and pastes, may have substantial investments and know-how related to their existing printing technologies, and may perceive risks relating to the reliability, quality, usefulness and profitability of adopting our conductive inks and pastes when compared to other production technologies available in the market. Our potential customers may also need to devote significant time and effort to testing and validating our technology prior to its adoption. Any failure of our technology to meet our potential customer benchmarks could result in customers choosing to retain their existing technology or to purchase technologies other than ours. If we fail to achieve market acceptance of our conductive inks and pastes or if market penetration is slower than expected, then our opportunities to grow our revenues and reach profitability will be severely limited. There is no assurance that we will succeed in any of the foregoing.

We believe that our future success depends on our ability to deliver products and services that meet changing technology and customer needs.

Our business may be affected by rapid technological change, changes in user and customer requirements and preferences, frequent new product and service introductions embodying new technologies and the emergence of new standards and practices, any of which could render our existing products and proprietary technology obsolete. Accordingly, our ongoing research and development programs are intended to enable us to maintain technological leadership. We believe that to remain competitive we must continually enhance and improve the functionality and features of our products, services and technologies. However, there is a risk that we may not be able to:

- Develop or obtain leading technologies useful in our business;

- Enhance our existing products;

- Develop new products, services and technologies that address the increasingly sophisticated and varied needs of prospective customers, particularly in the area of printer speeds and materials functionality;

- Respond to technological advances and emerging industry standards and practices on a cost-effective and timely basis; or

- Recruit or retain key technology employees.

If we are unable to meet changing technology and customer needs, our competitive position, revenue, results of operations and financial condition could be adversely affected.

We currently have minimal marketing and sales capabilities. If we are unable to establish significant sales and marketing capabilities or enter into agreements with third parties to market and sell our products once development of our technology for mass production is completed, we may be unable to generate significant revenue.

We have limited experience and capabilities in selling and marketing our conductive inks. In order to successfully commercialize our Sicrys™ inks and pastes or any other products, we will need to either further develop these capabilities on our own or by collaboration with third party distributors and sales agents with established sales and marketing operations and industry experience. However, there can be no assurance that we will be able to enter into other agreements with such third-party distribution and sales agents agreements on terms acceptable to us, or at all, or that such distributors or sales agents will be successful in marketing our inks and pastes. If we are not successful entering into such agreement our results of operation may be adversely affected.

Our ability to grow our business successfully depends, among other things, on our ability to develop and implement our production and operating infrastructure in a way that would effectively support our growth in our target markets.

We manufacture our inks and pastes at our Migdal Ha'Emek facilities. We currently have capacity to produce an estimated one ton of ink and paste per year and plan to upgrade our facilities to increase production capacity to 20 tons per year (estimated capital cost of at least $2.5 million), if and when demand for our inks and pastes is projected to surpass our production capabilities and we have sufficient available capital to do so.

Our future success requires among others that we have adequate capacity in our manufacturing facilities to manufacture the quantities of products to support our current sales level and the anticipated increased levels that may result from our growth. There can be no assurance as to the timing or our ability to achieve planned, needed, or desired manufacturing capacity levels. We believe that the capacity of our current manufacturing facilities is sufficient to meet anticipated demand for our products through the end of 2023. In the event that demand for our inks and pastes outgrows our internal manufacturing capacity, we intend to engage third-party manufacturers to produce additional inks and pastes. There can be no assurance that we will be able to enter into agreements with such manufacturers on terms acceptable to us, or at all, or that, once contracted, such manufacturers will perform as expected. If we are not successful entering into such agreement our results of operation may be adversely affected.

We are subject to a multitude of manufacturing risks, any of which could substantially increase our costs and limit supply of our products and technologies.

We currently only have one operating manufacturing line. The process of manufacturing our products and technologies is complex and subject to several risks and uncertainties, including but not limited to availability and prices of the raw materials (including silver in particular) necessary for production of our inks, and any major malfunctions in our manufacturing line. Any adverse developments affecting manufacturing operations for our products and technologies may result in shipment delays, inventory shortages, lot failures, withdrawals or recalls, or other interruptions in the supply of our products and technologies. We may also have to take inventory write-offs and incur other charges and expenses for products and technologies that fail to meet specifications, undertake costly remediation efforts, or seek more costly manufacturing alternatives.

We are subject to risks resulting from fluctuations in the price of silver and other raw materials.

The manufacturing process for our silver-based inks and pastes utilizes a silver salt, the price of which is linked to the price of silver. The price of silver as well as the price of other raw materials used in the manufacturing process for our inks and pastes, is affected by numerous factors beyond our control, including inflation, fluctuation of the United States dollar and foreign currencies, global and regional demand, speculative activities by commodities traders and others and the political and economic conditions of major silver producing countries throughout the world The volatility of mineral prices represents a substantial risk which no amount of planning or technical expertise can fully eliminate. In the event the prices of silver or other raw materials used in our manufacturing process increase and remain high for prolonged periods of time, we may not be able to produce inks and pastes at a cost effective and competitive price. Furthermore, if the price of silver decreases substantially and remains low for prolonged periods of time, the value proposition that we believe is offered by our copper-based nano-metric ink and paste may be substantially decreased, since a low price of the silver used in their manufacturing processes reduces the incentive for manufacturers of electronic devices to replace silver with another metal, such as copper. Any of the foregoing would have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Our business involves the use of hazardous materials, and we must comply with environmental, health and safety laws and regulations, which can be expensive and restrict how we do business, and if we fail to comply with such laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

Our business involves the blending, controlled storage, use and disposal of hazardous materials. We are subject to numerous environmental, health and safety laws, regulations and permitting requirements, currently mainly in Israel, including those governing the emission and discharge of hazardous materials into ground, air or water; the manufacture, storage, use, management, handling and disposal of hazardous waste; the registration of chemicals and in the future also import and export of chemicals; the clean-up of contaminated sites; and the health and safety of our employees. We expect to be subject to similar regulations in any other jurisdictions in which we may establish manufacturing operations in the future. Although we believe the safety procedures we utilized for handling and disposing of these materials comply with the standards prescribed by these laws and regulations, we cannot eliminate the risk of accidental contamination or injury from these materials. Some of these laws and regulations require us to obtain licenses or permits to conduct our operations. Environmental laws and regulations are complex, change frequently and have tended to become more stringent over time. If we violate or fail to comply with these laws, regulations, licenses or permits, we could be fined or otherwise sanctioned by regulators. We cannot predict the impact on our business of new or amended laws or regulations or any changes in the way existing and future laws and regulations are interpreted or enforced, nor can we ensure we will be able to obtain or maintain any required licenses or permits. In the event of an accident, local or foreign authorities may curtail the use of these materials and interrupt our business operations. If we are subject to any liability as a result of activities involving hazardous materials, our business and financial condition may be adversely affected and our reputation may be harmed.

We face competition in the markets in which we operate and the possibility that our competitors may develop products that are similar to, more advanced than, or more effective than ours, which may adversely affect our financial condition and our ability to successfully commercialize our products and technologies.

We are currently aware of various existing products in the market and in development that may compete with our products and technologies, directly and indirectly. To our knowledge, other companies are currently developing and selling silver-based inkjet inks and pastes for printed electronics (“PE”), digital electronic inkjet printing applications.

We are aware of several companies seeking to develop copper-based inks and pastes for printing, however, to our knowledge, none of our competitors has copper-based low viscosity inks in mass production and at a commercially viable price and quantity to be used in digital printing, and some are using copper oxide as a precursor in their inks instead of copper. Copper precursors are less effective for thick patterns and high throughput. To our knowledge, we are the only company offering as much as a 50% copper inkjet low viscosity ink; however, we have not yet proven our ability to mass produce the product.

Many of our competitors have substantially greater financial, technical, and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations. Mergers and acquisitions in the conductive ink industry may result in even more resources being concentrated in our competitors. As a result, these companies may be more effective in selling and marketing their products. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in this industry. Our competitors may succeed in developing, acquiring, or licensing on an exclusive basis, products that are more effective or less costly than our current or future products or technologies, or achieve earlier patent protection, product commercialization, and market penetration than we do. Additionally, technologies developed by our competitors may render our potential products and technologies uneconomical or obsolete, and we may not be successful in marketing our products and technologies against competitors.

International expansion of our business exposes us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of Israel.

Our headquarters are located in Israel. Nevertheless, our business strategy incorporates potentially significant international expansion. Doing business internationally involves a number of risks, including but not limited to:

- multiple, conflicting, and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements, and other governmental approvals, permits, and licenses;
- complexities and difficulties in obtaining protection for and enforcing our intellectual property rights;
- difficulties in staffing and managing foreign operations;
- limitations in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products, and exposure to foreign currency exchange rate fluctuations;
- changes in foreign regulations and customs;
- changes in currency exchange rates and currency controls;
- changes in a specific country's or region's political or economic environment;
- natural disasters, wars, terrorism, outbreak of disease, boycotts, curtailment of trade, and other business restrictions;
- certain expenses including, among others, expenses for travel, translation, and insurance; and
- certain countries' regulations may make it difficult for us to import our inks and pastes into such countries.

Any of these factors could significantly harm our future international expansion and operations and, consequently, our results of operations.

The health effects of nanotechnology are unknown.

There is no scientific agreement on the health effects of nanomaterials, but some scientists believe that, in some cases, nanomaterials may be hazardous to an individual's health or the environment. The science of nanotechnology is based on arranging atoms in such a way as to modify or build materials. Depending on the nanomaterials used, the resulting material may not be found in nature; therefore, the effects are unknown. Our technologies are based on nanometals that are, at most times, dispersed in a liquid minimizing the exposures risks. Moreover, once the metal particles have been printed and sintered they are no longer nanometals, therefore lowering exposure risks. Although, we take appropriate precautions for employees working with our materials and believe that any health risks related to the nanometals used in potential products can be minimized, we cannot assure that such precautions will be effective. Future research in the field of nanomaterials, in general, on health and environmental issues may have an adverse effect on products using our technology.

Our future success depends in part on our ability to retain our key management personnel and to attract, retain, and motivate other qualified personnel.

We are highly dependent on our key management personnel, and the loss of their services without proper replacements would adversely impact the achievement of our objectives. Recruiting and retaining additional key personnel and other qualified employees, consultants, and advisors for our business, including scientific and technical personnel, will also be critical to our success. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous high-tech companies for individuals with similar skill sets. The inability to recruit and retain qualified personnel, or the loss of the services of our key management personnel without proper replacement, may impede the progress of our research, development, and commercialization objectives.

We may not be successful in our efforts to identify, license, or discover additional products and technologies.

Although we intend to focus a substantial amount of our research and development efforts on the continued development and commercialization of our existing products and technologies, the success of our business also depends upon our ability to identify, license, or discover additional products and technologies. Given our limited resources it would be difficult to license or otherwise begin development of additional products. Our research programs or licensing efforts may fail to yield additional products and technologies for development for a number of reasons, including but not limited to the following:

- our research or business development methodology or search criteria and process may be unsuccessful in identifying potential products and technologies;
- we may not be able or willing to assemble sufficient resources to acquire or discover additional products and technologies;
- products and technologies we develop may be covered by third parties' patents or other exclusive rights;
- our products and technologies may not succeed in testing;
- our potential products and technologies may have characteristics that make them unmarketable;
- competitors may develop alternatives that render our products and technologies obsolete or less attractive;
- the market for a product may change during our program so that such a product becomes unreasonable to continue to develop;
- a product may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- our products and technologies may not succeed in testing.

If any of these events occurs, we may be forced to abandon our development efforts for a program or programs, or we may not be able to identify, license, or discover additional products and technologies, which would have a material adverse effect on our business. Research programs to identify new products and technologies require substantial technical, financial, and human resources. We may focus our efforts and resources on potential programs or products and technologies that ultimately prove to be unsuccessful.

Environmental, social and corporate governance ("ESG") issues, including those related to climate change and sustainability, may have an adverse effect on our business, financial condition and results of operations and damage our reputation.

There is an increasing focus from certain investors, customers, consumers, employees and other stakeholders concerning ESG matters. Additionally, public interest and legislative pressure related to public companies' ESG practices continue to grow. If our ESG practices fail to meet regulatory requirements or investor, employee or other stakeholders' evolving expectations and standards for responsible corporate citizenship in areas including environmental stewardship, support for local communities, Board of Director and employee diversity, human capital management, employee health and safety practices, product quality, supply chain management, corporate governance and transparency, our reputation and employee retention may be negatively impacted, and our suppliers may be unwilling to continue to do business with us.

Investors and other stakeholders are increasingly focusing on environmental issues, including climate change, energy and water use, plastic waste and other sustainability concerns. Concern over climate change may result in new or increased legal and regulatory requirements to reduce or mitigate impacts to the environment. Increased regulatory requirements may result in increased demands or requirements regarding components of our products and their environmental impact on sustainability. Complying with these demands or requirements could cause us to incur additional manufacturing, operating or product development costs.

In addition, new sustainability rules and regulations have been adopted and may continue to be introduced in various states and other jurisdictions. For example, the SEC has published proposed rules that would require companies to provide significantly expanded climate-related disclosures in their periodic reporting, which may require us to incur significant additional costs to comply and impose increased oversight obligations on our management and board of directors.

If we do not adapt to or comply with new regulations, or fail to meet evolving investor, industry or stakeholder expectations and concerns regarding ESG issues, investors may reconsider their capital investment in our Company, which could have a material adverse effect on our business or financial condition.

Our business, operating results and growth rates may be adversely affected by current or future unfavorable economic and market conditions and adverse developments with respect to financial institutions and associated liquidity risk.

Our business depends on the economic health of the global economies. If the conditions in the global economies remain uncertain or continue to be volatile, or if they deteriorate, including as a result of the impact of military conflict, such as the war between Russia and Ukraine, terrorism or other geopolitical events, our business, operating results and financial condition may be materially adversely affected. Economic weakness, inflation and increases in interest rates, limited availability of credit, liquidity shortages and constrained capital spending have at times in the past resulted, and may in the future result, in challenging and delayed sales cycles, slower adoption of new technologies and increased price competition, and could negatively affect our ability to forecast future periods. In addition, the military conflict may affect the ability to purchase materials sourced in Russia.

In addition, increases in inflation raise our costs for commodities, labor, materials and services and other costs required to operate our business, and failure to secure these on reasonable terms may adversely impact our financial condition. Additionally, increases in inflation, along with the uncertainties surrounding COVID-19, geopolitical developments and global supply chain disruptions, have caused, and may in the future cause, global economic uncertainty and uncertainty about the interest rate environment, which may make it more difficult, costly or dilutive for us to secure additional financing. A failure to adequately respond to these risks could have a material adverse impact on our financial condition, results of operations or cash flows.

More recently, the closures of SVB and Signature Bank and their placement into receivership with the FDIC created bank-specific and broader financial institution liquidity risk and concerns. Although the Department of the Treasury, the Federal Reserve and the FDIC jointly released a statement that depositors at SVB and Signature Bank would have access to their funds, even those in excess of the standard FDIC insurance limits, under a systemic risk exception, future adverse developments with respect to specific financial institutions or the broader financial services industry may lead to market-wide liquidity shortages, impair the ability of companies to access near-term working capital needs, and create additional market and economic uncertainty. There can be no assurance that future credit and financial market instability and a deterioration in confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, liquidity shortages, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, or if adverse developments are experienced by financial institutions, it may cause short-term liquidity risk and also make any necessary debt or equity financing more difficult, more costly, more onerous with respect to financial and operating covenants and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our strategy, our financial condition, results of operations or cash flows and stock price and could require us to alter our plans. In addition, there is a risk that one or more of our service providers**,** financial institutions, manufacturers, suppliers and other partners may be adversely affected by the foregoing risks, which could directly affect our ability to attain our operating goals on schedule and on budget.

A pandemic, epidemic or outbreak of an infectious disease, such as COVID-19, may materially and adversely affect our business, financial condition and operating results.

Public health crises such as pandemics or similar outbreaks could adversely impact our business. Beginning in 2019, a novel strain of a virus named SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), or coronavirus, which causes COVID-19, spread to most countries across the world, including Israel. The COVID-19 pandemic led to the implementation of various responses, including government-imposed quarantines, travel restrictions and other public health safety measures. In early 2020, the World Health Organization declared the rapidly spreading coronavirus disease (COVID-19) outbreak a pandemic. We experienced disruptions to our operations as a result of the COVID-19 pandemic, including disruptions to the Company's clinical studies. The extent to which the COVID-19 pandemic may in the future impact our operations or those of our third-party partners will depend on future developments, which are highly uncertain and cannot be predicted with confidence. In particular, any future spread of COVID-19 globally or the reinstatement of restrictions or other actions that may be required to contain COVID-19 or treat its impact could materially adversely impact our operations and workforce, including our research and development activities and could result in the inability of our suppliers to deliver components or raw materials on a timely basis or at all, each of which in turn could have a material adverse impact on our business, financial condition and results of operation. Further, uncertainty around the COVID-19 pandemic and related issues could lead to adverse effects on the economy of Israel, the United States and other economies, which could impact our ability to raise the necessary capital needed to develop and commercialize our products.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain effective patent rights for our products and technologies or any future products and technologies, we may not be able to compete effectively in our markets.

We rely upon a combination of patents, trade secret protection, and confidentiality agreements to protect the intellectual property related to our products and technologies. Our success depends in large part on our and our licensors' ability to obtain and maintain patent and other intellectual property protection in the United States and in other countries with respect to our proprietary technology and products.

We have sought to protect our proprietary position by filing patent applications in the United States and in other countries, as well as related to our novel technologies and products that are important to our business. The silver ink and dispersions-related patent applications based on PCT/US2011/063459, have been granted in several countries, including China, Russia, Japan, India, Israel, Korea, Brazil, France, Germany, the United Kingdom, the Netherlands, the U.S. and the European Union and we currently have additional patent applications pending in the U.S. supporting our silver-based inks, dispersions and some pastes. Our patent application based on PCT/IB2015/051536, relating to copper-based inks and dispersions, has been granted in several countries, including Europe, Russia, the United Kingdom, Belgium, Germany, Finland, France, Ireland, the Netherlands, Israel, Brazil, India and the United States. Additionally, we have patent applications based on PCT/IB2015/051536, relating to copper-based ink, which have been submitted to national phase in South Korea, Japan and China. This process is expensive and time consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

The patent position of technology companies generally is highly uncertain and involves complex legal and factual questions for which legal principles remain unsolved. The patents or patent applications that we own or in-license may fail to result in issued patents with claims that cover our products and technologies in the United States or in other foreign countries. There is no assurance that all potentially relevant prior art relating to our patents and patent applications has been found. The discovery of relevant prior art can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue, and even if such patents cover our products and technologies, third parties may challenge their validity, enforceability, or scope, which may result in such patents being narrowed, found unenforceable or invalidated. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property, provide exclusivity for our products and technologies, or prevent others from designing around our claims. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

We, independently or together with our licensors, have filed several patent applications covering various aspects of our products and technologies. Even though some have already been granted, we cannot provide any assurances about which, if any, additional patents will issue, the breadth of any such patent or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. Any successful opposition to these patents or any other patents owned by or licensed to us after patent issuance could deprive us of rights necessary for the successful commercialization of any products and technologies that we may develop. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product under patent protection could be reduced.

If we cannot obtain and maintain effective patent rights for our products and technologies, we may not be able to compete effectively and our business and results of operations would be harmed.

If we are unable to maintain effective proprietary rights for our products and technologies or any future products and technologies, we may not be able to compete effectively in our markets.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary knowhow that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce and any other elements of our product candidate discovery and development processes that involve proprietary knowhow, information or technology that is not covered by patents. However, trade secrets can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our employees, consultants, scientific advisors, and contractors. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors.

Although we expect all of our employees and consultants to assign their inventions to us, and all of our employees, consultants, advisors, and any third parties who have access to our proprietary knowhow, information, or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed or that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Misappropriation or unauthorized disclosure of our trade secrets could impair our competitive position and may have a material adverse effect on our business. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

There have been many lawsuits and other proceedings involving patent and other intellectual property rights in the high-technology industries, including patent infringement lawsuits, interferences, oppositions, and reexamination proceedings before the USPTO and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing products and technologies. As the conductive ink and paste industry expands and more patents are issued, the risk increases that our products and technologies may be subject to claims of infringement of the patent rights of third parties. We have never conducted a freedom to operate study.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, or methods of manufacture related to the use or manufacture of our products and technologies. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our products and technologies may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our products and technologies, the holders of any such patents may be able to block our ability to commercialize such product or technology unless we obtained a license under the applicable patents, or until such patents expire or are finally determined to be invalid or unenforceable.

Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture, or methods of use, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product or technology unless we obtained a license or until such patent expires or is finally determined to be invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our products and technologies. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages (including treble damages and attorneys' fees for willful infringement), pay royalties, redesign our infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

We may become subject to claims of intellectual property infringement by third parties or may be required to indemnify our distributors or other third parties against such claims, which, regardless of their merit, could result in litigation, distract our management and materially adversely affect our business, results of operations or financial condition.

We have in the past and may in the future become subject to third-party claims that assert that our solutions, services and intellectual property infringe, misappropriate or otherwise violate third-party intellectual property or other proprietary rights.

Intellectual property disputes can be costly and disruptive to our business operations by diverting the attention and energies of management and key technical personnel, and by increasing our costs of doing business. Even if a claim is not directly against us, our agreements with distributors generally require us to indemnify them against losses from claims that our products infringe third-party intellectual property rights and entitle us to assume the defense of any claim as part of the indemnification undertaking. Our assumption of the defense of such a claim may result in similar costs, disruption and diversion of management attention to that of a claim that is asserted directly against us. We may not prevail in any such dispute or litigation, and an adverse decision in any legal action involving intellectual property rights could harm our intellectual property rights and the value of any related technology or limit our ability to execute our business.

Adverse outcomes in intellectual property disputes could:

- require us to redesign our technology or force us to enter into costly settlement or license agreements on terms that are unfavorable to us;
- prevent us from manufacturing, importing, using, or selling some or all of our solutions;
- disrupt our operations or the markets in which we compete;

- impose costly damage awards;
- require us to indemnify our distributors and customers; and
- require us to pay royalties.

We may not be successful in obtaining or maintaining necessary rights to our products and technologies through intellectual property rights in-licenses.

We currently have rights to the intellectual property, through licenses from third parties and under patents that we own, to develop our products and technologies. Because our programs may require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to in-license, or use these proprietary rights. In addition, our products and technologies may require specific formulations to work effectively and efficiently and the rights to these formulations may be held by others. We may be unable to acquire or in-license any compositions, methods of use, processes, or other third-party intellectual property rights from third parties that we identify as necessary for our products and technologies. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources, and greater development and commercialization capabilities.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment. If we are unable to successfully obtain rights to required third-party intellectual property rights, we may have to abandon development of that program and our business and financial condition could suffer.

We may not be able to fully enforce covenants not to compete with our key employees, and therefore we may be unable to prevent our competitors from benefiting from the expertise of such employees.

Our employment agreements with our key employees contain non-compete provisions. These provisions prohibit our key employees, if they cease working for us, from competing directly with us or working for our competitors for a limited period of time. We may be unable to enforce these provisions under applicable laws in Israel where all of our key employees reside. In Israel, the Basic Law: Freedom of Occupation, as interpreted by binding case law, may restrict our ability to enforce non-compete provisions against our employees. If we cannot enforce our non-compete provisions against our employees, we may be unable to prevent our competitors from benefiting from the expertise of such employees. Even if these provisions are enforceable, they may not adequately protect our interests. As a result, if one or more of our employees leaves our employment and subsequently becomes employed by one of our competitors, our business, results of operations and ability to capitalize on our proprietary information may be materially adversely affected.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, and defending patents on products and technologies in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be 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.

Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Risks Related to Our Operations in Israel

Our headquarters and other significant operations are located in Israel and, therefore, our results may be adversely affected by political, economic and military instability in Israel.

Our executive offices, application department, labs, production site and warehouse are located in Migdal Ha'Emek, Israel. In addition, all of our officers and directors are residents of Israel. Accordingly, political, economic and military conditions in Israel may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring countries and militia groups. In recent years, Israel has been engaged in sporadic armed conflicts with Hamas, an Islamist terrorist group that controls the Gaza Strip, with Hezbollah, an Islamist terrorist group that controls large portions of southern Lebanon, and with Iranian-backed military forces in Syria. Certain of these conflicts involved missile strikes against civilian targets in various parts of Israel, including the city in which our headquarters are located as well as areas in which our employees and some of our consultants are located, and negatively affected business conditions in Israel. In addition, Iran has threatened to attack Israel, may be developing nuclear weapons and has targeted cyber attacks against Israeli entities.

Popular uprisings in various countries in the Middle East and North Africa have affected the political stability of those countries. Such instability may lead to deterioration in the political and trade relationships that exist between the State of Israel and these countries. Furthermore, several countries, principally in the Middle East, still restrict doing business with Israel and Israeli companies, while some of these countries are eliminating these constrains, additional countries may impose restrictions on doing business with Israel and Israeli companies if hostilities in Israel or political instability in the region continues or increases. These restrictions may limit materially our ability to obtain raw materials from these countries or sell our products to companies or persons in these countries. Any armed conflicts, terrorist activities or political instability in the region could adversely affect business conditions and could harm our results of operations and could make it more difficult for us to raise capital. Parties with whom we do business may sometimes decline to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements when necessary in order to meet our business partners face to face. In addition, the political and security situation in Israel may result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in such agreements. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners, or significant downturn in the economic or financial condition of Israel, could adversely affect our operations and product development, cause our sales to decrease and, if our securities become publicly traded, adversely affect the share price of our securities.

Our commercial insurance does not cover losses that may occur as a result of an event associated with the security situation in the Middle East. Although the Israeli government is currently committed to covering the reinstatement value of direct damages that are caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained, or if maintained, will be sufficient to compensate us fully for damages incurred. Any losses or damages incurred by us could have a material adverse effect on our business. Any armed conflicts or political instability in the region would likely negatively affect business conditions generally and could harm our results of operations.

Furthermore, the Israeli government is currently pursuing extensive changes to Israel's judicial system. In response to the foregoing developments, individuals, organizations and institutions, both within and outside of Israel, have voiced concerns that the proposed changes may negatively impact the business environment in Israel including due to reluctance of foreign investors to invest or conduct business in Israel, as well as to increased currency fluctuations, downgrades in credit rating, increased interest rates, increased volatility in securities markets, and other changes in macroeconomic conditions. Such proposed changes may also adversely affect the labor market in Israel or lead to political instability or civil unrest. To the extent that any of these negative developments do occur, they may have an adverse effect on our business, our results of operations and our ability to raise additional funds.

In addition, our operations could also be disrupted by the obligations of personnel to perform military service. As of December 31, 2022, we had 11 employees and independent contractors, all of whom were based in Israel. Some of these Israeli employees and independent contractors may be called upon to perform up to 54 days in each three year period (and in the case of military officers, up to 84 days in each three year period) of military reserve duty until they reach the age of 40 (and in some cases, depending on their specific military profession up to 45 or even 49 years of age) and, in certain emergency circumstances, may be called to immediate and unlimited active duty. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists and it is possible that there will be similar large-scale military reserve duty call-ups in the future. Our operations could be disrupted by the absence of a significant number of employees related to military service, which could materially adversely affect our business and results of operations.

The Israeli government grants we have received for research and development expenditures restrict our ability to manufacture products and transfer technologies outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received together with interest and penalties.

We have received grants from the Israel Innovation Authority (the "IIA"), for research and development programs and may apply for further grants in the future. In order to maintain our eligibility for these grants, we must comply with the requirements of the Encouragement of Research, Development and Technological Innovation in the Industry Law 5744-1984 (formerly known as the Law for the Encouragement of Research and Development in Industry 5744-1984), and the regulations and guidelines promulgated thereunder (the "Innovation Law"). Under the terms of the Innovation Law, in exchange for the research and development grants we received, we are required to pay the IIA royalties at the rate of 3% from our revenues up to an aggregate of 100% (which may be increased under certain circumstances, as described below) of the U.S. dollar-linked value of the grant, plus interest at the rate of 12-month LIBOR. As of December 31, 2022, we and our wholly-owned subsidiaries had received funding from the IIA in the aggregate amount of approximately $3.7 million. As of December 31, 2022, we and our wholly-owned subsidiaries had paid royalties to the IIA in the aggregate amount of approximately $1.1 million and had an obligation to the IIA with respect to such funding (including interest) in the amount of approximately $3.2 million (approximately $2.0 million out of such amount are contingent liabilities and therefore, not recorded in our liabilities).

The Innovation Law generally requires that the products developed as part of the programs under which the grants were given be manufactured in Israel and that the know-how developed thereunder may not be transferred outside of Israel, unless a prior written approval is received from IIA (such approval is not required for the transfer of a portion of the manufacturing capacity which does not exceed, in the aggregate, 10% of the portion declared to be manufactured outside of Israel in the applications for funding, in which case only notification is required) and additional payments are required to be made to IIA. The export of products that incorporate the funded know-how is not restricted. As of the date of this annual report on Form 20-F, we have not sought to obtain such approvals, as we do not have immediate plans to manufacture outside of Israel. We may not receive the required approvals for any transfer of manufacturing activities, if such transfer will be contemplated in the future. Even if we do receive approval to manufacture products developed with IIA grants outside of Israel, the royalty rate may be increased and we may be required to pay up to 300% of some or all of the grant amounts requiring repayment plus interest, depending on the manufacturing volume that is performed outside of Israel. This restriction may impair our ability to outsource manufacturing or engage in our own manufacturing operations for those products or technologies.

Additionally, under the Innovation Law, we are prohibited from transferring, including by way of license, the IIA-financed technologies and related intellectual property rights and knowhow outside of the State of Israel, except under limited circumstances and only with the prior approval of the IIA. As of the date of this annual report on Form 20-F, we have not sought to obtain such approvals, as we do not have immediate plans to transfer the IIA-funded technologies and related intellectual property rights and knowhow outside of Israel. We may not receive the required approvals for any proposed transfer, if any, and even if received, we may be required to pay the IIA a portion of the consideration that we receive upon any sale of such technology to a non-Israeli entity up to 600% of the grant amounts plus interest. The scope of the support received, the royalties that we have already paid to the IIA, the amount of time that has elapsed between the date on which the knowhow or the related intellectual property rights were transferred and the date on which the IIA grants were received and the sale price and the form of transaction will be taken into account in order to calculate the amount of the payment to the IIA. Approval of the transfer of technology to residents of the State of Israel is required, and may be granted in specific circumstances only if the recipient abides by the provisions of applicable laws, including the restrictions on the transfer of knowhow and the obligation to pay royalties. No assurance can be made that approval to any such transfer, if requested, will be granted.

These restrictions may impair our ability to sell our technology assets or to perform or outsource manufacturing outside of Israel, engage in change of control transactions or otherwise transfer our knowhow outside of Israel and may require us to obtain the approval of the IIA for certain actions and transactions and pay additional royalties and other amounts to the IIA.

These restrictions will continue to apply even after we have repaid the full amount of royalties on the grants. If we fail to satisfy the conditions of the Innovation Law, we may be required to refund certain grants previously received together with interest and penalties, and may become subject to criminal charges.

The Government of Israel has reduced the grants available under the IIA's program in recent years, and this program may be discontinued or curtailed in the future. If we do not receive additional grants in the future, we will be required to allocate other funds to product development at the expense of other operational costs.

We have also received a grant from the Israeli Ministry of Energy (the "Ministry") for one of our research and development programs. In order to maintain our eligibility for this grant, we must meet specified conditions, including the payment of royalties of 5% (plus interest) of any revenues generated from the intellectual property generated under the program. As of December 31, 2022, we had received funding from the Ministry in the aggregate amount of approximately NIS 585,119 ($168,574, based on the NIS/US$ exchange rate published by the Bank of Israel on December 31, 2013 of $1.00 = NIS 3.471). As of December 31, 2022, we had a contingent obligation to the Ministry with respect to such funding (including interest), following the payment of royalties up to that date, in the amount of NIS 576,773 (approximately $163,903). If we fail to comply with these conditions in the future, sanctions (such as the cancellation of the grant) might be imposed on us, and we could be required to refund any payments previously received. The terms of the Ministry's grant require us, among other things, to obtain the Ministry's approval prior to any assignment of know-how developed under the research and development program funded with its grant and we must continue to comply with the grant requirements of our agreement with the Ministry regarding intellectual property even following full repayment of any Ministry grant. The Ministry also has a right to receive a nonexclusive royalty free license to the know-how developed under any such program to the extent necessary for national needs. Pursuant to the terms of the grant, until the later of (i) full repayment of our contingent liability to the Ministry, or (ii) finalization of the research and development program, we are required to notify the Ministry of any new funding offered to us, including by the State of Israel, and the Ministry has a right to negotiate with such investor(s) for the repayment by us of the grant provided to us by the Ministry.

Exchange rate fluctuations, primarily between the U.S. dollar and the NIS currencies, and inflation may negatively affect our results of operations.

We incur expenses both in U.S. dollars and NIS, but our consolidated financial statements are denominated in U.S. dollars. As a result, we are exposed to the risks that the NIS may appreciate relative to the U.S. dollar, or, if the NIS instead depreciates relative to the U.S. dollar, that the inflation rate in Israel may exceed such rate of depreciation of the NIS, or that the timing of such depreciation may lag behind inflation in Israel. In any such event, the U.S. dollar cost of our operations in Israel would increase and our U.S. dollar-denominated results of operations would be adversely affected. We cannot predict any future trends in the rate of inflation in Israel or the rate of depreciation (if any) of the NIS against the U.S. dollar. In addition, we may incur operating expenses denominated in Euros, and therefore, our operating results may also be subject to fluctuations due to changes in the U.S. dollar/Euro exchange rate. We cannot predict any future trends in the rate of inflation in Israel or the rate of depreciation (if any) of the NIS, the Euro and other foreign currencies against the U.S. dollar. Given our general lack of currency hedging arrangements to protect us from fluctuations in the exchange rates of the NIS and Euro and other foreign currencies in relation to the U.S. dollar (and/or from inflation of such foreign currencies), we may be exposed to adverse effects from such movements. The rate of inflation in Israel or Europe or in currency exchange rates may materially change and we might not be able to effectively mitigate these risks.

Provisions of Israeli law and our Amended and Restated Articles of Association ("Articles of Association"), may delay, prevent or make undesirable an acquisition of all or a significant portion of our shares or assets.

Provisions of Israeli law and our Articles of Association could have the effect of delaying or preventing a change in control of our company; may make it more difficult for a third-party to acquire us; may make it more difficult for our shareholders to elect different individuals to our board of directors, even if doing so would be considered to be beneficial by some of our shareholders; and may limit the price that investors may be willing to pay in the future for our ordinary shares. Among other things:

- Israeli corporate law regulates mergers and requires that a tender offer be effected when more than a specified percentage of shares in a company are purchased;
- our Articles of Association generally require a vote of the holders of a majority of our outstanding ordinary shares entitled to vote and present at a general meeting of shareholders; however, the amendment of a limited number of provisions related to the board of directors, proceedings of the board of directors, and business combinations require a vote of the holders of 60% of our outstanding ordinary shares entitled to vote and present at a general meeting (excluding abstentions);
- our Articles of Association require a vote of the holders of 60% of our outstanding ordinary shares entitled to vote and present at a general meeting (excluding abstentions) for the removal of directors prior to the expiration of his or her term of office;
- our Articles of Association provide that director vacancies may only be filled by our board of directors; and
- our Articles of Association prevent "business combinations" with "interested shareholders" for a period of three years after the date of the transaction in which the person became an interested shareholder, unless the business combination is approved in accordance with our Articles of Association by a general meeting of our shareholders or satisfies other requirements specified in our Articles of Association.

Our Articles of Association provide for a board of directors consisting of no less than three and no more than seven directors, with all directors (other than the external directors, whose appointment is required under the Israeli Companies Law, 1999 (the "Companies Law"), as described below) divided into three classes with staggered three-year terms with each class of directors to consist, as nearly as possible, of one-third of the total number of directors other than the external directors. This provision may make it more difficult for our shareholders to elect different individuals to our board of directors, even if doing so would be considered to be beneficial by some of our shareholders, may limit the price that investors may be willing to pay in the future for our ordinary shares, and may make it more difficult for a potential acquiror to effect a change of control of our Company or may deter potential acquirors from seeking to effect a change of control.

In addition, under our Articles of Association, as approved by our shareholders on November 29, 2018, GTRIMG Investments Ltd. ("GTRIMG"), our controlling shareholder, has the right, so long it holds at least 5% of our issued and outstanding share capital, conditioned upon a $2.0 million investment by GTRIMG following such date, to appoint a director to the Board who shall also serve as the chairman of the Board, provided that such nominee has the required qualifications under applicable laws, including the stock exchange rules then applicable. In April 2020, following completion of GTRIMG's $2.0 million investment, GTRIMG appointed Mr. Dov Farkash to serve as a member of our Board as Active Chairman.

Furthermore, under an agreement dated October 27, 2021, entered into in connection with a private placement of our securities, certain of the investors, including GTRIMG, Messrs. Leon and Lenny Recanati, Dan Vilenski and Teuza, have the right to appoint three directors to our Board. Accordingly, Mr. Ofer Greenberger and Mr. David Boas were appointed to our Board as of May 19, 2022. Mr. Boas resigned from our Board as of January 1, 2023, and was replaced by Mr. Keinan Maman, who was appointed as a director as of March 6, 2023.

Further, Israeli tax considerations may make potential transactions undesirable to us or to some of our shareholders whose country of residence does not have a tax treaty with Israel granting tax relief to such shareholders from Israeli tax. With respect to mergers, Israeli tax law allows for tax deferral in certain circumstances but makes the deferral contingent on the fulfillment of various conditions, including a holding period of two years from the date of the transaction during which certain sales and dispositions of shares of the participating companies are restricted. Moreover, with respect to certain share swap transactions, the tax deferral is limited in time, and when such time expires, the tax becomes payable even if no actual disposition of the shares has occurred.

The tax benefits that are available to us as a preferred enterprise require us to continue to meet various conditions and may be terminated or reduced in the future, which could increase our costs and taxes.

We have not yet elected to be treated as a preferred enterprise for Israeli tax purposes, a designation which would allow us to receive certain tax benefits, since we are still not at a stage where we have to pay tax due to carry forward losses. Once we are liable for tax payments, we may be entitled to reduced tax rates and other tax benefits. If these tax benefits were reduced or eliminated or if we no longer comply with the various pre-conditions required, the amount of taxes that we pay would consequently be subject to corporate tax at the standard rate, which could adversely affect our results of operations.

It may be difficult to enforce a judgment of a United States court against us and our officers and directors and the Israeli experts named in this annual report on Form 20-F located in Israel or the United States, to assert United States securities laws claims in Israel or to serve process on our officers and directors and these experts.

We were incorporated in Israel. Our executive officers and all of our directors reside outside of the United States, and all of our assets and most of the assets of these persons are located outside of the United States. Therefore, a judgment obtained against us, or any of these persons, including a judgment based on the civil liability provisions of the U.S. federal securities laws, may not be collectible in the United States and may not necessarily be enforced by an Israeli court. It also may be difficult for you to effect service of process on these persons in the United States or to assert U.S. securities law claims in original actions instituted in Israel. Additionally, it may be difficult for an investor, or any other person or entity, to initiate an action with respect to United States securities laws in Israel. Israeli courts may refuse to hear a claim based on an alleged violation of United States securities laws, reasoning that Israel is not the most appropriate forum in which to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not United States law is applicable to the claim. If United States law is found to be applicable, the content of applicable United States law must be proven as a fact by expert witnesses, which can be a time consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel that addresses the matters described above. As a result of the difficulty associated with enforcing a judgment against us in Israel, you may not be able to collect any damages awarded by either a United States or foreign court.

Risks Related to Our Ordinary Shares

Our U.S. investors may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

Generally, if for any taxable year 75% or more of our gross income is passive income, or at least 50% of our assets are held for the production of, or produce, passive income, we would be characterized as a passive foreign investment company ("PFIC"), for U.S. federal income tax purposes. We have not determined whether we have been a PFIC for 2022 or any previous year, or whether we will be a PFIC in any future year. Because PFIC status is determined annually and is based on our income, assets and activities for the entire taxable year, there can be no assurance that we will not be classified as a PFIC in any year. If we were to be characterized as a PFIC for U.S. federal income tax purposes in any taxable year during which a U.S. Investor owns ordinary shares, such U.S. Investor could face adverse U.S. federal income tax consequences, including having gains realized on the sale of our ordinary shares classified as ordinary income, rather than as capital gain, the loss of the preferential rate applicable to dividends received on our ordinary shares by individuals who are U.S. Investors, and having interest charges apply to distributions by us and the proceeds of share sales. A "qualified electing fund" election may alleviate some of the adverse consequences of PFIC status; however, we do not intend to provide the information necessary for U.S. Investors to make qualified electing fund elections if we are classified as a PFIC.

Your rights and responsibilities as a shareholder will be governed by Israeli law which differs in some material respects from the rights and responsibilities of shareholders of U.S. companies.

The rights and responsibilities of our shareholders are governed by Israeli law and our Articles of Association. These rights and responsibilities differ in some material respects from the rights and responsibilities of shareholders in typical U.S.-based corporations. In particular, a shareholder of an Israeli company has a duty to act in good faith and in a customary manner in exercising its rights and performing its obligations towards the company and other shareholders and to refrain from abusing its power in the company, including, among other things, in voting at general meetings of shareholders on certain matters, such as an amendment to the company's articles of association, an increase of the company's authorized share capital, a merger of the company and approval of related party transactions that require shareholder approval. A shareholder also has a general duty to refrain from discriminating against other shareholders. In addition, a controlling shareholder or a shareholder who knows that it possesses the power to determine the outcome of a shareholders' vote or to appoint or prevent the appointment of an office holder in the company has a duty to act in fairness towards the company. However, Israeli law does not define the substance of this duty of fairness. There is limited case law available to assist us in understanding the nature of this duty or the implications of these provisions. These provisions may be interpreted to impose additional obligations and liabilities on our shareholders that are not typically imposed on shareholders of U.S. corporations.

We have never paid cash dividends on our share capital, and we do not anticipate paying any cash dividends in the foreseeable future.

We have never declared or paid cash dividends on our share capital, nor do we anticipate paying any cash dividends on our share capital in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our ordinary shares will be investors' sole source of gain for the foreseeable future. In addition, Israeli law limits our ability to declare and pay dividends, and may subject our dividends to Israeli withholding taxes. Furthermore, our payment of dividends (out of tax-exempt income) may retroactively subject us to certain Israeli corporate income taxes, to which we would not otherwise be subject.

Our major shareholders, directors and officers as a group have significant voting power and may take actions that may not be in the best interest of shareholders.

Our major shareholders, GTRIMG, Messrs. Leon and Lenny Recanati or companies under their control and Teuza – A Fairchild Technology Venture Ltd. ("Teuza"), and our directors and officers as a group beneficially owned approximately 81.05% of our outstanding ordinary shares as of May 15, 2023. As a result, they will have the ability to exert substantial influence over all matters requiring approval by our shareholders, including the election and removal of directors and any proposed merger, consolidation or sale of all or substantially all of our assets. Their interests may not be consistent with those of our other shareholders. In addition, due to their share ownership, our major shareholders, the directors appointed by them, our other directors and executive officers could dictate the management of our business and affairs. As of May 15, 2023, GTRIMG beneficially owned in the aggregate approximately 40.23% of our outstanding ordinary shares. This concentration of ownership may discourage third parties from seeking to acquire control of us and could have the effect of delaying, deferring or preventing a change in control, or impeding a merger or consolidation, takeover or other business combination that could be favorable to you. This significant concentration of share ownership may also adversely affect the trading price for our ordinary shares, if a public market further develops for such securities, because investors may perceive disadvantages in owning stock in a company with controlling affiliated shareholders.

We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

We are subject to the requirements to file periodic and annual reports under Section 15(d) of the Exchange Act, and are otherwise subject to laws applicable to public reporting companies in the United States. As a public reporting company, we incur significant legal, accounting, and other expenses. In addition, the Sarbanes-Oxley Act, as amended, and the rules and regulations of the SEC thereunder, have imposed various requirements on public companies. Shareholder activism, the current political environment, and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate. Our management and other personnel need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations increase our legal and financial compliance costs and will make some activities more time consuming and costly.

We are a "foreign private issuer" and have disclosure obligations that are different from those of U.S. domestic reporting companies.

We are a foreign private issuer and are not subject to the same requirements that are imposed upon U.S. domestic issuers by the SEC. Under the Exchange Act, we are subject to reporting obligations that, in certain respects, are less detailed and less frequent than those of U.S. domestic reporting companies. For example, we are not required to issue quarterly reports and proxy statements that comply with the requirements applicable to U.S. domestic reporting companies. Furthermore, although as an Israeli public company listed outside of Israel we are required to disclose the compensation of our five most highly compensated officers on an individual basis, this disclosure is not as extensive as that required of U.S. domestic reporting companies. We also have four months and an automatic extension of 15 days after the end of each fiscal year to file our annual reports with the SEC and are not required to file current reports as frequently or promptly as U.S. domestic reporting companies. Furthermore, our officers, directors and principal shareholders are exempt from the requirements to report short-swing profit recovery contained in Section 16 of the Exchange Act. Also, as a "foreign private issuer," we are also not subject to the requirements of Regulation FD (Fair Disclosure) promulgated under the Exchange Act. These exemptions and leniencies will reduce the frequency and scope of information and protections available to you in comparison to those applicable to U.S. domestic reporting companies.

Offers or availability for sale of a substantial number of our ordinary shares may cause the price of our ordinary shares to decline.

If our major shareholders sell substantial amounts of our ordinary shares in the public market (if one develops) or if there is a perception in the market that substantial sales may occur in the future upon the expiration of any statutory holding period, under Rule 144, or upon the exercise of outstanding options held by our director and officers or warrants held by investors, the market price of our ordinary shares could fall. The occurrence of such substantial sales or the perception that substantial sales of our ordinary shares may occur in the future could put downward pressure on the market price of our ordinary shares and may make it more difficult for us to raise additional financing through the sale of equity or equity related securities in the future at a time and price that we deem reasonable or appropriate.

Furthermore, we issued a significant number of warrants to certain investors, which, if exercised, may have a material dilutive effect on our share capital. For more information see "Item 7 A. Major Shareholders and Related Party Transactions — Major Shareholders".

Our management conducted an evaluation of the effectiveness of our internal control over financial reporting and concluded that our internal control over financial reporting was not effective as of December 31, 2022. If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures are designed to prevent fraud. Our management is required to assess the effectiveness of our internal controls and procedures and disclose changes in these controls on an annual basis. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us of our internal controls and procedures may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information.

Our management conducted an evaluation of the effectiveness of our internal control over financial reporting and concluded that our internal control over financial reporting was not effective as of December 31, 2022, and also concluded that our disclosure controls and procedures were not effective as of December 31, 2022, due to material weaknesses in our internal control over financial reporting, all as described in Item 15, "Controls and Procedures" of this annual report. As defined in Regulation 12b-2 under the Exchange Act, a "material weakness" is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual financial statements will not be prevented or detected on a timely basis.

The material weaknesses in internal control over financial reporting that were identified (among other things) were: (i) significant parts of entity level controls are missing, (ii) lack of segregation of duties, (iii) controls' effectiveness testing was predominantly not performed, among other things due to nonperformance of controls or absence of evidence for controls' performance, and (iv) non-remediation of material weaknesses identified in prior years. Based on such assessment, management has concluded that, as of December 31, 2022, our internal control over financial reporting is ineffective based on those criteria.

We have made, and will continue to make, changes in these and other areas. In any event, the process of determining whether our existing internal controls are compliant with applicable requirements and sufficiently effective will require the investment of substantial time and resources, including by our chief financial officer and other members of our senior management. As a result, this process may divert internal resources and take a significant amount of time and effort to complete. In addition, we cannot predict the outcome of this process and whether we will need to implement remedial actions in order to implement effective controls over financial reporting. The determination of whether or not our internal controls are sufficient and any remedial actions required could result in us incurring additional costs that we did not anticipate. We may also fail to complete our evaluation, testing and any required remediation needed to comply with applicable requirements in a timely fashion. Irrespective of compliance with applicable requirements, any additional failure of our internal controls could have a material adverse effect on our stated results of operations and harm our reputation. As a result, we may experience higher than anticipated operating expenses, as well as higher independent auditor fees during and after the implementation of these changes. If we are unable to implement any of the required changes to our internal control over financial reporting effectively or efficiently or are required to do so earlier than anticipated, it could adversely affect our operations, financial reporting or results of operations.

Furthermore, if we are unable to certify that our internal control over financial reporting is effective and in compliance with applicable requirements, we may be subject to sanctions or investigations by regulatory authorities, such as the SEC, and we could lose investor confidence in the accuracy and completeness of our financial reports, which could hurt our business and our ability to access the capital markets.

The market price of our ordinary shares may fluctuate significantly.

If a public trading market further develops for our ordinary shares, the market price of the ordinary shares may fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- the announcement of new products or product enhancements by us or our competitors;
- developments concerning intellectual property rights and regulatory approvals;
- variations in our and our competitors' results of operations;
- changes in earnings estimates or recommendations by securities analysts, if the ordinary shares are covered by analysts;
- developments in the nanotechnology and alternative energy industries;
- the results of product liability or intellectual property lawsuits;
- future issuances of ordinary shares or other securities;
- the addition or departure of key personnel;
- announcements by us or our competitors of acquisitions, investments or strategic alliances; and
- general market conditions and other factors, including factors unrelated to our operating performance, such as natural disasters and political and economic instability, including wars, terrorism, political unrest, results of certain elections and votes, emergence of a pandemic or other widespread health emergencies (or concerns over the possibility of such an emergency, including for example, the COVID-19 pandemic), boycotts, adoption or expansion of government trade restrictions, and other business restrictions.

Further, in recent years, the stock market has experienced extreme price and volume fluctuations. Continued or renewed market fluctuations could result in extreme volatility in the price of our ordinary shares, which could cause a decline in the value of the ordinary shares. Price volatility of our ordinary shares might be significant if the trading volume of the ordinary shares is low, which often occurs with respect to securities quoted on the OTCQB or the OTC Pink.

Because our ordinary shares are traded as a "penny stock," it may be more difficult for investors to sell our ordinary shares, and the market price of our ordinary shares may be adversely affected.

Our ordinary shares are deemed a "penny stock" since, among other things, the stock price is currently trading below $5.0 per share. Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the SEC. This document provides information about penny stocks and the nature and level of risks involved in investing in the penny-stock market. A broker must also give a purchaser, orally or in writing, bid and offer quotations and information regarding broker and salesperson compensation, make a written determination that the penny stock is a suitable investment for the purchaser and obtain the purchaser's written agreement to the purchase. Broker-dealers must also provide customers that hold penny stock in their accounts with such broker-dealer a monthly statement containing price and market information relating to the penny stock. If a penny stock is sold to an investor in violation of the penny stock rules, the investor may be able to cancel its purchase and get its money back.

The penny stock rules may make it difficult for investors to sell their ordinary shares. Because of the rules and restrictions applicable to a penny stock, there is less trading in penny stocks and the market price of the ordinary shares may be adversely affected. Also, many brokers choose not to participate in penny stock transactions. Accordingly, investors may not always be able to resell their ordinary shares publicly at times and prices that they feel are appropriate.

Compliance with changing regulations concerning corporate governance and public disclosure may result in additional expenses.

There have been changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act, new regulations promulgated by the SEC and rules promulgated by the national securities exchanges. These new or changed laws, regulations and standards are subject to varying interpretations in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. As a result, our efforts to comply with evolving laws, regulations and standards are likely to continue to result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. Our directors and executive officers could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified directors and executive officers, which could harm our business. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, we could be subject to liability under applicable laws or our reputation may be harmed.

ITEM 4. Information on the Company

A. History and development of the company

P.V. Nano Cell Ltd. was incorporated in Israel on June 24, 2009 as a private limited liability company, organized under the laws of State of Israel. We have three wholly-owned subsidiaries, all of which are private companies organized under the laws of the State of Israel: (i) Nano Size Ltd. ("Nano Size"), which we acquired on December 31, 2009; (ii) Digiflex Ltd. ("Digiflex"), which we acquired on December 3, 2017; and (iii) Jet CU P.C.B. Ltd. ("Jet CU"), which we acquired on July 26, 2020. Additionally, Digiflex wholly-owns one subsidiary based in the US: Digiflex Inc., incorporated under the laws of the State of Delaware.

Our Registration Statement on Form F-1 was declared effective by the SEC on September 30, 2015, and a FINRA-registered market maker subsequently filed an application on Form 211 with FINRA to quote the ordinary shares on the OTCQB. On March 31, 2016, the application on Form 211 with FINRA to make a market in our ordinary shares was approved by FINRA, and on December 15, 2016, quotation of our ordinary shares began on the OTCQB under the ticker symbol "PVNNF". On December 18, 2019, our ordinary shares began to be quoted on the OTC Pink. However, due to lack of available resources, we have not been able to comply in a timely manner with our SEC periodic filing obligations for the years ended December 31, 2020 and 2021. Accordingly, as of September 29, 2021, the public quote for our stock was removed from the OTC Pink. Depending on market and other conditions and the continued development of our products, we will consider applying to have our ordinary shares quoted on the OTC Pink.

Our principal offices are located at 8 Hamasger Street, Migdal Ha'Emek, Israel 2310102. Our telephone number is (972) 4-654-6881. Our website address is www.pvnanocell.com. This website address is included in this annual report on Form 20-F as an inactive textual reference only. The information and other content appearing on our website are not part of this annual report on Form 20-F. The Company does not have a registered agent in the United States.

B. Business Overview

We are a conductive ink and pastes manufacturing company focused on developing, manufacturing, marketing and commercializing conductive inks and pastes for digital conductive printing applications (mainly inkjet and aerosol printing technologies). We have developed the Sicrys™ family of single crystal nano-metric conductive inks and pastes, which we believe is significantly more effective alternative to other current printing processes, such as screen printing photolithography and etching processes, for photovoltaic heterojunction technology (PV-HJT) and digital printed electronics (PE) applications. We adapt our basic inks and pastes to specific customer requirements. We currently sell our Sicrys™ silver-based inks and pastes for PV and PE applications in low volumes and are in the process of seeking to expand our sales efforts to include sales of Sicrys™ inks and pastes for a wider range of applications, such as solar, automotive and digitally printed electronics. We have also developed what we believe is the first available commercially viable copper-based nano-metric low viscosity stable ink for mass-production of printed electronics. We believe that copper inks and pastes represent a significant improvement over silver-based inks and pastes given copper's significantly lower cost and nearly identical electrical and conductive properties.

Background

Photovoltaic Cell Metallization

PV cells (commonly known as solar cells) are the building blocks of solar module arrays that convert energy from sunlight into electricity. Multiple PV cells in an integrated group, all oriented in one plane, constitute a solar photovoltaic panel or module, and a group of connected modules make up an array. An array of PV cells is capable of converting solar energy into a usable amount of direct current electricity.

Most modern solar cells are made from either crystalline silicon or thin-film semiconductor material. Crystalline silicon cells are more efficient at converting sunlight to electricity, but generally have higher manufacturing costs. Thin-film materials are typically less efficient at converting sunlight into electricity, but can be cheaper to manufacture.

A key part of the PV crystalline silicon cell manufacturing process is the metallization of the cell – i.e., laying down metal electrodes to collect the electricity generated by the cell when exposed to sunlight. Typically, the metallization process is completed by the application of a silver paste to the front side and aluminum-silver pastes on the rear side of the cell using a screen-printing process. This process is one of the main bottlenecks to reducing the costs of the cells and the cost of electricity produced by the cells due to: high usage of metal (expensive silver), loss of paste in the process (some paste stays in the screens), cell breakage in the printing process (contact printing), wide printed patterns (higher shading of cells, less surface exposed to the light) and limited electrical properties of the pastes.

Silicon crystalline solar cells are being replaced by different types of cells like thin film, HJT, CIGS, perovskite solar cells and others. Some of these cells are sensitive to high temperatures, therefore, the potential to increase such cells' efficiencies and lower costs utilizing the screen printing process is limited. Inkjet printing and other non-contact printing processes utilizing our low temperature sintering inks and pastes has been demonstrated to increase cell efficiency and lower production costs. Therefore, we believe that temperature sensitive cells (such as HJT cells) would benefit from our technologies.

We believe that a significant market opportunity exists for a non-contact metallization low temperature sintering solution that is competitive with traditional screen printing process, does not break silicon cells, allows for thinner PV cell wafers (thus reducing silicon costs, which we believe to be a major obstacle to the wider proliferation of solar cell technologies), increases the active area of the cell by printing narrower conductors, and yields better electrical performance than screen-printed conductors. We believe that the market for inks and pastes to be used in inkjet printing for PV applications is a small subset of the market for silver pastes and inks in PV cell production generally, as described above. We further believe that such market has a potential to grow over time given the benefits of inkjet printing technologies and the benefits of our silver and copper based Sycris™ inks and pastes, which, among others, may apply to a range of printing technologies, and have lower costs and simpler operating procedures when compared to screen-printing processes commonly used.

Printed Electronics

Digital printed electronics is a set of methodologies by which electrical devices are digitally printed onto various substrates (i.e., base material) by depositing electrically functional inks and pastes (and possibly other additional functional inks and pastes such as insulating materials) on the substrate, creating active or passive devices, such as conductors, capacitors or resistors. The use of digital printed electronics presents an opportunity to facilitate widespread, production of new electronics, more efficient electronics, new electronic designs and customized and personalized electronics while keeping production costs low.

We believe that the current analog printing and etching methods have inherent limitations when implemented in flexible electronics, 3D (three dimensional) electronics and in customized and small-scale printing. Furthermore, these processes currently utilize expensive materials and produce toxic byproducts which must be disposed of, which increases overall production costs. We believe that a significant market opportunity exists for inks and pastes, such as ours, that enable digital inkjet conductive printing, enabling printing on flexible substrates, three-dimensional printing and customized and small-scale printing at a lower price.

Digitally printing electronics present many advantages over the traditional analog method, including:

- It is an additive process, no etching, or no dangerous waste are involved or generated;
- Digital process will allow printing of passive components (resistors & capacitors) embedded in the layers;
    a. Free mounting area on the outer surfaces (will allow minimizing the surface area and thickness).
    b. Saving component mounting costs and complexity.

While there are quite a few companies that have silver conductive inks and pastes (which are not compatible with mass production processes), there are very few companies offering copper nano particle dispersions, which, to our knowledge, are not inks or pastes. The Company offers silver and copper-based inks and pastes.

Our Solutions

Photovoltaic Cell Metallization

Our Sicrys™ family of inks are low viscosity, nano-particle inks optimized for inkjet printing. We believe that PV HJT utilizing our Sicrys™ inks results in the following benefits relative to traditional screen-printing processes:

- A more efficient solar cell;
- Immediate cost savings due to substantially lower metallization costs and increased cell efficiency (lower sintering temperatures);
- Potential future cost savings due to the ability to utilize thinner wafers for PV cells, thus reducing silicon costs and potentially further increasing cell efficiency;
- Enhanced performance due to improved conductive properties enabling printing of contact lines that are significantly thinner than the lines that can be produced with screen printing;
- Improve performance of temperature sensitive solar cells (CIGS, CdTe, HTJ, thin films and others); and
- Potential future costs savings with copper inks and pastes that we are currently investigating to penetrate the new technologies.

Printed Electronics

We currently offer silver-based Sicrys™ inks and pastes and our developed copper-based Sicrys™ for use in the production of PE utilizing inkjet printing technologies. We believe that inkjet production of PE utilizing our Sicrys™ inks and pastes results in the following benefits relative to traditional screen printing and photolithography processes:

- Applications for flexible and customized electronics and three-dimensional (3D) printed device manufacturing, due to digital (non-contact) printing and the lower sintering temperatures required for nano-based inks and pastes;
- Significant cost reductions, as we estimate that we will be able to market our copper-based inks and pastes at a lower price than silver inks and pastes currently used in screen printing or etch and photolithography processes; and
- Significant reductions in the generation of hazardous waste by products.

Our Strategy

Our goal is to become a leading producer of conductive inks and pastes for the solar industry and PE applications. Our strategy is to concentrate our efforts on mass production application opportunities by selling inks and pastes to be used in mass production printing technologies with high throughputs and high consumption of inks and pastes per year. We are currently focusing our efforts on demonstrating the advantages of our Sicrys™ technology primarily to dedicated customers. We also intend to work with our customers to develop the production processes suitable to the relevant applications and their needs (including printing strategy, printing temperature, sintering temperatures and time).

In addition, we are continuing our efforts to:

- *Develop copper based digital printing inks and pastes for solar cells applications*. We are working to develop a copper-based ink and paste and process (printing and sintering) which will be compatible with HJT type solar cells. This printing process would replace the silver and the wet plating chemistry used today to build the conductive patterns.
- *Increase market awareness of our products and technologies*. We are attempting to raise our profile in the relevant markets, as well as raise awareness of our product and technology offerings, by attending conferences, exhibitions and trade shows when this is feasible.
- *Partner with leading printing technology manufacturers to supply our solutions to potential customers.*
- *Explore application of our technologies to other fields*. We are currently exploring opportunities with several potential customers (worldwide) to implement our technologies in their processes.

We have several development consortiums in the framework of the European Horizon 2020, R&D support programs in Europe and Israel, which provide grants for research and development, including to companies in Israel. The grants are used to expand our know-how and network through research and development that we commit to, the costs of which is reimbursed in part by European Horizon 2020 and local financing entities. One consortium program for the inkjet-based fabrication of multilayer printed circuit boards with embedded printed passive elements was recently concluded.

The following additional projects were approved for financing in 2019 and 2021:

- RolaFlex – A project financed by the Horizon 2020 framework. The project's vision is to combine high-resolution laser printing and laser patterning and new materials with high throughput R-2-R process. The technology will be demonstrated in the high-speed fabrication of OLED and OPV components. The partners in this project are TNO (The Netherlands), Armor (France), Golem (Germany), Seqens (France), FlexEnable (UK), NTUA (Greece), Imperial Collage (UK), Avantama (Switzerland). The project was initially for a period of three years, commencing May 1, 2020, and was extended for an additional six-month period, until October 31, 2023.

- Tinker – A project financed by the Horizon 2020 framework (a ~$12 million budget, of which PVN has a budget of $0.79 million). The project's vision is to provide a new cost and resource-efficient pathway for RADAR and LIDAR sensor package fabrication with high throughput of up to 250 units/min. Partners in this project are: Bosch (Germany), Infineon (Germany), Profactor (Austria), Ibeo (Germany), Marelli (Italy), Leti (France), Notion (Germany), Tiger (Austria), EVG (Austria), Inkron (Finland), Sentech (Germany), Forth (Greece), Austrian Standards (Austria), Besi (The Netherlands), and Amires (Switzerland). The project was initially for a period of three years commencing October 1, 2020, and was extended for an additional six-month period, until March 31, 2024.

- Bussard – A project financed by the Solar EraNet (through the Israeli Ministry of Infrastructure) framework (a ~€4.4 million budget, of which PVN has a budget of $0.33 million). The project's vision is to develop solar cell metallization methods that can show substantially narrower patterns than the state of the art. Partners in this project are: Fraunhofer ISE, HighLine, Tempress Janoschka, ContiTech, JB Ecotech, Energetica and KAU (all in Germany). The project was initially for a period of two years commencing February 1, 2021, and was extended for an additional 12-month period, until January 31, 2024.

Research and Development

The conductive inks and pastes we manufacture for digital conductive printing applications are based on either silver or copper. Our Application and Research and Development ("R&D"), team's efforts are focused primarily on the following two goals:

- Continuous improvement and optimization of our inks and pastes:
    - Adapting the inks to the different available and emerging printing technologies in the market;
    - Optimizing inks and pastes for new and emerging applications; and
    - Reducing the sintering temperature, or the process that physically connects between the nano metal particles to produce a continuous conductive layer.
- Process development (engineering): We offer our customers a solution approach, comprised of inks, pastes and process know-how. In this framework we are developing for our customers the printing process for their specific applications, including printing samples and prototypes.

We have and our wholly-owned subsidiaries have received grants from the Government of Israel through the IIA for the financing of a portion of our research and development expenditures pursuant to the Innovation Law. As of December 31, 2022, we and our wholly-owned subsidiaries had received funding from the IIA in the aggregate amount of approximately $3.7 million. As of December 31, 2022, we and our wholly-owned subsidiaries had paid royalties to the IIA in the aggregate amount of approximately $1.1 million and had an obligation to the IIA with respect to such funding (including interest) in the amount of approximately $3.2 million (approximately $2.0 million out of such amount are contingent liabilities and therefore, not recorded in our liabilities). We may apply for additional IIA grants in the future; however, there is no assurance that such applications will be approved in the amount requested or at all. We have also received a grant from the Ministry for one of our research and development programs. As of December 31, 2022, we had received funding from the Ministry in the aggregate amount of approximately NIS 585,119 ($168,574, based on the NIS/US$ exchange rate published by the Bank of Israel on December 31, 2013, of $1.00 = NIS 3.471). As of December 31, 2022, we had a contingent obligation to the Ministry with respect to such funding (including interest), following the payment of royalties up to that date, in the amount of NIS 576,773 (approximately $163,903). See "Item 3 D –Risk Factors – Risks Related to Our Operations in Israel – *The Israeli government grants we have received for research and development expenditures restrict our ability to manufacture products and transfer technologies outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received together with interest and penalties."*

Competition

The digital electronic printing and inkjet conductive ink and paste manufacturing industries are extremely competitive. We are currently aware of various existing products in the market and in development that may compete with our products and technologies. To our knowledge, several other companies are currently developing silver-based inkjet inks for PE digital electronic inkjet printing applications. Some of these companies already sell conductive inkjet inks and pastes for PE applications. We also see a trend of bigger companies buying out some of the smaller players, and still not been able to supply products for mass production. We are aware of companies seeking to develop copper-based inks and pastes for inkjet printing; however, to our knowledge none of our competitors has copper based low viscosity inks compatible with digital printing in mass production and at a commercially viable price and quantity.

We believe that our inks have the following competitive advantages, relative to those currently being sold by our competitors, especially when aiming to print on mass production applications and throughputs:

- Higher metal load at low viscosities, which results in a more cost-efficient printing process;
- Higher stability and for a longer period of time (over one year for Sicrys™ at room temperature as compared to less than six months for our competitors, some of which require their inks to be stored at low temperatures to remain stable for an extended period of time);
- Copper inks with a similar stability profile as our silver inks (including its chemical stability), which is difficult to achieve due to the low oxidation point for copper, which results in certain of our competitors offering copper oxide inks as opposed to pure copper inks;
- Low resistivity. ($\rho < 2.5$ x bulk. Laser and thermal sintering);
- Low sintering temperature (< 200 °C);
- Silver inks suitable for solar cells metallization which can show higher efficiency due to enhanced electrical properties after firing the cells (low contact resistance and resistivity); and
- Compatibility with high throughput industrial printing (high jetting frequencies for long periods of time).

Based on the advantages of our inks, we are developing a paste for solar applications.

Furthermore, we believe that there is a high barrier to entry for competitors to develop and successfully bring competing inks to market due to the long lead times required to develop nano particles of an appropriate size to formulate inks compatible with inkjet printing and the difficulty in producing nano-based inks in large-scale quantities.

Notwithstanding the foregoing, many of our competitors have substantially greater financial, technical, and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations. Mergers and acquisitions in the conductive ink and paste industry may result in even more resources being concentrated in our competitors. As a result, these companies may be more effective in selling and marketing their products. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in this industry. Our competitors may succeed in developing, acquiring, or licensing on an exclusive basis, products that are more effective or less costly than our current or future products or technologies, or achieve earlier patent protection, product commercialization, and market penetration than we do. Additionally, technologies developed by our competitors may render our potential products and technologies uneconomical or obsolete, and we may not be successful in marketing our products and technologies against competitors.

Intellectual Property

An important part of our business and product development strategy is to seek, when appropriate, protection for our products and proprietary technology through the use of various United States and foreign patents. Our patent application based on PCT/US2011/063459 covering silver single crystal particle inks, dispersions and some pastes and dispersions have been granted in several countries, including China, Russia, Japan, India, Israel, Korea, Brazil, Germany, France, UK, Netherlands, the U.S. and the European Union and we currently have additional patent applications pending in the U.S. supporting our silver-based inks, dispersions and some pastes. Our patent application based on PCT/IB2015/051536, relating to copper-based ink, has been granted in several countries, including Russia, Europe, the United Kingdom, Belgium, Germany, Finland, France, Ireland, the Netherlands, Israel, Brazil, India and the United States. Additionally, we have patent applications based on PCT/IB2015/051536, relating to copper-based ink, which have been submitted to national phase in South Korea, Japan and China.

The silver family main claims are on the concentrated dispersions and inks made of a majority of single crystal Nano silver particles and the method for producing them. Patent applications are in different stages of qualification in additional countries. The single crystal particles are easy to police against infringement. The priority date for the silver family is December 6, 2010.

The copper family relates to nano-metric copper formulations and stable dispersions containing single-crystal metallic copper particles, and to the method of producing such formulations and dispersions. The priority date for the copper family is March 3, 2015.

We have a granted joint patent with Ramot (Tel Aviv University) for “Conductive Nanowire Films” (WO 2013/128458, US 9,373,515 B2), which Ramot maintains pursuant to the termination settlement of the Magneton Program.

Our wholly-owned subsidiary, Nano Size, has been granted several patents in the field of ultrasonic manufacturing of nano materials (7,157,058 (US); 7,504,075 (US); 144638 (IL); 149932 (IL)).

Digiflex has been granted several patents for inks, primers and primer lamination in the field of graphic arts in several countries, including, but not limited to, the United States, European Union, Canada, China, France, Germany, United Kingdom, Germany, India and Israel. These include: Process for Producing a Photomask on a Photopolymeric Surface; USA 9,513,551 and 12 countries and Process for Dry-coating of Flexographic Surfaces; USA 9,352,544.

We intend to continue to seek patent protection for our products that we may develop in the future. The patenting of technology-related products and processes involves uncertain and complex legal and factual questions. To date, no consistent policy has emerged regarding the breadth of claims of such technology patents. Therefore, there is no assurance that our pending applications will issue, or what scope of protection any issued patents will provide, or whether any such patents ultimately will be upheld as valid by a court of competent jurisdiction in the event of a legal challenge. The costs of such proceedings would be significant and an unfavorable outcome could result in the loss of rights to the invention at issue in the proceedings. If we fail to obtain patents for our technology and are required to rely on unpatented proprietary technology, there is no assurance that we can protect our rights in such unpatented proprietary technology, or that others will not independently develop substantially equivalent proprietary products and techniques, or otherwise gain access to our proprietary technology.

Competitors have filed applications for, or have been issued patents, and may obtain additional patents and proprietary rights relating to products or processes used in, necessary to, competitive with, or otherwise related to, our patents. The scope and validity of these patents, and the extent to which we may be required to obtain licenses under these patents or under other proprietary rights and the cost and availability of licenses is unknown. This may limit our ability to license our technology. Litigation concerning these or other patents could be protracted and expensive. If suit were brought against us for patent infringement, a challenge in the suit by us as to the validity of the other patent would have to overcome a legal presumption of validity. There can be no assurance that the validity of the patent would not be upheld by the court or that, in such event, a license of the patent to us would be available. Moreover, even if a license were available, the payments that would be required are unknown and could materially reduce the value of our interest in the affected products.

We also rely upon unpatented trade secrets. No assurances can be given that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose such technology or that we can meaningfully protect our rights to our unpatented trade secrets. We require our employees, consultants, advisors, and any third parties who have access to our proprietary know-how, information, or technology to enter into confidentiality agreements with us, which provide that all confidential information developed or made known to the individual during the course of the relationship is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees and consultants, the agreements provide that all inventions conceived by the individual will be our exclusive property or will be assigned to us. There is no assurance, however, that these agreements will provide meaningful protection for our trade secrets and other confidential proprietary information in the event of unauthorized use or disclosure of such information.

Marketing and Sales

We offer and sell several conductive inks and pastes based on either silver or copper, which are sold through our website as well as directly to customers or through distributors. We are focused on providing more efficient ink and paste solutions for the growing solar market segment and we work with our customers in the development of our solutions as part of our go-to-market strategy.

Seasonality

Our business and operations are generally not affected by seasonal fluctuations or factors.

Raw Materials and Suppliers

We believe that the raw materials that we require to manufacture our inks and pastes are readily available in adequate quantities from multiple sources. In addition, the manufacturing process for our silver-based inks and pastes utilizes a silver salt the price of which is linked to the price of silver. The price of silver as well as the price of other raw materials used in the manufacturing process for our inks and pastes, is affected by numerous factors beyond our control, including inflation, fluctuation of the United States dollar and foreign currencies, global and regional demand, speculative activities by commodities traders and others and the political and economic conditions of major silver producing countries throughout the world. The volatility of mineral prices represents a substantial risk which no amount of planning or technical expertise can fully eliminate. In the event the prices of silver or other raw materials used in our manufacturing process increase and remain high for prolonged periods of time, we may not be able to produce inks and pastes at a cost effective and competitive price. See "Item 3 D. — Risk Factors — *We are subject to risks resulting from fluctuations in the price of silver and other raw materials*."

Manufacturing

We manufacture our inks and pastes at our Migdal Ha'Emek facilities. We currently have capacity to produce an estimated one ton of ink per year, and plan to upgrade our facilities to increase production capacity to 20 tons per year (estimated capital cost of at least $2.5 million), if and when demand for our inks and pastes is projected to surpass our production capabilities and we have sufficient available capital to do so. In the event that demand for our inks outgrows our internal manufacturing capacity, we intend to engage third-party manufacturers to produce additional inks and pastes. There can be no assurance that we will be able to enter into agreements with qualified manufacturers on terms acceptable to us, or at all, or that, once contracted, such manufacturers will perform as expected.

Government Regulation

We are subject to various environmental, health and safety laws, regulations and permitting requirements, including those governing the emission and discharge of hazardous materials into ground, air or water; noise emissions, the generation, storage, use, management and disposal of hazardous waste; the registration of chemicals and in the future also import and export; the clean-up of contaminated sites; and the health and safety of our employees. Under such laws and regulations, we are required to obtain environmental permits from governmental authorities for certain operations. The manufacture of our products requires storing or using certain hazardous materials. Pursuant to the Israeli Dangerous Substances Law - 1993, we are required to (and did) obtain a toxin permit from the Ministry of Environmental Protection. Our permit is valid until May 10, 2025.

Other than applicable local laws in Israel relating to the handling and disposal of hazardous materials and waste, there are no government regulations that are material to the conduct of our business. If we establish manufacturing operations in other jurisdictions, we expect to become subject to environmental, health and safety laws, regulations and permitting requirements in those jurisdictions, which may be similar to or more onerous than those described above.

C. Organizational structure

P.V. Nano Cell Ltd. was incorporated in Israel on June 24, 2009, as a private limited liability company, organized under the laws of State of Israel. We have three wholly-owned subsidiaries, all of which are private companies organized under the laws of the State of Israel: (i) Nano Size, which we acquired on December 31, 2009; (ii) Digiflex, which we acquired on December 3, 2017; and (iii) Jet CU, which we acquired on July 26, 2020. Additionally, Digiflex wholly-owns one subsidiary based in the US: Digiflex Inc., incorporated under the laws of the State of Delaware.

D. Property, plants and equipment

We currently lease, through Nano Size, approximately 678 square meters (approximately 7,300 square feet) of space in Migdal Ha'Emek, Israel for our principal offices and manufacturing facilities at a monthly cost of approximately NIS 18,000 (approximately $5,115). This lease agreement expires on June 30, 2025, and we have an option to extend the lease for an additional three years.

Additionally, Digiflex currently leases approximately 110 square meters (approximately 1,200 square feet) of space in Migdal Ha'Emek, Israel for its principal office and laboratory at a monthly cost of approximately NIS 5,000 (approximately $1,420). This lease agreement, which was scheduled to expire on March 14, 2023, was renewed in February 2023 for a period until March 15, 2024, and we have an option to extend the lease for an additional period of one year.

We currently own production equipment, housed in our Migdal Ha'Emek facilities, capable of producing up to one ton of ink per year. We intend to upgrade our facilities to increase production capacity to 20 tons per year (estimated capital cost of at least $2.5 million), if and when demand for our inks and pastes is projected to surpass our production capabilities and we have sufficient available capital to do so.

ITEM 4A. Unresolved Staff Comments.

Not applicable.

ITEM 5. Operating and Financial Review and Prospects.

A. Operating results

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes that appear elsewhere in this annual report on Form 20-F. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this annual report on Form 20-F, particularly in the sections titled "Item 3 D. — Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements."

Overview

We are a conductive ink and pastes manufacturing company focused on developing, manufacturing, marketing and commercializing conductive inks and pastes for digital conductive printing applications (mainly inkjet and aerosol printing technologies). We have developed the Sicrys™ family of single crystal nano-metric conductive inks and pastes, which we believe is significantly a more effective alternative to other current printing processes, such as screen printing photolithography and etching processes, for photovoltaic heterojunction technology (PV-HJT) and digital printed electronics (PE) applications. We adapt our basic inks and pastes to specific customer requirements. We currently sell a low volume of our Sicrys™ silver-based inks and pastes for PV and PE applications and are in the process of seeking to expand our sales efforts to include sales of Sicrys™ inks and pastes for a wider range of applications, such as solar, automotive and digitally printed electronics. We have also developed what we believe is the first available commercially viable copper-based nano-metric low viscosity stable ink for mass-production of printed electronics. We believe that copper inks and pastes represent a significant improvement over silver-based inks and pastes given copper's significantly lower cost and nearly identical electrical and conductive properties.

Financial Overview

We have incurred net losses since our inception in 2009, including a net loss of approximately $4.5 million for the year ended December 31, 2022. As of December 31, 2022, we had an accumulated deficit of approximately $40.6 million. We are in default in repayment of our convertible notes which as of December 31, 2022 aggregated to approximately $1.5 million (including principal and interest). We have devoted substantially all of our financial resources to identifying, acquiring, licensing, and developing our products and technologies and providing general and administrative support for these operations. To date, we have financed our operations primarily through the sale of equity and convertible securities and government grants. The amount of our future net losses will depend, in part, on the rate of our future expenditures and our ability to generate significant revenues via commercialization of our products or technologies. We are dependent upon external sources to finance our operations and there can be no assurance that we will succeed in obtaining the necessary financing to continue our operations. As a result, our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

Key Components of our Statements of Comprehensive Loss

Revenues

Sources of revenues - we derive revenues primarily from sales of inks and pastes.

Cost of Revenues

Our total cost of revenues includes expenses for the manufacturing of inks and pastes, including: the cost of raw materials; employee-related expenses, including salaries, equity-based compensation and other benefits and related expenses, lease payments, utility payments, depreciation, changes in inventory of finished products, royalties and other manufacturing expenses. These expenses are partially reduced by an allotment of manufacturing costs associated with research and development activities to research and development expenses.

Operating Expenses

Research and Development Expenses, net

Research and development activities are central to our business model. However, we do not believe that it is possible at this time to accurately project total program-specific expenses.

Research and development expenses consist primarily of compensation for employees engaged in research and development activities, including salaries, equity-based compensation, benefits and related expenses, clinical trials, contract research organization sub-contractors, development materials, external advisors and the allotted cost of our manufacturing facility for research and development purposes.

Our research and development expenses, net, are net of grants for the research and development that we have received grants from the government of the State of Israel, through the IIA, pursuant to the Innovation Law, for the financing of a portion of our research and development expenditures. As of December 31, 2022, we and our wholly-owned subsidiaries had received funding from the IIA in the aggregate amount of approximately $3.7 million. As of December 31, 2022, we and our wholly-owned subsidiaries had paid royalties to the IIA in the aggregate amount of approximately $1.1 million and had an obligation to the IIA with respect to such funding (including interest) in the amount of approximately $3.2 million (approximately $2.0 million out of such amount are contingent liabilities and therefore, not recorded in our liabilities). We may apply for additional IIA grants in the future; however, there is no assurance that such applications will be approved in the amount requested or at all.

We have also received a grant from the Ministry for one of our research and development programs. In order to maintain our eligibility for this grant, we must meet specified conditions, including the payment of royalties with respect to the grant received. As of December 31, 2022, we had received funding from the Ministry in the aggregate amount of approximately NIS 585,119 ($168,574, based on the NIS/US$ exchange rate published by the Bank of Israel on December 31, 2013 of $1.00 = NIS 3.471). As of December 31, 2022, we had a contingent obligation to the Ministry with respect to such funding (including interest), following the payment of royalties up to that date, in the amount of NIS 576,773 (approximately $163,903).

For additional information regarding grants from the Israeli government, see "Item 3 D –Risk Factors – Risks Related to Our Operations in Israel – *The Israeli government grants we have received for research and development expenditures restrict our ability to manufacture products and transfer technologies outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received together with interest and penalties."*

In addition, from time to time, we participate in several development consortiums European Horizon 2020 and others in which we receive supporting grants which we record as a deduction to the research and development expenses. The grants are used to expand our knowhow and network through research and development that we commit to, the costs of which will be reimbursed in part by European Horizon 2020 and local financing entities.

Selling and Marketing Expenses

Selling and marketing expenses consist primarily of compensation expenses for personnel engaged in sales and marketing, including salaries, equity-based compensation and benefits and related expenses, as well as promotion, marketing, market access and sales and distribution activities.

General and Administrative Expenses

General and administrative expenses consist principally of compensation for employees in executive and administrative functions, including salaries, equity-based compensation, benefits and other related expenses, professional consulting services, including legal and audit fees, as well as costs of office and overhead.

Financial Income/Financial Expense

Financial income/expenses includes primarily change in fair value of warrants and capital note presented at fair value, Interest and accretion back in connection with convertible loans and exchange rate differences.

Results of Operations

The following table sets forth a summary of our operating results:

US $	**Year ended December 31,**		
	2022	**2021**	**2020**
Consolidated Statement of Operations Data:			
Revenues	$ 603,359	$ 568,704	$ 761,319
Cost of Revenues	375,877	271,817	307,713
Amortization of intangible assets	428,431	428,431	428,434
Gross loss (income)	200,949	131,544	(25,172)
Research and development, net	268,601	467,698	400,859
Sales and marketing	566,896	625,031	673,986
General and administrative	1,893,179	1,345,495	1,414,370
Goodwill impairment	—	—	265,089
Intangible asset impairment	2,108,117	—	—
Total operating expenses	4,836,793	2,438,224	2,754,304
Operating loss	5,037,742	2,569,768	2,729,132
Financial expenses (income), net	(528,195)	(50,904)	9,814,605
Net loss	$ 4,509,547	$ 2,518,864	$ 12,543,737

Year ended December 31, 2022, compared to year ended December 31, 2021:

Revenues

With respect to the years ended December 31, 2022 and December 31, 2021, total revenues amounted to $603,359 and $568,704, respectively, an increase of $34,655 or 6%. No significant change year over year.

Cost of revenues

With respect to the years ended December 31, 2022 and December 31, 2021, total cost of revenues amounted to $375,877 and $271,817, respectively, an increase of $104,060 or 38%. The increase related primarily to an additional employee joined and the increase of salary of another employee.

Amortization of intangible assets

With respect to the years ended December 31, 2022 and December 31, 2021, total amortization of intangible assets amounted to an aggregate amount of $428,431 for both years. The amortization of intangible assets expense in both years related to amortization of technology we recorded as part of the Digiflex purchase as of December 3, 2017.

Gross loss

With respect to the years ended December 31, 2022 and December 31, 2021, total gross loss amounted to $200,949 and $131,544, respectively, an increase of $69,405 or 53%. The increase related to an increase of $104,060 in cost of revenues, offset in part by an increase of $34,655 in revenues.

Research and development expenses, net

With respect to the years ended December 31, 2022 and December 31, 2021, net research and development expenses, net were $268,601, net of $437,045 grants recorded and $467,698, net of $315,697 grants recorded, respectively, a decrease of $199,097 or 43%. The decrease in research and development, net related primarily to higher research and development grants recorded in 2022.

Sales and marketing expenses

With respect to the years ended December 31, 2022 and December 31, 2021, sales and marketing expenses amounted to $566,896 and $625,031, respectively, a decrease of $58,135 or 9%. No significant change year over year.

General and administrative expenses

With respect to the years ended December 31, 2022 and December 31, 2021, general and administrative expenses amounted to $1,893,179 and $1,345,495, respectively, an increase of $547,684 or 41%. The increase related primarily to additional management salaries and fees, professional services fees and legal fees.

Intangible asset impairment

With respect to the years ended December 31, 2022 and December 31, 2021, intangible asset impairment amounted to $2,108,117 and $0, respectively. As of December 31, 2022, we recorded an impairment charge of $2,108,117, which is equal to the technology, net amount that we recorded as part of the Digiflex purchase in 2017. We have ceased the marketing activities associated with this technology and expect a negative cash-flow throughout its life, which led to such impairment charge of the remaining asset, net as of December 31, 2022.

Operating expenses

With respect to the years ended December 31, 2022 and December 31, 2021, operating expenses amounted to $4,836,793 and $2,438,224, respectively, an increase of $2,398,569 or 98%. The increase related to an increase of $2,108,117 and $547,684 in intangible asset impairment and general and administrative expenses, respectively, offset in part by a decrease of $199,097 and $58,135 in research and development, net and sales and marketing expenses, respectively.

Operating loss

With respect to the years ended December 31, 2022 and December 31, 2021, operating loss amounted to $5,037,742 and $2,569,768, respectively, an increase of $2,467,974 or 96%. The increase in operating loss related to an increase of $2,398,569 and $69,405 in operating expenses and gross loss, respectively.

Financial income, net

With respect to the years ended December 31, 2022 and December 31, 2021, financial income, net, amounted to $528,195 and $50,904, respectively, an increase of $477,291 or 938%. The increase in financial income, net, related primarily to a change in interest and accretion back in connection with convertible loans and foreign exchange income, net of $8,059,996 and $398,995, respectively, offset in part by a change in fair value of warrants and capital note presented at fair value of $8,020,602.

Net loss

With respect to the years ended December 31, 2022 and December 31, 2021, net loss amounted to $4,509,547 and $2,518,864, respectively, an increase of $1,990,683 or 79%. The increase in operating loss related to an increase of $2,467,974 and $477,291 in operating loss and financial income, net, respectively.

Year ended December 31, 2021, compared to year ended December 31, 2020:

Revenues

With respect to the years ended December 31, 2021 and December 31, 2020, total revenues amounted to $568,704 and $761,319, respectively, a decrease of $192,615 or 25%. The decrease in revenues relates primarily to lower sales of inks and pastes. We believe that our lack of resources for marketing efforts contributed to that decrease.

Cost of revenues

With respect to the years ended December 31, 2021 and December 31, 2020, total cost of revenues amounted to $271,817 and $307,713, respectively, a decrease of $35,896 or 12%. The decrease in cost of revenues is consistent with the decrease in revenues as mentioned above.

Amortization of intangible assets

With respect to the years ended December 31, 2021 and December 31, 2020, total amortization of intangible assets amounted to $428,431 and $428,434, respectively. The amortization in both years (which is basically the same) related to amortization of technology we recorded as part of the Digiflex purchase as of December 3, 2017.

Gross loss (income)

With respect to the years ended December 31, 2021 and December 31, 2020, total gross loss (income) amounted to $131,544 and $(25,172), respectively, a decrease of $156,716. The decrease related to a decrease of $192,615 in revenues, partially offset by a decrease of $35,896 in cost of revenues and decrease of $3 in amortization of intangible assets.

Research and development expenses, net

With respect to the years ended December 31, 2021 and December 31, 2020, research and development expenses, net were $467,698, net of $315,697 grants recorded, and $400,859, net of $525,838 grants recorded, respectively, an increase of $66,839 or 17%, respectively. The increase in research and development, net related primarily to lower grants recorded year over year.

Sales and marketing expenses

With respect to the years ended December 31, 2021 and December 31, 2020, sales and marketing expenses amounted to $625,031 and $673,986, respectively, a decrease of $48,955 or 7%. No significant change year over year.

General and administrative expenses

With respect to the years ended December 31, 2021 and December 31, 2020, general and administrative expenses amounted to $1,345,495 and $1,414,370, respectively, a decrease of $68,875 or 5%. No significant change year over year.

Goodwill impairment

With respect to the years ended December 31, 2021 and December 31, 2020, goodwill impairment amounted to $0 and $265,089, respectively. The goodwill impairment for the year ended December 31, 2020 was recorded following the purchase of Jet CU since that company has no activity.

Operating expenses

With respect to the years ended December 31, 2021 and December 31, 2020, operating expenses amounted to $2,438,224 and $2,754,304 respectively, a decrease of $316,080 or 11%. The decrease related to a decrease of $265,089 in goodwill impairment, $68,875 in general and administrative expenses and $48,955 in sales and marketing expenses, such decrease was partially offset by an increase of $66,839 in research and development, net.

Operating loss

With respect to the years ended December 31, 2021 and December 31, 2020, operating loss amounted to $2,569,768 and $2,729,132, respectively, a decrease of $159,364 or 6%. The decrease in operating loss related to a decrease of $316,080 in operating expenses, such decrease was partially offset by a decrease of $156,716 in gross loss (income).

Financial expenses (income), net

With respect to the years ended December 31, 2021 and December 31, 2020, financial expenses (income), net, amounted to $(50,904) and 9,814,605, a decrease of $9,865,509. The decrease in financial expenses, net related primarily to a change in fair value of warrants and capital note presented at fair value of $15,123,555, partially offset by an increase of $5,295,156 in interest and accretion back in connection with convertible loans.

Net loss

With respect to the years ended December 31, 2021 and December 31, 2020, net loss amounted to $2,518,864 and $12,543,737, respectively, a decrease of $10,024,873 or 80%. The decrease in net loss related to a decrease of $9,865,509 in financial expenses, net and a decrease of $159,364 in operating loss.

Share-Based Compensation and Liabilities Presented at Fair Value

Ordinary Share Valuations

The fair value of the ordinary shares was used to determine the value of the warrants presented as a liability and share-based compensation. The following table sets forth the fair value of our ordinary shares as of the following dates:

	Date	Fair Value
Ordinary share	December 31, 2020	**$ 0.24**
Ordinary share	December 31, 2021	**$ 0.09**
Ordinary share	December 31, 2022	**$ 0.03**

Option Valuations

Under U.S. GAAP, we account for share-based compensation for employees and others in accordance with the provisions of the FASB's ASC Topic 718 "Compensation—Stock Based Compensation," or ASC 718, which requires us to measure the cost of equity-based awards based on the fair value of the award on the grant date.

We selected the Black-Scholes option pricing model as the most appropriate method for determining the estimated fair value of option awards. The resulting cost of an equity incentive award is recognized as an expense over the requisite service period of the award, which is usually the vesting period. We recognize compensation expense over the vesting period using the straight-line method and classify these amounts in the consolidated financial statements based on the department to which the related employee reports.

The determination of the grant date fair value of options using the Black-Scholes option pricing model is affected by estimates and assumptions regarding a number of complex and subjective variables. These variables are estimated as follows:

- *Fair Value of our ordinary shares*. Discussed in the above "Ordinary Share Valuations".
- *Risk-free Interest Rate*. The risk-free interest rate is based on the yield from U.S. Treasury zero-coupon bonds with a term equivalent to the contractual life of the options.
- *Volatility*. The expected share price volatility derived from sample of similar companies.
- *Dividend Yield*. We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.
- *Expected Life.* We used the "simplified" method, meaning the expected life is set as the average of the vesting period for each vested tranche of options and the contractual term for those options.

If any of the assumptions used in the Black-Scholes option pricing model change significantly, share-based compensation for future awards may differ materially compared with the awards previously granted.

The following table presents the weighted-average assumptions used to estimate the fair value of options granted to employees, officers and consultants during the periods presented.

	Year Ended December 31,		
	2022	2021	2020
Dividend yield	0%	0%	0%
Expected volatility	80%	80%	80%
Risk-free interest	3.00%	0.81%	0.36%-1.62%
Expected life (in years)	5	5	5

Liabilities Presented at Fair Value

Some of our warrants are classified as liabilities in accordance with ASC No. 815-40, "Distinguishing Liabilities From Equity." Accordingly, these warrants are required to be marked to market at each reporting date.

We estimated the fair value of these warrants and such conversion feature using a Black-Scholes option pricing model, which is affected by estimates and assumptions regarding a number of complex and subjective variables. These variables are estimated as follows:

- *Fair Value of our ordinary shares*. Discussed in the above "Ordinary Share Valuations".
- *Risk-free Interest Rate*. The risk-free interest rate is based on the yield from U.S. Treasury zero-coupon bonds with a term equivalent to the contractual life of the warrants.
- *Volatility*. The expected share price volatility derived from sample of similar companies.
- *Dividend Yield*. We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.

In addition, the conversion feature of the capital note issued to a shareholder, is required to be marked to market at each reporting date. We estimated the fair value of the capital note by taking into account the expected occurrence of certain trigger events (such as public offering or M&A), multiplied by the value in a probability that the event will occur (based on our subjective assumptions) and discounting the value in an appropriate discount factor (based on the weighted average cost of capital of the Company) for a period of one year.

Reporting Currency

Our functional currency is the U.S. Dollar, although substantial portion of our costs are incurred in NIS. We finance our operations mainly in U.S. dollars and a substantial portion of our costs and revenues from its primary markets are anticipated to be incurred and generated in U.S. dollars. As such, we believe that the U.S. dollar is the currency of the primary economic environment in which we operate.

Transactions and balances that are denominated in dollars are presented at their original amounts. Non-dollar transactions and balances have been re-measured to dollars in accordance with Accounting Standards Codification ("ASC") No. 830, "Foreign Currency Matters". All foreign currency transaction gains and losses are reflected in the statements of operations as financial income or expenses, as appropriate.

B. Liquidity and Capital Resources

We currently have limited liquidity. As of December 31, 2022 and 2021, our cash on hand was $362,609 and $19,437, respectively. We are in default in repayment of our convertible notes which as of December 31, 2022 aggregated to approximately $1.5 million (including principal and interest). Based on our current cash burn rate, strategy and operating plan, we believe that our cash reserves as of the date of this report will enable us to operate through June 2023. In order to fund our anticipated liquidity needs beyond such period (or possibly earlier if our current cash burn rate, strategy or operating plan change in a way that accelerates or increases our liquidity needs), we will need to raise additional capital.

Significant recent financing activities:

To date, we have financed our operations primarily through the sale of equity and convertible securities as well as through government grants.

At the annual shareholders' meeting held on September 19, 2021, the shareholders approved (i) a capital raise at a per share purchase price of $0.07 and (ii) an adjustment to the conversion price of the Company's outstanding convertible loans (collectively, the "CLAs") from $0.17 to $0.07 per Ordinary Share, subject to the holders' agreement to cancel the outstanding related warrants that were issued in connection with the CLAs.

On September 23, 2021, the Company entered into agreements with the holders of approximately $3,521,748 in principal amount and accrued interest of CLAs for the conversion of the Company's indebtedness into an aggregate of 57,291,838 Ordinary Shares (at the rate of $0.07 per share). Furthermore, all the warrants that were issued previously in connection with those CLAs were cancelled and no longer have any force or effect.

Commencing July 2021 and through July 2022, we and certain existing Company shareholders, namely GTRIMG, Teuza, entities controlled by each of Leon Recanati and Lenny Recanati and Dan Vilenski, entered into definitive agreements relating to a private placement of the Company's ordinary shares for aggregate gross proceeds to the Company of $3.0 million (including approximately $230,000 plus interest thereon upon conversion of CLAs), at a price of $0.07 per ordinary share. The Company issued to such investors an aggregate of 42,926,031 ordinary shares in respect of the definitive agreements mentioned above.

In October 2022, certain existing Company shareholders, including GTRIMG, Teuza, entities controlled by each of Leon and Lenny Recanati and Dan Vilenski (collectively, the "Investors"), entered into subscription agreements pursuant to which they agreed to invest in our securities by way of a private placement, under the following terms:

- The Company offered, issued and sold to the Investors units of its securities for aggregate gross proceeds to the Company of $1.0 million (the "Initial Offering"), each unit comprised of (each, a "Unit" and, collectively, the "Units") (i) one Ordinary Share, and (ii) a warrant to purchase an additional two Ordinary Shares, exercisable through the earlier of (a) the closing of a subsequent offering of Company securities by the Company to qualified investors with an effective price per Ordinary Share of at least $0.20 and (b) the second anniversary of the issuance of such warrant, in each case at a per share exercise price of $0.07, subject to adjustment (the "Warrant"), at a per Unit purchase price of $0.07 (the "Purchase Price").

- The Company undertook to offer, issue and sell to the Investors, following the closing of the Initial Offering, additional Ordinary Shares for aggregate gross proceeds to the Company of up to an additional $1.0 million (the "Follow on Offering"), at a price per share equal to the Purchase Price, which offering was subject to the achievement by the Company of certain pre-defined milestones on or before December 31, 2022, subject to a further extension at the discretion of the Company, to a date on or before February 28, 2023. Following the partial fulfillment of the milestones, the Company initially raised from certain of the Investors $705,000 in the Follow on Offering. In April 2023, pursuant to the terms of the subscription agreement, Teuza joined the Follow-on Offering, as extended, in the amount of $295,000, resulting in aggregate proceeds to the Company of $1.0 million in the Follow-on Offering, which completed the Follow-on Offering.

- The Company undertook to offer, issue and sell to the Investors, following the initial closing of the Follow on Offering, additional Ordinary Shares for aggregate gross proceeds to the Company of up to an additional $800,000 (the "Final Offering"), at a price per share equal to the Purchase Price, which offering was subject to the achievement by the Company of a certain additional milestone set forth in the subscription agreement and any additional milestones to be agreed upon in good faith negotiations (the "Second Level Milestones"). The Final Offering shall be closed by no later than the close of business on the 30th business day after the delivery of notice by the Company to the Investors that the Second Level Milestones have been achieved. Two of the Investors undertook to invest $300,000 each in the Final Offering ($600,000 in total), if the Second Level Milestones are achieved. Notwithstanding that the Second Level Milestones have not yet been fulfilled, in April 2023, Teuza waived such condition and pursuant to the terms of the agreement, invested in this round in the amount of $105,000, resulting in aggregate proceeds to the Company of $105,000 in the Final Offering to date.

The Company expects to issue to the Investors an aggregate of 14,285,712 Ordinary Shares and warrants to purchase an aggregate 28,571,425 Ordinary Shares in the Initial Offering in respect of the $1.0 million raised, an additional aggregate 14,285,713 Ordinary Shares to the Investors that participated in the Follow on Offering in respect of the $1.0 million raised, and an additional 1,500,000 Ordinary Shares to Teuza in respect of the $105,000 raised to date in the Final Offering. If the Second Level Milestones are achieved and an additional $695,000 will be fully raised in the Final Offering, the Company would issue an additional aggregate 9,928,571 Ordinary Shares to such Investors participating in the Final Offering.

For additional information regarding how we financed our operations, please refer to Note 8, Note 11 and Note 17 to our consolidated financial statements for the year ended December 31, 2022 that appear elsewhere in this annual report on Form 20-F.

We expect to continue to fund our operations through equity or debt financings, strategic collaborations, grants and, to the extent our marketing and commercialization efforts are successful, sales of our products or technologies.

We have incurred cumulative losses of $40.6 million from inception through December 31, 2022. In addition, we have not yet established a stable recurring source of revenues sufficient to cover our operating costs and expect to continue to generate losses for the foreseeable future. There is no assurance that we will be able to obtain an adequate level of financing needed for our near-term requirements or the long-term development and commercialization of our product. These conditions raise substantial doubt about our ability to continue as a "going concern".

Cash Flows

The following table summarizes our consolidated statement of cash flows for the periods presented:

US $	**Year ended December 31,**		
	2022	**2021**	**2020**
Consolidated Statement of cash flows:			
Net cash provided by (used in):			
Operating activities	(2,889,426)	(853,426)	(793,757)
Investing activities	(93,168)	(1,869)	808,913
Financing activities	3,325,123	849,032	(34,126)

Net cash used in operating activities for the years ended December 31, 2022, 2021 and 2020 was $2,889,426, $853,426 and $793,757, respectively, an increase of $2,036,000 or 238% (from 2021 to 2022) and an increase of $59,669 or 8% (from 2020 to 2021). The increase in net cash used in operating activities in 2022 relative to 2021 was primarily attributable to payments of past liabilities in early 2022 and higher operating expenses during 2022. No significant change in net cash used in operating activities in 2021 relative to 2020.

Net cash provided by (used in) investing activities for the years ended December 31, 2022, 2021, and 2020 was $(93,168), $(1,869) and $808,913, respectively, an increase of $91,299 (from 2021 to 2022) and a decrease of 810,782 (from 2020 to 2021). The increase in net cash used in investing activities in 2022 relative to 2022 was attributable to higher purchase of property and equipment. The decrease in net cash provided by (used in) investing activities in 2021 relative to 2020 was attributable to the acquisition of Jet CU.

Net cash provided by (used in) financing activities for the years ended December 31, 2022, 2021 and 2020 was $3,325,123, $849,032 and $(34,126), respectively, an increase of $2,476,091 or 292% (from 2021 to 2022) and an increase of $883,158 (from 2020 to 2021). The increase in net cash provided by financing activities in 2022 relative to 2021 was primarily attributable to proceeds in connection with issuance of ordinary shares. The increase in net cash provided by (used in) financing activities in 2021 relative to 2020 was primarily attributable to advance payment on the account of issuing ordinary shares, proceeds from convertible loans and related warrants and change in short term loans.

C. Research and Development, patents and licenses, etc.

For information regarding our research and development activities and expenses, see "Item 4 B. — Business Overview" and "Item 5A. — Operating Results".

D. Trend Information

We are a development stage company with limited sales, and it is not possible for us to predict with any degree of accuracy the outcome of our research, development or commercialization efforts. As such, we cannot predict with any degree of accuracy any significant trends, uncertainties, demands, commitments or events that are reasonably likely to have a material effect on our net loss, liquidity or capital resources, or that would cause financial information to not be indicative of future operating results or financial condition. However, to the extent possible, certain trends, uncertainties, demands, commitments and events are described in Item 3D "Key Information—Risk Factors," Item 4A "Information on the Company" in this "Item 5. Operating and Financial Review and Prospects."

E. Critical Accounting Estimates

We prepare our consolidated financial statements in accordance with U.S. GAAP, which requires our management to make estimates that affect the reported amounts of assets, liabilities and disclosures of contingent liabilities at the balance sheet dates, as well as the reported amounts of revenues and expenses during the reporting periods. To the extent that there are material differences between these estimates and actual results, our financial condition or results of operations would be affected. We base our estimates on our own historical experience and other assumptions that we believe are reasonable after taking into account our circumstances and expectations for the future based on available information. We evaluate these estimates on an ongoing basis.

Our expectations regarding the future are based on available information and assumptions that we believe to be reasonable, which together form our basis for making judgments about matters that are not readily apparent from other sources. Since the use of estimates is an integral component of the financial reporting process, our actual results could differ from those estimates. Some of our accounting policies require a higher degree of judgment than others in their application.

We consider an accounting estimate to be critical if: (i) the accounting estimate requires us to make assumptions about matters that were highly uncertain at the time the accounting estimate was made, and (ii) changes in the estimate that are reasonably likely to occur from period to period or use of different estimates that we reasonably could have used in the current period, would have a material impact on our financial condition or results of operations.

When reading our consolidated financial statements, you should consider our selection of critical accounting policies, the judgment and other uncertainties affecting the application of such policies and the sensitivity of reported results to changes in conditions and assumptions. For summary information regarding these accounting policies, see Note 2 to the audited consolidated financial statements for the year ended December 31, 2022 included elsewhere in this annual report on Form 20-F. We believe the following accounting estimates involve the most significant judgments used in the preparation of our financial statements.

While management believes its judgments, estimates and assumptions are reasonable, they are based on information presently available and actual results may differ significantly from those estimates under different assumptions and conditions. We believe that the following critical accounting estimates involve the most significant judgments used in the preparation of our financial statements.

Going Concern Assessment

We assess liquidity and going concern uncertainty in our consolidated financial statements to determine whether there is sufficient cash on hand and working capital, including available borrowings on loans, to operate for a period of at least one year from the date the consolidated financial statements are issued or available to be issued, which is referred to as the "look-forward period", as defined in GAAP. As part of this assessment, based on conditions that are known and reasonably knowable to us, we consider various scenarios, forecasts, projections, estimates and make certain key assumptions, including timing and nature of projected cash expenditures or programs, our ability to delay or curtail expenditures or programs and our ability to raise additional capital, if necessary, among other factors. Based on this assessment, as necessary or applicable, we make certain assumptions around implementing curtailments or delays in the nature and timing of programs and expenditures to the extent we deem it probable that those implementations can be achieved and we have the proper authority to execute them within the look-forward period.

As of December 31, 2022, we had cash balance of $362,609. We are in default in repayment of our convertible notes which as of December 31, 2022 aggregated to approximately $1.5 million (including principal and interest). As of the date of this annual report, we had sufficient cash to fund operations as presently maintained through June 2023. We will need to raise additional capital to continue our operations beyond such period.

These factors raise substantial doubt about our ability to continue as a going concern. Our evaluation of the events and conditions and our plans regarding these matters are also described in Note 1.b to our consolidated financial statements for the year ended December 31, 2022 that appear elsewhere in this annual report on Form 20-F. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Impairment of long-lived assets

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable. When these events occur, we measure impairment by comparing the carrying value of the long-lived assets to the estimated undiscounted future cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flow is less than the carrying amount of the assets, we will recognize an impairment loss based on the fair value of the assets, using the expected future discounted cash flows.

Warrant Liabilities

We account for our warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in ASC 480, Distinguishing Liabilities from Equity ("ASC 480") and ASC 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for liability classification under ASC 815, including whether the warrants are indexed to our ordinary shares, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each cut-off end date while the warrants are outstanding.

Some of our warrants meet the criteria as liability classified derivative instruments and are recorded at fair value on the grant date and re-valued at each reporting date, with changes in the fair value reported in the consolidated statements of comprehensive loss. Warrant liabilities are classified on the balance sheet as current or non-current based on whether or not net-cash settlement or conversion of the instrument could be required within 12 months of the balance sheet date. Volatility in our ordinary shares may result in significant changes in the value of the warrant liabilities and resulting gains and losses on our consolidated statement of comprehensive loss.

Recent Accounting Pronouncements

For information with respect to recent accounting pronouncements, see Note 2.u. to the audited consolidated financial statements for the year ended December 31, 2022 included elsewhere in this annual report on Form 20-F.

ITEM 6. Directors, Senior Management and Employees.

A. Directors and Senior Management

The following table sets forth information regarding our directors and senior management team as of May 15, 2023.

Name	Age	Position
Dov Farkash	63	Active Chairman of the Board
Avi Magid[1]	62	Chief Executive Officer and Director
Dr. Fernando de la Vega	65	Chief Technology Officer and Director
Ofer Greenberger [2]	61	Director
Keinan Maman[3][4]	46	Director
Orly Solomon [2][3]	54	External Director
Ido Lapidot [2][3]	59	External Director
Evyatar Cohen	50	Chief Financial Officer

(1) Joined the Board of Directors on March 2, 2023.

(2) Member of our Compensation Committee.

(3) Member of our Audit Committee.

(4) Joined the Board of Directors on March 6, 2023.

The address of each of our directors and executive officers is c/o P.V. Nano Cell Ltd., 8 Hamasger Street Migdal Ha'Emek 2310102, Israel.

Dov Farkash has served as our Active Chairman since April 2020. Mr. Farkash has more than 25 years of experience in business leadership and technology development in the electronics industry. From January 2000 to September 2019, Mr. Farkash served in a range of senior business leadership and technology development positions at Nova Measuring Instruments Ltd., including Senior Vice President Strategic Development, Senior Corporate Vice President Modeling Software Division, Vice President Sales and Vice President Business Development. Prior to joining Nova, Mr. Farkash served as worldwide Sales and Marketing Manager of AFCON Ltd., and AFCON Inc. in the United States. Prior to that, Mr. Farkash served in various software development managerial positions at various hi-tech companies. Mr. Farkash holds a B.Sc. degree in Computer Engineering and an MBA degree from the Technion – Israel Institute of Technology, Haifa, Israel.

Avi Magid has served as our Chief Executive Officer since July 17, 2022 and as a director since March 2, 2023. Mr. Magid has wide and varied managerial experience in the semiconductor and electronics industries in both startups and established companies. From October 2017 to July 2022, Mr. Magid served as president of Pointer and Cellocator, an Israel based company engaged in IOT and telematics, which was acquired in November 2019 by Powerfleet, Inc., a Nasdaq traded company. Mr. Magid oversaw and successfully managed multiple business units and spearheaded M&A activities at Pointer and Cellocator. From January 2016 to September 2017, Mr. Magid was chief executive officer of Micro Point Pro, which operates in the semiconductor marketplace in both the back and front end. At Micro Point, Mr. Magid expanded its business by penetrating strategic accounts and establishing new sales channels. From July 2015 to Dec 2015, Mr. Magid served as Vice President, Industrial Division and Business Development, at Amiad Water Systems. Prior to that position, from August 2014 to June 2016, Mr. Magid served as the chief executive officer and a drector of Goji Ltd., which develops a paradigm-changing RF-based energy delivery technology. From July 2010 to July 2014, Mr. Magid served as the chief executive officer of Margan Ltd., which was engaged in ultrasonic sensing systems, where he transformed a small founder-based company into a business with multi-year contractual engagements. From October 2006 to October 2010, Mr. Magid served as the Executive Vice President Global Business Group at Nova Measuring Instruments Ltd., where he managed 110 employees and led the company from a non-profitable OEM position to a cutting-edge segment leader. From 1993 to 2006, Mr. Magid served as the in various managerial position with Kulick and Soffa Industries in both Israel and the United States. Mr. Magid received his B.Sc. degree in industrial engineering from Pomona Polytechnic University in California in 1992 and graduated the AeA program at Stanford University in 1999.

Dr. Fernando de la Vega co-founded PV Nano Cell Ltd. in 2009 and has served as a member of our board of directors since that time (as Chairman of the Board until April 2020), and served as our Chief Executive Officer from our inception until June 2021 and since such time has served as our Chief Technology Officer. Dr. de la Vega has more than 35 years industrial and entrepreneurial experience, having served in managerial positions with responsibility over research and development, quality and operations and has founded or co-founded several businesses in the fields of nano technology and functional materials. From 2001 to early 2009, Dr. de la Vega served as General Manager and a Director of Cima Nanotech Israel, a company focused on the development of innovative technologies in the field of flexible printed electronics. Dr. de la Vega also co-founded and, from 2003 through 2009, served as Chairman of the Nano Functional Materials Consortium, a five-year, $25 million research consortium which performed general research on nanotechnology, sponsored by the IIA (the former Office of the Chief Scientist) as part of the MAGNET program, a special program intended to encourage cooperation between industry and academia. Dr. de la Vega has also co-founded three European research and development consortiums. He is a co-inventor of more than 11 patent families in the fields of nanomaterials and nanotechnology and author and co-author of many scientific and technical publications (including sections on two books on conductive inks for inkjet printing). Dr. de la Vega holds a Ph.D. in Applied Chemistry from the Casali Institute at the Hebrew University of Jerusalem, as well as a M.Sc. degree in Applied Chemistry and a B.Sc. degree in Chemistry from the Hebrew University of Jerusalem.

Ofer Greenberger has served as a director since May 2022. Mr. Greenberger is an experienced executive with an international proven track record in turnaround management in the technology sector. Since February 2017, Mr. Greenberger has served as President and General Manager of Applied Materials (Israel), a subsidiary of a Nasdaq-listed company and a global leader in materials engineering solutions for semiconductors, flat panel display and photo voltaic industries. Prior to his position at Applied Materials, from March 2012 through September 2015, Mr. Greenberger served as the chief executive officer of Orbit Communications Systems, an Israel-based local provider of airborne communications and satellite- tracking maritime and ground-station and new space solutions. Prior thereto, from 2003 to 2011, Mr. Greenberger served as President and General Manager of KLA-Tencor (Israel), a subsidiary of a leading worldwide capital equipment company based that supplies process control and yield management systems for the semiconductor industry and other related nanoelectronics industries. From 1993 to 2003, Mr. Greenberger served as Vice President and General Manager for Kulicke & Soffa, a leading provider of semiconductor packaging and electronic assembly solutions supporting the global automotive, consumer, communications, computing and industrial segments. Mr. Greenberger holds a B.Sc. degree in mechanical engineering and an M.B.A. degree from the Technion – Israel Institute of Technology and is a graduate of the AEA Stanford Executive Program.

Keinan Maman has served as a director since March 2023. Mr. Maman is an experienced executive with proven track record in financial and business performance optimization. Since 2022, Mr. Maman has served as chief financial officer of Keshet-Teamim, an Israeli supermarket chain. Prior to this position, from 2019 to 2022, Mr. Maman is served as chief financial officer of Fibernet, an Israeli company that designs, develops and implements cybersecurity, multimedia and fiber optic-based solutions. Prior thereto, from 2014 to 2019, Mr. Maman served as General Manager of Greenland, an Israeli retail chain. Mr. Maman holds a BA degree in accounting from Haifa University and a M.B.A. degree in business administration from Tel-Aviv University.

Orly Solomon has served as an external director (with proficiency in accounting and finance) of the Company (within the meaning of the Companies Law) since December 2017. Ms. Solomon serves as Chief Financial Officer of Radview Software Ltd. (RDVWF) since November 2021. Ms. Solomon currently serves as a director of Next Era Ltd. Ms. Solomon served as Financial Director and Advisor to the board of directors of Med and Beyond Ltd. in the years 2019-2021. Ms. Solomon served on the board of directors of Shikmona, a governmental and city owned corporation in Haifa from 2014 to 2017, as a director with financial expertise. Ms. Solomon served as Chief Financial Officer of Inuitive Ltd from 2017 to 2021. From 2014 to 2016, Ms. Solomon served as Chief Financial Officer of Future Values Ltd. During 2013, Ms. Solomon served as Chief Executive Officer of D. Medical Industries Ltd. (NASDAQ /TASE: DMED). Ms. Solomon was also the chairman of the board of directors of RSL Electronics Ltd. (TASE: RSL) from 2011 to 2012. From 2010 to 2012, Ms. Solomon served as Chief Financial Officer and Deputy to the Chief Executive Officer of Lito Group Ltd. (TASE: LTGR-M). From 2009 to 2010, Ms. Solomon served as co-founder and Chief Financial Officer of Atid Team, Israel. From 2006 to 2010, Ms. Solomon served as co-founder and a director of Altshare (formerly known as Altshuler Shacham Benefits Israel), a subsidiary of the Altshuler Shacham Investment House. Ms. Solomon holds an MBA degree in Finance and Economics from the Hebrew University of Jerusalem, and a BSc. degree in Accounting, with honors, from Rutgers University, Newark, New Jersey.

Ido Lapidot has served as an external director of the Company (within the meaning of the Companies Law) since December 2017. Mr. Lapidot is a systematic innovation consultant and strategic planner, with over two decades of experience in driving innovation and sustainable growth across diverse industries. Ido is a partner at Next Leap Ventures, an investment club comprising former Intel employees, where he is in charge of identifying and nurturing groundbreaking technologies and startups and serving as NextLeap Ventures representative on the boards of directors at Sanolla, Wadis, and Marine Edge. Previously, Mr. Lapidot held several key positions at Intel R&D, Intel Labs, and Intel Corporate Services-EMEA, where he led LEAN manufacturing and TRIZ programs, and served as a strategic technologies' planner and TRIZ program leader. Mr. Lapidot also served as an external teacher for TRIZ and systematic innovation at Afeka College of Engineering, at Azrieli College of Engineering, and Hadassah Academic College. Mr. Lapidot holds an MA degree in Environmental Science, a BA degree in Chemistry, and a B.A. degree in Atmospheric Science from the Hebrew University of Jerusalem. Mr. Lapidot also holds a TRIZ L3 certification from MA-TRIZ, a testament to his deep understanding of innovation theory and practice.

Evyatar Cohen has served as our Chief Financial Officer since November 2017. Currently and prior to his appointment as our Chief Financial Officer, Mr. Cohen serves and has served as a Chief Financial Officer and financial consultant for several public companies traded in the United States, Israel and Europe as well as privately held companies. Mr. Cohen worked at PricewaterhouseCoopers in both Tel-Aviv and New York. Mr. Cohen has gained vast experience in many industries such as high-tech, bio-tech, oil and gas, entertainment and media, and venture capital. Mr. Cohen holds a B.A. degree in Business Management from the College of Management and a Masters of Law degree from Bar Ilan University, Israel. Mr. Cohen is a licensed and certified public accountant in both the United States and Israel.

Appointments to the Board

Under our Articles of Association, as approved by our shareholders on November 29, 2018, GTRIMG, our controlling shareholder, has the right, so long it holds at least 5% of our issued and outstanding share capital, to: (i) designate one non-voting observer to our Board, provided that the observer shall not be a competitor of ours, or employed by a competitor of ours; and (ii) conditioned upon a $2.0 million investment by GTRIMG following such date, to appoint a director to the Board who shall also serve as the chairman of the Board, provided that such nominee has the required qualifications under applicable laws, including the stock exchange rules then applicable. In October 2018, Ram Zeevi, the son of Gad Zeevi, who is the controlling shareholder of GTRIMG, was appointed as an observer to our Board. In April 2020, following completion of GTRIMG's $2.0 million investment, GTRIMG appointed Mr. Dov Farkash to server as a member of our Board as Active Chairman.

Under an agreement dated October 27, 2021, entered into in connection with a private placement of our securities, certain of the investors, including GTRIMG, Messrs. Leon and Lenny Recanati, Dan Vilenski and Teuza, have the right to appoint three directors to our Board. Accordingly, Mr. Ofer Greenberger and Mr. David Boas were appointed to our Board as of May 19, 2022. Mr. Boas resigned from our Board as of January 1, 2023, and was replaced by Mr. Keinan Maman, who was appointed as a director as of March 6, 2023.

Family Relationships

There are no family relationships between any members of our executive management and our directors.

B. Compensation

The table below reflects the compensation granted to our five most highly compensated office holders (as defined in the Companies Law) during or with respect to the year ended December 31, 2022. We refer to the five individuals for whom disclosure is provided herein as our "Covered Executives". For purposes of the table below, "compensation" includes amounts accrued or paid in connection with salary cost, consultancy fees, bonuses, share-based compensation, retirement or termination payments, benefits and perquisites (as applicable) to provide such compensation. All amounts reported in the table are in terms of cost to the Company, as recognized in our consolidated financial statements for the year ended December 31, 2022, plus compensation accrued or paid to such Covered Executives following the end of the year in respect of services provided during the year.

Individual Covered Executive Compensation Name and Principal Position	Salary[1]	Share-based Compensation [2]	Total
		US $	
Fernando de la Vega, Chief Technology Officer and Director	$ 246,190	$ 111,754	$ 357,944
Hanan Markovich, Former Chief Business Development Officer[3]	213,211	21,758	234,969
Ran Eisenberg, Former Chief Executive Officer and Director[4]	141,802	89,717	231,519
Evyatar Cohen, Chief Financial Officer	160,824	46,171	206,995
Dov Farkash, Active Chairman	$ 142,955	$ 35,894	$ 178,849

(1) Salary includes the Covered Executive's gross salary plus payment of social benefits made by us on behalf of such Covered Executive. Such benefits may include, to the extent applicable to the Covered Executive, payments, contributions and/or allocations for savings funds (e.g., managers' life insurance policy), education funds (referred to in Hebrew as "keren hishtalmut"), pension, severance, risk insurances (e.g., life, or work disability insurance), payments for social security and tax gross-up payments, vacation, medical insurance and benefits, convalescence or recreation pay and other benefits and perquisites consistent with our policies.

(2) Represents the share-based compensation expenses recorded in the Company's consolidated financial statements for the year ended December 31, 2022, based on the option's grant date fair value, calculated in accordance with accounting guidance for share-based compensation.

(3) Mr. Markovich ceased to serve as our Chief Business Development Officer on February 22, 2023.

(4) Mr. Eisenberg ceased to serve as a director on May 15, 2022, and ceased to serve as our Chief Executive Officer on July 1, 2022.

Compensation of Executive Officers and Directors as a Group

The aggregate compensation paid by us to our executive officers and directors for the year ended December 31, 2022, was approximately $1,210,276, including share-based compensation expenses of approximately $305,294. This amount does not include business travel, relocation, professional and business association dues and expenses reimbursed to officers, and other benefits commonly reimbursed or paid by companies in Israel. We did not set aside or accrue any amounts to provide pension, retirement or similar benefits to any officers or directors of the Company in the year ended December 31, 2022.

In connection with their appointments as directors effective May 19, 2022 and March 6, 2023, respectively, each of Mr. Ofer Greenberger and Mr. Keinan Maman was awarded under the Company's 2010 Option Plan options to purchase up to 1,300,000 shares of the Company's Ordinary Shares, which options are scheduled to vest as follows: 25% of the options vest on the first anniversary of the appointment to the Board (i.e., 325,000 options shares) and the balance are to vest over the next three years in equal instalments on a quarterly basis at the end of each three month period following the first anniversary of appointment to the Board (i.e., 81.250 option share per three month period).

We do not have any written agreements with any director providing benefits upon the termination of such director's relationship with our company, other than our consulting agreement with our chief technology officer as described below.

Our officers are employed under the terms and conditions prescribed in personal contracts. See below "Employment or Service Agreements with our Active Chairman, Chief Executive Officer, Chief Technology Officer and Chief Financial Officer." These personal contracts provide for notice periods of varying duration for termination of the agreement by us or by the relevant executive officer, during which time the executive officer will continue to receive base salary and benefits. These agreements also contain acceleration provisions upon material events such as a change of control or entry into a material agreement, customary provisions regarding non-competition, confidentiality of information and assignment of inventions. However, the enforceability of provisions regarding non-competition and assignment of inventions may be limited under applicable law. See "Item 3 D. — Risk Factors — Risks Related to Our Intellectual Property". Under current Israeli law, we may not be able to enforce office holders' covenants not to compete and therefore may be unable to prevent our competitors from benefiting from the expertise of some of our former officer holders.

Our other employees are employed under the terms prescribed in their respective personal contracts, in accordance with the decisions of our management. Under these employment contracts, the employees are entitled to the social benefits prescribed by law and as otherwise provided in their personal contracts. Each of these employment contracts contains provisions standard for a company in our industry regarding non-competition, confidentiality of information and assignment of inventions. Under current applicable employment laws, we may not be able to enforce covenants not to compete and therefore may be unable to prevent our competitors from benefiting from the expertise of some of our former employees. See "Item 3 D. — Risk Factors — Risks Related to Our Intellectual Property" for a further description of the enforceability of non-competition clauses. We also provide certain of our employees with a company car, which is leased from a leasing company.

Compensation of Non-Executive Directors

Our non-executive directors, other than our external directors (within the meaning of the Companies Law), do not receive any cash compensation.

We pay our external directors (an annual fee and per-meeting fees in an amount between the minimum and maximum amounts payable from time to time for such fees by us under the Israeli Companies Regulations (Rules Regarding Compensation and Expense Reimbursement of External Directors), 2000 (the "Compensation Regulations"). In March 2022, a temporary amendment to the Compensation Regulations was adopted, which was adopted retroactively as of March 2020, allowing boards of directors to adopt criteria for purposes of classifying the participation of directors in meetings held electronically as attendance in person for purposes of the payment of per meeting fees, during such period that a "public health emergency situation" has been declared due to the COVID-19 pandemic. Our Board of Directors adopted a resolution classifying the participation of directors in meetings held electronically as attendance in person for purposes of the payment of per meeting fees in consideration of the COVID-19 pandemic and the preparation required of Board members for such meetings. In accordance with the Compensation Regulations, we currently pay our external directors an annual fee of NIS 25,000 (approximately $7,104) as well as a fee of NIS 3,300 (approximately $938) for each board or committee meeting attended in person, via telephone or videoconference and NIS 1,650 (approximately $469) for participation by written consent.

Directors and Officers Equity-Based Compensation

As of December 31, 2022, a total of options to purchase 16,700,377 of our ordinary shares were outstanding and held by certain current directors and executive officers (consisting of eight persons), of which options to purchase 10,425,377 of our ordinary shares were exercisable or exercisable within 60 days of May 15, 2023. For information regarding the beneficial ownership of our ordinary shares by our directors and executive officers, see "Item 7 A. Major Shareholders and Related Party Transactions — Major Shareholders"..

Employment or Service Agreements with our Active Chairman, Chief Executive Officer, Chief Technology Officer and Chief Financial Officer

Dov Farkash. On April 19, 2020, we entered into an Active Chairman Agreement (the "Chairman Agreement"), with Exoro Ltd. ("Exoro"), a company wholly-owned by Mr. Dov Farkash. The Chairman Agreement provided that Exoro, through Mr. Farkash is to provide certain services to us as active chairman, focusing on go-to-market strategy. We agreed to enter into an indemnification agreement with Mr. Farkash and to include him in our directors' and officers' liability insurance. Mr. Farkash agreed not to provide any services that would conflict with or complete with ours. We agreed to pay to Exoro a monthly service fee of NIS 40,000 (approximately $11,366) plus Value Added Tax ("VAT"). Exoro was entitled to reimbursement of expenses in connection with the provision of the services and was provided a budget of $10,000/month for travel. The term of the Chairman Agreement was for four months, with our right to renew the agreement for an additional nine months, which was utilized. Either party could terminate upon 45 days prior written notice. The Chairman Agreement could also be terminated by us for Cause (as defined in the Chairman Agreement). Notwithstanding the expiration of the Chairman Agreement, Mr. Farkash has continued to serve as Active Chairman in accordance with the terms thereof, and we intend to present such continued engagement to the approval of our shareholders at the next general meeting of shareholders.

Avi Magid. On November 7, 2022, we entered into an employment agreement with Mr. Magid in connection with his appointment as our Chief Executive Officer, which was in effect through the close of business December 19, 2022 (the "Initial CEO Agreement"), at which time our annual general meeting of shareholders approved the terms and conditions of Mr. Magid's new employment agreement in such capacity, effective as of such date (the "CEO Agreement"). The primary difference between the Initial CEO Agreement and the CEO Agreement was that under the Initial CEO Agreement, Mr. Magid was entitled to a gross monthly salary in such amount as consistent with an aggregate monthly cost to the Company of NIS 60,000, retroactive to August 1, 2022 (his employment start date), whereas under the CEO Agreement, he is entitled to a gross monthly salary of NIS 60,000 (approximately $17,050). In addition, under the terms of the CEO Agreement, Mr. Magid is entitled to a leased vehicle or, alternatively, at his option, to receive an additional amount equal to the leasing cost as salary, provided that the total payroll will be in accordance with the limitation of our Compensation Policy. Under both agreements, Mr. Magid is also entitled to the following: (i) manager's insurance under Israeli law to which the Company contributes amounts equal to (a) 8.33% for severance payments, and 6.5%, or up to 7.5% (including disability insurance) designated for premium payment (and Mr. Magid contributes an additional 6%) of each monthly salary payment, and (b) 7.5% of his salary (with Mr. Magid contributing an additional 2.5%) to an education fund, a form of deferred compensation program established under Israeli law. Both employment agreements contain (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. Either party may terminate the CEO Agreement at any time upon one month's prior written notice.

In addition, pursuant to the approval of our shareholders at the annual general meeting held in December 2022, Mr. Magid was awarded options to purchase 5,249,758 ordinary shares, exercisable at a per share exercise price of $0.07 and scheduled to vest over three years as follows: one-third on August 1, 2023, the first anniversary of the employment start date, and the balance thereafter in equal monthly instalments at the end of each month, subject to his continued employment with the Company; provided, that as the number of reserved shares under the Company's 2010 Option Plan is not sufficient to support the grant in its totality at the time of the shareholder approval, options for only 4,000,000 shares were awarded and the balance of the grant (i.e., 1,249,758 options) shall be completed at such time as the number shares available for issuance under the Company's 2010 Option Plan shall have been increased (and such remaining options, once granted, will vest according to the vesting schedule referenced above).

Dr. Fernando de la Vega. On September 9, 2009, we entered into a services agreement (the "DBG Services Agreement"), as amended in November 2018, with Dr. de la Vega's wholly-owned service company, Dolev Bar-Guy Consulting and Management Ltd. ("DBG Services Agreement"), pursuant to which Dr. de la Vega provided us management services as our Chief Executive Officer through June 1, 2021, at which time he resigned from such position and assumed the position as Chief Technology Officer, under the same terms and conditions according to the DBG Services Agreement. Pursuant to the terms of the DBG Services Agreement, Dr. de la Vega is currently entitled to a monthly consultancy fee in the amount of 65,000 (approximately $18,471) plus VAT and car allowance in the amount of NIS 2,500 (approximately $710) plus VAT per month plus reimbursement for fuel expenses and tolls. Dr. de la Vega may, at any time, terminate the DBG Services Agreement by three months' prior written notice. If we wish to terminate the DBG Services Agreement, other than as a result of Dr. de la Vega's breach of his terms of office, we are required to provide six months' prior written notice (provided that if the termination is up to 12 months following an exit event, 24 months' prior written notice is required; between 12 and up to 24 months following an exit event, 12 months' prior written notice is required and between 24 months and up to 36 months following an exit event, 6 months' prior written notice is required).

In addition, Dr. de la Vega is entitled to receive:

(a) An annual cash bonus in an amount equivalent to up to four times his monthly service fee, plus VAT, subject to achievement of certain performance targets which are determined by our compensation committee and the board of directors on an annual basis.

(b) A special one-time bonus in an amount equivalent to six times his monthly service fee, plus VAT upon the occurrence of an Exit Event (as described below), provided that our pre-money valuation shall be at least $50,000,000 at the closing of such transaction or within 12 months following such closing.

(c) An equity-based award upon the occurrence of an Exit Event, in accordance with the following calculation:

(i) 0.5% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $30,000,000 but less than $40,000,000;

(ii) 1.25% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $40,000,000 but less than $50,000,000;

(iii) 2.0% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $50,000,000.

An 'Exit Event' is defined as: (i) the consummation of an initial public offering of ordinary shares of the Company on a recognized stock exchange; or (ii) a sale of all or substantially all of the share capital of the Company to any individual, firm, corporation, partnership, trust, incorporated or unincorporated association, joint venture, joint stock company, governmental authority or other entity of any kind, and shall include any successor (by merger or otherwise) of such entity (a "Person"); (iii) a sale, lease, conveyance or disposition of all or substantially all of the assets of the Company; (iv) a merger of the Company with or into another entity in which the shareholders of the Company immediately prior to such merger do not hold a majority of the share capital and voting rights of the surviving entity held by them by virtue of their holdings in the Company prior to the consummation of the transaction or a transaction or series of transactions in which a Person or group of Persons acquire more than 50% of the issued and outstanding share capital of the Company (other than an acquisition of such share capital from the Company); or (v) an up-listing to a higher exchange.

Evyatar Cohen. On November 12, 2017, we entered into a consultancy agreement with Mr. Cohen to serve as our Chief Financial Officer. Mr. Cohen's services include, among others, the services of Ms. Moran Cohen as our controller. Pursuant to the terms of the agreement, Mr. Cohen is entitled to a monthly fee of NIS 45,000 (approximately $12,787) plus VAT. Either we or Mr. Cohen may terminate the agreement by providing 45-days prior notice.

We have not paid our Active Chairman and certain executive officers all amounts due to them under their respective agreements due to financial difficulties and have recorded a liability in our consolidated financial statements with respect to such amounts.

Share Option Plan

During 2010, we adopted our 2010 Option Plan (the "Plan"). The purpose of the Plan is to serve as an incentive to attract new employees, directors, consultants and service providers, and to retain persons of training, experience and ability by providing them with opportunities to purchase securities, including shares of the Company, pursuant to the Plan, as approved by the board of directors of the Company. As of December 31, 2022, a total of 1,515,516 ordinary shares were reserved for issuance under the Plan. The number of ordinary shares reserved for issuance under the Plan may be changed from time to time at the sole discretion of the board of directors.

The Plan is administered by our board of directors, provided that the board of directors may delegate responsibility for the administration of the Plan to a committee designated by the board of directors. The board of directors has authority to designate grantees of awards under the Plan and the terms of any award granted, including the type of securities to be granted, the vesting terms of any securities granted, and any restrictions on transfer of any securities granted under the Plan.

Pursuant to the Plan, the Company may (1) grant awards of securities under the Plan under the capital gains track pursuant to Section 102 of the Israeli Income Tax Ordinance [New Version], 1961 (the "Ordinance"), to our directors, officers and employees who are not holders of 10% or more of our total share capital and are not otherwise controlling shareholders, and (2) grant awards pursuant to Section 3(i) of the Ordinance to non-employee Israeli service providers, consultants and shareholders who hold 10% or more of our total share capital or are otherwise controlling shareholders.

Section 102 of the Ordinance allows employees, directors and officers, who are not controlling shareholders and are considered Israeli residents, to receive favorable tax treatment for compensation in the form of shares or options. Our non-employee Israeli service providers, consultants and controlling shareholders, which includes any shareholder holding 10% or more of the Company's ordinary shares on a fully diluted basis, may only be granted options under Section 3(i) of the Ordinance, which does not provide for similar tax benefits. Section 102 of the Ordinance includes two alternatives for tax treatment involving the issuance of options or shares to a trustee for the benefit of the grantees and also includes an additional alternative for the issuance of options or shares directly to the grantee. Section 102(b)(2) of the Ordinance, the most favorable tax treatment for grantees, permits the issuance to a trustee under the "capital gains" track. However, under this track we are not allowed to deduct any expense with respect to the issuance of the options or shares. In order to comply with the terms of the capital gains track, all options granted under the Plan pursuant and subject to the provisions of Section 102 of the Ordinance, as well as the ordinary shares issued upon exercise of these options and other shares received subsequently following any realization of rights with respect to such options, such as share dividends and share splits, must be granted to a trustee for the benefit of the relevant employee, director or officer and should be held by the trustee for at least two years after the date of the grant. If such options or shares are sold by the trustee or are transferred to the grantee before the end of the two-year period, then the grantee would be taxed at top marginal rates upon selling the shares.

Options granted under the Plan will vest in accordance with the vesting dates determined by the board of directors with respect to each grant. Options that are not exercised within seven years of the grant date will expire, unless a shorter or longer term is provided for by the board of directors. Generally, if we terminate a grantee's employment or services to the Company, all options granted to such grantee that are then vested will be exercisable for a period of six months after the termination date (unless a shorter period is determined by the board of directors) or, if earlier, the expiration date of such options if we terminate a grantee's employment or service for cause, all of the grantee's vested and unvested unexercised options will expire and terminate on the date of termination. In case of termination for reasons of disability or death, the grantee or his legal successor may exercise options that have vested prior to termination within a period of twelve months from the date of disability or death.

In the event of a merger or consolidation of our Company subsequent to which we would no longer exist as a legal entity, or a sale of all, or substantially all, of our ordinary shares or assets or other transaction having a similar effect on us, the Company will seek to cause the acquirer in such transaction to substitute all outstanding and unexercised options under the Plan for an appropriate number of the same type of shares or other securities of the successor company as were distributed to the Company or the shareholders in connection with such transaction. If the acquirer refuses to substitute the options, unvested options held by any grantee will vest in accordance with the following formula: X+Y*X/Z, where X = the number of vested options held by the grantee, Y = the number of unvested options held by the grantee, and Z = the number of options held by the grantee.

C. Board Practices

Board of Directors

Under the Companies Law, the management of our business, including strategy and policies, is vested in our board of directors. Our board of directors may exercise all powers and may take all actions that are not specifically granted to our shareholders or to management. Our Chief Executive Officer and other executive officers are responsible for our day-to-day management and have responsibilities established by our board of directors. Our Chief Executive Officer is appointed by, and serves at the discretion of, our board of directors, subject to the terms of an employment agreement that we have entered into with him. All other executive officers are appointed by our chief executive officer, and are subject to the terms of any applicable employment agreements that we may enter into with them.

Election and Removal of Directors

Our Articles of Association provide for a board of directors consisting of no less than three and no more than seven directors, with all directors (other than the external directors, whose appointment is required under the Companies Law, as described below) divided into three classes with staggered three-year terms, designated as Class I, Class II and Class III, with each class of directors to consist, as nearly as possible, of one-third of the total number of directors other than the external directors. At each annual general meeting of our shareholders thereafter, the election or re-election of directors following the expiration of the term of office of the directors of that class of directors will be for a term of office that expires on the third annual general meeting following such election or re-election. Each director so elected will hold office until the annual general meeting of our shareholders for the year in which his or her term expires, unless the tenure of such director expires earlier pursuant to the Companies Law or unless he or she is removed from office as described below. Our board of directors is divided among the three classes of directors (except for the external directors) as follows:

- The Class I director is Mr. Dov Farkash, our Active Chairman, for a term expiring at the 2023 annual meeting of shareholders.

- The Class II directors are Mr. Ofer Greenberger and Mr. Keinan Maman, for a term expiring at the 2024 annual general meeting of shareholders.

- The Class III director is Dr. Fernando de la Vega, for a term expiring at the 2025 annual general meeting of shareholders.

Under our Articles of Association our Chief Executive Officer, currently Mr. Avi Magid, serves as an ex-officio member of our Board of Directors. In addition, Ms. Orly Solomon and Mr. Ido Lapidot serve as our external directors in accordance with Israeli law, as described further below.

Our Articles of Association allow our board of directors to appoint directors (other than the external directors) to fill vacancies on our board of directors, however created, for a term of office equal to the remaining period of the term of office of the director(s) whose office(s) have been vacated, and to appoint any person to be a Director in addition to the existing Board, so long as the total number of Directors shall not at any time exceed the maximum number prescribed by our Articles of Association. Any such director appointed by the Board of Directors shall be placed in a class of directors so that all classes are as nearly equal as possible. A director, appointed by the Board of Directors, shall be deemed, for all intents and purposes, as having been appointed by the Annual General Meeting, and, without derogating from the generality of the aforesaid, shall serve as a Director until the expiry of the term of office of the class to which he or she was appointed.

Observer

Under our Articles of Association, as approved by our shareholders on November 29, 2018, GTRIMG, our controlling shareholder, has the right, so long it holds at least 5% of our issued and outstanding share capital, to designate one non-voting observer to our Board, provided that the observer shall not be a competitor of ours or employed by a competitor of ours. In October 2018, Ram Zeevi, the son of Gad Zeevi, who is the controlling shareholder of GTRIMG, was appointed as an observer to our Board.

Chairman of the Board

Under our Articles of Association, as approved by our shareholders on November 29, 2018, GTRIMG, our controlling shareholder, has the right, so long it holds at least 5% of our issued and outstanding share capital, conditioned upon a $2.0 million investment by GTRIMG following such date, to appoint a director to the Board who shall also serve as the chairman of the Board, provided that such nominee has the required qualifications under applicable laws, including the stock exchange rules then applicable. In April 2020, following completion of GTRIMG's $2.0 million investment, GTRIMG appointed Mr. Dov Farkash to server as a member of our Board as Active Chairman.

Under the Companies Law, the chief executive officer (referred to as a "general manager" under the Companies Law) or a relative of the chief executive officer may not serve as the chairman of the board of directors, and the chairman of the board of directors or a relative of the chairman may not be vested with authorities of the chief executive officer unless approved by our shareholders by a special majority consisting of a majority vote of the shares present and voting at a shareholders meeting, *provided* that either:

- at least a majority of the shares of non-controlling shareholders and shareholders that do not have a personal interest in the approval voted at the meeting are voted in favor (disregarding abstentions); or

- the total number of shares of non-controlling shareholders and shareholders who do not have a personal interest in such appointment voting against such appointment does not exceed two percent of the aggregate voting rights in the company.

A person subordinated, directly or indirectly, to the chief executive officer may not serve as the chairman of the board of directors; the chairman of the board of directors may not be vested with authorities that are granted to those subordinated to the chief executive officer; and the chairman of the board of directors may not serve in any other position in the company or a controlled company, but he or she may serve as a director or chairman of the board of directors of a controlled subsidiary.

There are no family relationships among any of our officers and directors.

External Directors

Under the Companies Law, companies incorporated under the laws of the State of Israel whose shares are publicly traded are required to appoint at least two external directors who meet the qualification requirements set forth in the Companies Law within three months of the closing of the initial public offering.

At our general meeting of shareholders held in 2017, we appointed Ms. Orly Solomon and Mr. Ido Lapidot as our external directors for an initial term of three years and they were re-elected at our general meeting of shareholders held in December 2020 for an additional three-year term.

The Companies Law provides for special approval requirements for the election of external directors. External directors must be elected by a majority vote of the shares present and voting at a shareholders meeting, provided that either (which we refer to as the "Special Majority"):

- such majority includes at least a majority of the shares held by all shareholders who are not controlling shareholders and do not have a personal interest in such election (other than a personal interest which is not derived from a relationship with a controlling shareholder), present and voting at such meeting, excluding abstainers; or

- the total number of shares of non-controlling shareholders and shareholders who do not have a personal interest in such election (other than a personal interest which is not derived from a relationship with a controlling shareholder) voting against the election of an external director does not exceed 2% of the aggregate voting rights in the company.

After an initial term of three years, an external director may be re-elected to serve in that capacity for up to two additional terms of three years each under one of two alternatives. Under the first alternative, the external director may be nominated by the board of directors, and such external director's re-election is approved by a majority of the shareholders that was required to elect such external director in such director's initial election. Under the second alternative, the external director may be nominated by a shareholder(s) holding 1% or more of the voting power and at the general meeting of shareholders such re-election is approved by a majority of those shares present and voting that are held by shareholders who are non-controlling shareholders and do not have a personal interest in the re-election, provided that such shares represent at least 2% of the total voting power in the company.

Under the Companies Law, an external director cannot be dismissed from office unless the board of directors has learned there is a concern that: (i) the external director no longer meets the statutory requirements for his appointment as an external director; or (ii) the external director is in breach of his or her duty of loyalty to the company. The board of directors shall discuss the matter no later than in the first board of directors meeting convened after the board becomes aware of such circumstances. In the event the board of directors determines that an external director ceased to comply with the requirements set forth under the Companies Law, or that he or she breached his or her duty of loyalty to the company, the board of directors shall convene a general meeting of the shareholders that shall include on the agenda a resolution for the removal from office of such external director. The removal of an external director from office by the shareholders is subject to the same Special Majority requirements for the appointment of external directors (as described above); provided, however, that the external director has been given the opportunity to present his or her position. In addition, a court of law may determine, upon a request by a director or a shareholder, to dismiss the external director after finding that such external director no longer meets the statutory requirements of an external director set forth in the Companies Law or that the external director is in breach of his or her duty of loyalty to the company.

Any committee of the board of directors that is authorized to exercise powers of the board of directors is required to include at least one external director, and the audit and compensation committees are required to all of such company's external directors.

Under the Companies Law, external directors of a company are prohibited from receiving, directly or indirectly, any compensation from the company other than for their services as external directors pursuant to the provisions and limitations set forth in regulations promulgated under the Companies Law (the "Regulations"), which compensation is determined prior to their appointment and may not be changed throughout the term of their service as external directors (except for certain exceptions set forth in the regulations).

The Companies Law provides that a person is not qualified to serve as an external director if, as of the appointment date or at any time during the two years preceding his or her appointment, that person or a relative, partner or employer of that person, any person to whom that person is subordinate (whether directly or indirectly), or any entity under that person's control, had any affiliation or business relationship with the company, any controlling shareholder or relative of a controlling shareholder or an entity that, as of the appointment date is, or at any time during the two years preceding that date was, controlled by the company or by any entity controlling the company.

The term affiliation for this purpose includes (subject to certain exceptions):

- an employment relationship;
- a business or professional relationship maintained on a regular basis;
- control; and
- service as an office holder, excluding service as a director in a private company prior to the first offering of its shares to the public if such director was appointed as a director of the private company in order to serve as an external director following the public offering.

The Companies Law defines the term "office holder" of a company to include a general manager, chief business manager, deputy general manager, vice general manager, any other person assuming the responsibilities of any of these positions regardless of such person's title, a director and any other manager directly subordinate to the general manager.

The following additional qualifications apply to an external director:

- a person may not be elected as an external director if he or she is a relative of a controlling shareholder;
- if a company does not have a controlling shareholder or a holder of 25% or more of the voting power, then a person may not be elected as an external director if he or she (or his or her relative, partner, employer or any entity under his or her control) has, as of the date of the person's election to serve as an external director, any affiliation with the then chairman of the board of directors, Chief Executive Officer, a holder of 5% or more of the issued share capital or voting power, or the most senior financial officer of the company;
- a person may not serve as an external director if he or she (or his or her relative, partner, employer, a person to whom he or she is subordinated or any entity under his or her control) has business or professional relations with anyone with whom affiliation is prohibited as described above, and even if these relations are not on a regular basis (other than immaterial relations); and
- a person may not continue to serve as an external director if he or she accepts, during his or her tenure as an external director, direct or indirect compensation from the company for his or her role as a director, other than the amounts prescribed under the Regulations, indemnification, the company's undertaking to indemnify such person and insurance coverage.

Furthermore, no person may serve as an external director if that person's professional or other activities create, or may create, a conflict of interest with that person's responsibilities as a director or otherwise interfere with that person's ability to serve as an external director or if such person is an employee of the Israel Securities Authority or of an Israeli stock exchange. Following the termination of an external director's membership on the board of directors, such former external director and his or her spouse and children may not be provided a direct or indirect benefit by the company, its controlling shareholder or any entity under its controlling shareholder's control, including serving as an executive officer or director of the company or a company controlled by its controlling shareholder and cannot be employed by or provide professional services to the company for pay, either directly or indirectly, including through a corporation controlled by that former external director, for a period of two years (the prohibition also applies to relatives of the former external director who are not his or her spouse or children, but only for a period of one year).

If at the time an external director is appointed, all members of the board of directors who are not controlling shareholders or their relatives are of the same gender, the external director must be of the other gender. A director of one company may not be appointed as an external director of another company if a director of the other company is acting as an external director of the first company at such time.

In addition, under the Companies Law, our board of directors must determine the minimum number of directors who are required to have financial and accounting expertise and a person may be appointed as an external director only if he or she either has professional qualifications or has accounting and financial expertise, provided, at least one of the external directors must be determined by our board of directors to have accounting and financial expertise. A director with financial and accounting expertise is a director who, by reason of his or her education, professional experience and skill, has a high level of proficiency in and understanding of business accounting matters and financial statements. He or she must be able to thoroughly comprehend the financial statements of the company and initiate debate regarding the manner in which financial information is presented. In determining the number of directors required to have such expertise, the board of directors must consider, among other things, the type and size of the company and the scope and complexity of its operations.

A director with accounting and financial expertise is a director who, due to his or her education, experience and skills, possesses a high degree of proficiency in, and an understanding of, business-accounting matters and financial statements, such that he or she is able to understand the financial statements of the company, in depth, and initiate a discussion about the manner of presentation of the financial data. A director is deemed to have professional qualifications if he or she has any of (i) an academic degree in economics, business management, accounting, law or public administration, (ii) an academic degree or has completed another form of higher education in the primary field of business of the company or in a field which is relevant to his/her position in the company, or (iii) at least five years of experience serving in one of the following capacities, or at least five years of cumulative experience serving in two or more of the following capacities: (a) a senior business management position in a company with a significant volume of business; (b) a senior position in the company's primary field of business; or (c) a senior position in public administration or service. Our board of directors is charged with determining whether a director possesses financial and accounting expertise or professional qualifications.

Our board of directors has determined that the minimum number of directors with financial and accounting expertise is one and that Ms. Orly Solomon (an external director) qualifies as such. In addition, our Board has determined that Ms. Orly Solomon qualifies as an audit committee financial expert pursuant to the applicable SEC rules.

Audit Committee

Our Audit Committee is comprised of the following members: Ms. Solomon (external director), Mr. Lapidot (external director) and Mr. Maman. Ms. Solomon is the Chairwoman of the Audit Committee.

Pursuant to the Companies Law, the audit committee must be comprised of at least three directors, including all of the external directors, and a majority of its members must be unaffiliated directors. An unaffiliated director is an external director or a director who is appointed or classified as such, and who meets the qualifications of an external director (other than the professional qualifications/accounting and financial expertise requirement), whom the audit committee has confirmed to meet the external director qualifications, and who has not served as a director of the company for more than nine consecutive years (with any period of up to two years during which such person does not serve as a director not being viewed as interrupting a nine-year period).

Such person must meet the non-affiliation requirements as to relationships with the controlling shareholder (and any entity controlled by the controlling shareholder, other than the company and other entities controlled by the company) and must meet the nine-year requirement described above. Following the nine-year period, a director of an Israeli company traded on such foreign stock exchange may continue to be considered an unaffiliated director for unlimited additional periods of three years each, provided the audit committee and the board of directors of the company confirm that, in light of the director's expertise and special contribution to the work of the board of directors and its committees, the re-election for such additional period is beneficial to the company.

Under the Companies Law, the audit committee may not include the chairman of the board, any director employed by the company or who regularly provides services to the company (other than as a board member), a controlling shareholder or any relative of the controlling shareholder, as each term is defined in the Companies Law. In addition, the audit committee may not include any director employed by the company's controlling shareholder or by a company controlled by such controlling shareholder, or who provides services to the company's controlling shareholder, or a company controlled by such controlling shareholder, on a regular basis, or a director whose main livelihood is from the controlling shareholder. The chairman of the audit committee is required to be an external director.

Audit Committee Role

Our board of directors adopted an audit committee charter that sets forth the responsibilities of the audit committee consistent with the rules of the U.S. Securities and Exchange Commission as well as the requirements for such committee under the Companies Law, including the following:

- oversight of our independent registered public accounting firm and recommending the engagement, compensation or termination of engagement of our independent registered public accounting firm to the board of directors in accordance with Israeli law;
- recommending the engagement or termination of the person filling the office of our internal auditor; and
- recommending the terms of audit and non-audit services provided by the independent registered public accounting firm for pre-approval by our board of directors.

Our audit committee provides assistance to our board of directors in fulfilling its legal and fiduciary obligations in matters involving our accounting, auditing, financial reporting, internal control and legal compliance functions by pre-approving the services performed by our independent auditors and reviewing their reports regarding our accounting practices and systems of internal control over financial reporting. Our audit committee also oversees the audit efforts of our independent auditors and takes those actions that it deems necessary to satisfy itself that the auditors are independent of management.

Under the Companies Law, our audit committee is responsible for:

- determining whether there are deficiencies in the business management practices of our company, including in consultation with our internal auditor or the independent auditor, and making recommendations to the board of directors to improve such practices;
- determining whether a competitive process must be implemented for the approval of certain transactions with controlling shareholders or its relative or in which a controlling shareholder has a personal interest (whether or not the transaction is an extraordinary transaction), under the supervision of the audit committee or other party determined by the audit committee and in accordance with standards to be determined by the audit committee, or whether a different process determined by the audit committee should be implemented for the approval of such transactions (see "—Fiduciary duties and Approval of Related Party Transactions under Israeli law");
- determining the process for the approval of certain transactions with controlling shareholders or in which a controlling shareholder has a personal interest that the audit committee has determined are not extraordinary transactions but are not immaterial transactions;
- where the board of directors approves the working plan of the internal auditor, examining such working plan before its submission to the board of directors and proposing amendments thereto;
- examining our internal controls and internal auditor's performance, including whether the internal auditor has sufficient resources and tools to dispose of its responsibilities;
- examining the scope of our auditor's work and compensation and submitting a recommendation with respect thereto to our board of directors or shareholders, depending on which of them is considering the appointment of our auditor; and
- establishing procedures for the handling of employees' complaints as to deficiencies in the management of our business and the protection to be provided to such employees.

Under the Companies Law a quorum of the audit committee for discussion and approval requires the presence of a majority of the committee's members are present, which majority consists of unaffiliated directors including at least one external director.

Compensation Committee

Our Compensation Committee currently consists of Ms. Solomon (external director), Mr. Lapidot (external director) and Mr. Ofer Greenberger.

Ms. Solomon is the chairwoman of the compensation committee. Our board of directors adopted an audit committee charter that sets forth the responsibilities of the audit committee.

Under the Companies Law, the compensation committee is required to be comprised of at least three directors, including all of the external directors. The additional members of the Compensation Committee must be directors that receive compensation subject to the provisions and limitations set forth in the Regulations. Under the Companies Law, an external director must serve as the chairman of the Compensation Committee and the external directors shall constitute a majority of our compensation committee.

Our compensation committee's duties include, among other things:

- recommending to the board of directors for its approval (i) a compensation policy; (ii) whether a compensation policy should continue in effect, if the then-current policy has a term of greater than three years (approval of either a new compensation policy or the continuation of an existing compensation policy must in any case occur every three years); and (iii) periodic updates to the compensation policy. See "—Compensation Policy under the Companies Law." In addition, the compensation committee is required to periodically examine the implementation of the compensation policy;

- the approval of the terms of employment and service of office holders (including determining whether the compensation terms of a candidate for chief executive officer of the company need not be brought to approval of the shareholders); and

- reviewing and approving grants of options and other incentive awards to persons other than office holders to the extent such authority is delegated by our board of directors, subject to the limitations on such delegation as provided in the Israeli Companies Law.

Compensation Policy under the Companies Law

In general, under the Companies Law, a public company must have a compensation policy that applies to its office holders approved by the board of directors after receiving and considering the recommendations of the compensation committee. In addition, the compensation policy, which must be approved at least once every three years, or five years after a company's initial public offering, requires the approval of the general meeting of the shareholders. In public companies such as our company, shareholder approval by a majority vote of the ordinary shares present and voting at a meeting of shareholders called for such purpose is required, provided that either: (i) such majority includes the majority of the votes of those shareholders who are non-controlling shareholders and shareholders who do not have a personal interest in the approval of the compensation policy, who voted at the meeting (excluding abstentions) or (ii) the total number of votes against the proposal among the shareholders mentioned in clause (i) does exceed 2% of the voting rights in the company. Under special circumstances, the board of directors may approve the compensation policy despite the objection of the shareholders on the condition that the compensation committee and then the board of directors decide, on the basis of detailed arguments and after discussing again the compensation policy, that approval of the compensation policy, despite the objection of the meeting of shareholders, is in the best interests of the company.

Our current compensation policy was approved by our shareholders at our annual general meeting held on December 19, 2022.

The compensation policy serves as the basis for decisions concerning the financial terms of employment or engagement of executive officers and directors, including exculpation, insurance, indemnification or any monetary payment or obligation of payment in respect of employment or engagement. The compensation policy relates to certain factors, including advancement of the company's objectives, the company's business and its long-term strategy, and creation of appropriate incentives for executives. It also considers, among other things, the Company's risk management, size and the nature of its operations. The compensation policy furthermore considers the following additional factors:

- the knowledge, skills, expertise and accomplishments of the relevant director or executive;
- the director's or executive's roles and responsibilities and prior compensation agreements with him or her;
- the ratio between the cost of the terms of employment of an office holder and the cost of the employment of other employees of the company, including employees employed through contractors who provide services to the company, in particular the ratio between such cost, the average and median salary of the employees of the company, as well as the impact of such disparities on the work relationships in the company;
- if the terms of employment include variable components — the possibility of reducing variable compensation at the discretion of the board of directors, and the possibility of setting a limit on the exercise value of non-cash variable compensation; and
- if the terms of employment include severance compensation — the term of employment or office of the office holder, the terms of his or her compensation during such service period, the Company's performance during that period of service, the person's contribution towards the Company's achievement of its goals and the maximization of its profits, and the circumstances under which the person is leaving the company.

In addition, in according with the Companies Law, our Compensation Policy includes the following principles:

- the link between variable compensation (e.g., bonuses) and long-term performance and measurable criteria (i.e., variable compensation must be determined based on long-term performance and measurable criteria). Only "non-material" portion of variable compensation may be determined based on criteria that is not measurable, taking into account office holders' contribution to the company;;
- the ratio of variable to fixed compensation, and the ceiling for the value of variable compensation, which is determined at the time of payment, except that the ceiling for equity-based compensation is determined at the time of grant;
- the conditions under which a director or executive would be required to repay compensation paid to him or her if it was later shown that the data upon which such compensation was based was inaccurate and was required to be restated in the company's financial statements;
- the minimum holding or vesting period for variable, equity-based compensation while referring to appropriate a long-term perspective based incentives; and
- maximum limits for severance compensation.

Compensation of Directors

Under the Companies Law, the compensation of our directors requires the approval of our Compensation Committee, the subsequent approval of the board of directors and, unless exempted under the Regulations, the approval of the shareholders at a general meeting. Where the director is also a controlling shareholder, the requirements for approval of transactions with controlling shareholders apply, as described below under "—Fiduciary duties and approval of specified related party transactions under Israeli law —Disclosure of Personal Interests of a Controlling Shareholder and Approval of Acts and Transactions."

The directors are also entitled to be paid reasonable travel, hotel and other expenses expended by them in attending board meetings and performing their functions as directors of the Company, all of which is to be determined by the board of directors.

External directors are entitled to remuneration subject to the provisions and limitations set forth in the Regulations.

Internal Auditor

Under the Companies Law, the board of directors of an Israeli public company must appoint an internal auditor recommended by the audit committee. The role of the internal auditor is, among other things, to examine our compliance with applicable law and orderly business procedures.

Under the Companies Law, the internal auditor cannot be an interested party or an office holder or a relative of an interested party or an office holder, nor may the internal auditor be the company's independent auditor or its representative. An "interested party" is defined in the Companies Law as: (i) a holder of 5% or more of the issued share capital or voting power in a company, (ii) any person or entity who has the right to designate one or more directors or to designate the chief executive officer of the company, or (iii) any person who serves as a director or as a chief executive officer of the company. As of the date of this annual report on Form 20-F, the board of directors has not appointed an internal auditor, and the Company is therefore not currently in compliance with the requirements of the Companies Law. Due to such non-compliance with the Companies Law, the Company may be subject to third parties' and/or shareholders' claims under the Israeli Torts Ordinance New Version) 5728-1968.

Fiduciary duties and Approval of Related Party Transactions under Israeli law

Fiduciary duties of office holders

The Companies Law imposes a duty of care and a duty of loyalty on all office holders of a company. Each person listed in the table under "Directors and Senior Management" is an office holder under the Companies Law. The duty of care requires an office holder to act with the level of care with which a reasonable office holder in the same position would have acted under the same circumstances. The duty of care includes a duty to use reasonable means, in light of the circumstances, to (i) obtain information on the advisability of a given action brought for his or her approval or performed by virtue of his or her position and (ii) all other important information pertaining to these actions.

The duty of care includes a duty to use reasonable means to obtain:

- information on the appropriateness of a given action submitted for his or her approval or performed by virtue of his or her position; and
- all other important information pertaining to such action.

The duty of loyalty requires an office holder to act in good faith and in the best interests of the company, and includes, among other things, the duty to:

- refrain from any conflict of interest between the performance of his or her duties in the company and his or her other duties or personal affairs;

- refrain from any activity that is competitive with the business of the company;
- refrain from exploiting any business opportunity of the company for the purpose of gaining a personal advantage for himself or herself or others; and
- disclose to the company any information or documents relating to the company's affairs which the office holder received as a result of his or her position as an office holder.

We may approve an act performed in breach of the duty of loyalty of an office holder provided that the office holder acted in good faith, the act or its approval does not harm the company, and the office holder discloses his or her personal interest a sufficient amount of time before the date for discussion of approval of such act.

Disclosure of Personal Interests of an Office Holder and Approval Certain Transactions

The Companies Law requires that an office holder promptly disclose to the company any "personal interest" that he or she may have and all related material information or documents relating to any existing or proposed transaction by the company. An interested office holder's disclosure must be made promptly and in any event no later than the first meeting of the board of directors at which the transaction is considered. A personal interest includes an interest of any person in an act or transaction of a company, including a personal interest of one's relative or of a corporate body in which such person or a relative of such person is a 5% or greater shareholder, director or general manager or in which he or she has the right to appoint at least one director or the general manager, but excluding a personal interest stemming solely from one's ownership of shares in the company. A personal interest includes the personal interest of a person for whom the office holder holds a voting proxy or the personal interest of the office holder with respect to his or her vote on behalf of a person for whom he or she holds a proxy, discretionary or otherwise, even if such shareholder has no personal interest in the matter. An office holder is not, however, obliged to disclose a personal interest if it derives solely from the personal interest of his or her relative in a transaction that is not considered an extraordinary transaction.

Under the Companies Law, extraordinary transactions that require approval are defined as any of the following: a transaction other than in the ordinary course of business; a transaction that is not on market terms; or a transaction that may have a material impact on a company's profitability, assets or liabilities.

Generally, a person who has a personal interest in a matter which is considered at a meeting of the board of directors or the audit committee shall not be present at such a meeting or vote on that matter unless, with respect to an office holder, the chairman of the audit committee or board of directors (as applicable) determines that the office holder should be present during the discussions in order to present the transaction that is subject to approval (provided that the office holder may not vote on the matter). If a majority of the members of the audit committee or the board of directors (as applicable) has a personal interest in the approval of a transaction, then all directors may participate in discussions of the audit committee or the board of directors (as applicable) on such transaction and the voting on approval thereof. If a majority of the members of the board of directors has a personal interest in the approval of a transaction, shareholder approval is also required for such transaction.

The amendment of an existing related-party transaction requires only the approval of the audit committee, provided the committee determines that the amendment is not material in relation to the existing arrangement.

Approval of Transactions with Officer Holders

If it is determined that an office holder has a personal interest in a transaction that is not an extraordinary transaction, approval by the board of directors is required for the transaction, unless the company's articles of association provide for a different method of approval. Further, so long as an office holder has disclosed his or her personal interest in a transaction, the board of directors may approve an act by the office holder that would otherwise be deemed a breach of his or her duty of loyalty, provided that the transaction is in the company's best interest and the office holder acted in good faith. An extraordinary transaction in which an office holder has a personal interest requires approval first by the company's audit committee and subsequently by the board of directors.

Compensation of Officers Other than the Chief Executive Officer

Pursuant to the Companies Law, compensation arrangements such as insurance, indemnification or exculpation arrangements with office holders (other than the chief executive officer) or directors require approval first by the compensation committee, then by the board of directors, according to the company's compensation policy.

In special circumstances, the compensation committee and the board of directors may approve compensation arrangements inconsistent with the company's compensation policy, subject to the approval of a majority vote of the shares present and voting at a shareholders meeting, provided that provided that they have considered the same considerations and matters required for the approval of a compensation policy in accordance with the Israeli Companies Law and such arrangement must be approved by a majority vote of the shares present and voting at a shareholders meeting on the matter, provided that either: (a) such majority includes at least a majority of the shares held by all shareholders who are not controlling shareholders and shareholders who do not have a personal interest in such compensation arrangement; or (b) the total number of shares of non-controlling shareholders and shareholders who do not have a personal interest in the compensation arrangement and who vote against the arrangement does not exceed two percent of the company's aggregate voting rights ("Special Majority Vote for Compensation"). However, if the shareholders of the company do not approve a compensation arrangement with an executive officer that is inconsistent with the company's compensation policy by the Special Majority Vote for Compensation, the compensation committee and board of directors may, in special circumstances, override the shareholders' decision if each of the compensation committee and the board of directors discuss the arrangement again, analyze the shareholders' objection and provide detailed reasons for their decision.

An amendment to an existing arrangement with an office holder (other than the chief executive officer) who is not a director requires only the approval of the compensation committee, if the compensation committee determines that the amendment is not material in comparison to the existing arrangement. However, according to Regulations, an amendment to an existing arrangement with an office holder (who is not a director) who is subordinate to the chief executive officer shall not require the approval of the compensation committee, if (i) the amendment is approved by the chief executive officer and the company's compensation policy determines that a non-material amendment to the terms of service of an office holder (other than the chief executive officer) may be approved by the chief executive officer and (ii) the engagement terms are consistent with the company's compensation policy.

Compensation of Chief Executive Officer

Pursuant to the Companies Law, compensation of a public company's chief executive officer generally requires the approval of first, the company's compensation committee, second, the company's board of directors and third (except for a number of exceptions), the company's shareholders by the Special Majority for Compensation. Compensation arrangements with the Chief Executive Officer must comply with the company's compensation policy. However, if the shareholders of the company do not approve a compensation arrangement with a chief executive officer by the Special Majority Vote for Compensation, the compensation committee and the board of directors may in special circumstances, override the shareholders' decision if each of the compensation committee and the board of directors discuss the arrangement again, analyze the shareholders' objection and provide detailed reasons for their decision. Notwithstanding the above, the compensation committee is authorized to refrain from submitting a proposed compensation arrangement with a Chief Executive Officer candidate for shareholder approval, if (a) doing so would jeopardize the company's engagement of the candidate and (b) the proposed arrangement complies with the company's compensation policy.

According to regulations promulgated under the Companies Law, the renewal or extension of an existing arrangement with a chief executive officer shall not require shareholder approval if (i) the renewal or extension is not beneficial to the chief executive officer as compared to the prior arrangement or there is no substantial change in the terms and other relevant circumstances; and (ii) the engagement terms are consistent with the company's compensation policy and the prior arrangement was approved by the shareholders by the Special Approval for Compensation.

Compensation of Directors

Arrangements regarding the compensation of a director require the approval of the compensation committee, board of directors and (except for a number of exceptions) shareholders by ordinary majority, in that order. The approval of the compensation committee and board of directors must be in accordance with the compensation policy. In special circumstances, the compensation committee and board of directors may approve a compensation arrangement that is inconsistent with the company's compensation policy, provided that they have considered the same considerations and matters required for the approval of a compensation policy in accordance with the Israeli Companies Law and that shareholder approval was obtained by the Special Approval for Compensation.

With respect to compensation of an officer (including chief executive officer) or director who is also a controlling shareholder, see "— Disclosure of Personal Interests of Controlling Shareholders and Approval of Certain Transactions."

Disclosure of Personal Interests of a Controlling Shareholder and Approval of Certain Transactions

Pursuant to the Companies Law, the disclosure requirements regarding personal interests that apply to directors and executive officers also apply to a controlling shareholder of a public company. A controlling shareholder is a shareholder who has the ability to direct the activities of a company, and in the context of a transaction involving a shareholder of the company, includes also a shareholder who holds 25% or more of the voting rights in the company if no other shareholder holds more than 50% of the voting rights. For this purpose, the holdings of all shareholders who have a personal interest in the same transaction will be aggregated. Extraordinary transactions with a controlling shareholder or in which a controlling shareholder has a personal interest, including a private placement in which a controlling shareholder has a personal interest, and the terms of engagement with a controlling shareholder or a relative thereof, directly or indirectly (including through a corporation controlled by a controlling shareholder), for the provision of services to the company and his or her terms of employment or service as an office holder or employment as other than an office holder, require the approval of each of (i) the audit committee or the compensation committee with respect to the terms of service or employment by the company as an office holder, an employee or service provider; (ii) the board of directors; and (iii) the shareholders, in that order. The shareholder approval requires one of the following:

- at least a majority of the voting rights in the company held by shareholders who have no personal interest in the transaction and who are present and voting at the general meeting, must be voted in favor of approving the transaction (for this purpose, abstentions are disregarded); or

- the voting rights held by shareholders who have no personal interest in the transaction and who are present and voting at the general meeting, and who vote against the transaction, do not exceed 2% of the voting rights in the company.

Each shareholder voting on the approval of an extraordinary transaction with a controlling shareholder must inform the company prior to voting whether or not he or she has a personal interest in the approval of the transaction, otherwise, the shareholder is not eligible to vote on the proposal and his or her vote will not be counted for purposes of the proposal.

To the extent that any such transaction with a controlling shareholder or his relative is for a period extending beyond three years, shareholder approval is required once every three years, unless, in respect to certain transactions, the audit committee determines that the duration of the transaction is reasonable under the circumstances.

The compensation committee and board approval for arrangements regarding the terms of service or employment of a controlling shareholder must be in accordance with the company's compensation policy. In special circumstances the compensation committee and board of directors may approve a compensation arrangement that is inconsistent with the company's compensation policy, provided that they have considered the same considerations and matters required for the approval of a compensation policy in accordance with the Israeli Companies Law and that shareholder approval was obtained by the Special Majority Vote for Compensation.

Pursuant to regulations promulgated under the Israeli Companies Law, certain transactions with a controlling shareholder or his or her relative, or with directors, relating to terms of service or employment that would otherwise require approval of a company's shareholders may be exempt from shareholder approval upon certain determinations of the audit committee and board of directors. In addition, disclosure of a personal interest in a private placement of a public company (including disclosure of any material fact or document) is required by (i) a shareholder holding 5% or more of the company's issued and outstanding capital or its voting rights whose holdings will increase as result of the private placement and a shareholder who will hold 5% or more of the company's issued and outstanding capital or its voting rights as a result of the private placement, if 20% or more of the company's outstanding share capital prior to the private placement is issued in the private placement and the payment for which is not only in cash or listed securities or the transaction is not on market terms; and (ii) a person or entity that will become a controlling shareholder as a result of the private placement.

Duties of Shareholders

Under the Companies Law, a shareholder has a duty to to act in good faith and in a customary manner toward the company and other shareholders and to refrain from abusing its power in the company, including, among other things, voting at general meetings of shareholders on the following matters:

- an amendment to the company's articles of association;
- an increase in the company's authorized share capital;
- a merger; and
- the approval of related party transactions and acts of office holders that require shareholder approval.

A shareholder also has a general duty to refrain from discriminating against other shareholders.

In addition, certain shareholders have a duty of fairness toward the company, including any shareholder that knows that its vote can determine the outcome of a shareholder vote and any shareholder that, under a company's articles of association, has the power to appoint or prevent the appointment of an office holder, or has another power with respect to a company. The Companies Law does not define the substance of the duty of fairness, except to state that the remedies generally available upon a breach of contract will also apply in the event of a breach of the duty to act with fairness.

Exculpation, Insurance and Indemnification of Office Holders

Under the Companies Law, a company may not exculpate an office holder from liability for a breach of the duty of loyalty. A company may exculpate an office holder in advance from liability to the company, in whole or in part, for damages caused to the company as a result of a breach of the duty of care but only if a provision authorizing such exculpation is included in its articles of association. Our amended and restated articles of association include such a provision. An Israeli company may not exculpate a director from liability arising out of a breach of the duty of care with respect to a dividend or distribution to shareholders.

Under the Companies Law and the Securities Law, 5738—1968 (the "Securities Law"), a company may indemnify an office holder in respect of the following liabilities, payments and expenses incurred for acts performed as an office holder, either pursuant to an undertaking made in advance of an event or following an event, provided a provision authorizing such indemnification is contained in its articles of association:

- a financial liability incurred by or imposed on him or her in favor of another person pursuant to a judgment, including a settlement or arbitrator's award approved by a court. However, if an undertaking to indemnify an office holder with respect to such liability is provided in advance, then such undertaking must be limited to certain events which, in the opinion of the board of directors, can be foreseen based on the company's activities when the undertaking to indemnify is given, and to an amount or according to criteria determined by the board of directors as reasonable under the circumstances, and such undertaking shall detail the foreseen events and described above amount or criteria;

- reasonable litigation expenses, including reasonable attorneys' fees, incurred by the office holder (1) as a result of an investigation or proceeding instituted against him or her by an authority authorized to conduct such investigation or proceeding, provided that (i) no indictment was filed against such office holder as a result of such investigation or proceeding; and (ii) no financial liability was imposed upon him or her as a substitute for the criminal proceeding as a result of such investigation or proceeding or, if such financial liability was imposed, it was imposed with respect to an offense that does not require proof of criminal intent; and (2) in connection with a monetary sanction;

- expenses, including reasonable litigation expenses and legal fees, incurred by an office holder in relation to an administrative proceeding instituted against such office holder, or certain compensation payments made to an injured party imposed on an office holder in connection with an administrative procedure under the Securities Law; and

- reasonable litigation expenses, including attorneys' fees, incurred by the office holder or imposed by a court in proceedings instituted against him or her by the company, on its behalf or by a third party or in connection with criminal proceedings in which the office holder was acquitted or as a result of a conviction for an offense that does not require proof of criminal intent.

Under the Companies Law and the Securities Law, a company may insure an office holder against the following liabilities incurred for acts performed by him or her as an office holder if and to the extent provided in the company's articles of association:

- a breach of duty of care to the company or to a third party, to the extent such a breach arises out of the negligent conduct of the office holder;

- a breach of duty of loyalty to the company, provided that the office holder acted in good faith and had a reasonable basis to believe that the act would not harm the company;

- a financial liability imposed on the office holder in favor of a third party;

- expenses, including reasonable litigation expenses and legal fees, incurred by an office holder in relation to an administrative proceeding instituted against such office holder or certain compensation payments to an injured party imposed on an office holder by an administrative proceeding, pursuant to certain provisions of the Securities Law.

Under the Companies Law, a company may not indemnify, exculpate or insure an office holder against any of the following:

- a breach of duty of loyalty, except for indemnification and insurance for a breach of the duty of loyalty to the company to the extent that the office holder acted in good faith and had a reasonable basis to believe that the act would not harm the company;

- a breach of the duty of care committed intentionally or recklessly, excluding a breach arising out of the negligent conduct of the office holder;

- an act or omission committed with intent to derive illegal personal benefit; or

- a fine, monetary sanction or forfeit levied against the office holder.

Under the Companies Law, exculpation, indemnification and insurance of office holders must be approved by the compensation committee and the board of directors and, with respect to certain office holders or under certain circumstances, also by the shareholders. See "— Fiduciary duties and Approval of Related Party Transactions under Israeli law." However, the insurance of office holders shall not require shareholder approval and may be approved only by the compensation committee, if the engagement terms are determined in the company's compensation policy and that policy was approved by the shareholders by the Special Approval for Compensation, provided that the policy is on market terms and is not likely to materially impact the company's profitability, assets or obligations.

Our amended and restated articles of association permit us to exculpate, indemnify and insure our office holders as permitted under the Companies Law and the Israeli Securities Law. Our office holders are currently covered by a directors and officers' liability insurance policy. As of the date of this annual report on Form 20-F, no claims for directors' and officers' liability insurance have been filed under this policy, we are not aware of any pending or threatened litigation or proceeding involving any of our directors or officers in which indemnification is sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

We have entered into agreements with our directors and executive officers exculpating them from liability to us for damages caused to us as a result of a breach of duty of care and undertaking to indemnify them, in each case, to the fullest extent permitted by law and our Articles of Association, to the extent that these liabilities are not covered by insurance, all subject to limited exceptions. Indemnification for any monetary liability incurred by or imposed on a director or officer in favor of a third party is limited to certain events that were determined as foreseeable by our Board of Directors based on our operations, as set forth in the indemnification agreements. Under such indemnification agreements, the maximum aggregate amount of indemnification that we may pay to all of our directors and offices together based on such indemnification agreements is $5,000,000. However, in the opinion of the SEC, indemnification of office holders for liabilities arising under the Securities Act is against public policy and therefore unenforceable.

D. Employees

As of December 31, 2022, we had 11 full time employees in PVN and one full time employee in Digiflex, all of whom were located in Israel. 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 of our Israeli employees. Subject to certain 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 Israeli employees have pension plans in accordance with the applicable Israeli legal requirements.

While none of our employees are party to any collective bargaining agreements, certain provisions of the collective bargaining agreements between the Histadrut (General Federation of Labor in Israel) and the Coordination Bureau of Economic Organizations (including the Industrialists' Associations) are applicable to our employees by extension orders issued by the Israeli Ministry of Industry, Trade and Labor. These provisions primarily concern the length of the workday, minimum daily wages for professional workers, pension fund benefits for all employees, insurance for work-related accidents, procedures for dismissing employees, determination of severance pay and other conditions of employment. We generally provide our employees with benefits and working conditions beyond the required minimums.

E. Share Ownership

Share Ownership by Directors and Executive Officers

For information regarding beneficial ownership of our ordinary shares by our directors and executive officers, see "Item 7 A. Major Shareholders and Related Party Transactions — Major Shareholders".

Share Option Plan

For information on our share option plan, see "Item 6 B. — Compensation — Incentive Compensation Plan".

ITEM 7. Major Shareholders and Related Party Transactions

A. Major Shareholders.

The following table sets forth certain information regarding the beneficial ownership of our ordinary shares as of May 15, 2023, by:

- each person (or group of affiliated persons) known by us to be the beneficial owner of more than 5% of the outstanding ordinary shares.
- each of our directors and executive officers;
- all of our directors and executive officers as a group.

The beneficial ownership of our ordinary shares is determined in accordance with the rules of the SEC. Under these rules, a person is deemed to be a beneficial owner of a security if that person has or shares voting power, which includes the power to vote or to direct the voting of the security, or investment power, which includes the power to dispose of or to direct the disposition of the security. For purposes of the table below, we deem ordinary shares issuable pursuant to options that are currently exercisable or exercisable within 60 days as of May 15, 2023, if any, to be outstanding and to be beneficially owned by the person holding the options or warrants for the purposes of computing the percentage ownership of that person, but we do not treat them as outstanding for the purpose of computing the percentage ownership of any other person. The percentage of ordinary shares beneficially owned is based on 163,277,647 ordinary shares outstanding as of May 15, 2023.

Except where otherwise indicated, we believe, based on information furnished to us by such owners and based on public information, that the beneficial owners of the ordinary shares listed below have sole investment and voting power with respect to such shares. In addition, none of our shareholders have different voting rights from other shareholders.

	No. of Shares Beneficially Owned	Percentage Owned
Holders of more than 5% of our voting securities:		
GTRIMG Investments Ltd.	69,129,160(1)	40.24%
Legov Ltd.	38,370,282(2)	22.75%
Teuza – A Fairchild Technology Venture Ltd.	29,838,107(3)	17.84%
Y.T.Y. Lenny Investments Ltd.	13,695,182(4)	8.21%
Directors and executive officers who are not 5% holders:		
Dov Farkash, Chairman of the Board	939,164(5)	*
Avi Magid, Chief Executive Officer and Director	—	—
Fernando de la Vega, Chief Technology Officer and Director	5,801,534(6)	3.46%
Ofer Greenberger, Director	325,000(7)	*
Keinan Maman, Director	—	—
Orly Solomon, External Director	1,408,746(8)	*
Ido Lapidot, External Director	1,408,746(9)	*
Evyatar Cohen, Chief Financial Officer	1,878,327(10)	1.14%
Directors and executive officers as a group (8 persons)	11,761,517	7.08%

* Represents less than 1.0% beneficially held.

(1) Includes (i) 60,557,732 ordinary shares beneficially owned by GTRIMG Investments Ltd., a company incorporated under the laws of the State of Israel ("GTRIMG"), which is wholly-owned by TRIMG Communication International Ltd., a company incorporated under the laws of the State of Israel, ("GTRIMG Communication"), which itself is wholly-owned by GTRIMG Ltd., a company incorporated under the laws of the British Virgin Islands ("GTRIMG Ltd." and together with GTRIMG and GTRIMG Communication, the "GTRIMG Entities"), which itself is wholly-owned by GTRIMG Foundation, a foundation incorporated under the laws of the Principality of Liechtenstein, the beneficiaries of which are Messrs. Talia Zeevi, Rami Zeevi, Yael Zeevi Shoer, Michal Zeevi Bender and Gur Zeevi, and (ii) 8,571,428 ordinary shares issuable upon exercise of outstanding warrants held by GTRIMG currently exercisable or exercisable within 60 days as of May 15, 2023.

(2) Includes (i) an aggregate 29,798,854 ordinary shares held by Legov Ltd, GlenRock Israel Ltd, Insight Capital Ltd (collectively, the "LR Entities") and Leon Recanati, and (ii) 8,571,428 ordinary shares issuable upon exercise of outstanding warrants held by Insight Capital Ltd. currently exercisable or exercisable within 60 days as of May 15, 2023. Leon Recanati is the beneficial owner of the ordinary shares held by the LR Entities and underlying the warrants held by Insight Capital Ltd.

(3) Includes (i) 25,552,393 ordinary shares beneficially owned, and (ii) 4,285,714 ordinary shares issuable upon exercise of outstanding warrants currently exercisable or exercisable within 60 days as of May 15, 2023.

(4) Includes (i) an aggregate 7,980,897 ordinary shares held by Y.T.Y. Lenny Investments Ltd. and Sullam Holdings L.R Ltd., and (ii) 5,714,285 ordinary shares issuable upon exercise of outstanding warrants held by Sullam Holdings L.R Ltd. currently exercisable or exercisable within 60 days as of May 15, 2023. Lenny Recanati is the beneficial owner of the ordinary shares held by Y.T.Y. Lenny Investments Ltd. and Sullam Holdings L.R Ltd. and the ordinary shares underlying the warrants held by Sullam Holdings L.R. Ltd.

(5) Represents options to purchase 939,164 ordinary shares currently exercisable or exercisable within 60 days as of May 15, 2023.

(6) Includes (i) 1,336,140 ordinary shares beneficially owned, and (ii) options to purchase 4,465,394 ordinary shares currently exercisable or exercisable within 60 days as of May 15, 2023.

(7) Represents options to purchase 325,000 ordinary shares currently exercisable or exercisable within 60 days as of May 15, 2023.

(8) Represents options to purchase 1,408,746 ordinary shares currently exercisable or exercisable within 60 days as of May 15, 2023.

(9) Represents options to purchase 1,408,746 ordinary shares currently exercisable or exercisable within 60 days as of May 15, 2023.

(10) Represents options to purchase 1,878,327 ordinary shares currently exercisable or exercisable within 60 days as of May 15, 2023.

Record Holders

Based on the information provided to us by our transfer agent, as of May 15, 2023, 18 registered holders (holding approximately 3.63% of our ordinary shares) were U.S. domiciled holders (including CEDE & Co. as nominee for the Depository Trust Company, which held approximately 2.13% of our outstanding ordinary shares as of said date).

Significant Changes in Ownership of Major Shareholders

To our knowledge, in 2022 (i) each of the following ceased to be the beneficial owner of more than 5% of our outstanding shares: Slobel NV, Terra Venture Partners and Fineline PCB (Cyprus) Ltd.; and (ii) Y.T.Y. Lenny Investments Ltd. became a beneficial owner of more than 5% of our outstanding shares.

To our knowledge, there were no significant changes in the percentage of beneficial ownership held by our major shareholders during 2021.

To our knowledge, each of the following ceased to be the beneficial owner of more than 5% of our outstanding shares in 2020: Hypermarketing Inc.; Y.T.Y. Lenny Investments Ltd.; Fernando de la Vega; Amnon Mandelbaum; Bio Rad Laboratories Inc.; Ariel Lijtenstein; and ProSeed - Venture Capital Fund.

B. Related Party Transactions

The following is a description of our related party transactions since January 1, 2022:

Employment and Services Agreements. Employment and services agreements entered into with our executive officers and our Active Chairman, as described above under "Item 6 B. — Compensation — Employment or Service Agreements with Senior Managers."

Indemnification and Exculpation Agreements with Directors and Executive Officers. Customary indemnification and exculpation agreements entered into with our directors and executive officers, as described above under "Item 6 C. — Board Practices — Exculpation, Insurance and Indemnification of Office Holders."

Option Agreements with Directors and Executive Officers. Option Agreements entered into with our directors and executive officers, as described above under "Item 6 E. — Share Ownership — Incentive Compensation Plan".

Consultancy Agreement with Ram Zeevi. On May 15, 2018, the Company entered into a consultancy agreement with RINC Green Ltd. ("RINC Green"), as amended on April 30, 2019 (the "Ram Zeevi Consultancy Agreement"), pursuant to which Mr. Zeevi provides the Company with services in the field of business development in accordance with pre-approved monthly work plans, which include introduction of potential business partners and investors as well as assistance in negotiations of business and investment terms. Pursuant to the terms of the Ram Zeevi Consultancy Agreement, RINC Green is currently entitled to a gross monthly fee in the amount of $5,000 (25 hours per month at $200 per hour rate) plus VAT and to reimbursement of out-of-pocket expenses related directly to the provision of the consultancy services subject to prior written approval of the chief executive officer, to reimbursement of travel international travel and board expenses at the same standard as our chief executive officer and to an additional per-day fee equivalent to four hours per day abroad plus VAT. Either the Company or RINC Green may terminate the agreement at any time for any reason by providing a 30-day prior written notice. RINC Green ceased providing the above monthly service in January 2019. Ram Zeevi is the son of Gad Zeevi, who is the controlling shareholder of GTRIMG, our controlling shareholder.

In addition to the foregoing, RINC Green is entitled to receive (none of which were received so far):

- A one-time payment in the amount of $25,000 (plus VAT) upon an equity investment exceeding $500,000 by an investor that was introduced to the Company by Mr. Zeevi;

- $150,000 in cash (plus VAT) and options to purchase the Company's ordinary shares upon an equity investment or execution of business contract resulting in at least $2,000,000 in proceeds (or revenues) by an entity introduced to the Company by Mr. Zeevi, whereby the number of options will be calculated by dividing $150,000 by the average ordinary share price during the period of 90 days prior to the date upon which the Investment is actually made with an exercise price per share of NIS 0.01; and

- An equity based award to be granted upon of an Exit Event, in accordance with the following calculation:(i) 0.4% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $30,000,000 but less than $50,000,000, or (ii) 1.0% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $50,000,000. In the event that the Company terminates the Ram Zeevi Consultancy Agreement other than for Cause, and the Exit Event occurs within a period of six months of said termination, RINC Green will be entitled to the foregoing equity-based award. For the definition of Exit Event, see "Item 6 B – Compensation of Executive Officers and Directors as a Group – *Employment or Service Agreements with our Active Chairman, Chief Executive Officer, Chief Technology Officer and, Chief Financial Officer*."

On October 2, 2018, we granted to RINC Green options to purchase up to 120,000 of our ordinary shares, at an exercise price per share of $0.27. The options vested over a period of three years, with one third of the options vesting on September 30, 2019, and the remaining two thirds of the options vesting on a quarterly basis over the remaining two years.

Financing Agreements with Existing Shareholders. Agreements entered into with certain existing shareholders in connection with private placements of our securities, as described above under "Item 5 B. — Operating and Financial Review and Prospects — Liquidity and Capital Resources".

For additional information, see Note 13 to our consolidated financial statements for the year ended December 31, 2022, included elsewhere in this annual report on Form 20-F.

C. Interests of Experts and Counsel.

Not applicable.

ITEM 8. Financial Information.

A. Consolidated Financial Statements and Other Financial Information.

See "Item 18. Financial Statements" for the consolidated financial statements filed as part of this annual report on Form 20-F.

Legal Proceedings

From time to time, we may be involved in various claims and legal proceedings that arise through the normal course of business. As of the date of this filing, we are not a party to any material legal proceedings nor are we aware of any such pending or threatened legal proceedings.

We are not aware of any material legal proceedings in which any of our directors, officers or affiliates is either a party adverse to us or our subsidiaries or has a material interest adverse to ours or our subsidiaries.

For information regarding prior legal proceedings, see Note 9.b. to our consolidated financial statements that appear elsewhere in this annual report on Form 20-F.

Dividend Policy

We have never declared or paid any cash dividends on our ordinary shares and do not anticipate paying any cash dividends in the foreseeable future. Payment of cash dividends, if any, in the future will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

Our ability to distribute dividends also may be limited by Israeli law. The Companies Law restricts our ability to declare dividends. Unless otherwise approved by a court, we can distribute dividends only from "profits" (as defined by the Companies Law), and only if there is no reasonable concern that the dividend distribution will prevent us from meeting our existing and foreseeable obligations as they become due. Payment of dividends may also be subject to Israeli withholding taxes. See "Item 10 – Additional Information - Memorandum and Articles of Association".

B. Significant Changes.

Except as disclosed elsewhere in this annual report, there have been no other significant changes since December 31, 2022, until the date of the filing of this annual report.

ITEM 9. The Offer and Listing.

9.A Offer and Listing Details

Our ordinary shares were quoted on the OTC Pink under the symbol "PVNNF." However, due to lack of available resources, we were not able to comply with our SEC periodic filing obligations for the years ended December 31, 2020 and 2021. Accordingly, as of September 29, 2021, the public quote for our ordinary shares was removed from the OTC Pink. Depending on market and other conditions and the continued development of our products, we will consider applying to have our ordinary shares quoted on the OTC Pink.

9.B. Plan of distribution

Not applicable.

9.C. Market for ordinary shares

Not applicable.

9.D. Selling shareholders

Not applicable.

9.E. Dilution

Not applicable.

9.F. Expenses of the issue

Not applicable.

ITEM 10. Additional Information.

A. Share Capital.

Not applicable.

B. Memorandum and Articles of Association.

A copy of our amended and restated articles of association is incorporated by reference attached as Exhibit 1.1 to this annual report. As of December 31, 2022, our authorized share capital consists of 1,200,000,000 ordinary shares, par value NIS 0.01 per share, of which 147,134,792 were issued and outstanding. Other than as disclosed below, the information called for by this Item is set forth in Exhibit 2.1 to this annual report and is incorporated by reference into this annual report.

All of our outstanding ordinary shares are validly issued, fully paid and non-assessable. Our ordinary shares do not have any preemptive rights.

Registration Number and Purposes of the Company

Our registration number with the Israeli Companies Registrar is 514287093. Our purpose is set forth in our Articles of Association and includes any lawful activity.

Voting Rights and Conversion

All ordinary shares will have identical voting and other rights in all respects.

Holders of our ordinary shares have one vote for each ordinary share held on all matters submitted to a vote before the shareholders at a general meeting.

Transfer of shares

Our fully paid ordinary shares are issued in registered form and may be freely transferred under our amended and restated articles of association, unless the transfer is restricted or prohibited by another instrument, applicable law or the rules of a stock exchange on which the shares are listed for trade. The ownership or voting of our ordinary shares by non-residents of Israel is not restricted in any way by our amended and restated articles of association or the laws of the State of Israel, except for ownership by nationals of some countries that are, or have been, in a state of war with Israel.

Board of directors

See "Item 6 C. Directors, Senior Management and Employees—Board Practices."

Dividend and Liquidation Rights

We have never declared or paid any cash dividends on our ordinary shares and do not anticipate paying any cash dividends in the foreseeable future.

We may declare a dividend to be paid to the holders of our ordinary shares in proportion to their respective shareholdings. Under the Companies Law, dividend distributions are determined by the board of directors and do not require the approval of the shareholders of a company unless the company's articles of association provide otherwise. Our Articles of Association do not require shareholder approval of a dividend distribution and provide that dividend distributions may be determined by our board of directors.

Pursuant to the Companies Law, the distribution amount is limited to the greater of retained earnings or earnings generated over the two most recent fiscal years, according to our then last reviewed or audited financial statements, provided that the end of the period to which the financial statements relate is not more than six months prior to the date of the distribution. If we do not meet such criteria, then we may distribute dividends only with court approval. In each case, we are only permitted to distribute a dividend if our board of directors and the court, if applicable, determines that there is no reasonable concern that payment of the dividend will prevent us from satisfying our existing and foreseeable obligations as they become due.

In the event of our liquidation, after satisfaction of liabilities to creditors, our assets will be distributed to the holders of our ordinary shares in proportion to their shareholdings. This right, as well as the right to receive dividends, may be affected by the grant of preferential dividend or distribution rights to the holders of a class of shares with preferential rights that may be authorized in the future.

General Meetings of Shareholders and Shareholder Proposals

Under Israeli law, we are required to hold an annual general meeting of our shareholders once every calendar year that must be held no later than 15 months after the date of the previous annual general meeting. All meetings other than the annual general meeting of shareholders are referred to in Articles of Association as special general meetings. Our board of directors may call special general meetings whenever it sees fit, at such time and place, within or outside of Israel, as it may determine. In addition, the Companies Law provides that our board of directors is required to convene a special general meeting upon the written request of (i) any two or more of our directors or one-quarter or more of the members of our board of directors or (ii) one or more shareholders holding, in the aggregate, either (a) 5% or more of our outstanding issued shares and 1% or more of our outstanding voting power or (b) 5% or more of our outstanding voting power. Our Articles of Association contain procedural guidelines and disclosure items with respect to the submission of shareholder proposals for shareholder meetings.

Subject to the provisions of the Companies Law and the regulations promulgated thereunder, shareholders entitled to participate and vote at general meetings are the shareholders of record on a date to be decided by the board of directors, which may generally be between four and 21 days prior to the date of the meeting, and in certain circumstances, between four and 40 days prior to the date of the meeting. Furthermore, the Companies Law requires that resolutions regarding the following matters must be passed at a general meeting of our shareholders:

- amendments to our articles of association;
- appointment or termination of our auditors;

- appointment of external directors;
- approval of certain related party transactions;
- increases or reductions of our authorized share capital;
- a merger; and
- the exercise of our board of director's powers by a general meeting, if our board of directors is unable to exercise its powers and the exercise of any of its powers is required for our proper management.

The Companies Law requires that a notice of any annual general meeting or special general meeting be provided to shareholders at least 21 days prior to the meeting and if the agenda of the meeting includes the appointment or removal of directors, the approval of transactions with office holders or interested or related parties, or an approval of a merger, notice must be provided at least 35 days prior to the meeting. Under the Companies Law and our amended and restated articles of association, shareholders are not permitted to take action by way of written consent in lieu of a meeting.

Quorum

Pursuant to our amended and restated articles of association, holders of our ordinary shares have one vote for each ordinary share held on all matters submitted to a vote before the shareholders at a general meeting. The quorum required for our general meetings of shareholders consists of at least two shareholders (not in default in payment of any sum) present in person, by proxy or written ballot who hold or represent between or among them at least 25% of the total our issued share capital. If within thirty minutes from the time appointed for the general meeting the requisite quorum is not present, the meeting shall be dissolved, but shall stand adjourned to the same day in the next week at the same time the following week and at the same place or to a later date, if so specified in advance in the notice of the general meeting. All matters for which the general meeting was summoned shall be discussed at the adjourned meeting, and subject to a limited exception, any number of shareholders present in person or by proxy shall constitute a lawful quorum.

Vote Requirements

Our Articles of Association provide that all resolutions of our shareholders require a simple majority vote, unless otherwise required by the Companies Law or by our amended and restated articles of association. For special majority requirements under the Companies Law see "Item 6 C. — Board Practices". Under our Articles of Association, the alteration of the rights, privileges, preferences or obligations of any class of our shares requires a simple majority of the class so affected (or such other percentage of the relevant class that may be set forth in the governing documents relevant to such class), in addition to the ordinary majority vote of all classes of shares voting together as a single class at a shareholder meeting. Our Articles of Association also provide that a change to the provisions related to the committees of our board of directors, the number of directors, the election or removal of any director from office, the proceedings of our board of directors, mergers and business combinations, the winding up of the Company, and the amendment of our Articles of Association, require the vote of at least 60% of our outstanding share capital having the right to vote, voting in person or by proxy at such general meeting.

Access to corporate records

Under the Companies Law, all shareholders generally have the right to review minutes of our general meetings, our shareholder register, including with respect to material shareholders, our articles of association, our financial statements, other documents as provided in the Companies Law, and any document we are required by law to file publicly with the Israeli Companies Registrar or the Israeli Securities Authority. Any shareholder who specifies the purpose of its request may request to review any document in our possession that relates to any action or transaction with a related party which requires shareholder approval under the Companies Law. We may deny a request to review a document if we determine that the request was not made in good faith, that the document contains a commercial secret or a patent or that the document's disclosure may otherwise impair our interests.

Exchange Controls

There are currently no Israeli currency control restrictions on remittances of dividends on our ordinary shares, proceeds from the sale of the shares or interest or other payments to non-residents of Israel, except for shareholders who are subjects of countries that are, or have been, in a state of war with Israel.

Acquisitions under Israeli law

Merger

The Companies Law permits merger transactions if approved by each party's board of directors and, unless certain requirements described under the Companies Law are met, by a majority vote of each party's shares, and, in the case of the target company, a majority vote of each class of its shares, voted on the proposed merger at a shareholders meeting. The board of directors of a merging company is required pursuant to the Companies Law to discuss and determine whether in its opinion there exists a reasonable concern that as a result of a proposed merger, the surviving company will not be able to satisfy its obligations towards its creditors, such determination taking into account the financial status of the merging companies. If the board of directors has determined that such a concern exists, it may not approve a proposed merger. Following the approval of the board of directors of each of the merging companies, the boards of directors must jointly prepare a merger proposal for submission to the Israeli Registrar of Companies.

For purposes of the shareholder vote, unless a court rules otherwise, the merger will not be deemed approved if a majority of the shares represented at the shareholders meeting that are held by parties other than the other party to the merger, or by any person (or group of persons acting in concert) who holds (or hold, as the case may be) 25% or more of the outstanding shares or the right to appoint 25% or more of the directors of the other party, vote against the merger. If the transaction would have been approved but for the separate approval of each class or the exclusion of the votes of certain shareholders as provided above, a court may still approve the merger upon the request of holders of at least 25% of the voting rights of a company, if the court holds that the merger is fair and reasonable, taking into account the value of the parties to the merger and the consideration offered to the shareholders. Pursuant to the Companies Law, if a merger is with a company's controlling shareholder or if the controlling shareholder has a personal interest in the merger, then the merger is instead subject to the same special majority approval that governs all extraordinary transactions with controlling shareholders (as described above under "Board Practices — Fiduciary duties and Approval of Related Party Transactions under Israeli law.").

In addition, under our Articles of Association, the Company shall not engage in any Business Combination with any Interested Shareholder for a period of three years following the time that such shareholder became an Interested Shareholder, unless either prior to such time the Board of Directors approved either the Business Combination or the transaction which resulted in the shareholder becoming an Interested Shareholder; or upon consummation of the transaction which resulted in the shareholder becoming an Interested Shareholder, the Interested Shareholder owned at least 85% of the Voting Shares of the Company outstanding at the time the transaction commenced.

Under the Companies Law, each merging company must send a copy of the proposed merger plan to its secured creditors. Unsecured creditors are entitled to receive notice of the merger pursuant to regulations promulgated under the Companies Law. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations the target company. The court may further give instructions to secure the rights of creditors.

In addition, a merger may not be completed unless at least fifty days have passed from the date that a proposal for approval of the merger was filed with the Israeli Companies Registrar and thirty days from the date on which the merger was approved by the shareholders of each party.

Full tender offer

A person wishing to acquire shares of a public Israeli company and who would as a result hold over 90% of the target company's issued and outstanding share capital, or of a certain class of shares, is required by the Companies Law to make a tender offer to all of the company's shareholders or the shareholders who holds shares of the same class for the purchase of all of the issued and outstanding shares of the company or of the same class, as applicable.

If the shareholders who do not respond to or accept the offer hold less than 5% of the issued and outstanding share capital of the company or of the applicable class of the shares, and more than half of the shareholders who do not have a personal interest in the offer accept the offer, all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. However, a tender offer will also be accepted if the shareholders who do not accept the offer hold less than 2% of the issued and outstanding share capital of the company or of the applicable class of shares.

Upon a successful completion of such a full tender offer, any shareholder that was an offeree in such tender offer, whether the shareholder accepted the tender offer or not, may, within six months from the date of acceptance of the tender offer, petition the Israeli court to determine whether the tender offer was for less than fair value and that the fair value should be paid as determined by the court. However, under certain conditions, the offeror may include in the terms of the tender offer that an offeree who accepted the offer will not be entitled to petition the Israeli court as described above.

If the full tender offer was not accepted in accordance with the above alternatives, the acquirer may not acquire shares of the company that will increase its holdings to more than 90% of the company's voting rights or issued and outstanding share capital or of the applicable class from shareholders who accepted the tender offer.

Special tender offer

The Companies Law provides that an acquisition of shares of a public Israeli company must be made by means of a special tender offer if as a result of the acquisition the purchaser would become a holder of at least 25% of the voting rights in the company. This rule does not apply if there is already another holder of at least 25% of the voting rights in the company. Similarly, the Companies Law provides that an acquisition of shares in a public company must be made by means of a tender offer if as a result of the acquisition the purchaser would become a holder of more than 45% of the voting rights in the company, if there is no other shareholder of the company who holds more than 45% of the voting rights in the company, subject to certain exceptions.

A special tender offer must be extended to all shareholders of a company but the offeror is not required to purchase shares representing more than 5% of the voting power attached to the company's outstanding shares, regardless of how many shares are tendered by shareholders. A special tender offer may be consummated only if (i) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror and (ii) the number of shares tendered by shareholders who accept the offer exceeds the number of shares whose holders objected to the offer (excluding the purchaser and its controlling shareholders, holders of 25% or more of the voting rights in the company or any person having a personal interest in the acceptance of the tender offer or any other person acting on their behalf, including relatives and entities under such person's control). If a special tender offer is accepted, then (i) shareholders who did not respond to or that had objected to the offer may accept the offer within four days of the last date set for the acceptance of the offer and they will be considered to have accepted the offer from the first day it was made, and (ii) the purchaser or any person or entity controlling it or under common control with the purchaser or such controlling person or entity may not make a subsequent tender offer for the purchase of shares of the target company and may not enter into a merger with the target company for a period of one year from the date of the offer, unless the purchaser or such person or entity undertook to effect such an offer or merger in the initial special tender offer.

In the event that a special tender offer is made, a company's board of directors is required to express its opinion on the advisability of the offer, or shall abstain from expressing any opinion if it is unable to do so, provided that it gives the reasons for its abstention. In addition, the board of directors must disclose any personal interest each member of the board of directors has in the offer or stems therefrom. An office holder in a target company who, in his or her capacity as an office holder, performs an action the purpose of which is to cause the failure of an existing or foreseeable special tender offer or is to impair the chances of its acceptance, is liable to the potential purchaser and shareholders for damages resulting from his or her acts, unless such office holder acted in good faith and had reasonable grounds to believe he or she was acting for the benefit of the company. However, office holders of the target company may negotiate with the potential purchaser in order to improve the terms of the special tender offer, and may further negotiate with third parties in order to obtain a competing offer.

Shares purchased in contradiction to the tender offer rules under the Companies Law, as described above, will have no rights and will become dormant shares.

Borrowing Powers

Pursuant to the Israeli Companies Law and our amended articles of association, our board of directors may exercise all powers and take all actions that are not required under law or under our amended articles of association to be exercised or taken by our shareholders, including the power to borrow money for company purposes.

For details regarding the approvals required under the Israeli Companies Law for the approval of director compensation, see "Item 6 C "Directors, Senior Management and Employees — Board Practices – Fiduciary Duties and Approval of Related Party Transactions under Israeli Law."

Changes in Capital

Our amended and restated articles of association enable us to increase or reduce our share capital. Any such changes are subject to Israeli law and must be approved by a resolution duly passed by our shareholders at a general meeting by voting on such change in the capital. In addition, transactions that have the effect of reducing capital, such as the declaration and payment of dividends in the absence of sufficient retained earnings or profits, require the approval of both our board of directors and an Israeli court.

Transfer Agent and Registrar

The transfer agent and registrar for our ordinary shares is Vstock Transfer, LLC. Its address is 18 Lafayette Place Woodmere, New York 11598, and its telephone number is (212) 828-8436.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described below and in Item 4. "Information on Our Company", "Item 5 B. — Operating and Financial Review and Prospects — Liquidity and Capital Resources", "Item 6 B. — Directors, Senior Management and Employees— Compensation," "Item 7B. Major Shareholders and Related Party Transactions — Related Party Transactions" or elsewhere in this annual report.

Convertible Loan Agreements

For information regarding certain convertible loan agreements we entered into, all of which convertible loans have matured and (to the extent not converted) were not timely repaid by us due to financial difficulties, see Note 8 to our consolidated financial statements for the year ended December 31, 2022 that appear elsewhere in this annual report on Form 20-F.

D. Exchange Controls.

There are no Israeli government laws, decrees or regulations that restrict or that affect our export or import of capital or the remittance of dividends, interest or other payments to non-resident holders of our securities, including the availability of cash and cash equivalents for use by us and our wholly-owned subsidiaries, except for ownership by nationals of certain countries that are, or have been, declared as enemies of Israel.

E. Taxation

The following description is not intended to constitute a complete analysis of all tax consequences relating to the acquisition, ownership and disposition of our ordinary shares. You should consult your own tax advisor concerning the tax consequences of your particular situation, as well as any tax consequences that may arise under the laws of any state, local, foreign or other taxing jurisdiction.

Certain Israeli Tax Considerations

The following is a brief summary of the material Israeli income tax laws applicable to us. This summary does not discuss all the aspects of Israeli tax law that may be relevant to a particular investor in light of his or her personal investment circumstances or to some types of investors subject to special treatment under Israeli law. Examples of this kind of investor include residents of Israel or investors in securities who are subject to special tax regimes not covered in this discussion. To the extent that the discussion is based on new tax legislation that has not yet been subject to judicial or administrative interpretation, we cannot assure you that the appropriate tax authorities or the courts will accept the views expressed in this discussion. This summary is based on laws and regulations in effect as of the date hereof and does not take into account possible future amendments which may be under consideration.

General Corporate Tax Structure in Israel

Israeli resident companies are generally subject to corporate tax. In 2018 and thereafter the corporate tax rate is 23% of their taxable income. However, the effective tax rate payable by a company that derives income from an Approved Enterprise, a Preferred Enterprise, a Beneficiary Enterprise or a Technology Enterprise (as discussed below) may be considerably less.

Capital gains derived by an Israeli resident company are generally subject to corporate tax rate.

Law for the Encouragement of Industry (Taxes), 5729-1969

The Law for the Encouragement of Industry (Taxes), 5729-1969, which we refer to as the Industry Encouragement Law, provides several tax benefits for "Industrial Company," which is defined as Israeli resident-company incorporated in Israel, of which 90% or more of its income in any tax year, other than income from certain government loans, is derived from an "Industrial Enterprise" that it owns and located in Israel or in the "Area", in accordance with the definition in section 3a of the Ordinance. An "Industrial Enterprise" is defined as an enterprise which is held by an Industrial Company whose principal activity in a given tax year is industrial production. Eligibility for benefits under the Industry Encouragement Law is not contingent upon approval of any governmental authority.

The following corporate tax benefits, among others, are available to Industrial Companies:

- amortization over an eight-year period of the cost of purchased patent, rights to use a patent and rights to know-how, which are used for the development or advancement of the Industrial Enterprise, commencing in the year in which such rights were first exercised;
- under limited conditions, an election to file consolidated tax returns with related Industrial Companies; and
- expenses related to a public offering are deductible in equal amounts over three years commencing on the year of the offering.

We believe that we currently qualify as an "Industrial Company" within the meaning of the Industry Encouragement Law. There can be no assurance that we will qualify as an industrial company or that the benefits described above will be available in the future.

Law for the Encouragement of Capital Investments, 5719-1959

The Law for the Encouragement of Capital Investments, 5719-1959, generally referred to as the Investment Law, provides certain incentives for capital investments in production facilities (or other eligible assets). Generally, an investment program that is implemented in accordance with the provisions of the Investment Law, is entitled to benefits. These benefits may include cash grants from the Israeli government and tax benefits, based upon, among other things, the geographic location in Israel of the facility in which the investment and manufacture activity are made. In order to qualify for these incentives, an Approved Enterprise, a Beneficiary Enterprise, a Preferred Enterprise or a Technology Enterprise is required to comply with the requirements of the Investment Law.

The Investment Law was significantly amended effective as of April 1, 2005 (the "2005 Amendment"), as of January 1, 2011 (the "2011 Amendment") and as of January 1, 2017 (the "2017 Amendment"). Pursuant to the 2005 Amendment, tax benefits granted in accordance with the provisions of the Investment Law prior to its revision by the 2005 Amendment remain in force but any benefits granted subsequently are subject to the provisions of the amended Investment Law. Similarly, the 2011 Amendment introduced new benefits to replace those granted in accordance with the provisions of the Investment Law in effect prior to the 2011 Amendment. However, companies entitled to benefits under the Investment Law as in effect prior to January 1, 2011 were entitled to choose to continue to enjoy such benefits, provided that certain conditions are met, or elect instead, irrevocably, to forego such benefits and have the benefits of the 2011 Amendment apply. The 2017 Amendment introduces new benefits for Technological Enterprises, alongside the existing tax benefits.

The following discussion is a summary of the Investment Law following its recent amendments:

Tax Benefits under the 2011 Amendment

The 2011 Amendment canceled the availability of the benefits granted to Industrial Companies under the Investment Law prior to 2011 and, instead, introduced new benefits for income generated by a "Preferred Company" through its "Preferred Enterprise" (as such terms are defined in the Investment Law) as of January 1, 2011. The definition of a Preferred Company includes a company incorporated in Israel that is not fully owned by a governmental entity, and that has, among other things, Preferred Enterprise status and is controlled and managed from Israel. Pursuant to the 2011 Amendment, a Preferred Company is entitled to a reduced corporate tax rate of 15% with respect to its income derived by its Preferred Enterprise in 2011 and 2012, unless the Preferred Enterprise is located in a specified development zone, in which case the rate will be 10%. Under the 2011 Amendment, such corporate tax rate was reduced from 15% and 10%, respectively, to 12.5% and 7%, respectively, in 2013, 16% and 9% respectively, in 2014, 2015 and 2016, and 16% and 7.5%, respectively, in 2017 and thereafter. Income derived by a Preferred Company from a "Special Preferred Enterprise" (as such term is defined in the Investment Law) would be entitled, during a benefits period of 10 years, to further reduced tax rates of 8%, or 5% if the Special Preferred Enterprise is located in a certain development zone. As of January 1, 2017, the definition for 'Special Preferred Enterprise' includes less stringent conditions. The tax benefits under the 2011 Amendment also include accelerated depreciation and amortization for tax purposes.

As of January 1, 2014, dividends distributed from income which is attributed to a "Preferred Enterprise" or to a Special Preferred Enterprise will be subject to withholding tax at source at the following rates: (i) Israeli resident corporations – 0%, (although, if such dividends are subsequently distributed to individuals or a non-Israeli company, withholding tax at a rate of 20% or such lower rate as may be provided in an applicable tax treaty will apply (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate)) (ii) Israeli resident individuals – 20% (iii) non-Israeli residents (individuals and corporations) - 20%, subject to a reduced tax rate under the provisions of an applicable double tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate). In 2017-2019 dividends paid out of preferred income attributed to a Special Preferred Enterprise, directly to a foreign parent company, are subject to withholding tax at source at the rate of 5% (temporary provisions).

Currently, we are not entitled to receive the tax benefits described above and there can be no assurance that we will be entitled to receive such benefits at any time in the future. Furthermore, there can be no assurance that even if in the future we meet the relevant requirements for such tax benefits, that such tax benefits will be available to us at all.

New Tax benefits under the 2017 Amendment that became effective on January 1, 2017

The 2017 Amendment was enacted as part of the Economic Efficiency Law that was published on December 29, 2016 and is effective as of January 1, 2017. The 2017 Amendment provides new tax benefits for two types of "Technology Enterprises", as described below, and is in addition to the other existing tax beneficial programs under the Investment Law.

The 2017 Amendment provides that a technology company satisfying certain conditions will qualify as a "Preferred Technology Enterprise" and will thereby enjoy a reduced corporate tax rate of 12% on income that qualifies as "Preferred Technology Income", as defined in the Investment Law. The tax rate is further reduced to 7.5% for a Preferred Technology Enterprise located in development zone "A". In addition, a Preferred Technology Company will enjoy a reduced corporate tax rate of 12% on capital gain derived from the sale of certain "Benefitted Intangible Assets" (as defined in the Investment Law) to a related foreign company if the Benefitted Intangible Assets were acquired from a foreign company on or after January 1, 2017 for at least NIS 200 million (approximately $64 million), and the sale receives prior approval from the IIA.

The 2017 Amendment further provides that a technology company satisfying certain conditions will qualify as a "Special Preferred Technology Enterprise" and will thereby enjoy a reduced corporate tax rate of 6% on "Preferred Technology Income" regardless of the company's geographic location within Israel. In addition, a Special Preferred Technology Enterprise will enjoy a reduced corporate tax rate of 6% on capital gain derived from the sale of certain "Benefitted Intangible Assets" to a related foreign company if the Benefitted Intangible Assets were either developed by the Special Preferred Technology Enterprise or acquired from a foreign company on or after January 1, 2017, and the sale received prior approval from the IIA. A Special Preferred Technology Enterprise that acquires Benefitted Intangible Assets from a foreign company for more than NIS 500 million (approximately $161 million) will be eligible for these benefits for at least ten years, subject to certain approvals as specified in the Investment Law.

Dividends distributed by a Preferred Technology Enterprise or a Special Preferred Technology Enterprise, paid out of Preferred Technology Income, are generally subject to withholding tax at source at the rate of 20% or such lower rate as may be provided in an applicable tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate). However, if such dividends are paid to an Israeli company, no tax is required to be withheld (although, if such dividends are subsequently distributed from such Israeli company to individuals or a non-Israeli company, withholding tax at a rate of 20% or such lower rate as may be provided in an applicable tax treaty will apply). If such dividends are distributed to a foreign company and other conditions are met, the withholding tax rate will be 4% (or a lower rate under a tax treaty, if applicable, subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate).

Currently, we are not entitled to receive the tax benefits described above and there can be no assurance that we will be entitled to receive such benefits at any time in the future. Furthermore, there can be no assurance that even if in the future we meet the relevant requirements for such tax benefits, that such tax benefits will be available to us at all.

Capital Gains Taxes Applicable to Non-Israeli Resident Shareholders.

Israeli capital gains tax is imposed on the disposal of capital assets by a non-Israeli resident if such assets are either (i) located in Israel; (ii) shares or rights to shares in an Israeli resident company, or (iii) represent, directly or indirectly, rights to assets located in Israel, unless a specific exemption is available or unless a tax treaty between Israel and the seller's country of residence provides otherwise. Capital gain is generally subject to tax at the corporate tax rate (23% in 2018 and thereafter), if generated by a company, or at the rate of 25% if generated by an individual, or 30% in the case of sale of shares by a Substantial Shareholder (i.e., a person who holds, directly or indirectly, alone or together with such person's relative or another person who collaborates with such person on a permanent basis, 10% or more of any of the company's "means of control" (including, among other things, the right to receive profits of the company, voting rights, the right to receive proceeds upon liquidation and the right to appoint a director)) at the time of sale or at any time during the preceding 12-month period. Individual and corporate shareholders dealing in securities in Israel are taxed at the tax rates applicable to business income (a corporate tax rate for a corporation and a marginal tax rate of up to 47% for an individual in 2021) unless the benefiting provisions of an applicable treaty applies.

Notwithstanding the foregoing, a non-Israeli resident (individual or corporation) who derives capital gains from the sale of shares in an Israeli resident company that were purchased after the company was listed for trading on a recognized stock exchange in Israel or outside of Israel will generally be exempt from Israeli tax so long as the shares were not held through a permanent establishment that the non-resident maintains in Israel (and with respect to shares listed on a recognized stock exchange outside of Israel, so long as neither the shareholder nor the particular capital gain is otherwise subject to the Israeli Income Tax Law (Inflationary Adjustments) 5745-1985). However, non-Israeli corporations will not be entitled to the foregoing exemption if Israeli residents: (i) have a controlling interest of more than 25% in such non-Israeli corporation or (ii) are the beneficiaries of, or are entitled to, 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly. These provisions dealing with capital gain are not applicable to a person whose gains from selling or otherwise disposing of the shares are deemed to be business income.

Additionally, a sale of shares by a non-Israeli resident may be exempt from Israeli capital gains tax under the provisions of an applicable tax treaty. For example, under the United States-Israel Tax Treaty, the sale, exchange or other disposition of shares of an Israeli company by a shareholder who (i) is a U.S. resident (for purposes of the treaty), (ii) holds the shares as a capital asset, and (iii) is entitled to claim the benefits afforded to such person by the treaty, is generally exempt from Israeli capital gains tax. Such exemption will not apply if: (i) the capital gain arising from such sale, exchange or disposition is attributed to real estate located in Israel; (ii) the capital gain arising from such sale, exchange or disposition is attributed to royalties; (iii) the capital gain arising from the sale, exchange or disposition that can be attributed to a permanent establishment of the shareholder that is maintained in Israel under certain terms; (iv) the shareholder holds, directly or indirectly, shares representing 10% or more of the voting rights during any part of the 12-month period preceding such sale exchange or other disposition, subject to certain conditions; or (v) such U.S. resident is an individual and was present in Israel for a period or periods aggregating to 183 days or more during the relevant taxable year. In any such case, the sale, exchange or disposition of our ordinary shares would be subject to Israeli tax, to the extent applicable; however, under the United States-Israel Tax Treaty, a U.S. resident would be permitted to claim a credit for such taxes against the U.S. federal income tax imposed with respect to such sale, exchange or disposition, subject to the limitations under U.S. law applicable to foreign tax credits. The United States-Israel Tax Treaty does not relate to U.S. state or local taxes.

In some instances where our shareholders may be liable for Israeli tax on the sale of their ordinary shares, the payment of the consideration may be subject to the withholding of Israeli tax at source. Shareholders may be required to demonstrate that they are exempt from tax on their capital gains in order to avoid withholding at source at the time of sale. Specifically, in transactions involving a sale of all of the shares of an Israeli resident company, such as a merger or other transaction, the Israel Tax Authority may require from shareholders who are not liable for Israeli tax to sign declarations in forms specified by that authority or obtain a specific exemption from the Israel Tax Authority to confirm their status as non-Israeli residents, and, in the absence of such declarations or exemptions, may require the purchaser of the shares to withhold taxes at source.

Taxation of Non-Israeli Shareholders on Receipt of Dividends.

Non-Israeli residents (whether individuals or corporations) are generally subject to Israeli income tax on the receipt of dividends paid on our ordinary shares at the rate of 25% or 30% (if the recipient is a Substantial Shareholder at the time of receiving the dividend or at any time during the preceding 12 months) or 15% if the dividend is distributed from income attributed to a Benefited Enterprise and 20% with respect to a Preferred Enterprise, subject to certain conditions. Such dividends are generally subject to Israeli withholding tax at a rate of 25% so long as the shares are registered with a nominee company (whether the recipient is a Substantial Shareholder or not) and 15% if the dividend is distributed from income attributed to a Benefited Enterprise or 20% if the dividend is distributed from income attributed to an Preferred Enterprise, unless a reduced rate is provided under an applicable tax treaty (subject to the receipt of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate).

For example, under the United States-Israel Tax Treaty, the maximum rate of tax withheld at source in Israel on dividends paid to a holder of our ordinary shares who is a U.S. resident (for purposes of the United States-Israel Tax Treaty) is 25%. However, generally, the maximum rate of withholding tax for dividends not generated by a Benefited Enterprise and paid to a U.S. corporation holding 10% or more of the outstanding voting rights from the start of the tax year preceding the distribution of the dividend through (and including) the distribution of the dividend, is 12.5%, provided that not more than 25% of the gross income for such preceding year consists of certain types of dividends and interest. Notwithstanding the foregoing, a distribution of dividends to non-Israeli residents is subject to withholding tax at source at a rate of 15% if the dividend is distributed from income attributed to a Benefited Enterprise for such U.S. corporation shareholder, provided that the condition related to our gross income for the previous year (as set forth in the previous sentence) is met. U.S. residents who are subject to Israeli withholding tax on a dividend may be entitled to a credit or deduction for United States federal income tax purposes in the amount of the taxes withheld, subject to detailed rules contained in U.S. tax legislation.

If the dividend is attributable partly to income derived from a Benefited Enterprise or a Preferred Enterprise, and partly from other sources of income, the withholding rate will be a blended rate reflecting the relative portions of the two types of income.

Estate and Gift Tax.

Israeli law presently does not impose estate or gift taxes.

Excess Tax.

Beginning on January 1, 2013, an additional tax liability at the rate of 2% was added to the applicable tax rate on the annual taxable income of individuals (whether any such individual is an Israeli resident or non-Israeli resident) exceeding a certain level, including, but not limited to, dividends, interest and capital gain. Pursuant to new legislation enacted recently, such tax rate was increased to 3% on annual income exceeding NIS 698,280 in 2023.

U.S. Federal Income Taxation

The following is a description of the material U.S. federal income tax consequences to U.S. Holders (as defined below) of the acquisition, ownership and disposition of our ordinary shares. This description addresses only the U.S. federal income tax consequences to purchasers of our ordinary shares and that will hold such ordinary shares as capital assets. This description does not address tax considerations applicable to holders that may be subject to special tax rules, including, without limitation:

- banks, financial institutions or insurance companies;
- real estate investment trusts, regulated investment companies or grantor trusts;
- dealers or traders in securities, commodities or currencies;
- tax-exempt entities;
- certain former citizens or long-term residents of the United States;
- persons that received our ordinary shares as compensation for the performance of services;
- persons that will hold our ordinary shares as part of a "hedging," "integrated" or "conversion" transaction or as a position in a "straddle" for U.S. federal income tax purposes;
- partnerships (including entities classified as partnerships for U.S. federal income tax purposes) or other pass-through entities, or holders that will hold our ordinary shares through such an entity;
- U.S. Holders (as defined below) whose "functional currency" is not the U.S. dollar; or
- holders that own directly, indirectly or through attribution 10.0% or more of the voting power or value of our ordinary shares.

Moreover, this description does not address the United States federal estate, gift, alternative minimum tax or net investment income tax consequences, or any state, local or non-U.S. tax consequences, of the acquisition, ownership and disposition of our ordinary shares.

This description is based on the U.S. Internal Revenue Code of 1986, as amended (the "Code"), existing, proposed and temporary U.S. Treasury Regulations and judicial and administrative interpretations thereof, in each case as in effect and available on the date hereof. Each of the foregoing is subject to change, which change could apply retroactively and could affect the tax consequences described below. There can be no assurances that the U.S. Internal Revenue Service will not take a different position concerning the tax consequences of the acquisition, ownership and disposition of our ordinary shares or that such a position would not be sustained.

For purposes of this description, a "U.S. Holder" is a beneficial owner of our ordinary shares that, for U.S. federal income tax purposes, is:

- a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or any state thereof, including the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if such trust has validly elected to be treated as a U.S. person for U.S. federal income tax purposes or if (1) a court within the United States is able to exercise primary supervision over its administration and (2) one or more U.S. persons have the authority to control all of the substantial decisions of such trust.

If a partnership (or any other entity treated as a partnership for U.S. federal income tax purposes) holds ordinary shares, the tax treatment of a partner in such partnership will generally depend on the status of the partner and the activities of the partnership. Such a partner or partnership should consult its tax advisor as to its tax consequences.

You should consult your tax advisor with respect to the U.S. federal, state, local and foreign tax consequences of acquiring, owning and disposing of our ordinary shares.

Distributions

Subject to the discussion below under "— Passive Foreign Investment Company Considerations," if you are a U.S. Holder, the gross amount of any distribution that we pay you with respect to our ordinary shares before reduction for any non-U.S. taxes withheld therefrom generally will be includible in your income as dividend income to the extent such distribution is paid out of our current or accumulated earnings and profits as determined under U.S. federal income tax principles. To the extent that the amount of any cash distribution exceeds our current and accumulated earnings and profits as determined under U.S. federal income tax principles, it will be treated first as a tax free return of your adjusted tax basis in our ordinary shares and thereafter as capital gain. We do not expect to maintain calculations of our earnings and profits under U.S. federal income tax principles. Therefore, if you are a U.S. Holder, you should expect that the entire amount of any cash distribution generally will be reported as dividend income to you; provided, however, that distributions of ordinary shares to U.S. Holders that are part of a pro rata distribution to all of our shareholders generally will not be subject to U.S. federal income tax. Non-corporate U.S. Holders may qualify for the lower rates of taxation with respect to dividends on ordinary shares applicable to long term capital gains (i.e., gains from the sale of capital assets held for more than one year), provided that certain conditions are met, including certain holding period requirements and the absence of certain risk reduction transactions. Moreover, such reduced rate shall not apply if we are a PFIC for the taxable year in which it pays a dividend or were a PFIC for the preceding taxable year. Dividends will not be eligible for the dividends received deduction generally allowed to corporate U.S. Holders.

If you are a U.S. Holder, subject to the discussion below, dividends that we pay you with respect to our ordinary shares will be treated as foreign source income, which may be relevant in calculating your foreign tax credit limitation. Subject to certain conditions and limitations, non-U.S. tax withheld on dividends may be deducted from your taxable income or credited against your U.S. federal income tax liability. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends that we distribute generally should constitute "passive category income," or, in the case of certain U.S. Holders, "general category income." A foreign tax credit for foreign taxes imposed on distributions may be denied if you do not satisfy certain minimum holding period requirements. The rules relating to the determination of the foreign tax credit are complex, and you should consult your tax advisor to determine whether and to what extent you will be entitled to this credit.

Although, as discussed above, dividends that we pay to a U.S. Holder will generally be treated as foreign source income, for periods in which we are a "United States-owned foreign corporation," a portion of dividends paid by us may be treated as U.S. source income solely for purposes of the foreign tax credit. We would be treated as a United States-owned foreign corporation if 50% or more of the total value or total voting power of our stock is owned, directly, indirectly or by attribution, by United States persons. To the extent any portion of our dividends is treated as U.S. source income pursuant to this rule, the ability of a U.S. Holder to claim a foreign tax credit for any Israeli withholding taxes payable in respect of our dividends may be limited. A U.S. Holder entitled to benefits under the United States-Israel Tax Treaty may, however, elect to treat any dividends as foreign source income for foreign tax credit purposes if the dividend income is separated from other income items for purposes of calculating the U.S. Holder's foreign tax credit. U.S. Holders should consult their own tax advisors about the impact of, and any exception available to, the special sourcing rule described in this paragraph, and the desirability of making, and the method of making, such an election.

The amount of any dividend income paid in NIS will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars. If the dividend is converted into U.S. dollars on the date of receipt, you should not be required to recognize exchange gain or loss in respect of the dividend income. You may have exchange gain or loss if the dividend is converted into U.S. dollars after the date of receipt. Exchange gain or loss will be treated as U.S.-source ordinary income or loss.

Sale, Exchange or Other Disposition of Ordinary Shares

Subject to the discussion below under "— Passive Foreign Investment Company Considerations," if you are a U.S. Holder, you generally will recognize an amount of gain or loss on the sale, exchange or other disposition of our ordinary shares equal to the difference between the amount realized on such sale, exchange or other disposition and your tax basis in our ordinary shares, and such gain or loss will be capital gain or loss. The tax basis in an ordinary share generally will equal the U.S. dollar cost of such ordinary share. If you are a non-corporate U.S. Holder, capital gain from the sale, exchange or other disposition of ordinary shares generally will be eligible for a preferential rate of taxation applicable to capital gains, if your holding period for such ordinary shares exceeds one year. The deductibility of capital losses for U.S. federal income tax purposes is subject to limitations under the Code. Any such gain or loss that a U.S. Holder recognizes generally will be treated as U.S. source income or loss for foreign tax credit limitation purposes.

If an Israeli tax is imposed on the sale or other disposition of our ordinary shares, your amount realized will include the gross amount of the proceeds of the sale or other disposition before deduction of the Israeli tax. Because your gain from the sale or other disposition of our ordinary shares will generally be U.S.-source gain, and you may use foreign tax credits to offset only the portion of U.S. federal income tax liability that is attributable to foreign source income, you may be unable to claim a foreign tax credit with respect to the Israeli tax, if any, on gains. You should consult your tax adviser as to whether the Israeli tax on gains may be creditable against your U.S. federal income tax on foreign-source income from other sources.

Passive Foreign Investment Company

In general, a non-U.S. corporation will be treated as a PFIC for U.S. federal income tax purposes in any taxable year in which either (i) at least 75% of its gross income is "passive income," or (ii) on average at least 50% of its assets by value produce passive income or are held for the production of passive income. Passive income for this purpose generally includes, among other things, certain dividends, interest, royalties, rents and gains from commodities and securities transactions and from the sale or exchange of property that gives rise to passive income. Passive income also includes amounts derived by reason of the temporary investment of funds, including those raised in a public offering. Assets that produce or are held for the production of passive income include cash, even if held as working capital or raised in a public offering, marketable securities and other assets that may produce passive income. In determining whether a non-U.S. corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account.

A foreign corporation's PFIC status is an annual determination that is based on tests that are factual in nature, and our status for any year will depend on the corporation's income, assets, and activities for such year. We have not determined whether we have been a PFIC for any previous year prior to 2021. Also we cannot assure that we will not be considered a PFIC for 2021, based on our estimation, we do not expect to be a PFIC for the 2021 tax year. We did not conduct an analysis whether we will be a PFIC in 2022 or in any future years.

U.S. Holders should be aware of certain tax consequences of investing directly or indirectly in us due to our classification as a PFIC. A U.S. Holder is subject to different rules depending on whether the U.S. Holder makes an election to treat us as a "qualified electing fund," referred to herein as a "QEF election," for the first taxable year that the U.S. Holder holds ordinary shares makes a "mark-to-market" election with respect to the ordinary shares, or makes neither election.

QEF Election. One way in which certain of the adverse consequences of PFIC status can be mitigated is for a U.S. Holder make a QEF election. Generally, a shareholder making the QEF election is required for each taxable year to include in income a pro rata share of the ordinary earnings and net capital gain of the QEF, subject to a separate election to defer payment of taxes, which deferral is subject to an interest charge. An election to treat us as a QEF will not be available if we do not provide the information necessary to make such an election. It is not expected that a U.S. Holder will be able to make a QEF election because we do not intend to provide U.S. Holders with the information necessary to make a QEF election.

Mark-to-Market Election. Alternatively, if our ordinary shares are treated as "marketable stock," a U.S. Holder would be allowed to make a "mark-to-market" election with respect to our ordinary shares, provided the U.S. Holder completes and files IRS Form 8621 in accordance with the relevant instructions and related Treasury Regulations. If that election is made, the U.S. Holder generally would include as ordinary income in each taxable year the excess, if any, of the fair market value of our ordinary shares at the end of the taxable year over such holder's adjusted tax basis in such ordinary shares. The U.S. Holder would also be permitted an ordinary loss in respect of the excess, if any, of the U.S. Holder's adjusted tax basis in our ordinary shares over their fair market value at the end of the taxable year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. A U.S. Holder's tax basis in our ordinary shares would be adjusted to reflect any such income or loss amount. Gain realized on the sale, exchange or other disposition of our ordinary shares would be treated as ordinary income, and any loss realized on the sale, exchange or other disposition of our ordinary shares would be treated as ordinary loss to the extent that such loss does not exceed the net mark-to-market gains previously included in income by the U.S. Holder, and any loss in excess of such amount will be treated as capital loss. Amounts treated as ordinary income will not be eligible for the favorable tax rates applicable to qualified dividend income or long-term capital gains.

A mark-to-market election will not apply to our ordinary shares held by a U.S. Holder for any taxable year during which we are not a PFIC, but will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any PFIC subsidiary that we own.

Generally, stock will be considered marketable stock if it is "regularly traded" on a "qualified exchange" within the meaning of applicable Treasury Regulations. A class of stock is regularly traded on an exchange during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. To be marketable stock, our ordinary shares must be regularly traded on a qualifying exchange (i) in the United States that is registered with the SEC or a national market system established pursuant to the Exchange Act or (ii) outside the United States that is properly regulated and meets certain trading, listing, financial disclosure and other requirements. Since our ordinary shares are quoted only on the OTC Pink, they may not currently qualify as marketable stock for purposes of the election and therefore the election may not be available to a U.S. Holder. U.S. Holders should consult their own tax advisors regarding the availability and tax consequences of a mark-to-market election in respect to our ordinary shares under their particular circumstances.

Each U.S. Holder should consult its own tax adviser with respect to the applicability of the "net investment income tax" (discussed below) where a mark-to-market election is in effect.

Default PFIC Rules. A U.S. Holder who does not make a timely QEF election (we do not currently intend to prepare or provide the information that would enable a U.S. Holder to make a QEF election) or a mark-to-market election, referred to in this summary as a "Non-Electing U.S. Holder," will be subject to special rules with respect to (i) any "excess distribution" (generally, the portion of any distributions received by the Non-Electing U.S. Holder on the ordinary shares in a taxable year in excess of 125% of the average annual distributions received by the Non-Electing U.S. Holder in the three preceding taxable years, or, if shorter, the Non-Electing U.S. Holder's holding period for the ordinary shares), and (ii) any gain realized on the sale or other disposition of such ordinary shares. Under these rules:

- the excess distribution or gain would be allocated ratably over the Non-Electing U.S. Holder's holding period for such ordinary shares;
- the amount allocated to the current taxable year and any year prior to us becoming a PFIC would be taxed as ordinary income; and
- the amount allocated to each of the other taxable years would be subject to tax at the highest rate of tax in effect for the applicable class of taxpayer for that year, and an interest charge for the deemed deferral benefit would be imposed with respect to the resulting tax attributable to each such other taxable year.

If a Non-Electing U.S. Holder who is an individual dies while owning our ordinary shares, the Non-Electing U.S. Holder's successor would be ineligible to receive a step-up in tax basis of such ordinary shares. Non-Electing U.S. Holders should consult their tax advisors regarding the application of the "net investment income tax" (described below) to their specific situation.

To the extent a distribution on our ordinary shares does not constitute an excess distribution to a Non-Electing U.S. Holder, such Non-Electing U.S. Holder generally will be required to include the amount of such distribution in gross income as a dividend to the extent of our current or accumulated earnings and profits (as determined for U.S. federal income tax purposes) that are not allocated to excess distributions. Each U.S. Holder is encouraged to consult its own tax advisor with respect to the appropriate U.S. federal income tax treatment of any distribution on our ordinary shares.

If we are treated as a PFIC for any taxable year during the holding period of a Non-Electing U.S. Holder, we will continue to be treated as a PFIC for all succeeding years during which the Non-Electing U.S. Holder is treated as a direct or indirect Non-Electing U.S. Holder even if we are not a PFIC for such years. A U.S. Holder is encouraged to consult its tax advisor with respect to any available elections that may be applicable in such a situation, including the "deemed sale" election of Code Section 1298(b)(1) (which will be taxed under the adverse tax rules described above).

We may invest in the equity of foreign corporations that are PFICs or may own subsidiaries that own PFICs. If we are classified as a PFIC, under attribution rules, U.S. Holders will be subject to the PFIC rules with respect to their indirect ownership interests in such PFICs, such that a disposition of the ordinary shares of the PFIC or receipt by us of a distribution from the PFIC generally will be treated as a deemed disposition of such ordinary shares or the deemed receipt of such distribution by the U.S. Holder, subject to taxation under the PFIC rules. There can be no assurance that a U.S. Holder will be able to make a QEF election, and a U.S. Holder may not make a mark-to-market election, with respect to PFICs in which we invest. Each U.S. Holder is encouraged to consult its own tax advisor with respect to tax consequences of an investment by us in a corporation that is a PFIC.

In addition, U.S. Holders should consult their tax advisors regarding the IRS information reporting and filing obligations that may arise as a result of the ownership of ordinary shares in a PFIC, including IRS Form 8621, Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund.

The U.S. federal income tax rules relating to PFICs elections are complex. U.S. Holders are urged to consult their own tax advisors with respect to the purchase, ownership and disposition of our ordinary shares, any elections available with respect to such ordinary shares and the IRS information reporting obligations with respect to the purchase, ownership and disposition of our ordinary shares.

Certain Reporting Requirements

Certain U.S. Investors are required to file IRS Form 926, Return by U.S. Transferor of Property to a Foreign Corporation, and certain U.S. Investors may be required to file IRS Form 5471, Information Return of U.S. Persons With Respect to Certain Foreign Corporations, reporting transfers of cash or other property to us and information relating to the U.S. Investor and us. Substantial penalties may be imposed upon a U.S. Investor that fails to comply.

In addition, certain U.S. Investors are required to report information on IRS Form 8938 with respect to their investments in certain "foreign financial assets," which would include an investment in our ordinary shares, to the IRS.

Investors who fail to report required information could become subject to substantial civil and criminal penalties. U.S. Investors should consult their tax advisors regarding the possible implications of these reporting requirements and any other applicable reporting requirement with respect to their investment in and ownership of our ordinary shares.

Disclosure of Reportable Transactions

If a U.S. Investor sells or disposes of the ordinary shares at a loss or otherwise incurs certain losses that meet certain thresholds, such U.S. Investor may be required to file a disclosure statement with the IRS. Failure to comply with these and other reporting requirements could result in the imposition of significant penalties.

Backup Withholding Tax and Information Reporting Requirements

U.S. backup withholding tax and information reporting requirements may apply to certain payments to certain holders of stock. Information reporting generally will apply to payments of dividends on, and to proceeds from the sale, exchange or redemption of, our ordinary shares made within the United States, or by a United States payor or United States middleman, to a holder of our ordinary shares, other than an exempt recipient (including a payee that is not a United States person that provides an appropriate certification and certain other persons). Payments made (and sales or other dispositions effected at an office) outside the U.S. will be subject to information reporting in limited circumstances. A payor will be required to withhold backup withholding tax from any payments of dividends on, or the proceeds from the sale or redemption of, ordinary shares within the United States, or by a United States payor or United States middleman, to a holder, other than an exempt recipient, if such holder fails to furnish its correct taxpayer identification number or otherwise fails to comply with, or establish an exemption from, such backup withholding tax requirements, or to report dividends required to be shown on the holder's U.S. federal income tax returns. Back up withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a credit against the beneficial owner's U.S. federal income tax liability, if any, and any excess amounts withheld under the backup withholding rules may be refunded, provided that the required information is timely furnished to the IRS.

Medicare Tax on Investment Income

Certain U.S. persons, including individuals, estates and trusts, will be subject to an additional 3.8% Medicare tax, or "net investment income tax," on unearned income. For individuals, the additional net investment income tax applies to the lesser of (i) "net investment income" or (ii) the excess of "modified adjusted gross income" over $200,000 ($250,000 if married and filing jointly or $125,000 if married and filing separately). "Net investment income" generally equals the taxpayer's gross investment income reduced by the deductions that are allocable to such income. Investment income generally includes passive income such as interest, dividends, annuities, royalties, rents, and capital gains. U.S. Investors are urged to consult their own tax advisors regarding the implications of the additional net investment income tax resulting from their ownership and disposition of our ordinary shares.

THIS SUMMARY OF MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES IS NOT TAX ADVICE. THE DETERMINATION OF THE ACTUAL TAX CONSEQUENCES FOR A U.S. HOLDER WILL DEPEND ON THE U.S. HOLDER'S SPECIFIC SITUATION. U.S. HOLDERS OF ORDINARY SHARES SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSEQUENCES OF ACQUIRING, OWNING AND DISPOSING OF OUR ORDINARY SHARES, INCLUDING THE APPLICABILITY AND EFFECT OF THE ALTERNATIVE MINIMUM TAX AND ANY STATE, LOCAL, FOREIGN OR OTHER TAX LAWS AND OF CHANGES IN THOSE LAWS.

F. Dividends and Paying Agents.

Not applicable.

G. Statements by Experts.

Not applicable.

H. Documents on Display.

We are subject to the informational requirements of the Exchange Act. Accordingly, we are required to file reports and other information with the SEC, including annual reports on Form 20-F and reports on Form 6-K. As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. Furthermore, as a foreign private issuer, we are also not subject to the requirements of Regulation FD (Fair Disclosure) promulgated under the Exchange Act. In addition, we are not required under the Exchange Act to file annual or other reports and consolidated financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. Instead, we must file with the SEC, within 120 days after the end of each fiscal year, or such other applicable time as required by the SEC, an annual report on Form 20-F containing consolidated financial statements audited by an independent registered public accounting firm. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding registrants like us that file electronically with the SEC. You can also inspect this annual report on such website.

We maintain a corporate website at www.pvnanocell.com. Information contained on, or that can be accessed through, our website does not constitute a part of this annual report on Form 20-F. We have included our website address in this annual report on Form 20-F solely as an inactive textual reference.

I. Subsidiary Information.

Not applicable.

J. Annual Report to Security Holders.

Not applicable.

ITEM 11. Quantitative and Qualitative Disclosures about Market Risk.

Quantitative and Qualitative Disclosure about Market Risk

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position, results of operations or cash flows due to adverse changes in financial market prices and rates, including interest rates and foreign exchange rates, of financial instruments.

Foreign Currency Exchange Risk

Our foreign currency exposures give rise to market risk associated with exchange rate movements of the NIS mainly against the U.S. dollar because a large portion of our expenses are denominated in NIS. Our NIS expenses consist principally of payments made to employees, sub-contractors, professional services, other research and development activities and general and administrative activities. We anticipate that a large portion of our expenses will continue to be denominated in currencies other than the U.S. dollar. Our financial position, results of operations and cash flow are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. The majority of our expenses are denominated in NIS. In addition, we may incur operating expenses denominated in Euros, and therefore, our operating results may also be subject to fluctuations due to changes in the U.S. dollar/Euro exchange rate. We cannot predict any future trends in the rate of inflation in Israel or the rate of depreciation (if any) of the NIS, the Euro and other foreign currencies against the U.S. dollar. Given our general lack of currency hedging arrangements to protect us from fluctuations in the exchange rates of the NIS and Euro and other foreign currencies in relation to the U.S. dollar (and/or from inflation of such foreign currencies), we may be exposed to adverse effects from such movements. The rate of inflation in Israel or Europe or in currency exchange rates may materially change and we might not be able to effectively mitigate these risks.

To date, we have not engaged in hedging our foreign currency exchange risk. In the future, we may enter into formal currency hedging transactions to decrease the risk of financial exposure from fluctuations in the exchange rates of our principal operating currencies. These measures, however, may not adequately protect us from the material adverse effects of such fluctuations.

Interest Rate Risk

Our exposure to interest rate risk for changes in interest rates relates primarily to the interest income generated by excess cash invested in bank deposits. We have not used any derivative financial instruments in our investment portfolio or for cash management purposes. Interest-earning instruments carry a degree of interest rate risk. We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates. However, our future interest income may fall short of expectations due to changes in interest rates.

ITEM 12. Description of Securities Other Than Equity Securities

A. Debt Securities.

Not applicable.

B. Warrants and Rights.

Not applicable.

C. Other Securities.

Not applicable.

D. American Depositary Shares.

Not applicable.

PART II

ITEM 13. Defaults, Dividend Arrearages and Delinquencies.

Certain convertible loans that we received from certain lenders during 2017 and onwards matured in accordance with their respective terms and such lenders did not exercise their conversion rights in full prior to their maturity date and therefore, such loans became repayable by us in cash at such time. We did not timely repay such loans due to financial difficulties and therefore, we are currently in default under those convertible loan agreements. As of December 31, 2022, we have recorded a liability in the amount of approximately $1.5 million (including principal and interest) with respect to such convertible loans. For additional information, see Note 8 to the audited consolidated financial statements for the year ended December 31, 2022 included elsewhere in this annual report on Form 20-F.

ITEM 14. Material Modifications to the Rights of Security Holders and Use of Proceeds.

Not applicable.

ITEM 15. Controls and Procedures

(a) ***Disclosure Controls and Procedures***. Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure, and that such information is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms.

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2022, pursuant to Rule 13a-15 under the Exchange Act. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of December 31, 2022 as a result of the material weaknesses identified in our internal control over financial reporting. These material weaknesses are discussed in "Report of Management on Internal Control over Financial Reporting" below. Our management considers our internal control over financial reporting to be an integral part of our disclosure controls and procedures.

(b) ***Report of Management on Internal Control over Financial Reporting***. Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022. In making our assessment, our management used the criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). A material weakness, as defined by SEC rules, is a control deficiency, or combination of control deficiencies, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

Based on such assessment, management has concluded that, as of December 31, 2022, our internal control over financial reporting is ineffective due to (among other things) the following material weaknesses : (i) significant parts of entity level controls are missing, (ii) lack of segregation of duties, (iii) controls' effectiveness testing was predominantly not performed, among other things due to nonperformance of controls or absence of evidence for controls' performance, and (iv) non-remediation of material weaknesses identified in prior years.

Due to lack of resources, during 2022, as in previous years, we were unable to implement in any material respect our remediation plans for the material weaknesses identified in prior years. We intend to take appropriate and reasonable steps to make the necessary improvements to remediate these deficiencies, provided that we have the resources to implement them.

(c) ***Changes in Internal Control over Financial Reporting***. There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16. [RESERVED]

ITEM 16A. Audit Committee Financial Expert.

Our board has determined that Ms. Orly Solomon, who serves as the chair of our audit committee, is an audit committee financial expert, as defined by the SEC rules, and has the requisite financial sophistication as defined by the Nasdaq Listing Rules. Ms. Solomon is an independent director as such term is defined in Rule 10A-3(b)(1) under the Exchange Act and under the Nasdaq Listing Rules. For Ms. Solomon's relevant experience, see "Item 6 A. — Directors and Senior Management".

ITEM 16B. Code of Ethics.

We have adopted a Code of Business Conduct and Ethics applicable to all of our directors and employees, including our Chief Executive Officer, Chief Technology Officer, Chief Financial Officer, controller or principal accounting officer or other persons performing similar functions, which is a "code of ethics" as defined in Item 16B of Form 20-F promulgated by the SEC. Section 406(c) of the Sarbanes-Oxley Act provides that a "code of ethics" means such standards as are reasonably necessary to promote (i) honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; (ii) full, fair, accurate, timely and understandable disclosure in the periodic reports required to be filed by the issuer; and (iii) compliance with applicable governmental rules and regulation.

The full text of the Code of Business Conduct and Ethics is posted on our website at www.pvnanocell.com. Information contained on, or that can be accessed through, our website does not constitute a part of this annual report on Form 20-F and is not incorporated by reference herein. We will provide a copy of such Code of Business Conduct and Ethics without charge upon request by mail or by telephone. If we make any amendment to the Code of Business Conduct and Ethics or grant any waivers, including any implicit waiver, from a provision of the Code of Business Conduct and Ethics, we will disclose the nature of such amendment or waiver on our website to the extent required by the rules and regulations of the SEC.

ITEM 16C. Principal Accountant Fees and Services.

On April 7, 2022, our shareholders approved the appointment of Ilanit Halperin, CPA ("Halperin") as our independent registered public accountants for the fiscal years ended December 31, 2020 and 2021. On April 14, 2023, our shareholders approved the appointment of Ziv Haft (BDO Member Firm) ("BDO") as our independent registered public accounting firm for the year ended December 31, 2022.

The following table presents the aggregate fees by categories specified below for professional services rendered by Halperin as our independent registered public accountants for the year ended December 31, 2021 and by BDO as our independent registered public accounting firm for the year ended December 31, 2022.

	Year ended December 31,	
	2022	**2021**
Audit Fees	$ 135,000	$ 95,000
Tax fees	20,000	20,000
Total	**$ 155,000**	**$ 115,000**

Audit fees. Consist of aggregate fees for the audit of our annual consolidated financial statements. This category also includes services that the independent accountant generally provides, such as consents, assistance with, and review of documents filed with the SEC (as applicable).

Tax fees. Consist of aggregate fees for professional services to be rendered by our independent registered public accounting firm for tax compliance and tax advice on actual or contemplated transactions.

Audit Committee Pre-Approval Policies and Procedures

Our audit committee provides assistance to our board of directors in fulfilling its legal and fiduciary obligations in matters involving our accounting, auditing, financial reporting, internal control and legal compliance functions by pre-approving the services performed by our independent accountants and reviewing their reports regarding our accounting practices and systems of internal control over financial reporting. Our audit committee also oversees the audit efforts of our independent accountants and takes those actions that it deems necessary to satisfy itself that the accountants are independent of management. Our audit committee authorized all auditing and non-auditing services provided by Halperin during 2021 and BDO during 2022 and the fees for such services.

ITEM 16D. Exemptions from the Listing Standards for Audit Committees.

Not applicable.

ITEM 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.

Not applicable.

ITEM 16F. Change in Registrant's Certifying Accountant.

At the Company's annual general meeting of the shareholders held on April 7, 2022, the Company's auditor, Halperin, was appointed to serve as the Company's independent auditor with respect to the audit of the Company's financial statements for the years ended December 31, 2021 and 2020.

In February 2023, each of our Audit Committee and Board of Directors approved the appointment of BDO as the Company's independent auditors to audit our consolidated financial statements for the year ended December 31, 2022 and for such additional period until the annual general meeting of shareholders to be held on or prior to December 31, 2023. The approval of the appointment of BDO by our Audit Committee and Board of Directors was made after an evaluation process and consideration by the Company. The Company's decision to make this change was not the result of any disagreement between the Company and Halperin on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure. On April 14, 2023, the Company's shareholders ratified and approved the appointment of BDO as the Company's independent auditors for the audit of our consolidated financial statements for the year ended December 31, 2022 and for such additional period until the next annual general meeting of shareholders.

The reports of Halperin on our consolidated financial statements as of and for the years ended December 31, 2021, and 2020 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles, except that the audit report on the consolidated financial statements of the Company for the years ended December 31, 2021 and 2020 contained an uncertainty about the Company's ability to continue as a going concern.

During the years ended December 31, 2021, and 2020, there were no disagreements with Halperin on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to Halperin satisfaction, would have caused Halperin make reference to the subject matter thereof in connection with its reports for such years.

We provided Halperin with a copy of this annual report and requested a letter addressed to the SEC indicating whether or not it agrees with the above disclosures. A copy of Halperin CPA's letter dated May 15, 2023 is attached as Exhibit 4.18 to this annual report.

During the two fiscal years ended December 31, 2021 and 2020, and through the subsequent interim period to April 14, 2023, neither the Company nor anyone on its behalf consulted BDO with respect to either (i) the application of accounting principles to a specified transaction, either completed or proposed; or the type of audit opinion that might be rendered on the Company's consolidated financial statements, and neither a written report nor oral advice was provided to the Company that BDO concluded was an important factor considered by the Company in reaching a decision as to any accounting, auditing or financial reporting issue; or (ii) any matter that was either the subject of a disagreement with Halperin (as described in Item 16F(a)(1)(iv) of Form 20-F and the related instructions to Item 16F) or a reportable event (as described in Item 16F(a)(1)(v) of Form 20-F).

ITEM 16G. Corporate Governance.

Not applicable.

ITEM 16H. Mine Safety Disclosure.

Not applicable.

ITEM 16I. Disclosure Regarding Foreign Jurisdictions That Prevent Inspections.

Not applicable.

ITEM 16J. Insider Trading Policy.

Not applicable.

PART III

ITEM 17. Financial Statements

Not Applicable.

ITEM 18. Financial Statements.

Please refer to the consolidated financial statements beginning on page F-1. The following consolidated financial statements, its schedules and related notes are filed as part of this annual report on Form 20-F.

P.V. NANO CELL LTD. AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2022

IN U.S. DOLLARS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Directors
P.V. Nano Cell Ltd,
Migdal Ha'Emek, Israel.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of P.V. Nano Cell Ltd. (the "Group") as of December 31, 2022 and the related consolidated statements of comprehensive loss, stockholders' deficit, and cash flows for the year ended December 31, 2022 and the related notes (collectively referred to as 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, 2022 and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt About the Group's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Group will continue as a going concern. As described in Note 1.b to the consolidated financial statements, the Group has suffered recurring losses, negative cash flows from operations since inception and is in default in repayments of its convertible notes and does not have sufficient capital to repay such obligations which are currently due. These factors raise substantial doubt about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1.b. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter.

Basis for Opinion

These consolidated financial statements are the responsibility of the Group's management. Our responsibility is to express an opinion on the Group's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Group 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 audit 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 Group is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit, 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 Group's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit 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 audit 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 audit provides a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/ Ziv Haft
Certified Public Accountants (Isr.)

We have served as the Group's auditor since 2023
PCAOB ID 1185

Tel Aviv, Israel
May 15, 2023

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of

P.V. NANO CELL LTD.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of P.V. Nano Cell Ltd. and its subsidiaries (the Company) as of December 31, 2021, the related consolidated statements of comprehensive loss, shareholders' equity (deficit), and cash flows, for each of the two years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

The Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1.b. to the financial statements, the Company has suffered recurring losses from operations, has a working capital deficiency, and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1.b. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 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 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Halperin Ilanit.
Certified Public Accountants (Isr.)
PCAOB number 650100001

Tel Aviv, Israel
June 21, 2022

We have served as the Company's auditor since 2022 to 2023

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CONSOLIDATED BALANCE SHEETS

U.S. dollars

	December 31,	
	2022	**2021**
ASSETS		
CURRENT ASSETS:		
Cash	$ 362,609	$ 19,437
Restricted cash	4,984	5,627
Accounts receivable, net	110,687	46,613
Other current assets	230,319	252,790
Inventory, net	38,730	68,421
Total current assets	**747,329**	**392,888**
NON-CURRENT ASSETS:		
Property and equipment, net	125,548	91,658
Intangible asset, net	—	2,536,548
Goodwill	3,026,036	3,026,036
Right of use asset	135,107	—
Total non-current assets	**3,286,691**	**5,654,242**
Total assets	**4,034,020**	**6,047,130**
LIABILITIES AND SHAREHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Short term bank credit	—	69,877
Short term loans	—	234,004
Trade payables	508,716	626,271
Employees and payroll accruals	694,709	1,184,185
Accrued expenses and other current liabilities	2,577,711	2,782,888
Convertible loans	1,470,213	1,637,577
Warrants presented at fair value	—	17,296
Current maturity of lease liability	60,071	—
Total current liabilities	**5,311,420**	**6,552,098**
NON-CURRENT LIABILITIES:		
Capital note	40,000	40,000
Warrants presented at fair value	15,459	89,679
Israel Innovation Authority	—	381,216
Lease liability, net of current maturity	75,036	—
Total non-current liabilities	**130,495**	**510,895**
Total liabilities	**5,441,915**	**7,062,993**
Commitment and Contingencies (Note 9)		
SHAREHOLDERS' DEFICIT:		
Ordinary shares of NIS 0.01 par value - Authorized: 1,200,000,000 as of December 31, 2022 and 2021, respectively; Issued and outstanding: 147,134,792 and 90,205,191 ordinary shares as of December 31, 2022 and 2021, respectively	441,590	270,750
Additional paid in capital	38,856,908	34,910,233
Treasury stocks	(122,482)	(122,482)
Accumulated deficit	(40,583,911)	(36,074,364)
Total shareholders' deficit	**(1,407,895)**	**(1,015,863)**
Total liabilities and shareholders' deficit	**$ 4,034,020**	**$ 6,047,130**

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

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

U.S. dollars

	Year ended December 31,		
	2022	**2021**	**2020**
Revenues	$ 603,359	$ 568,704	$ 761,319
Cost of revenues	375,877	271,817	307,713
Amortization of intangible assets	428,431	428,431	428,434
Gross loss (profit)	**200,949**	**131,544**	**(25,172)**
Operating expenses:			
Research and development	705,646	783,665	926,697
Less - research and development grants	(437,045)	(315,967)	(525,838)
Research and development, net	268,601	467,698	400,859
Sales and marketing	566,896	625,031	673,986
General and administrative	1,893,179	1,345,495	1,414,370
Goodwill impairment	—	—	265,089
Intangible asset impairment	2,108,117	—	—
Total operating expenses	4,836,793	2,438,224	2,754,304
Operating loss	**5,037,742**	**2,569,768**	**2,729,132**
Financial expenses (income), net (Note 14)	(528,195)	(50,904)	9,814,605
Net loss	**$ 4,509,547**	**$ 2,518,864**	**$ 12,543,737**
Net loss per ordinary share:			
Basic and diluted net loss per ordinary share	$ 0.03	$ 0.06	$ 0.49
Weighted average number of ordinary shares used in computing basic and diluted net loss per ordinary share	129,144,562	44,453,153	25,581,000

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

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' DEFICIT

U.S. dollars

	Ordinary shares					
	Number of ordinary shares	Amount	Additional paid-in Capital	Treasury stocks	Accumulated deficit	Total
Balance as of January 1, 2020	**24,393,218**	**$ 65,842**	**$ 19,951,632**	$ —	**$ (21,011,763)**	**$ (994,289)**
Issuance of ordinary shares in connection with conversion of convertible loans	386,735	1,111	64,634	—	—	65,745
Issuance of ordinary shares in connection with Professional service rendered	206,250	602	33,443	—	—	34,045
Issuance of Ordinary Shares as a consideration for the Jet CU purchase	2,000,000	5,848	218,352	—	—	224,200
Treasury stocks	—	—	—	(122,482)	—	(122,482)
Stock based compensation	—	—	464,773	—	—	464,773
Net loss	—	—	—	—	(12,543,737)	(12,543,737)
Balance as of December 31, 2020	**26,986,203**	**$ 73,403**	**$ 20,732,834**	**$ (122,482)**	**$ (33,555,500)**	**$ (12,871,745)**
Issuance of ordinary shares in connection with conversion of convertible loans	57,790,416	180,399	12,897,067	—	—	13,077,466
Issuance of additional ordinary shares to former Jet CU shareholders in return for forfeiting their related warrants	5,428,572	16,948	471,959	—	—	488,907
Advance payment on the account of issuing ordinary shares	—	—	350,000	—	—	350,000
Stock based compensation	—	—	458,373	—	—	458,373
Net loss	—	—	—	—	(2,518,864)	(2,518,864)
Balance as of December 31, 2021	**90,205,191**	**$ 270,750**	**$ 34,910,233**	**$ (122,482)**	**$ (36,074,364)**	**$ (1,015,863)**
Issuance of ordinary shares in connection with Professional service rendered	75,000	229	6,521	—	—	6,750
Issuance of Ordinary Shares	56,854,601	170,611	3,459,212	—	—	3,629,823
Stock based compensation	—	—	480,942	—	—	480,941
Net loss	—	—	—	—	(4,509,547)	(4,509,547)
Balance as of December 31, 2022	**147,134,792**	**441,590**	**38,856,908**	**(122,482)**	**(40,583,911)**	**(1,407,895)**

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars

	Year ended December 31,		
	2022	**2021**	**2020**
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	**$ (4,509,547)**	**$ (2,518,864)**	**$ (12,543,737)**
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	59,278	55,076	63,095
Amortization	428,431	428,431	428,434
Financial expenses in connection with convertible loans	(167,364)	7,892,632	2,597,476
Interest in connection with short term loans	819	4,004	—
Share-based compensation	480,942	458,373	464,773
Restricted shares issued for services	6,750	—	34,045
Goodwill impairment	—	—	265,089
Intangible asset impairment	2,108,117	—	—
Capital loss	—	—	43,216
Change in fair value of warrants and capital note	(91,516)	(8,112,118)	7,011,437
Change in operating assets and liabilities:			
Change in accounts receivable, net	(64,074)	152,754	(112,873)
Change in other current assets	22,471	(162,681)	156,041
Change in inventory, net	29,691	16,822	17,539
Change in trade payables	(117,555)	14,142	(171,463)
Change in employees and payroll accruals	(489,476)	433,313	70,582
Change in accrued expenses and other current liabilities	(586,393)	484,690	882,589
Net cash used in operating activities	**(2,889,426)**	**(853,426)**	**(793,757)**
CASH FLOWS FROM INVESTING ACTIVITIES:			
Net cash acquired in acquisition of Jet CU (see also Note 3)	—	—	811,773
Purchase of property and equipment	(93,168)	(1,869)	(2,860)
Net cash provided by (used in) investing activities	**(93,168)**	**(1,869)**	**808,913**
CASH FLOWS FROM FINANCING ACTIVITIES:			
Change in in short term bank credit	(69,877)	14,032	(36,385)
Proceeds in connection with issuance of ordinary shares	3,395,000	—	—
Change in in short term loans	—	230,000	—
Proceeds from convertible loans and related warrants	—	255,000	16,748
Advance payment on the account of issuing ordinary shares	—	350,000	—
Proceeds (repayment) of short-tern bank loan	—	—	(14,489)
Net cash provided by (used in) financing activities	**3,325,123**	**849,032**	**(34,126)**
Decrease in cash and restricted cash	342,529	(6,263)	(18,970)
CASH AND RESTRICTED CASH AT THE BEGINNING OF THE YEAR	25,064	31,327	50,297
CASH AND RESTRICTED CASH AT THE END OF THE YEAR	**$ 367,593**	**$ 25,064**	**$ 31,327**
SUPPLEMENTAL INFORMATION AND DISCLOSURE OF NON-CASH FINANCING ACTIVITIES			
Issuance of ordinary shares and warrants in connection with acquisition (see also Note 3)	$ —	$ —	$ 411,781
Conversion of convertible loans including interest to ordinary shares	$ —	$ 13,077,466	$ 65,745
Conversion of short term loans including interest to ordinary shares	234,823	—	—
Right of use asset recognized with corresponding lease liabilities	135,107	—	—
Allocation of the 8,000,000 warrants FV granted to former Jet CU shareholders to the consolidated statement of shareholders' equity (deficit) as of September 23, 2021 in exchange for 5,428,572 additional ordinary shares	$ —	$ 488,907	$ —

	December 31,		
	2022	**2021**	**2020**
Cash	$ 362,609	$ 19,437	$ 31,327
Restricted cash	4,984	5,627	—
	$ 367,593	$ 25,064	$ 31,327

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

NOTE 1: GENERAL

a. P.V. Nano Cell Ltd. (the "Company") was incorporated in June 2009 under the laws of Israel. The Company along with its three fully owned Israeli subsidiaries: Nano Size Ltd. ("Nano Size"), Digiflex Ltd. ("Digiflex") and JET CU P.C.B. Ltd. ("Jet CU"), and Digiflex's fully owned US subsidiary Digiflex Inc ("Inc"), are mainly engaged in developing, manufacturing, marketing and commercializing conductive inks for digital inkjet conductive printing applications and manufacturing printing machines, which offer solutions for inkjet print-quality technologies. See Note 3 for additional information regarding the acquisition of Jet CU on July 26, 2020. The Company, Nano Size, Digiflex, Jet CU and Inc are jointly defined as the "Group".

b. Since its inception, the Group has incurred operating losses, negative cash flows from operations since inception and is in default in repayments of its convertible notes and does not have sufficient capital to repay such obligations which are currently due. During the year ended December 31, 2022, the Group used cash in operating activities of approximately $2.9 million, incurred a net loss of approximately $4.5 million and had a total accumulated deficit of approximately $40.6 million as of December 31, 2022. The Group requires additional financing in order to continue to fund its current operations and to pay existing and future liabilities.

The Group intends to finance operating costs over the next twelve (12) months through issuance of equity securities or debt and by increasing its inflow from revenue. The Group is currently negotiating with third parties in an attempt to obtain additional sources of funds. The satisfactory completion of these negotiations is essential to provide sufficient cash flow to meet current operating requirements. However, the Group cannot give any assurance that it will be able to achieve a level of profitability from the sale of its products to sustain its operations in the future. These conditions raise substantial doubt about the Group's ability to continue as a going concern.

The accompanying consolidated financial statements do not include any adjustments to reflect the possible future effects on recoverability and reclassification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES

a. Basis of presentation:

The consolidated financial statements are prepared according to United States generally accepted accounting principles ("U.S. GAAP").

b. Use of estimates:

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the period. The Group's management believes that the estimates, judgments and assumptions used are reasonable based upon information available at the time they are made. Actual results could differ from those estimates.

On an ongoing basis, the Group's management evaluates estimates, including those related to fair values of stock-based awards, warrants to purchase the Group's ordinary shares and capital note. Such estimates are based on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

c. Consolidated financial statements in U.S. dollars:

The accompanying consolidated financial statements have been prepared in U.S. dollars ("dollar" or "dollars").

A substantial portion of the Group's costs are incurred in New Israeli Shekels ("NIS"). However, the Group finances its operations mainly in dollars and a majority of the Group's revenues are denominated in dollars. As such, the Group's management believes that the dollar is the currency of the primary economic environment in which the Group operates. Thus, the functional and reporting currency of the Group is the dollar.

Transactions and balances that are denominated in dollars are presented at their original amounts. Non-dollar transactions and balances have been re-measured to dollars in accordance with Accounting Standards Codification ("ASC") No. 830, "Foreign Currency Matters". All foreign currency transaction gains and losses are reflected in the consolidated statements of operations as financial income or expenses, as appropriate.

d. Principles of consolidation:

The consolidated financial statements include the accounts of the Company and its subsidiaries, and intercompany transactions and balances have been eliminated upon consolidation.

e. Inventory, net:

Inventories are stated at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Inventory write-offs are provided to cover risks arising from slow-moving items, excess inventories, discontinued products, new products introduction and for market prices lower than cost. Any write-off is recognized in the consolidated statements of comprehensive loss as cost of revenues.

f. Property and equipment:

Property and equipment are stated at cost net of accumulated depreciation. Depreciation is calculated by the straight-line method, over the estimated useful lives of the assets, at the following annual rates:

	%
Computers	15 – 33
Equipment	7 – 33
Office furniture	7 – 15
Leasehold improvements	(*)

(*) Leasehold improvements are amortized on a straight-line basis over the shorter of the lease term (including the extension option held by the Group and intended to be exercised) and the expected life of the improvement.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

f. Property and equipment (cont.):

Long-lived assets of the Group are reviewed for impairment in accordance with ASC No. 360, "Property, Plant and Equipment", whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. The Group did not record any impairment losses during the years ended December 31, 2022, 2021 and 2020.

g. Goodwill:

Goodwill reflects the excess of the consideration transferred plus the fair value of any non-controlling interest in the acquiree at the business combination date over the fair values of the identifiable net assets acquired. Goodwill is not amortized but rather is tested for impairment annually at the reporting unit level, or whenever events or circumstances present an indication of impairment. Goodwill is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized.

The primary items that generate goodwill include the value of the synergies between the acquired companies and the Company and the acquired assembled workforce, neither of which qualifies for recognition as an intangible asset.

Goodwill is tested for impairment on an annual basis in the fourth quarter and whenever indicators of potential impairment require an interim goodwill impairment analysis. The Group may first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the Group performs a qualitative assessment and concludes that it is more likely than not that the fair value of a reporting unit exceeds its carrying value, goodwill is not considered impaired and the quantitative impairment test is not required. However, if the Group concludes otherwise, it is then required to perform a quantitative assessment for goodwill impairment.

The Group performs its quantitative goodwill impairment test by comparing the fair value of its reporting unit with its carrying value. If the reporting unit's carrying value is determined to be greater than its fair value, an impairment charge is recognized for the amount by which the carrying value exceeds the reporting unit's fair value. If the fair value of the reporting unit is determined to be greater than its carrying amount, the applicable goodwill is not impaired and no further testing is required.

The evaluation of goodwill impairment requires the Group to make assumptions associated with its reporting unit fair value. These assumptions require significant judgment and actual results may differ from assumed and estimated amounts.

As of December 31, 2019 and onwards, the Group has early adopted the ASU 2017-04 FASB revised guidance of goodwill impairment. Under this guidance, entities that have reporting units with zero or negative carrying amount are no longer required to perform the qualitative assessment. The results of such test as of December 31, 2022, 2021 and 2020, were that the fair value was greater than the reporting unit's negative carrying value and therefore no goodwill impairment was recorded as of this date.

As a result of the Jet CU purchase on July 26, 2020, the Company recorded a goodwill impairment of $265,089. See Note 3 for additional information.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

h. Intangible assets:

Intangible assets and their useful lives are as follows:

	Estimated useful life
Technology	Ten (10) years
Backlog	One (1) year

Intangible assets represent acquired technology and backlog. Definite life intangible assets are amortized using the straight-line method over their estimated period of useful life, which is determined by identifying the period over which most of the cash flows are expected to be generated.

For definite life intangible assets, the Group reviews the carrying amounts for potential impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In evaluating recoverability, the Group groups assets and liabilities at the lowest level such that the identifiable cash flows relating to the group are largely independent of the cash flows of other assets and liabilities. The Group then compares the carrying amounts of the asset or asset groups with their respective estimated undiscounted future cash flows. If the definite life intangible asset or asset group are determined to be impaired, an impairment charge is recorded at the amount by which the carrying amount of the asset or asset group exceeds their fair value.

As of December 31, 2022, the Group recorded an impairment charge of $2,108,117, which is equal to the technology, net amount that the Group recorded as part of the Digiflex purchase in 2017. The Group has ceased the marketing activities associated with this technology and expect a negative cash-flow throughout its life, which led to such impairment charge of the remaining asset, net as of December 31, 2022.

The Group did not record any intangible assets impairment during the years ended December 31, 2021 and 2020.

i. Revenue Recognition:

The Group generated its revenues primarily from sales of inks and pastes and recognizes the revenue primarily at a point in time.

Effective January 1, 2020, the Group adopted a new accounting standard related to the recognition of revenue in contracts with customers. The Group did not have any material cumulative-effect adjustment as a result of the adoption of ASC 606. In addition, the adoption of ASC 606 did not have any material impact on the Group consolidated financial statement line items in the year of adoption.

The Group determines revenue recognition through the following steps:

- Identification of the contract, or contracts, with a customer.
- Determination of the transaction price.
- Determination of the transaction price.
- Allocation of the transaction price to the performance obligations in the contract.
- Recognition of revenue when, or as, the Group satisfies a performance obligation.

As a general point, the Group applies the five-step model to contracts when it is probable that it will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, the Group assesses the goods or services promised within each contract and determines those that are performance obligations and assesses whether each promised good or service is distinct. The Group then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

j. Research and development, net:

Research and development expenses are charged to the consolidated statements of operations as incurred, net of grants received, as described in section k. below.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

k. Government grants:

The Group has received research and development funds and grants from the government of Israel and European grants. These amounts are recognized on an accrual basis as a reduction of research and development costs as such costs are incurred.

l. Income taxes:

The Group accounts for income taxes in accordance with ASC No. 740, "Income Taxes". This Statement prescribes the use of the liability method whereby deferred tax assets and liability account balances are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Group provides a valuation allowance, if necessary, to reduce deferred tax assets to amounts that more likely than not to be realized.

ASC 740 contains a two-step approach to recognizing and measuring a liability for uncertain tax positions. The first step is to evaluate the tax position taken or expected to be taken in a tax return by determining if the weight of available evidence indicates that it is more likely than not that, on an evaluation of the technical merits, the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement.

m. Accounting for stock-based compensation:

The Group accounts for share-based compensation in accordance with ASC No. 718, "Compensation – Stock Compensation," which requires companies to estimate the fair value of equity-based payment awards on the date of grant using an option-pricing model. The Group recognizes compensation expenses for the value of its awards granted based on the straight-line attribution method over the requisite service period of each of the awards. The Group recognizes forfeitures of awards as they occur.

The Group selected the Black-Scholes option pricing model as the most appropriate fair value method for its stock-options awards. The Black-Scholes option-pricing model requires a number of assumptions, of which the most significant are the expected stock volatility and the expected option term. Expected volatility was calculated based upon similar traded companies' historical stock price movements. The Group uses the simplified method until such time as there is sufficient historical exercise data to allow the Group to make and rely upon assumptions as to the expected life of outstanding options. The risk-free interest rate is based on the yield from U.S. treasury bonds with an equivalent term to the expected life of the options. Historically, the Group has not paid dividends and in addition has no foreseeable plans to pay dividends, and therefore uses an expected dividend yield of zero in the option pricing model.

The Group accounts for non-employee share-based awards pursuant to ASC 505-50, "Equity-Based Payments to Non-Employees." ASC 505-50 requires the costs of goods and services received in exchange for an award of equity instruments to be recognized using the fair value of the goods and services or the fair value of the equity award, whichever is more reliably measurable. The fair value of the equity award is determined on the measurement date, which is the earlier of the date that a performance commitment is reached or the date that performance is complete. Generally, our awards do not entail performance commitments. When an award vests over time such that performance occurs over multiple reporting periods, we estimate the fair value of the award as of the end of each reporting period and recognize an appropriate portion of the cost based on the fair value on that date. When the award vests, we adjust the cost previously recognized so that the cost ultimately recognized is equivalent to the fair value on the date the performance is complete.

The fair value for options granted is estimated at the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	Year ended December 31,		
	2022	**2021**	**2020**
Dividend yield	0%	0%	0%
Expected volatility	80%	80%	80%
Risk-free interest	3.00%	0.81%	0.36%-1.62%
Expected life (in years)	5	5	5

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

n. Concentrations of credit risks:

Financial instruments that potentially subject the Group to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivables. The Group's cash and cash equivalents balances are managed in major banks in Israel.

The majority of the Group's cash and cash equivalents are deposited in major banks in Israel. Deposits in Israel are not insured. Generally, these deposits may be withdrawn upon demand and therefore bear low risk.

The Group's accounts receivables are derived from sales mainly in Israel, Europe and the US. Concentration of credit risk with respect to accounts receivables is limited by ongoing credit evaluation and account monitoring procedures. The Group performs ongoing credit evaluations and establishes an allowance for doubtful accounts based on factors that may affect a customers' ability to pay, such as known disputes, age of the receivable balance and past experience. There was no allowance for doubtful accounts as of December 31, 2022 and 2021. The Group writes off receivables when they are deemed uncollectible, having exhausted all collection efforts. Actual collection experience may not meet expectations and may result in increased bad debt expense.

o. Severance pay:

Pursuant to Section 14 of Israel's Severance Pay Law, 5723-1963 ("Section 14"), the Group's Israeli employees, covered by this section, are entitled only to monthly deposits, at a rate of 8.33% of their monthly salary, made on their behalf by the Group to an Israeli insurance company. Payments in accordance with Section 14 release the Group from any future severance liabilities in respect of those employees. Neither severance pay liability nor severance pay fund under Section 14 for such employees is recorded on the Group's consolidated balance sheets.

Severance expenses for the years ended December 31, 2022, 2021 and 2020 amounted to $51,554, $53,389 and $59,087, respectively.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

p. Fair value of financial instruments:

The Group applies ASC 820, "Fair Value Measurements and Disclosures" ("ASC No. 820") with respect to fair value measurements of all financial assets and liabilities. Under this standard, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date.

In determining fair value, the Group uses various valuation approaches. ASC 820 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent from the Group. Unobservable inputs are inputs that reflect the Group's assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

The following methods and assumptions were used by the Group in estimating the fair value of their financial instruments:

The carrying values of cash and cash equivalents, short-term bank deposits, trade receivables, prepaid expenses and other current assets, trade payables, employees and payroll accruals and accrued expenses and other current liabilities approximate their fair values due to the short-term maturities of these instruments.

The hierarchy is broken down into three (3) levels based on the inputs as follows:

Level 1 Valuations based on quoted prices in active markets for identical assets or liabilities that the Group has the ability to access at the measurement date.

Level 2 Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3 Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The Group measures its warrants to purchase the Company's ordinary shares classified as liability and the capital note at fair value. The carrying amounts of cash and cash equivalents, accounts receivable, other current assets, trade payables and other accounts liabilities approximate their fair value due to the short-term maturity of such instruments.

The following table presents liabilities measured at fair value on a recurring basis as of December 31, 2022:

	Fair value measurements using input type			
	Level 1	Level 2	Level 3	Total
Warrants	—	—	$ 15,459	$ 15,459
Capital note	—	—	40,000	40,000
Total financial liabilities	—	—	$ 55,459	$ 55,459

The following table presents liabilities measured at fair value on a recurring basis as of December 31, 2021:

	Fair value measurements using input type			
	Level 1	Level 2	Level 3	Total
Warrants	—	—	$ 106,975	$ 106,975
Capital note	—	—	40,000	40,000
Total financial liabilities	—	—	$ 146,975	$ 146,975

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

p. Fair value of financial instruments (cont.):

The following table presents reconciliations for the Company's liabilities measured and recorded at fair value on a recurring basis, using significant unobservable inputs (Level 3):

	Level 3
Balance as of January 1, 2020	$ 1,544,112
Fair value of warrants issued	192,451
Changes in Fair value of warrants and capital note	7,011,437
Balance as of December 31, 2020	8,748,000
Allocation of the 8,000,000 warrants FV granted to former Jet CU shareholders to the consolidated statement of shareholders' equity (deficit) as of September 23, 2021 in exchange for 5,428,572 additional ordinary shares	(488,907)
Changes in Fair value of warrants and capital note	(8,112,118)
Balance as of December 31, 2021	146,975
Changes in Fair value of warrants and capital note	(91,516)
Balance as of December 31, 2022	55,459

q. Basic and diluted net loss per ordinary share:

Basic net loss per ordinary share is computed based on the weighted average number of ordinary shares outstanding during each year.

The total number of ordinary shares related to the outstanding stock options, warrants and conversion of the outstanding convertible loans as of December 31, 2022, aggregated to 23,783,274, 30,611,525 and 14,710,663, respectively, were excluded from the calculations of diluted loss per ordinary share, since it would have an anti-dilutive effect.

r. Contingencies:

The Group has been involved in legal proceedings and assessments and inquiries of the Israeli tax authorities from time to time. The Group records accruals for these types of contingencies to the extent that the Group concludes their occurrence is probable and that the related liabilities are estimable. When accruing these costs, the Group will recognize an accrual in the amount within a range of loss that is the best estimate within the range. When no amount within the range is a better estimate than any other amount, the Group accrues for the minimum amount within the range. The Group records anticipated recoveries under existing insurance contracts that are virtually certain of occurring at the gross amount that is expected to be collected. Legal costs are expensed as incurred.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (Cont.)

s. Leases:

The Group adopted the new accounting standard ASC 842 "Leases" and all the related amendments on January 1, 2020 and used the effective date as the Group's date of initial application. The Group determines if an arrangement is a lease at inception. Lease classification is governed by five criteria in ASC 842-10-25-2. If any of these five criteria is met, the Group classifies the lease as a finance lease. Otherwise, the Group classifies the lease as an operating lease. When determining lease classification, the Group's approach in assessing two of the mentioned criteria: (i) generally, 75% or more of the remaining economic life of the underlying asset is a major part of the remaining economic life of that underlying asset; and (ii) generally, 90% or more of the fair value of the underlying asset comprises substantially all of the fair value of the underlying asset.

t. Segments:

The Group operates in one reportable segment.

u. Recently issued accounting standards:

Not yet adopted in the current year:

1. In August 2020, the FASB issued ASU No. 2020-06, Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging Contracts in Entity s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity s Own Equity. ASU 2020-06 will simplify the accounting for convertible instruments by reducing the number of accounting models for convertible debt instruments and convertible preferred stock. Limiting the accounting models results in fewer embedded conversion features being separately recognized from the host contract as compared with current GAAP. Convertible instruments that continue to be subject to separation models are (1) those with embedded conversion features that are not clearly and closely related to the host contract, that meet the definition of a derivative, and that do not qualify for a scope exception from derivative accounting and (2) convertible debt instruments issued with substantial premiums for which the premiums are recorded as paid-in capital. ASU 2020-06 also amends the guidance for the derivatives scope exception for contracts in an entity's own equity to reduce form-over-substance-based accounting conclusions. ASU 2020-06 will be effective for public companies for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years.

   The Group is currently evaluating the impact that the adoption of ASU 2020-06 will have on the Group's consolidated financial statement presentation or disclosures.

2. In June 2022, the FASB issued Accounting Standards Update ("ASU") 2022-03, Fair Value Measurement (Topic 820), Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions: to clarify that a contractual restriction on the sale of an equity security is not considered part of a unit of account of the equity security, and, therefore, is not considered in measuring fair value. The amendments also clarify that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. The amendments also require the following disclosures for equity securities subject to the contractual sale restrictions:

   - The fair value of equity securities subject to the contractual sale restrictions reflected on the balance sheet.
   - The nature and remaining duration of the restriction(s).
   - The circumstances that could cause a lapse in the restriction(s).

   This guidance is effective for fiscal years beginning after December 15, 2023, and interim periods within those financial years. The Group does not expect the adoption of ASU 2022-03 to have a significant impact on its consolidated financial statements.

3. With the exception of the new standards discussed above, there have been no other recent accounting pronouncements or changes in accounting pronouncements during the year ended December 31, 2022, that are of significance or potential significance to the Group.

NOTE 3: ACQUISITION

On July 26, 2020, the Company consummated the acquisition of 100% of the shares of Jet CU, a company that was incorporated in Israel in May 2014 and was inactive on the purchase date since its operational assets were sold few years before. The main balance sheet items as of the purchase date were cash and a liability to the Israel Innovation Authority ("IIA") of approximately $0.8 million and approximately $1.0 million, respectively. The Company issued 2,000,000 ordinary shares and warrants to purchase 8,000,000 ordinary shares, at an exercise price of $0.26 per share, as consideration for the purchase. The warrants were exercisable until the date which is the earlier of (i) 24 months following the purchase date and (ii) a merger or acquisition transaction or an initial public offering.

The purchase price (as mentioned above) aggregated to $411,781 as follows:

$224,200 attributed to the 2,000,000 ordinary shares issued, based on the stock price as of July 26, 2020, and $187,581 to the 8,000,000 warrants (the Company used the following assumptions: 0% dividend yield, 80.0% expected volatility, 0.14% risk free rate and 2 expected life in years) issued, and such warrants were classified as liability at the issuance date. The fair value of the warrants as of December 31, 2020 aggregated to $691,473.

The allocation of the purchase price to assets acquired and liabilities assumed is as follows:

Cash and cash equivalents	$ 811,773
Prepaid expenses and other current assets	1,977
Balance with the Company (*)	50,000
Investment in the Company's shares (**)	122,482
CLA provided to the Company (*)	167,188
Liability to Israel Innovation Authority	(1,006,605)
Accrued expenses and other current liabilities	(123)
Goodwill (***)	265,089
Total purchase price	$ 411,781

(*) Such amount was eliminated at the consolidated level.

(**) Such amount was recorded as treasury stock within the consolidated statements of shareholders' equity (deficit) for the year ended December 31, 2020.

(***) Such amount was impaired following the purchase date since Jet CU has no activity and was recorded within the consolidated statements of comprehensive loss for the year ended December 31, 2020.

In September 2021, the Company issued an additional 5,428,572 ordinary shares to the Jet CU former shareholders as an additional consideration upon their agreement to forfeit the 8,000,000 warrants that were granted to them on the purchase date.

NOTE 4: OTHER CURRENT ASSETS

	December 31,	
	2022	2021
Prepaid expenses (primarily insurance policies)*	$ 108,250	$ 149,349
Government authorities	122,069	103,354
Other*	—	87
	$ 230,319	$ 252,790

* Reclassified

NOTE 5: PROPERTY AND EQUIPMENT, NET

	December 31,	
	2022	2021
Cost:		
Equipment	$ 446,189	$ 390,573
Computers	4,949	965
Office furniture	11,949	11,069
Leasehold improvements	22,000	23,461
	485,087	426,068
Accumulated depreciation:	359,539	334,410
Property and equipment, net	$ 125,548	$ 91,658

Depreciation expenses for the years ended December 31, 2022, 2021 and 2020 were $59,278, $55,076 and $63,095, respectively.

NOTE 6: INTANGIBLE ASSETS, NET

	December 31,	
	2022	2021
Cost:		
Technology	$ 4,284,315	$ 4,284,315
Backlog	45,996	45,996
	4,330,311	4,330,311
Accumulated amortization and impairment:		
Accumulated amortization	2,222,194	1,793,763
Intangible asset impairment	2,108,117	—
	4,330,311	1,793,763
Intangible assets, net	$ —	$ 2,536,548

Amortization expenses for the years ended December 31, 2022, 2021 and 2020 were $428,431, $428,431 and $428,434, respectively. Furthermore, as of December 31, 2022, the Group recorded an impairment charge of $2,108,117, which equals to the remaining technology net amount. See Note 2.h. for further information.

NOTE 7: ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

	December 31,	
	2022	2021
Provision for professional fees	$ 959,654	$ 1,169,156
Government authorities*	1,211,885	921,726
Grants received in advance	243,956	526,578
Provision for legal claims	43,477	49,195
Other	118,739	116,233
	$ 2,577,711	$ 2,782,888

* Such amount for both December 31, 2022 and 2021 contains primarily liability to the IIA. See Note 3 for additional information. The remainder of the liability towards the IIA as of December 31, 2021 is presented in a separate line item within the non-current liabilities according to the related settlement. See Note 9.a.1. for additional information.

NOTE 8: LOANS AND CONVERTIBLE BRIDGE FINANCING

a. In August 2017, the Company entered into several Securities Purchase Agreements with new investors and additional existing shareholders (collectively, the "CLA August 2017"), pursuant to which the Company issued and sold to such holders senior secured convertible notes in an aggregate principal amount of $905,555 in consideration for an aggregate subscription amount of $774,400 net of issuance costs of $40,600.

As part of the CLA August 2017, the Company also issued to the lenders five-year warrants to purchase an aggregate 905,555 ordinary shares, at an exercise price of $1.20 per ordinary share. The Company classified the warrants as liabilities due to their nature in the amount of $492,034 (the Company used the following assumptions: 0% dividend yield, 69% expected volatility, 2.16% risk free rate and 4.64 expected life in years). As of December 31, 2021, the fair value of the warrants amounted to $5,841. The warrants were forfeited during 2022.

The notes include a 10% original issue discount on the consideration paid and bear interest at 6% per annum. The notes mature after 14-24 months and may be converted into ordinary shares, subject to the terms of such notes. The initial conversion price of the notes was $1.00, but it was adjusted in January 2018 to $0.50, in October 2018 to $0.17 and further adjusted in September 2021 to $0.07. The Company accounted for the convertible loans in accordance with ASC 470-20, "Debt with conversion and other Options." According to ASC 470-20-30-8, since the intrinsic value of the beneficial conversion feature ("BCF") exceeds the entire proceeds of the convertible loan, the Company allocated the entire proceeds to the BCF as additional paid in capital. During 2022 and 2021, $0 and $84,758 of the convertible notes were converted into 0 and 498,758 ordinary shares, respectively. The Company may require mandatory conversion of the notes in certain circumstances and pay the convertible note in cash upon event of fundamental transaction and change of control transaction as described in the convertible note agreement.

In connection with the convertible loan agreement signed in October 2018 as described in section c. below, the lenders in the CLA August 2017 agreed to extend the original maturity date for an additional 24 months. In addition, the Company issued to certain participants in the CLA August 2017 additional four-year warrants to purchase in the aggregate 1,659,971 ordinary shares at an exercise price of $0.17. The Company classified the warrants as liabilities in the amount of $42,591. As of December 31, 2021, the fair value of the warrants amounted to $11,359. The warrants were forfeited during 2022.

The CLA August 2017 was required to be repaid by October 2020. The majority of the lenders did not exercise their conversion right under the convertible loans prior to the repayment date and therefore, the outstanding amounts (principal and interest) became repayable in cash at such time. The Company did not timely repay such loan amounts due to financial difficulties and therefore, the Company is in default under those agreements.

NOTE 8: LOANS AND CONVERTIBLE BRIDGE FINANCING (Cont.)

b. On May 8, 2018, the Company entered into a Share Purchase Agreement with an existing shareholder (collectively, the "CLA May 2018"), pursuant to which the shareholder provided the Company with an 18-month convertible loan in an aggregate principal amount of $170,000 and received from the Company warrants to purchase 170,000 ordinary shares at an exercise price of $0.50 per ordinary share. The loan amount is convertible into ordinary shares at a conversion price of $1.00 per ordinary share. The loan includes a 10% original issue discount and bears interest of 6% per annum. In accordance with the accounting guidance on convertible instruments, the BCF of $15,300 was recognized in additional paid in capital. The warrants may be exercised, in whole or in part, for a period of five (5) years. Such warrants were classified as equity due to their nature, their fair value upon issuance date amounted to $65,718 (the Company used the following assumptions: 0% dividend yield, 59.69% expected volatility, 2.80% risk free rate and 5 expected life in years).

The CLA May 2018 was required to be repaid by November 2019. This lender did not exercise its conversion right under the convertible loans prior to the repayment date and therefore, the outstanding amount (principal and interest) became repayable in cash as such time. The Company did not timely repay such loan due to financial difficulties and therefore, the Company is in default under this agreement.

c. On October 10, 2018, the Company entered into a Convertible Loan Agreement with an existing investor who invested relatively low amounts previously (the "CLA October 2018"). Pursuant to this agreement, the investor provided the Company a convertible loan in an aggregate principal amount of $1,000,000 at an exercise price as defined in the convertible loan agreement but no less than $0.17. The convertible loan bears an interest rate at Israeli prime plus 4% per annum. Under the terms of the CLA October 2018, the investor was granted an option to lend the Company an additional amount up to $2,000,000 (the "Additional Loan Amount") and the Company also issued to the investor a warrant to purchase ordinary shares for an aggregate purchase price of $5,000,000, and undertook to issue an additional warrant conditioned upon the investment of the Additional Loan Amount to purchase ordinary shares for an aggregate purchase price of up to $5,000,000 calculated pro-rata to the amount out of the Additional Loan Amount actually provided.

In March, April, August and December 2019 such investor provided to the Company additional amounts of $500,000, $500,000, $100,000 and $150,000, respectively on account of the Additional Loan Amount (the "CLA March-December 2019"). The Company determined that the $100,000 received in August 2019 contained a BCF of $21,445 and recorded such BCF in the additional paid in capital in the year ended December 31, 2019. The Company also issued to the investor for the aggregate $1,250,000 Additional Loan Amount a warrant to purchase ordinary shares for an aggregate purchase price of $3,125,000. Such convertible loans bears same terms as the CLA October 2018.

In July 2020, this investor provided to the Company an additional $16,748 on account of the Additional Loan Amount (the "CLA July 2020") and the Company granted the investor a warrant to purchase ordinary shares for an aggregate purchase price of $83,740. The terms of that convertible loan and the associated warrants are the same as those of the CLA October 2018.

The CLA October 2018, CLA March-December 2019 and CLA July 2020 were required to be repaid by the Company in October 2020. This lender did not exercise its conversion right under such convertible loans prior to their repayment date and therefore, they became repayable in cash as such time. The Company did not timely repay such loans due to financial difficulties and therefore, the Company is in default under those agreements.

On September 23, 2021, all those CLAs (principal plus the accrued interest as of that date) were converted into ordinary shares and all the related warrants were cancelled. See Note 11.b.5. for additional information.

NOTE 8: LOANS AND CONVERTIBLE BRIDGE FINANCING (Cont.)

d. On November 10, 2018, the Company entered into several convertible loan agreements with existing shareholders (collectively, the "CLA November 2018"), pursuant to which they provided the Company with convertible loans in an aggregate principal amount of $225,000. The convertible loans bear an interest rate at Israeli prime plus 4% per annum. Under those agreements, the Company issued to the lenders warrants to purchase ordinary shares for an aggregate purchase price of $1,125,000. The conversion price for both the loan amount and the warrants is defined in the convertible loan agreement but no less than $0.17.

The granted warrants were classified as a liability at the issuance date, their fair value aggregated to $79,227 (the Company used the following assumptions: 0% dividend yield, 59.69% expected volatility, 2.87% risk free rate and 2 expected life in years). As of December 31, 2019, the fair value of the warrants amounted to $50,510. The warrants were forfeited during 2020.

The CLA November 2018 was required to be repaid by November 2020. The lenders did not exercise their conversion right under the convertible loans prior to the repayment date and therefore, the outstanding amount (principal and interest) became repayable in cash as such time. The Company did not timely repay the loans due to financial difficulties and therefore, the Company is in default under these agreements.

On September 23, 2021, $25,000 of the amounts outstanding under the CLA November 2018 (principal plus the accrued interest as of that date) was converted into ordinary shares and all the related warrants were cancelled. See Note 11.b.5. for additional information. The remainder of that the amounts outstanding under the CLA November 2018 were not converted and are referred to as the 'CLA November 2018' from that date onwards.

e. On December 29, 2018, the Company entered into a convertible loan agreement with a new investor (the "CLA December 2018"), pursuant to which it provided the Company with a convertible loan in an aggregate principal loan amount of $400,000. The convertible loan bears an interest rate at Israeli prime plus 4% per annum. Under this agreement, the Company issued to the lender warrants to purchase ordinary shares for an aggregate purchase price of $2,000,000.

As part of the CLA December 2018, the Company paid a finder's fee of $40,000 and issued to the finder a five-year warrant, commencing February 2019, to purchase ordinary shares for an aggregate purchase price of $240,000. The conversion price for both the loan amount and the warrants is defined in the CLA December 2018 agreement but no less than $0.17.

The warrants issued to the new investor were classified as a liability. At the issuance date their fair value aggregated to $180,281 (the Company used the following assumptions: 0% dividend yield, 59.69% expected volatility, 2.48% risk free rate and 2 expected life in years). As of December 31, 2019, the fair value of the warrants amounted to $107,602. The warrants were forfeited during 2020.

The warrants issued as part of the finder's fee compensation were classified as a liability. At the issuance date their fair value aggregated to $45,327 (the Company used the following assumptions: 0% dividend yield, 59.69% expected volatility, 2.51% risk free rate and 5 expected life in years). As of December 31, 2022 and 2021, the fair value of the warrants amounted to $673 and $34,948, respectively.

The CLA December 2018 was required to be repaid by December 2020. This lender did not exercise its conversion right under the convertible loan prior to the repayment date and therefore, the outstanding amount (principal and interest) became repayable in cash as such time. The Company did not timely repay such loan due to financial difficulties and therefore, the Company was in default under this agreement.

On September 23, 2021, all of the amount understanding under the CLA December 2018 (principal plus the accrued interest as of that date) was converted into ordinary shares and all the related warrants were cancelled. See Note 11.b.5. for additional information.

NOTE 8: LOANS AND CONVERTIBLE BRIDGE FINANCING (Cont.)

f. In January, February and April 2019, the Company entered into several convertible loan agreements with existing shareholders (collectively, the "CLA January-April 2019"), pursuant to which they provided the Company with convertible loans in an aggregate principal amount of $200,000. The convertible loans bear interest at Israeli prime plus 4% per annum. Under those agreements, the Company issued to the lenders warrants to purchase ordinary shares for an aggregate purchase price of $1,000,000. The conversion price for all the loan amount and the warrants is defined in the convertible loan agreement but no less than $0.17.

The CLA January-April 2019 were required to be repaid between January-April 2021. The lenders did not exercise their conversion right under the convertible loans prior to the repayment date and therefore, the outstanding amount (principal and interest) became repayable in cash as such time. The Company did not timely repay such loans due to financial difficulties and therefore, the Company was in default under those agreements.

On September 23, 2021, all the amounts outstanding under the CLA January-April 2019 (principal plus the accrued interest as of that date) were converted into ordinary shares and all the related warrants were cancelled. See Note 11.b.5. for additional information.

g. In August, September and December 2019, the Company entered into several convertible loan agreements with a new investor and existing shareholders (collectively, the "CLA August-December 2019"), pursuant to which they provided the Company with convertible loans in an aggregate principal amount of $475,000. The convertible loans bear an interest rate at Israeli prime plus 4% per annum. Under those agreements, the Company issued the lenders warrants to purchase ordinary shares for an aggregate purchase price of $2,375,000. The conversion price for all the loan amount and the warrants is defined in the convertible loan agreement but no less than $0.17.

The granted warrants were classified as liability at the issuance date, their fair value aggregated to $409,668 (the Company used the following assumptions: 0% dividend yield, 54.50% expected volatility, 1.60% risk free rate and 2 expected life in years). As of December 31, 2020,the fair value of the warrants amounted to $1,334,255. The warrants were forfeited during 2021.

On September 23, 2021, $375,000 out of amounts outstanding under the CLA August-December 2019 (principal plus the accrued interest as of that date) was converted into ordinary shares and all the related warrants were cancelled. See Note 11.b.5. for additional information. The remainder of the amounts outstanding under the CLA August-December 2019 were not converted and are referred to as the 'CLA August 2019' from that date onwards.

h. In March and June 2021, the Company entered into several convertible loan agreements with new investors (collectively, the "CLA March-June 2021"), pursuant to which they provided the Company with convertible loans in an aggregate principal amount of $255,000. The convertible loans bear an interest rate at Israeli prime plus 4% per annum. Under those agreements, the Company issued to the lenders warrants to purchase ordinary shares for an aggregate purchase price of $985,000. The conversion price for all the loan amount and the warrants is defined in the convertible loan agreement but no less than $0.17.

On September 23, 2021, all of the amounts outstanding under the CLA March-June 2021 (principal plus the accrued interest as of that date) were converted into ordinary shares and all the related warrants were cancelled. See Note 11.b.5. for additional information.

i. The fair value of the warrants issued as part of the convertible loan agreements ("CLAs") along with warrant issued as finder's fees were bifurcated out of the principal loans. Commencing with the grant dates, the Company calculates the accretion back to the principal amount during the CLAs' period along with the related interest and record them financial expenses in connection with convertible loans as part of the financial expenses (income), net line item within the statement of operations.

NOTE 8: LOANS AND CONVERTIBLE BRIDGE FINANCING (Cont.)

The Company's CLAs presented as part of its current liabilities as of December 31, 2022 as follows:

Type of CLA	Original principal loans amounts	Additional principal loans provided	Loans already converted	Remaining principal loans amount	Converted through	Loans presented as of December 31, 2022	
CLA August 2017(*)	$ 905,555	$ 22,322	$ (276,211)	$ 651,666	2020	$ 861,764	See Note 8.a.
CLA May 2018(*)	170,000	—	—	170,000	2019	241,557	See Note 8.b.
CLA November 2018(*)	225,000	—	(25,000)	200,000	2020(**)	247,629	See Note 8.d.
CLA August 2019(*)	475,000	—	(375,000)	100,000	2021(**)	119,263	See Note 8.g.
	$ 1,775,555	$ 22,322	$ (676,211)	$ 1,121,666		$ 1,470,213	

(*) Those CLAs were not repaid on time and therefore were in default as of December 31, 2022. Due to such default, the Company presented those CLAs in their fair value which was equaled to the principal loan plus its accrued interest as of that date.

(**) Structured as a 24-month convertible loan or less in case of a public offering event.

The Company's CLAs presented as part of its current liabilities as of December 31, 2021 as follows:

Type of CLA	Original principal loans amounts	Additional principal loans provided	Loans already converted	Remaining principal loans amount	Converted through	Loans presented as of December 31, 2021	
CLA August 2017(*)	$ 905,555	$ 22,322	$ (276,211)	$ 651,666	2020	$ 1,057,711	See Note 8.a.
CLA May 2018(*)	170,000	—	—	170,000	2019	230,224	See Note 8.b.
CLA November 2018(*)	225,000	—	(25,000)	200,000	2020(**)	236,129	See Note 8.d.
CLA August 2019(*)	475,000	—	(375,000)	100,000	2021(**)	113,513	See Note 8.g.
	$ 1,775,555	$ 22,322	$ (676,211)	$ 1,121,666		$ 1,637,577	

(*) Those CLA's were not repaid on time and therefore were in default as of December 31, 2021. Due to such default, the Company presented those CLA's in their fair value.

(**) Structured as a 24-month convertible loan or less in case of a public offering event.

NOTE 9: COMMITMENTS AND CONTINGENT LIABILITIES

a. Royalties commitments:

1. The Company has received grants for research and development programs from the IIA. The Company is committed to pay royalties to the IIA at the rate of 3.0% of sales of products and services resulting from know-how financed by the IIA. The amount shall not exceed the grant amount received, linked to the dollar, including accrued interest at the LIBOR rate (subject to certain exceptions under certain circumstances). The obligation to pay these royalties is contingent on actual sales of the products and in the absence of such sales, no payment is required.

   During the years ended December 31, 2022, 2021 and 2020, the Company accrued royalties in respect to the IIA grants in the amount of $16,854, $11,562 and $19,486, respectively, and the liability to the IIA as of December 31, 2022 aggregated to $47,902, which is recorded within the accrued expenses and other current liabilities line item.

   The total grants received by the Company and Nano Size as of December 31, 2022 aggregated to $1,445,622. The Company's total contingent liability (including interest) as of December 31, 2022, with respect to the IIA grants received, net of royalties paid to the IIA, amounted to $2,048,160.

   As of December 31, 2022 and 2021, Digiflex had received grants for research and development programs from the IIA in an aggregate amount of approximately $2.2 million, out of which an amount of approximately $1.1 million had been repaid to the IIA by Jet CU as a result of its sale of IIA funded technology and know-how to a foreign company in January 2018, which sale was authorized by the IIA . The remaining liability at such time (after additional payments) was reduced to approximately $1.0 million and recorded in Jet CU, and as of December 31, 2022, increased to approximately $1.1 million due to accrued interest and change in the NIS vs. USD exchange rate. See Note 3 for additional information.

2. On December 15, 2011, the Company entered into a research and development agreement with the Israeli Ministry of Energy ("Ministry"). Pursuant to the agreement, the Ministry agreed to fund up to 62.5% of the Company's expenses related to an approved program up to a maximum amount of NIS 625,000 ($180,063 based on the exchange rate of $1.00 / NIS 3.471 in effect as of December 31, 2013), out of which the Company received NIS 585,119 ($168,574 based on the exchange rate of $1.00 / NIS 3.471 in effect as of December 31, 2013) as of December 31, 2022, in exchange for the Company's agreement to pay royalties of 5% plus interest, as detailed in the agreement, of any revenues generated from the intellectual property generated under the program. The Company does not expect to receive further funding under this agreement.

   During the years ended December 31, 2022, 2021 and 2020, the Company accrued royalties with respect to the grant from the Ministry in the amount of $6,026, $814 and $384, respectively, and the liability to the Ministry as of December 31, 2022, aggregated to $6,026 and was recorded within the accrued expenses and other current liabilities line item.

   As of December 31, 2022, the aggregate contingent liability to the Ministry (including interest), following the payment of royalties up to that date, amounted to NIS 576,773 ($163,903 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022).

3. In October 2010, the Company entered into a Convertible Bridge Financing Agreement with Israel Electric Corporation ("IEC") and, as part of the agreement, the Company committed to pay IEC royalties equal to 2% of the total net sales of the Company's products and service revenues from the product developed and manufactured through this agreement, up to a cap of NIS 8,000,000 ($2,273,373 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022).

   During the years ended December 31, 2022, 2021 and 2020, the Company accrued royalties in the amount of $11,236, $7,708 and $12,991, respectively, and the liability as of December 31, 2022 aggregated to $46,911, which was recorded within the accrued expenses and other current liabilities line item.

4. In connection with the acquisition of Nano Size, the Company is obligated to pay 3% from future sales and 10% of sublicense fees derived from Nano Size's intellectual property, until the aggregate consideration amounts to $1,400,000. The consideration included a minimum consideration of $180,000 which was paid during 2011 and will be offset against future royalty payments which will be payable by the Company from sales of products and services.

   During the years ended December 31, 2022, 2021 and 2020, the Company accrued royalties in the amount of $18,100, $17,061 and $22,839, respectively, and the liability as of December 31, 2022 aggregated to $94,317, which was recorded within the accrued expenses and other current liabilities line item.

NOTE 9: COMMITMENTS AND CONTINGENT LIABILITIES (Cont.)

a. Royalties commitments (cont.):

5. In September 2012, the Company entered into a Know-How License Agreement with Fraunhofer Institute for Ceramic Technologies and Systems IKTS ("IKTS"), pursuant to which the Company purchased from IKTS certain additives (the agreement is still active). The Company has the right to receive the production file and knowhow to its chosen manufacturer, in consideration for payment to IKTS of royalties of €25 ($27 based on the exchange rate of $1.00 / €0.94 in effect as of December 31, 2022) per kilogram of the ingredients not manufactured by IKTS. In addition, as of December 31, 2022, the Company is obligated to pay IKTS a minimum annual royalty of €2,000 ($2,127 based on the exchange rate of $1.00 / €0.94 in effect as of December 31, 2022) deductible against royalties.

   During the year ended December 31, 2022, 2021 and 2020, the Company recorded royalty expenses in the amount of $2,127, $2,272 and $2,453, respectively and the liability as of December 31, 2022 aggregated to $4,265, which is recorded within the trade payables line item.

b. Legal proceedings:

On May 16, 2019, a lawsuit was filed by Yaskawa Europe Technology Ltd. against the Company and Digiflex in the Magistrate Court in Kfar Saba in Israel. On January 19, 2020, the Group settled this claim for a total of NIS 152,997 ($43,477 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) plus Value Added Tax ("VAT") but failed to pay such settlement due to financial difficulties. As such, the liability is recorded as a provision for legal claims within the accrued expenses and other current liabilities as of December 31, 2022 and 2021.

c. Lease commitments:

The Group has the following lease agreements:

1. The Company currently leases, through Nano Size, approximately 7,300 square feet of space in Migdal Ha'Emek, Israel for its principal offices and manufacturing facilities at a monthly cost of approximately NIS 18,000 (approximately $5,115 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022). This lease agreement expires on June 30, 2025, and the agreement contains an option of the Company to extend the lease for an additional three (3) years.

2. Digiflex currently leases approximately 1,200 square feet of space in Migdal Ha'Emek, Israel for its principal office and laboratory at a monthly cost of approximately NIS 5,000 (approximately $1,420 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022). This lease was scheduled to expire on March 14, 2023, and was renewed in February 2023 for an additional one year and the Company has an option to extend the lease for another year.

Under ASC 842, all leases with durations greater than 12 months, including non-cancellable operating leases, are recognized on the balance sheet. The aggregated present value of lease agreements is recorded as a long-term asset titled right-of-use assets. The corresponding lease liabilities are split between Lease current liability and Lease non-current liability.

Future minimum lease payments under non-cancellable operating leases as of December 31, 2022, are as follows (as of December 31, 2021, the Group's lease agreements were for short periods with relatively low rent expenses and therefore, the Group did not apply the lease guidance as of that date):

	December 31, 2022 (U.S. dollars)
Future minimum lease payments:	
2023	$ 67,497
2024	63,926
2025	31,963
Total Future payments	$ 163,386
Less imputed interest	(28,279)
Net present value of future minimum lease payments	$ 135,107
Lease liabilities:	
Current lease liabilities	$ 60,071
Non-current lease liabilities	75,036
Net present value of future minimum lease payments	$ 135,107
Incremental Borrowing Rate	10.00%

NOTE 10: TAXES ON INCOME

a. Corporate Tax rates:

The Israeli corporate tax rate applicable to the Company, Nano Size and Digiflex commencing 2020 and thereafter is 23%.

Non-Israeli subsidiaries are taxed according to the tax laws in their respective countries of residence.

b. Net operating losses carryforwards:

As of December 31, 2022, the Company and its Israeli subsidiaries have accumulated losses for tax purposes in the amount of $46.0 million which may be carried forward and offset against taxable income for an indefinite period.

c. Accounting for uncertainty in income taxes:

For the years ended December 31, 2022, 2021 and 2020, the Company did not have any unrecognized tax benefits and no interest and penalties related to unrecognized tax benefits had been accrued. The Company does not expect that the amount of unrecognized tax benefits will change significantly within the next 12 months.

d. Tax assessments:

Tax reports filed by the Company and its Israeli subsidiaries through the year ended December 31, 2016 are considered final.

e. Deferred taxes on income:

Significant components of the Group's deferred tax assets are as follows:

	December 31,	
	2022	2021
Deferred tax assets		
Operating loss carry forward	$ 10,579,957	$ 10,204,294
Temporary differences	189,099	126,150
	10,769,056	10,330,444
Deferred tax liability		
Beneficial conversion feature	(99,790)	(99,790)
Total deferred tax, net	10,669,266	10,230,654
Valuation allowance	(10,669,266)	(10,230,654)
Net deferred tax assets	$ —	$ —

The net change in the total valuation allowance for the year ended December 31, 2022 related primarily to an increase in deferred taxes calculated on the operating loss carry forward. In assessing the likelihood that deferred tax assets will be realized, management considers whether it is more likely than not that some or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets depends on the generation of future taxable income during the periods in which those temporary differences and tax loss carry forwards are deductible.

NOTE 10: TAXES ON INCOME (Cont.)

f. Reconciliation of the theoretical tax benefit and the actual tax expense:

	Year ended December 31,		
	2022	2021	2020
Loss before tax benefit	$ (4,509,547)	$ (2,518,864)	$ (12,543,737)
Statutory tax rate	23%	23%	23%
Income tax benefit	1,037,196	579,339	2,885,060
Effect of:			
Losses and timing differences for which valuation allowance was provided, net	(438,612)	(463,784)	(329,578)
Non-deductible expenses and other permanent differences	(624,299)	(196,980)	(2,526,808)
Other	25,715	81,425	(28,674)
Income tax expense recognized in profit or loss	$ —	$ —	$ —

NOTE 11: SHARE CAPITAL

a. Ordinary shares:

The share capital as of December 31, 2022 and 2021 is comprised of ordinary shares of NIS 0.01 ($0.003 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) par value as follows:

	Number of ordinary shares		Number of ordinary shares	
	Authorized	Issued and outstanding	Authorized	Issued and outstanding
	December 31, 2022		December 31, 2021	
Ordinary shares	1,200,000,000	147,134,792	1,200,000,000	90,205,191

On December 28, 2020, as part of the Company's annual general meeting of the shareholders', the authorized share capital was increased from NIS 2,000,000 to NIS 12,000,000, divided into 1,200,000,000 ordinary shares of NIS 0.01 ($0.003 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) par value.

NOTE 11: SHARE CAPITAL (Cont.)

b. Issuance of ordinary shares:

1. During 2020, the Company issued 386,735 ordinary shares in connection with the conversion of convertible loans.

2. During 2020, the Company issued 206,250 ordinary shares to a few of the Company's service providers. The Company recorded an expense of $34,045 during the year ended December 31, 2020 in connection with the issuance of those restricted ordinary shares.

3. During 2020, the Company issued 2,000,000 ordinary shares in connection with the Jet CU purchase. See Note 3 for additional information.

4. During 2021, the Company issued 498,578 ordinary shares in connection with the conversion of convertible loans. See Note 8.a. for additional information.

5. At the annual shareholders' meeting held on September 19, 2021, the shareholders approved (i) a capital raise at a per share purchase price of $0.07 for the Company's Ordinary Shares, NIS 0.01 ($0.003 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) par value and (ii) an adjustment to the conversion price of the Company's outstanding CLAs from $0.17 to $0.07 per Ordinary Share, subject to the holders' agreement to cancel the outstanding related warrants that were issued in connection with the CLAs.

   As a result, on September 23, 2021, the Company entered into agreements with the holders of approximately $3,521,748 in principal amount and accrued interest of CLAs for the conversion of the Company's indebtedness under such agreements into an aggregate of 57,291,838 ordinary shares. Furthermore, in connection therewith, all the warrants that were previously issued in connection with those CLAs were cancelled and no longer have any force or effect.

   Most of those converted CLAs had previously matured and had not been not repaid on time and therefore, were in default as of September 23, 2021. Due to such default, the Company presented those CLAs at their fair value just before the conversion occurred, which aggregated to $12,992,708. Such amount was allocated to the Consolidated Statement of Changes in Stockholders' Equity (Deficit) as of that date.

6. In September 2021, the Company issued an additional 5,428,572 Ordinary Shares to the Jet CU former shareholders. See Note 3 for additional information.

7. Commencing July 2021 and through 2022, the Company and seven (7) existing Company shareholders entered into definitive agreements relating to a private placement (the "Private Placement") of the Company's Ordinary Shares for aggregate gross proceeds to the Company of $3.0 million. During 2022, the Company issued an aggregate of 42,926,031 Ordinary Shares in connection with such investment. The shares were issued at a price of $0.07 per ordinary share. $350,000 out of the $3.0 million was received during 2021 and was recorded as an advance payment on the account of issuing ordinary shares within the Consolidated Statement of Shareholders' Equity for the year ended December 31, 2021.

   Under an agreement entered into in connection with the Private Placement, certain of the Private Placement investors have the right to nominate three members to the Company's board of directors.

8. In June 2022, the Company issued 75,000 ordinary shares to one of the Company's service providers. The Company recorded an expense of $6,750 for the year ended December 31, 2022 in connection with the issuance of those restricted ordinary shares.

9. As of December 31, 2022 the Company completed $975,000 part of an internal round and as a result issued 13,928,570 Ordinary Shares and warrants to purchase 27,857,140 Ordinary Shares. Such amount was part of a $2.8 million internal round. See Note 17 for further information.

c. Rights of ordinary shares:

Ordinary shares confer upon their holders the rights to elect directors of the Company, to participate and vote in the general meetings of the Company, to receive dividends, if and when declared, subject to the payment in full of all preferential dividends to which the holders of the Preferred Shares (if any) are entitled under the Company's articles of association and to participate in the distribution of the surplus assets and funds of the Company in the event of liquidation, subject to the liquidation preference of the Preferred Shares (if any). Each ordinary share entitles its holder to one vote on all matters submitted to a vote of the Company's shareholders.

NOTE 11: SHARE CAPITAL (Cont.)

d. Stock option plan:

Under the Company's 2010 Option Plan, options may be granted to officers, directors, employees, consultants and service providers of the Company.

The vesting terms of the options are determined by the Board and can vary from grant to grant. Options vest over a period of zero to four years from date of grant. Any options that are cancelled or forfeited before expiration become available for future grants. The options may be exercised for a period of seven years from grant.

1. On January 7, 2020, the Company's Board of Directors increased the options pool by an additional 15,607,995 ordinary shares, such that 18,783,274 ordinary shares were available for issuance under the plan following such increase. On the same date, the Company also granted 13,739,570 options to employees and service providers with three (3) years vesting and an exercise price of $0.068 per share. The fair value of those options on their grant date aggregated to $1,097,955.

2. On June 22, 2020, the Company granted 939,164 options to its Active Chairman with three (3) years vesting and an exercise price of $0.068 per share. The fair value of those options on their grant date aggregated to $107,683.

3. On June 1, 2021, the Company granted 2,003,436 options to its former Chief Executive Officer with three (3) years vesting and an exercise price of $0.17 per share. The fair value of those options on their grant date aggregated to $403,725. Such exercise price was modified to $0.07 on April 28, 2022. This Chief Executive Officer notified the Company on July 1, 2022 of his resignation from his role.

4. On July 19, 2021, the Company's Board of Directors increased the options pool by additional 5,000,000 ordinary shares, such that 23,783,274 ordinary shares were reserved for issuance under the plan following such increase.

5. In May 2022, the Company granted an aggregate 2,600,000 options to two new directors with four (4) years vesting and an exercise price of $0.07 per share. One of those directors resigned from his role on January 1, 2023. The fair value of the options for the director who remained within the Company on their grant date aggregated to $3.

6. During 2022, the Company granted 5,249,758 options to its new Chief Executive Officer. The fair value of those options on their grant date aggregated to $155,845. See Note 13.e. for additional information.

7. The total number of ordinary shares available for future grants under the Company's 2010 Option Plan as of December 31, 2022 and 2021 was 1,515,516 and 5,460,052, respectively.

NOTE 11: SHARE CAPITAL (Cont.)

d. Stock option plan (cont.):

8. A summary of the Company's option activities and related information for the year ended December 31, 2022, is as follows:

	Number of options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic-value
Outstanding as of January 1, 2021	18,323,222	$ 0.12		
Granted*	6,600,000	0.07		
Forfeited	(2,655,464)	0.10		
Outstanding as of December 31, 2021	22,267,758	$ 0.11	4.66	$ —
Exercisable as of December 31, 2021	15,999,078	$ 0.12	4.00	$ —

* 1,249,758 options approved for grant to the Company's new Chief Executive Officer were not issued since the number of reserved shares under the Company's 2010 Option Plan was not sufficient to support such grant in its totality (and therefore not presented within the Granted line item above). See Note 13.e. for additional information.

9. A summary of the Company's option activities and related information for the year ended December 31, 2021, is as follows:

	Number of options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic-value
Outstanding as of January 1, 2021	16,319,786	$ 0.12		
Granted	2,003,436	0.17		
Outstanding as of December 31, 2021	18,323,222	$ 0.12	4.97	$ 342,452
Exercisable as of December 31, 2021	11,332,153	$ 0.08	4.68	$ 233,086

NOTE 11: SHARE CAPITAL (Cont.)

d. Stock option plan (cont.):

10. The options granted to officers, directors, employees, consultants and service providers of the Company which were outstanding as of December 31, 2022 have been classified into exercise prices as follows:

	Outstanding		Exercisable	
Exercise price	Number of options	Weighted average remaining contractual life (years)	Number of options	Weighted average remaining contractual life (years)
$ 0.03	4,451	1.8	4,451	1.8
0.068	13,728,037	4.0	13,649,773	4.0
0.07	5,300,000(*)	6.5	—	—
0.17	2,003,436	5.4	1,113,020	5.4
0.27	739,000	3.0	739,000	3.0
0.34	8,020	0.9	8,020	0.9
0.92	455,501	1.5	455,501	1.5
$ 5.73	29,313	0.9	29,313	0.9
	22,267,758		15,999,078	

* 1,249,758 options approved for grant to the Company's new Chief Executive Officer were not issued since the number of reserved shares under the Company's 2010 Option Plan was not sufficient to support such grant in its totality (and therefore not presented within the related line item above). See Note 13.e. for additional information.

As of December 31, 2022, the total compensation cost related to options granted to employees, consultants and service providers, not yet recognized, amounted to $143,176 and is expected to be recognized over a weighted average period of 1.29 years.

11. The options granted to officers, directors, employees, consultants and service providers of the Company which were outstanding as of December 31, 2021 have been classified into exercise prices as follows:

	Outstanding		Exercisable	
Exercise price	Number of options	Weighted average remaining contractual life (years)	Number of options	Weighted average remaining contractual life (years)
(*)	230,425	—	230,425	—
$ 0.03	19,288	2.8	19,288	2.8
0.068	14,678,734	5.0	9.507,559	5.0
0.17	2,003,436	6.4	—	—
0.27	809,000	4.0	792,542	4.0
0.34	8,020	1.9	8,020	1.9
0.92	540,501	2.4	540,501	2.4
4.72	1,068	0.2	1,068	0.2
5.05	2,769	0.2	2,769	0.2
$ 5.73	29,981	1.8	29,981	1.8
	18,323,222		11,332,153	

(*) Represents an amount lower than $0.01.

As of December 31, 2021, the total compensation cost related to options granted to employees, consultants and service providers, not yet recognized, amounted to $770,396 and is expected to be recognized over a weighted average period of 0.92 years.

NOTE 11: SHARE CAPITAL (Cont.)

e. Stock based compensation were recorded as follows:

	Year Ended December 31,		
	2022	2021	2020
Research and Development	$ 130,637	$ 147,696	$ 167,328
Sales and Marketing	30,804	47,031	48,671
General and Administrative	319,501	263,646	248,774
	$ 480,942	$ 458,373	$ 464,773

f. The Company's outstanding warrants classified as equity

The Company's outstanding warrants classified as equity as of December 31, 2022 are as follows:

Outstanding	Issuance year	Exercise price	Exercisable through	
117,209	2009	$ (*)	Exit event	(**)
59,384	2013	0.92	2023	(**)
170,000	2018	0.50	2023	See Note 8.b.
200,001	2018	0.50	2023	(**)
27,857,140	2022	$ 0.07	2024(***)	See Note 11.b.9 and 17
28,403,734				

(*) Represents an amount lower than $0.01.

(**) Issued in connection with the 2018, 2013 and 2009 arrangements.

(***) The earlier of (i) the closing of a subsequent offering of Company securities by the Company to qualified investors with an effective price per Ordinary Share of at least $0.20 and (ii) the second anniversary of the issuance of such warrant.

The Company's outstanding warrants classified as equity as of December 31, 2021 are as follows:

Outstanding	Issuance year	Exercise price	Exercisable through	
117,209	2009	$ (*)	Exit event	(**)
59,384	2013	0.92	2023	(**)
170,000	2018	0.50	2023	See Note 8.b.
200,001	2018	$ 0.50	2023	(**)
546,594				

(*) Represents an amount lower than $0.01.

(**) Issued in connection with the 2018, 2013 and 2009 arrangements.

All warrants are exercisable to ordinary shares. The exercise price of the warrants and the number of ordinary shares issuable thereunder is subject to standard anti-dilution features, including dividends, stock splits, combinations and reclassifications of the Company's capital stock. In accordance with ASC 815, "Derivatives and Hedging", the warrants were classified as equity instruments.

NOTE 12: WARRANTS PRESENTED AT FAIR VALUE

The Company's outstanding warrants classified as a liability as of December 31, 2022 are as follows:

Outstanding	Exercise price	Issuance year	Exercisable through	Fair value	
120,000	$ 0.92(*)	2014	(***)	$ 1	(****)
675,926	(**)	2017	2024	14,785	(****)
1,411,765	0.17	2019	2024	673	See Note 8.e.
2,207,691				$ 15,459	(*****)

(*) Subject to changes as describe in the agreement.

(**) Less than $0.01.

(***) M&A or qualified public offering as described in the agreement.

(****) Issued in connection with the 2014 through 2017 financing rounds.

(*****) Contains warrants presented at fair value within non-current liabilities.

The Company's outstanding warrants classified as a liability as of December 31, 2021 are as follows:

Outstanding	Exercise price	Issuance year	Exercisable through	Fair value	
120,000	$ 0.92(*)	2014	(***)	$ 94	(****)
905,555	0.17	2017	2022	5,841	See Note 8.a.
436,666	1.50	2017	2022	2	(****)
33,332	1.20	2017	2022	—	(****)
33,332	1.00	2017	2022	—	(****)
675,926	(**)	2017	2024	54,731	(****)
11,111	1.20	2017	2022	—	(****)
1,659,971	0.17	2018	2022	11,359	See Note 8.a.
1,411,765	0.17	2019	2024	34,948	See Note 8.e.
5,287,658				$ 106,975	(*****)

(*) Subject to changes as described in the agreement.

(**) Less than $0.01.

(***) M&A or qualified public offering as described in the agreement.

(****) Issued in connection with the 2014 through 2017 financing rounds.

(*****) Contains warrants presented at fair value within current liabilities of $17,296 and within non-current liabilities of $89,679.

NOTE 13: RELATED PARTIES

a. Employment or Service Agreements with Dr. Fernando de la Vega, the Company's Chief Executive Officer:

On September 9, 2009, the Company entered into a services agreement, as amended in November 2018 ("DBG Services Agreement"), with Dr. de la Vega's wholly-owned service company, Dolev Bar-Guy Consulting and Management Ltd. ("DBG"), pursuant to which Dr. de la Vega provided us management services as the Company's chief executive officer through June 1, 2021, at which time he resigned from such position and assumed the position as Chief Technology Officer, under the same terms and conditions according to the DBG Services Agreement. Pursuant to the terms of the DBG Services Agreement, Dr. de la Vega is currently entitled to a monthly consultancy fee in the amount of NIS 65,000 ($18,471based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) plus VAT and car allowance in the amount of NIS 2,500 ($710 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) plus VAT per month plus reimbursement for fuel expenses and tolls. . The liability towards DBG as of December 31, 2022 and 2021 aggregated to NIS 1,838,300 ($522,392 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) plus VAT and NIS 1,774,957 ($570,725 based on the exchange rate of $1.00 / NIS 3.11 in effect as of December 31, 2021) plus VAT, respectively, and was recorded as part of the Employees and payroll accruals line item within the current liabilities. Dr. de la Vega may terminate the DBG Services Agreement at any time for any reason upon a three (3) months' prior written notice. If the Company wishes to terminate the DBG Services Agreement, other than as a result of Dr. de la Vega's breach of his terms of office, the Company shall be required to provide a six (6) months' prior written notice (provided that if the termination is up to 12 months following an exit event, 24 months' prior written notice is required; between 12 and up to 24 months following an exit event, 12 months' prior written notice is required and between 24 months and up to 36 months following an exit event, 6 months' prior written notice is required).

In addition, Dr. de la Vega is entitled to receive (none of which were received so far):

1. An annual cash bonus in an amount equivalent to up to four (4) times his monthly service fee, plus VAT, based on achievement of certain performance targets which are determined by our compensation committee and the board of directors on an annual basis.

2. A special one-time bonus in an amount equivalent to six times his monthly service fee, plus VAT upon the occurrence of an Exit Event (as described below), provided that the Company's pre-money valuation shall be at least $50,000,000 at the closing of such transaction or within 12 months following such closing.

3. An equity-based award upon the occurrence of an Exit Event, in accordance with the following calculation:

   (i) 0.5% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $30,000,000 but less than $40,000,000;

   (ii) 1.25% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $40,000,000 but less than $50,000,000;

   (iii) 2.0% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $50,000,000.

An 'Exit Event' is defined as: (i) the consummation of an initial public offering of ordinary shares of the Company on a recognized stock exchange; or (ii) a sale of all or substantially all of the share capital of the Company to any individual, firm, corporation, partnership, trust, incorporated or unincorporated association, joint venture, joint stock company, governmental authority or other entity of any kind, and shall include any successor (by merger or otherwise) of such entity (a "Person"); (iii) a sale, lease, conveyance or disposition of all or substantially all of the assets of the Company; (iv) a merger of the Company with or into another entity in which the shareholders of the Company immediately prior to such merger do not hold a majority of the share capital and voting rights of the surviving entity held by them by virtue of their holdings in the Company prior to the consummation of the transaction or a transaction or series of transactions in which a Person or group of Persons acquire more than 50% of the issued and outstanding share capital of the Company (other than an acquisition of such share capital from the Company); or (v) an up-listing to a higher exchange.

To date, the Company did not pay or record any bonus to DBG.

NOTE 13: RELATED PARTIES (Cont.)

b. Consultancy Agreement with Ram Zeevi:

On May 15, 2018, the Company entered into a consultancy agreement with RINC Green Ltd. ("RINC Green"), as amended on April 30, 2019 (the "Ram Zeevi Consultancy Agreement"), pursuant to which Mr. Zeevi provides the Company with services in the field of business development in accordance with pre-approved monthly work plans, which include introduction of potential business partners and investors as well as assistance in negotiations of business and investment terms. Pursuant to the terms of the Ram Zeevi Consultancy Agreement, RINC Green is currently entitled to a gross monthly fee in the amount of $5,000 (25 hours per month at $200 per hour rate) plus VAT and to reimbursement of out-of-pocket expenses related directly to the provision of the consultancy services subject to prior written approval of the chief executive officer, to reimbursement of travel international travel and board expenses at the same standard as our chief executive officer and to an additional per-day fee equivalent to four hours per day abroad plus VAT. Either the Company or RINC Green may terminate the agreement at any time for any reason by providing a 30-day prior written notice. RINC Green ceased providing the above monthly service in January 2019.

In addition to the foregoing, RINC Green is entitled to receive (none of which were received so far):

1. A one-time payment in the amount of $25,000 (plus VAT) upon an equity investment exceeding $500,000 by an investor that was introduced to the Company by Mr. Zeevi;

2. $150,000 in cash (plus VAT) and options to purchase the Company's ordinary shares upon an equity investment or execution of business contract resulting in at least $2,000,000 in proceeds (or revenues) by an entity introduced to the Company by Mr. Zeevi, whereby the number of options will be calculated by dividing $150,000 by the average ordinary share price during the period of 90 days prior to the date upon which the investment is actually made with an exercise price per share of NIS 0.01 ($0.003 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022); and

3. An equity based award to be granted upon of an Exit Event, in accordance with the following calculation:(i) 0.4% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $30,000,000 but less than $50,000,000, or (ii) 1.0% of the Company's share capital on a fully diluted basis, if the Company's pre-money valuation shall be equal to or higher than $50,000,000. In the event that the Company terminate the Ram Zeevi Consultancy Agreement other than for Cause, and the Exit Event occurs within a period of six (6) months of said termination, RINC Green will be entitled to the foregoing equity-based award. An 'Exit Event' is defined the same as mentioned in section a. above.

To date, the Company has not paid or recorded any bonus to RINC Green.

On October 2, 2018, the Company granted to RINC Green options to purchase up to 120,000 of the Company's ordinary shares, at an exercise price per share of $0.27. The options vested over a period of three (3) years, with one third of the options vesting on September 30, 2019, and the remaining two thirds of the options vesting on a quarterly basis over the remaining two (2) years.

Ram Zeevi is the son of Gadi Zeevi, who is the controlling shareholder of GTRIMG Investments Ltd., the Company's controlling shareholder.

NOTE 13: RELATED PARTIES (Cont.)

c. Consultancy Agreement with Dov Farkash, the Company's Active Chairman:

On April 19, 2020, an Active Chairman Agreement (the "Chairman Agreement") with Exoro Ltd. ("Exoro"), a company wholly owned by Mr. Dov Farkash. The Chairman Agreement provides that Exoro, through Mr. Farkash is to provide certain services to us as active chairman, focusing on go-to-market strategy. The Company agreed to enter into an indemnification agreement with Mr. Farkash and to include him in the Company's directors' and officers' liability insurance. Mr. Farkash has agreed not to provide any services that would conflict with or complete with the Company. The Company agreed to pay a monthly service fee of NIS 40,000 ($11,366 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022) plus VAT to Exoro. The Company granted to Mr. Farkash options to purchase 939,164 ordinary shares under our 2010 Option Plan, in accordance with our director compensation plan, at an exercise price of $0.068 per share, vesting over three (3) years from April 19, 2020, with one-third vesting after one year and the remainder monthly over a 24-month period. Exoro was entitled to reimbursement of expenses in connection with the provision of the services and was provided a budget of $10,000/month for travel. The term of the Chairman Agreement was for four (4) months, and the Company has a right to renew the agreement for an additional nine months, which was utilized. Either party could terminate upon 45 days prior written notice. The Chairman Agreement could also be terminated by the Company for Cause (as defined in the Chairman Agreement). Notwithstanding the expiration of the Chairman Agreement, Mr. Farkash has continued to serve as Active Chairman in accordance with the terms thereof, and the Company intends to present such continued engagement to the approval of the shareholders at the next general meeting of shareholders.

d. Consultancy Agreement with Ran Eisenberg, the Company's former Chief Executive Officer:

On June 1, 2021, the Company entered into a consultancy agreement with Mr. Ran Eisenberg to serve as the Company's Chief Executive Officer during the term of the agreement. Pursuant to the terms of the agreement, Mr. Eisenberg was entitled to a monthly fee of NIS 40,000 ($12,861 based on the exchange rate of $1.00 / NIS 3.11 in effect as of December 31, 2021) plus VAT, which was increased to 60,000 NIS ($19,292 based on the exchange rate of $1.00 / NIS 3.11 in effect as of December 31, 2021) plus VAT four (4) months from his commencement date. In addition, Mr. Eisenberg was awarded options to purchase up to 2,003,346 of the Company's shares at a per share exercise price of $0.17, which was reduced to $0.07. Vesting of the options is over three (3) years from June 1, 2021, with one-third vesting after one year and the remainder monthly over a 24-month period. The options accelerate upon an Exit Event (as defined in section a. above). See Note 11.d. regarding Mr. Eisenberg resignation.

e. Consultancy Agreement with Avi Magid, the Company's new Chief Executive Officer:

On July 19, 2022, the Company announced the appointment of Mr. Avi Magid as the Company's Chief Executive Officer. In connection with being named as the Company's Chief Executive Officer, on November 7, 2022, the Company and Mr. Magid executed an employment agreement with the Company which continued in effect through the close of business on the day of the annual general meeting of shareholders of the Company which occurred on December 19, 2022 ("Annual Meeting"). The principal component of such agreement was a gross monthly salary with an aggregate monthly cost to the Company of NIS 60,000 ($17,050 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022), retroactive to August 1, 2022. Under the terms of the new employment agreement, as approved at the Annual Meeting, Mr. Magid is entitled to a gross monthly salary of NIS 60,000 ($17,050 based on the exchange rate of $1.00 / NIS 3.519 in effect as of December 31, 2022). At Mr. Magid's option, the Company leases a vehicle for Mr. Magid or, alternatively, may add an amount equal to the vehicle costs as additional salary to Mr. Magid, provided that the total payroll will be in accordance with the limitation of the Compensation Policy. Mr. Magid was also awarded options under the Company's 2010 Option Plan for an aggregate of 5,249,758 Ordinary Shares, exercisable at a per share exercise price of $0.07 and scheduled to vest as follows: one third (1/3) on August 1, 2023, the first anniversary of the employment start date, and the balance thereafter in equal monthly instalments at the end of each month, subject to his continued employment with the Company; provided, that as the number of reserved shares under the Company's 2010 Option Plan was not sufficient to support the grant in its totality at the time of the Annual Meeting, options for only 4,000,000 shares were awarded and the balance of the grant (i.e., 1,249,758 options) shall be completed at such time as the number shares available for issuance under the Company's option plan shall have been increased, and such remaining options, once granted, will vest according to the vesting schedule referenced above. Under the agreement, Mr. Magid is also entitled to the following: (i) manager's insurance under Israeli law to which the Company contributes amounts equal to (a) 8.33% for severance payments, and 6.5%, or up to 7.5% (including disability insurance) designated for premium payment (and Mr. Magid contributes an additional 6%) of each monthly salary payment, and (b) 7.5% of his salary (with Mr. Magid contributing an additional 2.5%) to an education fund, a form of deferred compensation program established under Israeli law. The employment 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 twelve (12) months thereafter and (iii) certain non-solicitation provisions during the term of the agreement and for one year thereafter. Either party may terminate the employment agreement at any time upon one month's prior notice.

f. See Notes 8.c., 11.b.7., 11.b.9., 11.d.4. and 17 for additional related party transactions.

NOTE 14: FINANCIAL EXPENSES (INCOME), NET

	Year ended December 31,		
	2022	2021	2020
Financial (income):			
Change in fair value of warrants and capital note presented at fair value	$ (91,516)	$ (8,112,118)	$ —
Interest and change in fair value in connection with convertible loans	(167,364)	—	—
Foreign exchange income, net	(354,725)	—	—
Financial expenses:			
Change in fair value of warrants and capital note presented at fair value	—	—	7,011,437
Interest, accretion back and change in fair value in connection with convertible loans	—	7,892,632	2,597,476
Foreign exchange loss, net	—	44,270	175,877
Other	85,410	124,312	29,815
	$ (528,195)	$ (50,904)	$ 9,814,605

NOTE 15: DISAGGREGATED REVENUES

Geographic information:

Revenues reported in the consolidated financial statements derived from the Company's country of domicile (Israel) and foreign countries based on the location of the customers, are as follows:

	Year ended December 31,		
	2022	2021	2020
Spain	$ 355,274	$ 78,960	$ 106,376
Israel	145,472	129,976	281,174
United states	43,614	194,489	264,739
Germany	8,548	83,317	55,131
Holland	384	3,752	9,676
Austria	839	6,144	4,775
Other	49,408	72,066	39,448
	$ 603,359	$ 568,704	$ 761,319

NOTE 16: CONCENTRATION RISK

Major customers are defined as those from whom the Group derives at least 10% of its consolidated revenues consolidated accounts receivable.

During the years ended December 31, 2022, 2021 and 2020, consolidated revenues from the major customers reflected 77% (two customers), 45% (three customers) and 27% (one customer) of the total consolidated revenues, respectively.

As of December 31, 2022 and 2021, consolidated accounts receivable from the major customers reflected 71% (two customers) and 13% (one customer), respectively.

NOTE 17: SUBSEQUENT EVENT

The Company announced that it entered into definitive agreements with certain existing Company shareholders (the "Investors") relating to a private placement of the Company's ordinary shares, par value NIS 0.01 per share in February 2023, for maximum aggregate proceeds to the Company of $2.8 million, under the following terms:

- The Company offered, issued and sold to the Investors units of its securities for aggregate gross proceeds to the Company of $1.0 million (the "Initial Offering"), each unit comprised of (each, a "Unit" and, collectively, the "Units") (i) one (1) Ordinary Share, and (ii) a warrant to purchase an additional two (2) Ordinary Shares, exercisable through the earlier of (i) the closing of a subsequent offering of Company securities by the Company to qualified investors with an effective price per Ordinary Share of at least $0.20 and (ii) the second anniversary of the issuance of such warrant, in each case at a per share exercise price of $0.07, subject to adjustment (the "Warrant"), at a per Unit purchase price of $0.07 (the "Purchase Price").

- The Company undertook to offer, issue and sell to the Investors, following the closing of the Initial Offering, additional Ordinary Shares for aggregate gross proceeds to the Company of up to an additional $1.0 million (the "Follow on Offering"), at a price per share equal to the Purchase Price, which offering was subject to the achievement by the Company of certain pre-defined milestones on or before December 31, 2022, subject to a further extension at the discretion of the Company, to a date on or before February 28, 2023.

  Following the partial fulfillment of the milestones, the Company initially raised from certain of the Investors $705,000 in the Follow-on Offering. In April 2023, pursuant to the terms of the subscription agreement, an additional Investor joined the Follow-on Offering, as extended, in the amount of $295,000, resulting in aggregate proceeds to the Company of $1.0 million in the Follow-on Offering, which completed the Follow-on Offering.

- Following the closing of the Follow on Offering, the Company undertook to offer, issue and sell to the Investors, following the initial closing of the Follow on Offering, additional Ordinary Shares for aggregate gross proceeds to the Company of up to an additional $800,000 (the "Final Offering"), at a price per share equal to the Purchase Price, which offering was subject to the achievement by the Company of a certain additional milestone set forth in the subscription agreement and any additional milestones to be agreed upon in good faith negotiations (the "Second Level Milestones"). The Final Offering shall be closed by no later than the close of business on the 30th business day after the delivery of notice by the Company to the Investors that the Second Level Milestones have been achieved.

  Two of the Investors undertook to invest $300,000 each in the Final Offering ($600,000 in total), if the Second Level Milestones are achieved. Notwithstanding that the Second Level Milestones have not yet been fulfilled, an Investor waived such condition and pursuant to the terms of the agreement, invested in this round in the amount of $105,000, resulting in aggregate proceeds to the Company of $105,000 in the Final Offering to date.

The Company expects to issue to the Investors an aggregate of 14,285,712 Ordinary Shares and warrants to purchase an aggregate 28,571,425 Ordinary Shares in the Initial Offering in respect of the $1.0 million raised, an additional aggregate 14,285,713 Ordinary Shares to the Investors that participated in the Follow on Offering in respect of the $1.0 million raised, and an additional 1,500,000 Ordinary Shares to an Investor in respect of the $105,000 raised to date in the Final Offering. If the Second Level Milestones are achieved and an additional $695,000 will be fully raised in the Final Offering, the Company would issue an additional aggregate 9,928,571 Ordinary Shares to such Investors participating in the Final Offering.

ITEM 19. Exhibits

Exhibit No.	Exhibit Description
1.1	Articles of Association of P.V. Nano Cell Ltd.
2.1	Description of Securities
4.1[(1)]	Agreement, dated December 15, 2011, by and between P.V. Nano Cell Ltd. and the Ministry of National Infrastructures, Energy and Water Resources.
4.2[(1)]	Share Purchase Agreement, effective November 29, 2009, by and among the shareholders of Nano Size Ltd. and P.V. Nano Cell Ltd.
4.3[(1)]	Capital Note of IP Bank International (Suzhou) Co., Ltd., dated November 26, 2014
4.4[(1)]	Agreement, dated September 9, 2009, by and between P.V. Nano Cell Ltd. and Dolev Bar-Guy Consulting and Management Ltd.
4.5[(1)]	First Addendum to the Consultancy Agreement, dated April 9, 2013, by and between P.V. Nano Cell Ltd. and Dolev Bar-Guy Consulting and Management Ltd.
4.6[(1)]	Second Addendum to the Consultancy Agreement, dated May 23, 2013, by and between P.V. Nano Cell Ltd. and Dolev Bar-Guy Consulting and Management Ltd.
4.7[(2)]	P.V. Nano Cell Ltd. 2010 Option Plan (unofficial English translation from Hebrew original)
4.8[(3)]	Securities Purchase Agreement, dated August 16, 2017, by and between P.V. Nano Cell Ltd. and Alpha Capital Anstalt
4.9[(3)]	Warrant executed in favor of Amnon Mendelbaum and Steven Zadka
4.10[(3)]	Share Purchase Agreement, dated May 8, 2018, by and between P.V. Nano Cell Ltd. and Slobel NV
4.11[(3)]	Consultancy Agreement, dated November 12, 2017, by and between P.V. Nano Cell Ltd. and Evyatar Cohen
4.12[(4)]	Amendment No. 1 to P.V. Nano Cell Ltd. 2010 Option Plan (unofficial English translation from Hebrew original)
4.13[(5)]	Form of Loan Conversion and Warrant Cancellation Agreement between P.V. Nano Cell Ltd. and certain Investors
4.14[(5)]	Form of Subscription Agreement, by and between P.V Nano Cell Ltd. and certain Investors ($3.0 million private placement)
4.15[(5)]	Active Chairman Agreement dated April 19, 2020 between P.V. Nano Cell Ltd. and Exoro Ltd.
4.16[(6)]	Letter of Engagement dated May 18, 2022, between P.V. Nano Cell Ltd and Ofer Greenberger.
4.17	Form of Subscription Agreement, by and between P.V Nano Cell Ltd. and certain Investors ($2.8 million private placement)
4.18	Letter from Ilanit Halperin, CPA, dated May 15, 2023
4.19	Compensation Policy for Executive Officers and Directors
8.1[(6)]	List of Subsidiaries
12.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a), promulgated under the Securities Exchange Act of 1934, as amended
12.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a), promulgated under the Securities Exchange Act of 1934, as amended
13.1	Certifications pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
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 (formatted as Inline XBRL and contained in Exhibit 101).

(1) Filed as part of our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on September 2, 2015 (File No. 333-206723).

(2) Filed as part of our annual report on Form 20-F for the 2018 fiscal year filed with the Securities and Exchange Commission on May 15, 2019.

(3) Filed as part of our annual report on Form 20-F for the 2017 fiscal year filed with the Securities and Exchange Commission on May 15, 2018.

(4) Filed as part of our annual report on Form 20-F for the 2019 fiscal year filed with the Securities and Exchange Commission on April 29, 2021.

(5) Filed as part of our annual report on Form 20-F for the 2020 fiscal year filed with the Securities and Exchange Commission on May 16, 2022.

(6) Filed as part of our annual report on Form 20-F for the 2021 fiscal year filed with the Securities and Exchange Commission on June 21, 2022.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on Form 20-F on its behalf.

P.V. Nano Cell Ltd.

By: /s/ Avi Magid
Avi Magid
Chief Executive Officer

Date: May 15, 2023

Exhibit 1.1

THE COMPANIES LAW, 5759-1999
A COMPANY LIMITED BY SHARES
FOURTH AMENDED AND RESTATED ARTICLES OF ASSOCIATION
OF P.V. NANO CELL LTD.
Company Number 514287093

Interpretation; General

1. In these Fourth Amended and Restated Articles of Association, in addition to the terms defined elsewhere herein, unless the context requires otherwise the following terms shall have the respective meanings ascribed to them below:

1.1 "**Articles**" means these Fourth Amended Articles of Association of the Company, as shall be in force from time to time.

1.2 "**Board of Directors**" means the board of directors of the Company as constituted from time to time in accordance with the Companies Law and these Articles.

1.3 "**Business Day**" means Sunday to Thursday, inclusive, with the exception of holidays and official days of rest in the state of Israel.

1.4 "**Companies Law**" means the Israeli Companies Law, 5759-1999, as amended from time to time, including any regulations promulgated thereunder.

1.5 "**Companies Ordinance**" means the relevant sections of the Companies Ordinance (New Version), 5743-1983, as currently in effect, and as may be amended from time to time, and any regulations promulgated by virtue thereof.

1.6 "**Company**" means P.V. Nano Cell Ltd.

1.7 "**General Meeting**" means the Annual General Meeting (as defined in Article 32 below) of the Company's Shareholders and any Special General Meeting (as defined in Article 33 below) of the Company's Shareholders.

1.8 "**Office**" means the office of the Company as recorded with the Israeli Registrar of Companies.

1.9 "**Office Holder**" means a Director and any other person defined as such in Section 1 of the Companies Law.

1.10 "**Ordinary Majority**" means a majority of more than 50% of all the actual votes cast by the Shareholders present (either in person, through proxy or through written ballot), and entitled to vote on the relevant proposal in a General Meeting (or Class Meeting, if applicable), without taking into account abstentions.

1.11 "**Register**" means the share register of the Company maintained pursuant to Sections 130 - 134 of the Companies Law and including an "Additional Register" kept pursuant to Section 138 of the Companies Law, if the Company elects to have an Additional Register. For the avoidance of doubt, the list of shareholders kept by the Company's transfer agent regarding the holder(s) of the Company's securities shall be deemed an "Additional Register" for the purposes of these Articles.

1.12 "**Registered Shareholders**" means only those Shareholders who are registered in the Register.

1.13 "**Securities**" means securities of any kind, including shares of any class, options, warrants, convertible debentures and securities by their terms convertible or exchangeable for shares or securities of any class, or any rights or options to subscribe for, purchase or otherwise acquire any shares of any class in any manner.

1.14 "**Securities Law**" means the Israeli Securities Law 5728-1968, as amended from time to time, including any regulations promulgated thereunder.

1.15 "**Shareholder**" means a person or corporate entity that is registered as a shareholder in the Register or in whose favor a share is registered with a stock exchange registration company and that share has been included amongst the shares registered in the Register in the name of the registration company, if the Company shares or any part thereof shall be registered with a stock exchange.

1.16 "**Share**" shall have the meaning given to it in Article 5 below.

Unless the subject or the context otherwise requires: (i) words and expressions defined in the Companies Law shall have the same meanings herein; (ii) words and expressions importing the singular shall include the plural and vice versa; (iii) any pronoun shall include the corresponding masculine, feminine and neuter forms; (iv) words and expressions importing persons shall include bodies corporate; (v) the word "or" is not exclusive; (vi) the word "including" means including without limiting the generality of any description preceding such terms and shall be deemed to be followed by the phrase "without limitation"; (vii) the terms "these Articles", "hereof", "hereunder", "herein" and similar expressions refer to these Articles as a whole, and not to any particular Article, subsection or other portion hereof; (viii) all references in these Articles to "Dollars" or "$" shall mean the lawful currency of the United States of America and all references to "NIS" shall mean the lawful currency of the State of Israel; (ix) the term "law" means the applicable provisions of any "din," as defined in the Interpretation Law, 1981, as well as the rules and regulations of any stock exchange, stock market or over-the-counter market on which the Shares (and if applicable, other Securities of the Company) are listed for trade; (x) the term "shares" includes "Shares"; (xi) references to a law or to a specific section thereof shall be construed as a reference to such law or section, as the same may have been, or may from time to time be, amended, succeeded or re-enacted; and (xii) the term "writing" or any term of like import includes words typewritten, printed, painted, engraved, lithographed, photographed, scanned or represented or reproduced by any mode of reproducing words in a visible form, including facsimile, computer file, electronic mail or other form of writing produced by electronic communication.

The captions in these Articles are for convenience only and shall not be deemed a part hereof or affect the construction of any provision hereof. The specific provisions of these Articles shall supersede the provisions of the Companies Law and the Companies Ordinance, as applicable, to the extent permitted under the Companies Law and the Companies Ordinance, as applicable. Wherever these Articles state that the provisions hereof shall apply subject to the provisions of the Ordinance and/or subject to the provisions of the Companies Law and/or subject to the provisions of applicable law, the intention is to the provisions of the Ordinance and/or the provisions of the Companies Law and/or the provisions of applicable law, which cannot be derogated from, unless the context requires otherwise. With respect to any matter that is not specifically addressed in these Articles, the provisions of the Companies Law and the Companies Ordinance, as applicable, shall govern.

Name of the Company

2. The name of the company is P.V. Nano Cell Ltd.

Public Company

3. The Company is a public company as such term is defined in the Companies Law.

Purpose

4. The purpose of the Company is to engage in any lawful act or activity for which companies may be organized under the Companies Law.

The Share Capital of the Company and the Rights Attached to Shares

5. The authorized share capital of the Company is NIS 12,000,000, divided into 1,200,000,000 Ordinary Shares with a nominal value of NIS 0.01 per share (each a "**Share**" and collectively the "**Shares**"). The Company may alter its authorized share capital in accordance with the provisions of the Companies Law.

6. The Shares shall entitle their owners to:

6.1 An equal right to participate in and vote at the General Meetings of the Company. Each of the shares in the Company shall entitle its owner present at the meeting and participating in the vote in person, by proxy, or by means of a letter of voting, to one vote;

6.2 An equal right to participate in the distribution of dividends, whether in cash or in benefit shares, in the distribution of assets, or in any other distribution, according to the proportionate nominal value of the shares held thereby;

6.3 An equal right to participate in the distribution of the surplus assets of the Company in the event of its liquidation in accordance with the proportionate nominal value of the shares held thereby.

7. The Board of Directors is entitled to issue shares and other convertible securities or securities that may be realized as shares up to the limit of the Company's authorized share capital. For the purpose of calculating the limit of the authorized share capital, convertible securities or securities that may be realized as shares shall be considered to have been converted or realized as of their date of issue.

Limited Liability

8. The liability of each of the Company's Shareholders for the Company's debts is limited to the full payment of the nominal value (subject to Section 304 of the Companies Law) of the Shares in the Company held by such Shareholder and which remains unpaid, and only to that amount. If at any time the Company shall issue shares with no nominal value, the liability of the Shareholders shall be limited to the payment of the amount which the Shareholders should have paid the Company in respect of each Share in accordance with the conditions of such issuance.

Donations

9. The Company is entitled to donate a reasonable sum of money for charitable purposes. The Board of Directors of the Company is entitled to determine, at its discretion, rules for the making of donations by the Company.

Changes in Share Capital

10. Subject to the provisions of these Articles and applicable law, the Company may from time to time increase the Company's authorized share capital by creating new shares of an existing type or a new type, all as shall be determined in the decision of the General Meeting.

    Subject to the Companies Law, if at any time the share capital of the Company is divided into different classes of shares, the rights attached to any class, unless otherwise provided by these Articles, may be modified or abrogated by the Company with the approval of an Ordinary Majority of Shareholders voting at a General Meeting and subject to the approval by an Ordinary Majority of each class of shares present and voting at a separate class meeting of the holders of the shares of such class (a "**Class Meeting**"). For the avoidance of doubt, any change of rights that requires an amendment to these Articles shall be subject to the provisions of Article 92 below.

Consolidation, Subdivision, Cancellation and Reduction of Share Capital

11. Subject to the provisions of these Articles and applicable law, the Company may, from time to time with the approval of an Ordinary Majority of Shareholders voting at a General Meeting and subject to the approval by an Ordinary Majority at a Class Meeting, if applicable:

    11.1 consolidate all or any of its issued or unissued share capital into shares of larger nominal value than its existing shares;

    11.2 subdivide its shares (issued or unissued) or any of them, into shares of smaller nominal value than is fixed by these Articles, and the resolution whereby any share is subdivided may determine that, as among the holders of the shares resulting from such subdivision, one or more of the shares may, as compared with the others, have any such preferred or deferred rights or rights of redemption or other special rights, or be subject to any such restrictions, as the Company has power to attach to unissued or new shares;

    11.3 cancel any authorized shares not yet issued, provided that the Company has made no commitment, including a conditional commitment, to issue such shares; or

    11.4 reduce its share capital in any manner, subject to any authorization or consent required by applicable law.

12. With respect to any consolidation of shares and any other action which may result in fractional shares, the Board of Directors may settle any difficulty which may arise with regard thereto as it deems fit, including, inter alia, by resorting to one or more of the following actions:

    12.1 allot, in contemplation of or subsequent to such consolidation or other action, such shares or fractional shares sufficient to preclude or remove fractional share holdings;

    12.2 to the extent as may be permitted under the Companies Law, redeem or purchase such shares or fractional shares sufficient to preclude or remove fractional shareholdings;

12.3 to the extent as may be permitted under the Companies Law, cause the transfer of fractional shares by certain Shareholders of the Company to other Shareholders thereof so as to most expediently preclude or remove any fractional shareholdings, and cause the transferees to pay the transferors the fair value of fractional shares so transferred, and the Board of Directors is hereby authorized to act as agent for the transferors and transferees with power of substitution for purposes of implementing the provisions of this sub-Article.

Issuance of Shares

13. Subject to the provisions of these Articles, the authorized and unissued share capital of the Company shall be at the disposal of the Board of Directors which may without specifically limiting or affecting any rights previously conferred on the holders of any existing shares, offer, allot, grant options over or otherwise dispose of shares or other Securities convertible or exchangeable or exercisable into shares, to such persons, at such times and upon such terms and conditions as the Company may determine by resolution of the Board of Directors including that the consideration therefor be paid in cash, kind or otherwise, as the Board of Directors deems appropriate.

14. The authorization of a new series of shares or class of shares, or the issuance of such shares, shall not be deemed, for any purpose hereunder, to modify or abrogate the rights attached to an existing class of shares if the rights attached to the new class of shares apply in the same manner *vis-a-vis* all other existing series or classes of shares, without a different application to different classes, even though the result of such equal application may be different with respect to different Shareholders due to the number of shares held by them and/or even though such an issuance will change the economic value of the existing shares (but not the legal rights of such shares), even if one may argue that the economic value of the shares was decreased by such an act.

15. Subject to the provisions of these Articles, the Board of Directors may issue Shares, redeemable Securities (including for the removal of doubt, redeemable shares) and other Securities, at par value, with no par value or by way of a premium, according to such stipulations and conditions and having such rights as will be determined by the Board of Directors.

16. The Board of Directors may decide on the issuance of a series of bonds or other debt Securities within the framework of its authority or to take a loan on behalf of the Company and within the limits of the same authority.

17. The Shareholders of the Company at any given time shall not have any preemptive right or priority or any other right whatsoever with respect to the acquisition of Securities of the Company. The Board of Directors, in its sole discretion, may decide to offer Securities of the Company first to existing Shareholders or to any one or more of them.

18. The Company is entitled to pay a commission (including underwriting fees) to any person, in consideration for underwriting services, or the marketing or distribution of Securities of the Company, whether reserved or unreserved, as determined by the Board of Directors. Payments, as stated in this Article, may be paid in cash, Shares or in other Securities of the Company, or any combination thereof.

Issuance of Share Certificates; Replacement of Lost Certificates

19. Share certificates in respect of issued Shares shall, if issued, be issued under the seal or the rubber stamp of the Company or the Company printed name, and shall bear the signature of the Chief Executive Officer and the Chairperson of the Board, or of any other person or persons authorized thereto by the Board of Directors.

20. Each Registered Shareholder shall be entitled to receive from the Company, at such shareholder's request, within a period of up to 45 days after the issuance or registration of the shares of such Registered Shareholder to one or more numbered certificate for all the shares of any class registered in his name, in such form as shall be determined by the Board of Directors consistent with the Companies Law.

21. A share certificate registered in the names of two or more persons shall be delivered to the person first named in the Register in respect of such co-ownership and the Company shall not be obligated to issue more than one certificate as aforesaid.

22. If a share certificate is defaced, lost or destroyed, it may be replaced, upon payment of such fee, and upon the furnishing of such evidence of ownership and such indemnity, as the Board of Directors or the Company may think fit.

23. Except as otherwise provided in these Articles, the Company shall be entitled to treat any Shareholder as the absolute owner of any shares registered in such Shareholder's name, and, accordingly, shall not, except as ordered by a court of competent jurisdiction, or as required by statute, be bound to recognize any equitable or other claim to, or interest in, such share on the part of any other person.

Payments for Shares

24. All the shares in the Company's issued capital shall be fully paid up shares. Without derogating from that stipulated in this Article, the Board of Directors may forfeit a share allotted by the Company and sell it, if the consideration undertaken for it by a Shareholder, fully or partially, has not been paid to the Company, and the provisions of the Companies Law in this matter shall apply.

Transfer of Shares

25. The Company's Shares are transferable. The transfer of shares by a shareholder registered as the holder of such Shares in the Company's Register, must be made in writing, and it shall be recorded only if:

    25.1 All transfers of Shares shall be made in writing in a form reasonably satisfactory to the Board of Directors and/or to the Company's transfer agent (a "**Share Transfer Deed**"). The Share Transfer Deed shall be accompanied by the certificates of the share intended for transfer, if such were issued, and shall be delivered to the Company or its transfer agent; provided that the Board of Directors may approve other methods of recognizing the transfer of Shares, taking into account the manner of trading of the Company's shares. The Share Transfer Deed shall be signed by the transferor and by a witness confirming the signature of the transferor. In the event of the transfer of Shares that are not fully paid as of the date of transfer, the Share Transfer Deed shall also be signed by the recipient of the Share; or

    25.2 A court order for the amendment of the Register shall be delivered to the Company; or

    25.3 It shall be proved to the Company (to the satisfaction of the Board of Directors) that lawful conditions pertain for the transfer of the right to the Share.

    The transfer of Shares that have not been fully paid requires the authorization of the Board of Directors, which is entitled to refuse to grant its authorization at its absolute discretion and without stating grounds therefor. Subject to the forgoing, the effectiveness of a transfer of Shares shall not require the prior approval of the Board of Directors. The transfer of a fraction of a Share shall lack validity.

    The Company may impose a fee for registration of a Share transfer, at a reasonable rate as may be determined by the Board of Directors from time to time.

26. Subject to the provisions of the Companies Law, the transferor shall be deemed to remain the holder of the transferred Shares until the transfer is entered into the Register and the transferee is registered as the holder thereof in the Register.

27. The Company may close the Register for a period of time to be determined by the Board of Directors provided that it is not more, in total, than thirty (30) days annually. During the period that the Register is closed, no transfer of Shares by a Registered Shareholder shall be registered in the Register.

Transmission of Shares

28. Decedents Shares. Upon the death of a Shareholder, the Company shall recognize the custodian or administrator of the estate or executor of the will, and in the absence of such, the lawful heirs of the Shareholder, as the only holders of the right for the Shares of the deceased Shareholder, after receipt of evidence to the entitlement thereto to the satisfaction of the Board of Directors.

29. Receivers and Liquidators. The Company may recognize the receiver or liquidator of any corporate Shareholder in liquidation or dissolution, or the receiver or trustee in bankruptcy of any Shareholder, as being entitled to the Shares registered in the name of such Shareholder, after receipt of evidence to the entitlement thereto to the satisfaction of the Board of Directors.

30. Notwithstanding the foregoing, subject to the provisions of the Companies Law and the provisions of these Articles, if it is proven to the Company to the satisfaction of the Board of Directors and by means to be determined by the Board of Directors that the conditions in law for the endorsement of a right in the shares registered in the Register in the name of a Shareholder exist, the Company will recognize the endorsee and the endorsee only as holding the right of the said Shares.

Record Date for General Meetings

31. The Shareholders entitled to receive notice of (in accordance with these Articles), to participate in and to vote at a General Meeting, or to express consent to or dissent from any corporate action in writing, shall be determined by the Board of Directors subject to the restrictions set forth under the Companies Law. Unless provided otherwise in the notice provided by the Company regarding such General Meeting, a determination of Shareholders of record with respect to a General Meeting shall apply to any adjournment of such meeting if it is held within no later than 30 days following the date on which such General Meeting was to be held.

General Meetings

32. Annual General Meeting. An annual General Meeting shall be held once in every calendar year, but not later than 15 months after the previous General Meeting, at such time as is required in accordance with applicable law and at such place either within or outside of the State of Israel as may be determined by the Board of Directors, and shall deliberate over the matters required by the Companies Law or other applicable law to be deliberated upon at an annual general meeting or such other matters as shall be determined by the Board of Directors. These General Meetings shall be referred to as "Annual General Meetings".

33. Special General Meetings. All General Meetings other than Annual General Meetings shall be called "Special General Meetings". The Board of Directors may, whenever it deems fit, convene a Special General Meeting at such time and place, within or outside of the State of Israel, as may be determined by the Board of Directors.

The Board of Directors shall be obligated to convene a Special General Meeting upon requisition in writing in accordance with Section 63 of the Companies Law.

34. Shareholder Proposals.

34.1 A shareholder (a "**Proposing Shareholder**") holding one percent or more of the outstanding voting rights in the Company may request, subject to the provisions of Section 66(b) of the Companies Law, that the Board of Directors include a proposal on the agenda of a General Meeting to be held in the future, provided that the Proposing Shareholder gives timely notice of such request in writing (a "**Proposal Request**") to the Company and the Proposal Request complies with all the requirements of this Article 34, these Articles and applicable law and stock exchange rules (if applicable). To be considered timely, a Proposal Request must be delivered, either in person or by certified mail, postage prepaid, and received at the principal executive office of the Company, no less than sixty (60) days prior to the date of issuance of the Company's proxy statement summoning a General Meeting.

34.2 The Proposal Request shall set forth all the following: (i) the name, business address, telephone number and fax number or email address of the Proposing Shareholder (or each member of the group constituting the Proposing Shareholder, as the case may be) and, if an entity, the name(s) of the person(s) that controls or manages such entity; (ii) the number of Ordinary Shares held by the Proposing Shareholder, directly or indirectly, and, if any of such Ordinary Shares are held indirectly, an explanation of how they are held and by whom, and, if such Proposing Shareholder is not the holder of record of any such Ordinary Shares, a written statement from the holder of record or authorized bank, broker, depository or other nominee, as the case may be, indicating the number of Shares the Proposing Shareholder is entitled to vote as of a date that is no more than ten (10) days prior to the date of delivery of the Proposal Request; (iii) any agreements, arrangements, understandings or relationships between the Proposing Shareholder and any other person with respect to any securities of the Company or the subject matter of the Proposal Request; (iv) the Proposing Shareholder's purpose in making the Proposal Request; (v) the complete text in the English language of the resolution that the Proposing Shareholder proposes to be voted upon at the General Meeting and, if the Proposing Shareholder wishes to have a statement in support of the Proposing Shareholder's proposal included in the Company's proxy statement, a copy of such statement, which shall be in the English language; and (vi) a statement of whether the Proposing Shareholder has a personal interest in the proposal and, if so, a description in reasonable detail of such personal interest.

34.3 If the proposal of the Proposing Shareholder is to nominate a candidate for election to the Board of Directors, the Proposal Request shall set forth, in addition to the requirements set forth in Article 34.2, the following: (i) a declaration signed by the nominee and the other information required under Section 224B of the Companies Law; (ii) to the extent not otherwise provided in the Request Proposal, all the declarations, documents and other information required pursuant to the Companies Law and any other law to which the Company shall be subject at that time, including the rules of every stock exchange on which the Company's shares are listed for trade at that time, in order to propose the candidate for election and in order for him to be appointed as a director; (iii) if the Shares are listed, a representation of whether the nominee meets the objective criteria for an independent director of the Company under the listing rules of the stock exchange on which the Shares are then listed, and if not, an explanation of why not, and (iv) a statement signed by the nominee that he consents to be named in the Company's notices and proxy materials relating to the General Meeting and, if elected, to serve on the Board of Directors.

34.4 In addition to the forgoing, the Proposing Shareholder shall promptly provide any other information reasonably requested by the Company. The Company shall be entitled to publish information provided by a Proposing Shareholder pursuant to this Article 34, and the Proposing Shareholder shall be responsible for the accuracy thereof.

34.5 The information required pursuant to this Article 34 shall be updated as of the record date of the General Meeting, five Business Days before the date of the General Meeting, the date of the General Meeting, and the date of any adjournment or postponement thereof.

34.6 A Proposing Shareholder holding (i) five percent (5%) or more of the outstanding voting rights in the Company or (ii) five percent (5%) or more of the outstanding share capital and one percent (1%) or more of the voting rights in the Company, may request, subject to the provisions of Section 63(b)(2) of the Companies Law, that the Board of Directors convene a Special General Meeting, provided that the request complies with all the applicable requirements of a "Proposal Request" set forth in this Article 34 above, these Articles and applicable laws and stock exchange rules.

35. Notice of General Meetings. No notices of General Meetings shall be required to be given to Shareholders other than the Registered Shareholders. Notices of General Meetings shall be given as required by the provisions of the Companies Law and other applicable laws.

Proceedings at General Meetings

36. Quorum and Adjournment. Two (2) or more Shareholders (not in default in payment of any sum referred to in these Articles) present in person by proxy or through a written ballot (to the extent relevant), who hold or represent between or among them at least twenty-five percent (25%) of the Company's issued share capital shall constitute a quorum at a General Meetings ("**the Requisite Quorum**"). No business shall be transacted at a General Meeting, or at any adjournment thereof, unless the Requisite Quorum is present when the meeting proceeds to business. A proxy may be deemed to be from more than one Shareholder based on the number of Shareholders it represents.

If within thirty (30) minutes from the time appointed for the General Meeting the Requisite Quorum is not present, the meeting shall be dissolved, but shall stand adjourned to: (i) the same day, at the same time the following week and at the same place; or (ii) to a later date, if so specified in advance in the notice of the General Meeting (each of the adjourned meetings under (i) or (ii) - a "**Deferred General Meeting**"), and the Company shall not be obligated to give notice to the Shareholders of the Company of such Deferred General Meeting.

In the Deferred General Meeting, all matters for which the General Meeting was summoned shall be discussed, provided that if the Requisite Quorum is not present at the adjourned meeting within thirty (30) minutes from the time appointed for such meeting, subject to the provisions of applicable law, one or more Shareholders present in person or by proxy, shall constitute a quorum, unless the meeting was called pursuant to a request by the Company's Shareholders in accordance with Article 34.1 above, in which case the quorum required shall be one or more Shareholders, present in person or by proxy, and holding the number of shares required for making such request. No business shall be transacted at any adjourned meeting except business that might lawfully have been transacted at the meeting as originally called.

37. Chairperson. The Chairperson of the Board of Directors (the "**Chairperson**") shall preside as chairperson at every General Meeting of the Company. If at any meeting such Chairperson is not present within fifteen (15) minutes after the time fixed for holding the meeting or is unwilling to act as chairperson of the meeting, any director appointed for such purpose by the Board of Directors shall chair such General Meeting of the Company.

Where there is no chairperson as aforementioned, or if, at any meeting such appointed director is not present fifteen (15) minutes after the time fixed for the start of the meeting or if such appointed director has refused to chair the meeting, the directors present, by a majority of votes amongst them, shall select a director or one of the other Office Holders of the Company present at the meeting, and if they do not do so, the Shareholders present in person or by proxy will elect first, one of the directors and then, one of the other Office Holders (who is not director) who are present to chair the meeting. If all the directors and the other Office Holders are not present, or all the directors and the other Office Holders have refused to chair the meeting, one of the Shareholders or his proxy will be elected to chair the meeting by an Ordinary Majority vote of the Shareholders present and voting, not including abstentions.

38. Adoption of Resolutions at General Meetings.

38.1 Unless otherwise specifically provided in these Articles or under any applicable law, all resolutions submitted to the Shareholders shall be deemed adopted if approved by an Ordinary Majority. In the event of a tie vote, the proposed resolution shall be rejected. The chairperson of a General Meeting shall have no additional or casting vote.

38.2 The Board of Directors may determine, in its discretion, the matters that may be voted at the General Meeting by written ballot in addition to those matters required to be voted on by written ballot by applicable law.

38.3 Every matter submitted to a General Meeting shall be decided by a count of votes.

38.4 Minutes of each meeting of the Shareholders shall be recorded and duly entered in books provided for that purpose. Such minutes shall, in all events, set forth the names of the persons present at the meeting and all resolutions adopted thereat. Any minutes as aforesaid, if purporting to be signed by the chairperson of the General Meeting shall constitute *prima facie* evidence of the matters recorded therein.

38.5 Subject to the provisions of the Companies Law, a defect in convening or conducting a General Meeting, including a defect deriving from the non-fulfillment of any provision or condition set forth in the Companies Law or these Articles, including with regard to the manner of convening or conducting the General Meeting, shall not disqualify any resolution passed at the General Meeting and shall not affect the discussions or decisions which took place thereat.

39. Power to Adjourn.

39.1 The Chairperson of a General Meeting at which a quorum is present may, with the consent of an Ordinary Majority of the Shareholders participating in such meeting in person or by proxy and that participate in such vote (and shall if so directed by an Ordinary Majority at the meeting), adjourn the meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting except business which might lawfully have been transacted at the meeting as originally called. Subject to these Articles, it shall not be necessary to give any notice of an adjournment unless the meeting is adjourned for more than twenty-one (21) days, in which event notice thereof shall be given in the manner required for the meeting as originally called.

39.2 Where a General Meeting has been adjourned without changing its agenda, to a date which is not more than twenty- one (21) days, notices shall be given for the new date, as early as possible, and by no later than seventy-two (72) hours before the General Meeting.

40. Voting Power. Subject to any provision hereof conferring special rights as to voting, or restricting the right to vote, every Shareholder shall have one (1) vote for each share held by such Shareholder, on every resolution, without regard to whether the vote hereon is conducted by a show of hands, by proxy, by written ballot or by any other means.

41. Voting Rights.

41.1 Subject to the terms of applicable law, the right of a Shareholder to vote at any General Meeting (or be counted as a part of the quorum thereat), shall be subject to regulations and procedures with regard to proof of title to the shares prescribed by the Board of Directors and applicable law.

41.2 A company or other corporate body that is a Shareholder of the Company may, by resolution of its directors or any other managing body thereof, authorize any person to be its representative at any General Meeting. Any person so authorized shall be entitled to exercise on behalf of such Shareholder all the power that the latter could have exercised if it were an individual Shareholder. Upon the request of the chairperson of the General Meeting, written evidence of such authorization (in form acceptable to the chairperson) shall be delivered to the chairperson and if such authorization is not acceptable to the chairperson, then such person shall not be entitled to exercise any powers on behalf of such Shareholder.

41.3 Any Shareholder entitled to vote may vote either personally or by proxy (the holder of which proxy need not be a Shareholder of the Company), or, if the Shareholder is a company or other corporate body, by a representative authorized pursuant to Article 41.2.

41.4 If two or more persons are registered as joint holders of any share, the vote of the senior holder who tenders a vote, in person or by proxy, shall be accepted to the exclusion of the vote(s) of the other joint holder(s); and for this purpose seniority shall be determined by the order in which the names appear in the Register. Separate guardians or separate executors of estates of a deceased registered Shareholder shall be deemed, for the purposes of this Article 41.4, as joint Shareholders in such cases.

41.5 Minors and legally incompetent persons shall only be allowed to vote through their legal guardian, and any such guardian may vote as a proxy.

42. Proxy.

42.1 The instrument appointing a proxy shall be in writing and shall be substantially in the following form:

Proxy

I (Name of Shareholder) of(Address of Shareholder) being a shareholder of P.V Nano Cell Ltd. hereby appoint(Name of Proxy) of (Address of Proxy) as my proxy to vote for me in my name and stead in respect of(Amount of Shares) Ordinary Shares which are held by me, at the General Meeting of the Company to be held on the_____day of, 20_____and at any adjournment(s) thereof.

Signed this_____ day of, 20_____
(Signature of Appointer)

or in any usual or common form or in such other form as may be approved by the Board of Directors including an instrument effected through the internet or any other electronic medium and including a form which provides for a continuing proxy until the occurrence of such date or event as is specified in the proxy.

Such instrument shall be duly signed by the appointer or his or her duly authorized attorney or, if such appointer is a company or other corporate body, under its common seal or stamp or the hand of its duly authorized agent(s) or attorney(s). The Board of Directors may demand that the Company be given written confirmation, to its satisfaction, that the given signatories have the authority to bind the corporate body of the appointing Shareholder.

42.2 Unless otherwise prescribed by the Board of Directors, the instrument appointing a proxy (and the power of attorney or other authority, if any, under which such instrument has been signed) shall be delivered to the Company (at its Office, at its principal place of business, at its transfer agent, by e-mail to the address of the Company, by e-mail to the address of the transfer agent, or at such place and by such means of communication, as the Board of Directors may specify) not less than forty-eight (48) hours (or such shorter period as may be determined by the Board of Directors or the chairperson of the General Meeting) before the time fixed for the meeting at which the person named in the instrument proposes to vote. Such requirement shall not apply to electronic voting if such is permitted by the Board of Directors and in such even the Board of Directors shall determine the time-frame for such voting.

42.3 Any Shareholder who holds more than one share shall be entitled to appoint a proxy with respect to all or some of its shares or appoint more than one proxy, provided that the instrument appointing a proxy shall include the number and class of shares with respect to which it was issued and only one proxy shall be appointed with respect to any one share.

42.4 To the extent required by the Companies Law, Shareholders shall also be entitled to vote at a General Meeting by means of a written ballot, in the manner set forth in the Companies Law, on issues regarding which the Companies Law prescribes that voting in relation thereto shall be by means of a written ballot and on any other issue regarding which the Board of Directors shall expressly resolve that voting at the General Meeting on the aforesaid issue is to be permitted also by means of a written ballot, regardless of whether this is decided in relation to an issue on the agenda of a particular General Meeting or generally in relation to a particular issue.

43. Effect of Death of Appointer or Revocation of Appointment. Subject to applicable law, a vote cast pursuant to an instrument appointing a proxy shall be valid notwithstanding the previous death, liquidation or winding-up of the appointing Shareholder (or of his or her attorney-in-fact, if any, who signed such instrument), or the revocation of the appointment or the transfer of the share in respect of which the vote is cast, provided no written intimation of such death, liquidation, winding-up, evocation or transfer shall have been received by the Company or by the chairperson of the General Meeting before such vote is cast and, provided further, that the appointing Shareholder, if present in person at said meeting, may revoke the appointment by means of a writing, oral notification to the chairperson of the General Meeting, or otherwise.

44. Class Meetings. Subject to the provision of the Companies Law and other applicable laws, the provisions of these Articles relating to General Meetings shall apply, *mutatis mutandis*, to any Class Meeting.

Board of Directors

45. Powers of Board of Directors. The Board of Directors shall determine the Company's policies, oversee the activities of the Chief Executive Officer, and take such other actions as are described in these Articles, Section 92 of the Companies Law or any other applicable law.

The authority conferred on the Board of Directors by this Article 45 shall be subject to the provisions of the Companies Law, these Articles and any resolution consistent with these Articles adopted from time to time by the Company in a General Meeting, provided, however, that no such resolution shall invalidate any prior act done by or pursuant to a decision of the Board of Directors which would have been valid if such resolution had not been adopted. The Board of Directors may execute any power of the Company that is not specifically allocated by applicable law or by these Articles to another organ of the Company.

46. Exercise of Powers of Directors. A meeting of the Board of Directors at which a quorum is present shall be competent to exercise all the authorities, powers and discretions vested in or exercisable by the Board of Directors. A resolution proposed at any meeting of the Board of Directors shall be deemed adopted if approved by a majority of the Directors present when such resolution is put to a vote and voting thereon, without taking into account abstentions and with each director entitled to only one (1) vote.

The Chairperson of the Board of Directors will not have an additional or casting vote in the case of a tie. A resolution in writing signed by all directors then in office and lawfully entitled to vote thereon (as conclusively determined by the Chairperson of the Board of Directors) or to which all such directors have given their written consent (by e-mail, facsimile, letter or otherwise) and which has been signed by the Chairperson of the Board of Directors shall be deemed to have been unanimously adopted by a meeting of the Board of Directors duly convened and held.

47. Committees of the Board of Directors.

47.1 Subject to applicable law, the Board of Directors may delegate any or all of its powers to committees, each consisting of two or more persons, and it may from time to time revoke such delegation or alter the composition of any such committee. Any Committee so formed (hereinafter referred to as a "**Committee of the Board of Directors**"), shall, in the exercise of the powers so delegated, conform to any regulations imposed on it by the Board of Directors, subject to applicable law. The meetings and proceedings of any such Committee of the Board of Directors shall, *mutatis mutandis*, be governed by the provisions herein contained for regulating the meetings of the Board of Directors, so far as not superseded by any regulations adopted by the Board of Directors under this Article 47.

47.2 The Board of Directors shall determine, in the conditions of empowerment of a Committee of the Board of Directors, whether specific authorities of the Board of Directors shall be delegated to the Committees of the Board of Directors, in such manner that the decision of the Committee of the Board of Directors shall be considered tantamount to a decision of the Board of Directors, or whether the decision of the Committee of the Board of Directors shall merely constitute a recommendation, subject to the authorization of the Board of Directors.

47.3 Unless otherwise expressly provided by the Board of Directors in delegating powers to a Committee of the Board of Directors, such Committee of the Board of Directors shall not be empowered to further delegate such powers; and subject to the provisions of the Companies Law and except as otherwise prescribed by the Board of Directors, any resolution by a Committee of the Board of Directors within its authority shall be binding as if it was adopted by the Board of Directors. Nothing in this Article shall be deemed to limit the ability of the Board of Directors to otherwise delegate its powers.

47.4 A person who is not a director shall not serve in a Committee of the Board of Directors to which the Board of Directors has delegated authorities. Persons who are not members of the Board of Directors may serve in a Committee of the Board of Director whose function is merely to advise or submit recommendations to the Board of Directors.

48. Number of Directors. The number of directors serving on the Board of Directors may be determined from time to time by the Board of Directors provided however that the overall number of directors at a given time be not less than three (3) and not more than seven (7).

49. Election and Removal of Directors.

49.1 The Directors of the Company (other than any external directors elected pursuant to the Companies Law) shall be divided by the Board of Directors into three (3) classes, designated as class I, class II and class III. Each class of Directors shall consist, as nearly as possible as determined by the Board of Directors, of one-third of the total number of directors constituting the entire Board of Directors (excluding the external directors). The first term of office of the class I Directors shall expire at the annual General Meeting occurring in 2016; the first term of office of the class II Directors shall expire at the annual General Meeting in 2017; and the first term of office of the class III Directors shall expire at the annual General Meeting in 2018. Any Director whose term has expired (upon the expiring of the term of such director's class) may be reelected to the Board of Directors.

49.2 At each annual General Meeting, election or re-election of Directors following the expiration of the term of office of the Directors of a certain class, will be for a term of office that expires on the third Annual General Meeting following such election or reelection, such that from 2016 and forward, each year the term of office of only one class of Directors will expire (i.e., the term of office of Class I will initially expire at the Annual Meeting held in 2016 and thereafter at 2019, 2022 etc.). Election of directors shall be conducted by a separate vote on each candidate.

The Chief Executive Officer will be appointed ex-officio to serve as a Director.

49.3 A Director shall hold office until his or her successors are elected and qualified.(a) GTRIMG Investments Ltd. ("GTRIMG") is entitled to designate one (1) non-voting observer to the Board of Directors (the "Observer"), provided that the Observer shall not be a competitor, or employed by a competitor, of the Company. The Observer shall be entitled to attend and participate in all meetings of the Board of Directors (whether in person, by telephone or otherwise) in a non-voting, observer capacity. The Observer shall abide by the policies of the Board of Directors and shall execute a standard non-disclosure agreement to protect the Company's confidential information in reasonable form provided by the Company. Subject to the above limitations, the Observer shall be entitled to receive notice of, to attend and to receive copies of any documentation distributed to the directors before, during or after, all meetings (including any action to be taken by written consent) of the Board of Directors at the same time such notice or material is provided or delivered to members of the Board of Directors.

(b) In addition to the right to appoint an observer as set forth in Articles 49.3(a) above, in the event that and conditioned upon the conversion of the loan amount or the investment of at least US $2,000,000 following the effective date of this Amendment, GTRIMG shall be entitled to elect one (1) director to the Board of Directors of the Company. Said director shall serve as the Chairman of the Board of Directors, provided that such nominee has the required qualifications under applicable laws including the stock exchange rules then applicable.

The rights of GTRIMG under Article 49.3 (b) shall be effective as long as GTRIMG holds at least 5% of the issued and outstanding share capital of the Company.

49.4 Upon a change in the number of Directors (other than as a result of a vacancy), in accordance with the provisions hereof, any increase or decrease shall be apportioned by the Board of Directors at their discretion among the classes so as to maintain the number of Directors in each class as nearly equal as possible provided that no decrease in the number of directors constituting the Board of Directors shall shorten the term of any director presently holding office.

49.5 Any Director shall assume his or her position as Director on the date of election to the Board of Directors, unless a later date has been designated in the resolution appointing such Director.

49.6 The Board of Directors shall have the sole and exclusive power, at any time and from time to time, to appoint any person to be a Director, to fill a vacancy however created. The Board of Directors shall have the power, at any time and from time to time, to appoint any person to be a Director in addition to the existing Board, so long as the total number of Directors shall not at any time exceed the maximum number prescribed by the Articles. Any such director appointed by the Board of Directors shall be placed in a class of directors so that all classes are as nearly equal as possible. A director, appointed by the Board of Directors as aforesaid in this sub-article, shall be deemed, for all intents and purposes, as having been appointed by the Annual General Meeting, and, without derogating from the generality of the aforesaid, shall serve as a Director until the expiry of the term of office of the class to which he or she was appointed.

49.7 Subject to the provisions of Article 34.3 above, the Board of Directors (or a committee acting on its behalf, if it is authorized to do so by the Board of Directors) shall have the exclusive authority to recommend a person to be appointed as a director (which may include a person who has served as a director in the Company up to the date of the Annual General Meeting) by the Annual General Meeting. To remove any doubt, the provisions of Article 34.3 above shall not apply with respect to the appointment of external directors and only the Board of Directors or a committee thereof as aforesaid may propose candidates to be appointed as external directors at the Annual General Meeting.

49.8 The provisions of this Article 49 shall not apply to external directors which shall be elected or removed pursuant to the provisions of the Companies Law and their service as directors shall be governed by all the relevant provisions of the Companies Law which apply to external directors.

50. Subject to the foregoing, if a seat be vacated on the Board of Directors, the remaining Directors may at any time act, notwithstanding any such vacancy, provided a legal quorum exists.

51. Deleted.

52. Cessation of Office.

52.1 The office of a director shall become vacant by the director's written resignation in accordance with the procedures set forth by applicable law. Such resignation shall become effective on the date set forth in such letter of resignation, or upon the delivery thereof to the Company, whichever is later.

52.2 The office of a director shall be vacated, *ipso facto*, upon the occurrence of any of the following: (i) such director's death, (ii) such director is convicted of a crime as described in Section 232 of the Companies Law, (iii) such directors is no longer fit to serve as a director in accordance with Section 228A of the Companies Law, (iv) such director is removed by a court of law in accordance with Section 233 or the Companies Law, (v) such director becomes legally incompetent, (vi) if such director is an individual, such director is declared bankrupt, (vii) if such director's term of office has expired, (viii) if such director is a corporate entity, upon its winding-up or liquidation, whether voluntary or involuntary, or (iv) if such director is prohibited by applicable law or listing requirements from serving as a director of the Company.

52.3 The General Meeting shall be entitled, by a vote of the shareholders holding at least sixty present (60%) of the outstanding shares capital of the Company having the right to vote, voting in person or by proxy at such General Meeting, to remove any Director (other than an external director) from office prior to the expiry of his or her term in office (hereinafter: the "Removed Director"), provided that the Removed Director shall be given a reasonable opportunity to state his or her case before the General Meeting. External Directors may be removed from office only in accordance with the provisions of the Companies Law (as provide in Article 49.7 above).

53. Remuneration of Directors. Subject to the provisions of the Companies Law, the Company may pay directors remuneration and/or grant them Securities in consideration for the fulfillment of their positions as directors (and for their special services) and shall compensate its external directors pursuant to the provisions of the Companies Law. The Company may reimburse directors for their reasonable expenses for traveling, board and lodging and other expenses connected with their participation at meetings of the Board of Directors and the performance of their duties as directors.

54. Conflict of Interests. Subject to the provisions of any applicable law, the Company may enter into any contract or otherwise transact any business with any Office Holder in which contract or business such Office Holder has a personal interest, directly or indirectly; and may enter into any contract or otherwise transact any business with any third party in which contract or business an Office Holder has a personal interest, directly or indirectly. The Board of Directors shall be entitled to delegate its approval power under Section 271 of the Companies Law to a Committee of the Board of Directors or to such person it deems appropriate, whether generally, with respect to a certain contract or transaction or with respect to certain types of contracts or transactions, and the power of such committee or person shall be regarded as another method of approval within the meaning of Section 271 of the Companies Law.

Proceedings of the Board of Directors

55. Meetings. The Board of Directors may meet and adjourn its meetings and otherwise regulate such meetings and proceedings as the directors think fit, provided that the Board of Directors shall convene at least once every three (3) calendar months. Prior notice of the convening of the Board of Directors shall be given to all members of the Board of Directors a reasonable period of time before the time for the meeting, but in no event less than 48 (forty eight) hours prior notice, unless the urgency of the matter(s) to be discussed at the meeting reasonably require(s) a shorter notice period or subject to applicable law, such notice as to a particular meeting is waived in writing by all of the directors. The Board of Directors may hold meetings by use of any means of communication, on condition that all participating directors can hear each other at the same time. In the case of a resolution passed by way of a telephone call or any such other means of communication, a copy of the text of the resolution shall be sent, as soon as possible thereafter, to the directors.

56. Notices. The Chairperson shall specifying the place, date, hour and agenda of such meeting. The Company may require each director to provide it with a fax number or e-mail address to which the Company may send notices and which shall be deemed to have been received by such director upon transmission. Any notice of a meeting of the Board of Directors may be verbal, by means of a telephone call, in writing, by fax or by E-mail.

57. Quorum. Until otherwise unanimously decided by the Board of Directors, a quorum at a meeting of the Board of Directors shall be constituted by the presence, in person or by any other means of communication by which the directors may hear each other simultaneously, of a majority of the directors then in office (as conclusively determined by the Chairperson of the Board of Directors).

If within half an hour from the time appointed for the holding of a Board of Directors meeting a quorum is not present, the Board of Directors meeting shall stand adjourned to the same time and place on the next business day or to such other day, time and place as the Chairperson may appoint by notice to the Directors, and at such adjourned Board of Directors meeting the necessary quorum for the business for which the original Board meeting was called shall be at least two (2) Directors present.

58. Chairperson of the Board of Directors. The Board of Directors may from time to time (i) elect one of its members to be its Chairperson, and (ii) remove such Chairperson from office and appoint another in his place. The Board of Directors may appoint one (1) or more of its members as a deputy Chairperson of the Board of Directors, who shall serve as an acting chairperson in the Chairperson's absence.

The Chairperson shall preside at every meeting of the Board of Directors, but if he or she is not present within fifteen (15) minutes of the time fixed for the meeting, or if the appointed Chairperson has previously notified Board of Directors that he or she will not attend the meeting or is unwilling to take the chair, and the deputy Chairperson of the Board of Directors is not present or unwilling to take the chair, the directors present shall choose one of their number to be the chairperson of such meeting.

59. Validity of Acts Despite Defects. Subject to the provisions of the Companies Law, all acts done bona fide at any meeting of the Board of Directors, or of a Committee of the Board of Directors, shall be as valid as if there were no such defect or disqualification notwithstanding that it may afterwards be discovered that there was some defect in the appointment of the participants in such meetings, any of them or any person(s) acting as aforesaid or that they or any of them were disqualified or any other defect in the proceedings.

60. Minutes. Minutes of each meeting of the Board of Directors (or any Committee of the Board of Directors) shall be recorded and duly entered in books provided for that purpose. Such minutes shall set forth the names of the persons present at the meeting and all resolutions adopted thereat. Any minutes as aforesaid, if purporting to be signed by the chairperson of the meeting or by the chairperson of the next succeeding meeting, shall constitute *prima facie* evidence of the matters recorded therein.

Chief Executive Officer

61. Appointment. The Board of Directors shall appoint from time to time one or more persons, as chief executive officer(s) of the Company and may confer upon such person(s), and from time to time modify or revoke, such title(s) (including General Manager, Managing Director, Director General or any similar or dissimilar title) (the "**Chief Executive Officer**"). The appointment of the Chief Executive Officer may be either for a fixed term or without any limitation of time. Subject to the terms of the employment (or service) agreement of the Chief Executive Officer and any applicable law, the Board of Directors may from time to time remove or dismiss the Chief Executive Officer from office and appoint another or others in the Chief Executive Officer's place.

62. Subject to the Companies Law and the terms set forth in these Articles, the Chief Executive Officer shall manage the business of the Company pursuant to the policies determined by the Board of Directors.

63. The Board of Directors (and, so long as required by applicable law, the Compensation Committee, if appointed, and the Shareholders unless exempted from Shareholder approval) may from time to time determine the Chief Executive Officer's remuneration and other terms and conditions of the Chief Executive Officer's employment, subject to the terms of his employment agreement and the provisions of any applicable law. Subject to the provisions of the Companies Law, all Company employees shall be subordinate, directly or indirectly, to the Chief Executive Officer of the Company. The Chief Executive Officer of the Company shall have the right to remove any Company employee from his position and/or terminate the employment of any such employee with the Company and, subject to the provisions of the Companies Law, may delegate such powers to other employees of the Company.

Indemnity, Release and Insurance

64. Indemnity. Subject to the provisions of the Companies Law, the Company may indemnify an Office Holder, to the fullest extent permitted by applicable law, in respect of any liability imposed on the Office Holder or incurred by him in respect of any act or omission or alleged act or omission (each, an "**Action**") performed by him in his capacity as an Office Holder, in respect of the following:

64.1 Any financial liability imposed on such Office Holder or incurred by an Office Holder in favor of another person by a court judgment, including a compromise judgment or an arbitrator's award approved by court;

64.2 Reasonable litigation expenses, including without limitation attorneys' fees and the fees and expenses of investigators, accountants and other experts, expended by the Office Holder or charged to such Office Holder by court, (i) in a proceeding instituted against the Office Holder by the Company or on its behalf or by another person; or (ii) in any criminal proceeding in which the Office Holder is acquitted; or (iii) in any criminal proceeding for an offense which does not require proof of criminal intent and of which the Office Holder is convicted;

64.3 Reasonable litigation expenses, including without limitation attorneys' fees and the fees and expenses of investigators, accountants and other experts, expended by an Office Holder as a result of an investigation or proceeding instituted against the Office Holder by an authority authorized to conduct such investigation or proceeding, which: (i) is Concluded Without The Filing Of An Indictment (as defined in the Companies Law) against the Office Holder and without the imposition on the Office Holder of any Financial Obligation In Lieu of Criminal Proceedings (as defined in the Companies Law), or (ii) which is Concluded Without The Filing Of An Indictment against the Office Holder, but with the imposition on the Office Holder of a Financial Obligation In Lieu of Criminal Proceedings in respect of an offense that does not require proof of criminal intent or in connection with a financial sanction; and

64.4 A financial obligation imposed upon an Office Holder and reasonable litigation expenses, including without limitation reasonable attorney fees, expended by the Office Holder as a result of an Administrative Proceeding (as defined below) instituted against the Office Holder. Without derogating from the generality of the foregoing, such obligation or expense will include a payment which the Office Holder is obligated to make to an injured party as set forth in Section 52(54)(a)(1)(a) of the Securities Law, and expenses that the Office Holder incurred in connection with a proceeding under Chapters H'3, H'4 or I'1of the Securities Law, including reasonable legal expenses, which term includes attorney fees.

In these Articles, "**Administrative Proceeding**" shall mean a proceeding pursuant to Chapter H'3 (Imposition of Financial Sanctions by the Securities Authority), H'4 (Imposition of Administrative Enforcement Measures by the Administrative Enforcement Committee) or I'1 (Arrangement to Prevent the Initiation of Proceedings or to Conclude Proceedings, Subject to Conditions) of the Securities Law.

Subject to the provisions of the Companies Law, including the receipt of all approvals as required therein or under any other applicable law, the Company may resolve to undertake in advance to indemnify the Company's Office Holders, to the fullest extent permitted by applicable law, for those liabilities and expenses described in sub-Articles 64.1 - 64.4 provided that, with regard to those liabilities and expenses described in Article 64.1, the undertaking to indemnify will be limited to events that, in the opinion of the Board of Directors, are foreseeable in light of the Company's actual activity at the time of the undertaking, and to amounts and/or criteria that the Board of Directors has resolved that are reasonable in the circumstances, and that such limitations (of events and amounts and/or criteria) shall be indicated in the undertaking to indemnify.

Subject to the provisions of the Companies Law, if so requested by an Office Holder, and subject to the Company's right of reimbursement, the Company may advance amounts to cover such Office Holder's expenses with respect to an Actions for which such Office Holder is entitled to indemnity under sub-Articles 64.1 - 64.4 above.

The indemnity amount payable hereunder shall be in addition to any amount paid (if paid) under insurance and/or by a third party pursuant to any such indemnification arrangement.

65. Release. Subject to the provisions of the Companies Law, the Company may release, in advance, an Office Holder from liability to the Company for damages which arise from breach of such Office Holder's duty of care to the Company (as such term is defined under the Companies Law) other than with respect to liability arising out of a Prohibited Distribution (as such term is defined under the Companies Law).

66. Insurance. Subject to the provisions of the Companies Law, the Company may enter into a contract for the insurance of all or part of the liability of any Office Holder imposed on the Office Holder in respect of an act or omission or alleged act or omission performed in his capacity as an Office Holder, in respect of each of the following:

66.1 A breach of his duty of care to the Company or to another person; or

66.2 A breach of his duty of loyalty to the Company, provided that the Office Holder acted in good faith and had reasonable cause to assume that such act would not prejudice the interests of the Company; or

66.3 A financial liability imposed on the Office Holder in favor of another person; or

66.4 A financial obligation imposed upon an Office Holder and reasonable litigation expenses, including without limitation attorney fees, expended by the Office Holder as a result of an Administrative Proceeding instituted against him. Without derogating from the generality of the foregoing, such obligation or expense will include a payment which the Office Holder is obligated to make to an injured party as set forth in Section 52(54)(a)(1)(a) of the Securities Law and expenses that the Office Holder incurred in connection with a proceeding under Chapters H'3, H'4 or I'1 of the Securities Law, including reasonable legal expenses, which term includes attorney fees.

In any event in which the Company is entitled to receive insurance compensation under a liability insurance policy, it is agreed and acknowledged that the Company is authorized to provide Office Holders with priority over the Company's entitlement to receive such insurance compensation under that policy.

67. The provisions of Articles 64 to 66 above are not intended, and shall not be interpreted, to restrict the Company in any manner in respect of the procurement of insurance and/or in respect of indemnification (i) in connection with any person who is not an Office Holder, including, without limitation, any employee, agent, consultant or contractor of the Company who is not an Office Holder, and/or (ii) in connection with any Office Holder to the extent that such insurance and/or indemnification is not specifically prohibited under law; provided that the procurement of any such insurance and/or the provision of any such indemnification shall be approved by the Board of Directors of the Company.

For the purposes of Articles 64 to 66 above, the term Officer Holder shall include the Office Holders of any subsidiary of the Company.

68. In accordance with the provisions of Section 263 of the Companies Law, Articles 64 and 66 shall not apply under any of the following circumstances: (i) a breach of an Office Holder's duty of loyalty, in which the Office Holder did not act in good faith and with reasonable grounds to assume that the action in question was in the best interests of the Company; (ii) a reckless or intentional violation of an Office Holder's duty of care, excluding a breach arising out of the negligent conduct of the Office Holder; (iii) an intentional action or omission by an Office Holder in which such Office Holder intended to have unlawful personal gain; and (iv) a fine or forfeit levied against the Office Holder.

69. Any amendment to the Companies Law, the Securities Law or any other applicable law, statute or rule adversely affecting the right of any Office Holder to be indemnified or insured pursuant to Articles 64 and 66 above shall be prospective in effect, and shall not affect the Company's obligation or ability to indemnify or insure an Office Holder for any act or omission occurring prior to such amendment, unless otherwise provided by the Companies Law, the Securities Law or such other applicable law, statute or rule.

Dividends and Benefit Shares

70. Subject to the provisions of the Companies Law and these Articles, a resolution of the Company regarding a distribution of dividends or benefit shares shall be passed by the Board of Directors.

71. Any distributions of dividends, if any, will be effected on a prorated basis among the Shareholders in proportion to the number of Shares held by them, and the Board of Directors may designate an effective date for payment and entitlement.

72. The Board of Directors resolving to distribute a dividend may resolve that the dividend be paid, fully or partially, in cash or by means of distributing specific assets, including Securities or any other way, at its discretion.

73. The Board of Directors shall be able, prior to it resolving upon the distribution of dividends, to set aside from out of the profits of the Company, amounts, as it shall deem to be advisable, as a reserve fund for exceptional requirements, or for equalization of dividends or for special dividends or for the repair, the improvement or the maintenance of property of the Company, and for any other purpose as the Board of Directors, in its absolute discretion, shall deem to be beneficial to the interests of the Company; and it shall be able to invest and expend the amounts which are set aside as mentioned above in such investments and expenses which shall be found to be appropriate and from time to time to deal with these investments or expenses and to alter them and to make use of the entirety thereof or part thereof for the benefit of the Company, and it may divide the reserve fund into special funds, as it shall find to be appropriate, and to use the fund or any part thereof in the businesses of the Company, without being obligated to hold them separately from the remainder of the assets of the Company.

74. The Company shall give notice to the Registered Shareholders entitled to receive dividends in an amount of at least the NIS equivalent of $10 (ten US dollars) as at the date of declaration, to the address appearing in the Register, of his entitlement as aforesaid and shall request his instructions as to the manner of transferring the sum of the dividend to his possession. Pending receipt of instructions as aforesaid from a Registered Shareholder, such sum shall be deemed to be unclaimed and the provisions of Article 80 shall apply.

75. Implementation of Powers. The Board of Directors may settle any difficulty which may arise in regard to the distribution of dividends as it thinks expedient, and, in particular, may issue fractional certificates, and may determine that cash payments shall be made to any Shareholders, or that fractions of less value than the nominal value of one (1) share may be disregarded in order to adjust the rights of all parties, and may vest any such cash with a trustee in trust for the persons entitled to the dividend as may seem expedient to the Board of Directors.

76. Deductions from Dividends. The Board of Directors may deduct from any dividend or other moneys payable to any Shareholder in respect of a Share, any and all sums of money then payable by such Shareholder to the Company on account of any matter or transaction or as required to be paid by law.

77. Retention of Dividends. The Board of Directors may retain any dividend or other moneys payable or property distributable in respect of a Share in respect of which any person is, under these Articles, entitled to become a Shareholder, or which any person is, under these Articles, entitled to transfer, until such person shall become a Shareholder in respect of such Share or shall transfer the same.

78. Interest. No dividend or other benefit in respect of shares shall bear interest against the Company.

79. Mechanics of Payment. Any dividend or other moneys payable in cash in respect of a Share may be paid by check sent through the post to, or left at, the registered address of the Registered Shareholder or by transfer to a bank account specified by such person (or, if two or more persons are registered as joint holders of such share or are entitled jointly thereto in consequence of the death or bankruptcy of the holder or otherwise, to any one of such persons or to his bank account), or to such person and at such address as the person entitled thereto may by writing direct. Every such check shall be made payable to the order of the Registered Shareholder, or to such person as the person entitled thereto as aforesaid may direct, and payment of the check by the banker upon whom it is drawn shall be a good discharge to the Company. Every such check shall be sent at the risk of the person entitled to the money represented thereby.

80. Unclaimed Distribution. All unclaimed dividends or other moneys payable in respect of a Share may be invested or otherwise made use of by the Board of Directors for the benefit of the Company until claimed. Subject to applicable law, the payment by the Board of Directors of any unclaimed dividend or such other money into a separate account shall not constitute the Company a trustee in respect thereof, and any dividend unclaimed after a period of seven (7) years from the date of declaration of such dividend, and any such other moneys unclaimed after a like period from the date the same were payable, shall be forfeited and shall revert to the Company, provided, however, that the Board of Directors may, at its discretion, cause the Company to pay any such dividend or such other moneys, or any part thereof, to a person who would have been entitled thereto had the same not reverted to the Company.

Borrowing Powers

81. The Company may, by resolution of the Board of Directors, from time to time, raise or borrow or secure the payment of any sum or sums of money for the purposes of the Company. The Company, by resolution of the Board of Directors, may also raise or secure the payment or repayment of such sum or sums in such manner and upon such terms and conditions in all respects as it deems fit, and in particular by the issue of debentures or debenture stock of the Company charged upon all or any part of the property of the Company (both present and future) including its unissued and/or its uncalled authorized capital for the time being.

The Company may, from time to time, by resolution of the Board of Directors, borrow funds or guarantee and/or provide securities for the payment of any sum by Company or by any other third party.

The Company may, by resolution of the Board of Directors, borrow or secure the payment of such sums in the manner and under the conditions as it deems fit, whether by means of issuing debt Securities, whether against a floating charge on all or a portion of the Company's assets, whether owned at such time or in the future, including capital not yet called, against liens or other security interests of any kind. Any debt Securities may be issued at a discount or a premium or in any other matter and on such terms and conditions that the Board of Directors deems appropriate, including with conversion, redemption or allotment rights.

Signatory Rights

82. The Board of Directors shall be entitled to authorize any person or persons (who need not be an Office Holder) to act and sign on behalf of the Company, and the signature of such person(s) on behalf of the Company, together with the Company's name in print, stamp or handwriting, shall bind the Company insofar as such person(s) acted and signed within the scope of such person's authority.

Notices

83. All notices and other communications made pursuant to these Articles shall be in writing. Any notice shall be deemed to have been served three (3) Business Days after it has been posted (five (5) Business Days if sent internationally), or when actually received by the addressee if sooner. Notice given by facsimile or electronic mail or other similar form shall be deemed to have been served one (1) Business Day after being sent or when actually received by the addressee if sooner. A declaration in writing of a person authorized therefor by the Company or an authorized person from the Company's designated transfer agent stating that a notice was sent to a Shareholder shall suffice as evidence of the same for the purposes of this Article. The term "Address" means, (i) with respect to each Shareholder - such Shareholder's post address, facsimile number or email address, as the case may be, as specified in the Register; and (ii) with respect to the Company - the address of the Office.

A Shareholder may change or supplement the Address for service of any notice pursuant to these Articles, or designate additional addresses, facsimile numbers and email addresses for the purposes of this Article 83 by giving the Company a written notice of the new contact details in the manner set forth above.

If a notice is, in fact, received by the addressee, it shall be deemed to have been duly served, when received, notwithstanding that it was defectively addressed or failed, in some respect, to comply with the provisions of this Article 83. All notices to be given to the Shareholders shall, with respect to any share to which persons are jointly entitled, be given to whichever of such persons is named first in the Register, and any notice so given shall be sufficient notice to all of the holders of such Share. Any Shareholder whose address is not set forth in the Register, and who shall not have designated in writing an address for the receipt of notices, shall not be entitled to receive any notice from the Company. If notice is given in more than one of the manners specified above, it shall be deemed to have been received on the earliest date on which it is deemed to have been delivered, as provided above.

Whenever it is necessary to give notice of a particular number of days or a notice for another period, the day of delivery shall be counted in the number of calendar days or the period, unless otherwise specified.

Notwithstanding anything to the contrary contained herein and to the extent permitted under the Companies Law, notice by the Company of a General Meeting, containing the information required to be set forth in such notice under these Articles, which is published, within the time otherwise required for giving notice of such meeting, in: (i) at least two daily newspapers in the State of Israel shall be deemed to be notice of such meeting duly given, for the purposes of these Articles, to any shareholder whose address as registered in the Register (or as designated in writing for the receipt of notices and other documents) is located in the State of Israel; and (ii) one daily newspaper in the city where the Company's shares are listed and in one international wire service shall be deemed to be notice of such meeting duly given, for the purposes of these Articles, to any shareholder whose address as registered in the Register (or as designated in writing for the receipt of notices and other documents) is located outside the State of Israel.

84. Notwithstanding anything to the contrary contained herein and subject to the provisions of the Companies Law, notice to a Shareholder shall be deemed to have been duly delivered if notice is provided in any manner prescribed by applicable law.

85. Subject to applicable law, any Shareholder, director or any other person entitled to receive notice in accordance with these Articles or under applicable law, may waive notice, in advance or retroactively, in a particular case or type of cases or generally, and if so, notice will be deemed as having been duly delivered, and all proceedings or actions for which the notice was required will be deemed valid.

86. The accidental omission to give notice of a meeting to any Shareholder or the non-receipt of notice by any Shareholder entitled to receive notice shall not invalidate the proceedings at any meeting or any resolutions adopted by such meeting.

Merger and Business Combinations

87. Subject to the provisions of applicable law, if the approval of the General Meeting to a "Merger" (as defined in the Companies Law) is required by law, the "Merger" shall be approved by an Ordinary Majority at a General Meeting or at a Class Meeting, if any, as the case may be.

88.

88.1 Notwithstanding any other provision of these Articles and subject to the provisions of any applicable law, the Company shall not engage in any Business Combination (as defined below) with any Interested Shareholder (as defined below) for a period of three (3) years following the time that such shareholder became an Interested Shareholder, unless:

(i) Prior to such time the Board of Directors approved either the Business Combination or the transaction which resulted in the shareholder becoming an Interested Shareholder; or

(ii) Upon consummation of the transaction which resulted in the shareholder becoming an Interested Shareholder, the Interested Shareholder owned at least 85% of the Voting Shares (as defined below) of the Company outstanding at the time the transaction commenced.

88.2 As used in this Article only, the term:

(i) "**Affiliate**" means a Person (as defined below) that directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with another Person.

(ii) "**Associate**" when used to indicate a relationship with any Person, means: (a) any corporation, partnership, unincorporated association or other entity of which such Person is a director, officer or partner or is, directly or indirectly, the owner of twenty percent (20%) or more of any class of Voting Share; (b) any trust or other estate in which such Person has at least a twenty percent (20%) beneficial interest or as to which such Person serves as trustee or in a similar fiduciary capacity; and (c) any relative or spouse of such Person, or any relative of such spouse, who has the same residence as such Person.

(iii) "**Business Combination**" when used in reference to the Company and any Interested Shareholder of the Company, means:

(a) any merger or consolidation of the Company or any direct or indirect majority owned subsidiary of the Company with (1) an Interested Shareholder, or (2) with any other corporation, partnership, unincorporated association or other entity if the merger or consolidation is caused by an Interested Shareholder and as a result of such merger or consolidation Article 88.1 is not applicable to the surviving entity;

(b) any sale, lease, exchange, mortgage, pledge, transfer or other disposition (in one transaction or a series of transactions), except proportionately as a shareholder of such Company, to or with the Interested Shareholder, whether as part of a dissolution or otherwise, of assets of the Company or of any direct or indirect majority owned subsidiary of the Company, which assets have an aggregate market value equal to ten percent (10%) or more of either the aggregate market value of all of the assets of the Company determined on a consolidated basis or the aggregate market value of all of the outstanding shares of the Company;

(c) any transaction which results in the issuance or transfer by the Company or by any direct or indirect majority-owned subsidiary of the Company of any shares of the Company or of such subsidiary to the Interested Shareholder, except (1) pursuant to the exercise, exchange or conversion of securities exercisable for, exchangeable for or convertible into, shares of the Company or any such subsidiary, which securities were outstanding prior to the time that the Interested Shareholder became such; (2) pursuant to a dividend or distribution paid or made, or the exercise, exchange or conversion of securities exercisable for, exchangeable for or convertible into shares of the Company or any such subsidiary, which security is distributed pro-rata to all holders of shares of the Company subsequent to the time the Interested Shareholder became such; (3) pursuant to an exchange offer by the Company to purchase shares made on the same terms to all holders of said shares; or (4) any issuance or transfer of shares by the Company; provided, that in no case under (2)-(4) above shall there be an increase in the Interested Shareholder's proportionate share of the shares or of the voting shares of the Company;

(d) any transaction involving the Company or any direct or indirect majority-owned subsidiary of the Company which has the effect directly or indirectly of increasing the proportionate share of the shares of any class or series or securities convertible into the shares of any class or series of the Company or of any such subsidiary which is owned by the Interested Shareholder except as a result of immaterial changes due to fractional share adjustments or as a result of any purchase or redemption of any shares not caused, directly or indirectly, by the Interested Shareholder; or

(e) any receipt by the Interested Shareholder of the benefit, directly or indirectly (except proportionately as a shareholder of such company), of any loans, advances, guarantees, pledges or any other financial benefits (other than those expressly permitted in subparagraphs 88.2 (iii) (a) - (d) above) provided by or through the Company or any direct or indirect majority owned subsidiary.

(iv) "**Control**" including the term "Controlling", "Controlled by" and "under common control with" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of Voting Shares, by contract or otherwise. A Person who is the owner of twenty percent (20%) or more of the outstanding Voting Shares of any corporation, partnership, unincorporated association or other entity shall be presumed to have control of such entity, in the absence of proof by a preponderance of the evidence to the contrary. Notwithstanding the foregoing, a presumption of control shall not apply where such Person holds Voting Shares in good faith and not for the purpose of circumventing this Article as an agent, bank, broker, nominee, custodian or trustee for one or more owners who do not individually or as a group have control of such entity.

(v) "**Interested Shareholder**" means any person (other than the Company and any direct or indirect majority- owned subsidiary of the Company) that is the Owner of fifteen percent (15%) or more of the outstanding Voting Shares of the Company. Notwithstanding the foregoing, the term Interested Shareholder shall not include any Person whose ownership of outstanding Voting Shares in excess of the fifteen percent (15%) limitation set forth herein is the result of action taken solely by the Company; provided that such Person shall be an Interested Shareholder if thereafter such person acquires additional Voting Shares of the Company, except as a result of further corporate action not caused, directly or indirectly, by such Person. For the purpose of determining whether a person is an Interested Shareholder, the Voting Shares of the Company deemed to be outstanding shall include shares deemed to be owned by the person through application of subparagraph (ix) of this Article 88.2 but shall not include any other unissued shares of the Company which may be issuable pursuant to any agreement, arrangement or understanding, or upon exercise of conversion rights, warrants or options, or otherwise.

(vi) "**Person**" means any individual, corporation, partnership, unincorporated association or other entity.

(vii) "**Share**" means with respect to any corporation shares of its capital and with respect to any other entity any equity interest.

(viii) "**Voting Shares**" means with respect to any corporation Shares of any class or series entitled to vote generally in the election of directors and, with respect to any entity that is not a corporation, any equity interest entitled to vote generally in the election of the governing body of such entity. Every reference to a percentage of Voting Shares shall refer to such percentage of the votes of such Voting Shares.

(ix) "**Owner**" including the terms "own" and "owned", when used with respect to any Share, means a Person that individually or with or through any of its Affiliates or Associates:

(a) beneficially owns such share, directly or indirectly; or

(b) has (1) the right to acquire such share (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, warrants or options, or otherwise; provided however, that a Person shall not be deemed the owner of share tendered pursuant to a tender or exchange offer made by such Person; or any of such Person's Affiliates or Associates until such tendered shares are accepted for purchase or exchange; or (2) the right to vote such share pursuant to any agreement, arrangement or understanding; provided however, that a person shall not be deemed the owner of any share because of such person's right to vote such share if the agreement, arrangement, or understanding to vote such share arises solely from a recoverable proxy or consent given in response to a proxy or consent solicitation made to ten (10) or more Persons; or

(c) has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting (except voting pursuant to a revocable proxy or consent as described in subparagraph (ix)(b)(2) of this Article) or disposing of such Share with any other Person that beneficially owns or whose Affiliates or Associates beneficially own, directly or indirectly, such share.

Winding Up

89. If the Company is wound up on liquidation or dissolution, then, subject to applicable law, all the assets of the Company available for distribution among the Shareholders shall be distributed to them in proportion to the sum paid on account of the nominal value of the shares held by them. A voluntary winding up of the Company shall require the approval set forth in the Companies Ordinance or any other approval as may be required by any applicable law.

90. Subject to the provisions of the Companies Law and the rights attached to the various classes of shares existing in the Company, the liquidator may, by special resolution of the Company, distribute in specie among the Shareholders all or part of the surplus property, and the liquidator may further, by such special resolution, deposit any part of the surplus property with trustees who shall hold same in trust in favor of the Shareholders, as the liquidator shall deem fit.

91. In order to distribute the surplus property in specie, the liquidator may determine the value of the distributable assets and decide how such distribution shall be implemented among the Shareholders, taking into account the rights attached to Shares held by each of the Shareholders of the Company.

Amendment of these Articles

92. Subject to applicable law, any amendment of these Articles shall require a resolution to be adopted by a General Meeting of the Shareholders by shareholders holding at least a majority of the outstanding shares capital of the Company having the right to vote, voting in person or by proxy at such General Meeting, except with respect to Articles 47-49, 52.3, 55-58, 88 and 92 which shall require the approval of the shareholders holding at least sixty percent present (60%) of the outstanding shares capital of the Company having the right to vote, voting in person or by proxy at such General Meeting (a "**Special Majority**").

Subject to applicable law, and unless provided otherwise herein, a resolution passed at a General Meeting by a Special Majority which purports to amend any of the provisions set forth herein, shall be deemed a resolution to amend these Articles even if not expressly stated as such in the resolution or at the General Meeting.

Conflicting Provisions

93. As of the date that these Articles were duly adopted by the Shareholders, these Articles automatically replace and amend any and all previously adopted articles of association of the Company.

Internal Auditor

94. The internal auditor of the Company shall be appointed in accordance with the rules and regulations of the Companies Law, and shall report to the chairperson of the Board of Directors or as otherwise determined by the Board of Directors. Notwithstanding the forgoing, in even that that the chairman of the Board of Directors is an executive officer of the Company, the internal auditor shall report to the chairman of the Company's Audit Committee.

95. The internal auditor shall file with the Audit Committee (unless decided otherwise by the Board of Directors) a proposal for an annual or other periodic work plan, which shall be approved by the Audit Committee (unless decided otherwise by the Board of Directors).

Independent Auditor

96. The independent auditors of the Company shall be appointed by resolution of the Company's Shareholders at the Annual General Meeting and shall serve until its/their re-election, removal or replacement by subsequent resolution. The Board of Directors shall have the power and authority to fix the remuneration of the independent auditors for audit services as well as for other services.

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Exhibit 2.1

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

As of December 31, 2022, P.V. NANO CELL LTD. had one class of securities registered under Section 15(d) of the Securities Exchange Act of 1934, as amended: our ordinary shares. References herein to "we," "us," "our" and the "Company" refer to P.V. NANO CELL LTD. and not to any of its subsidiaries. The following description may not contain all of the information that is important to you, and we therefore refer you to our Amended and Restated Articles of Association (our "**Articles of Association**"), a copy of which is filed with the Securities and Exchange Commission (the "**SEC**") as exhibit 1.1 to this annual report on Form 20-F.

Registration Number and Purposes of the Company

Our registration number with the Israeli Companies Registrar is 514287093. Our purpose is set forth in our Articles of Association and includes any lawful activity.

Share Capital

As of December 31, 2022, our authorized share capital consists of 1,200,000,000 ordinary shares, par value NIS 0.01 per share, of which 147,134,792 were issued and outstanding.

All of our outstanding ordinary shares are validly issued, fully paid and non-assessable. Our ordinary shares do not have any preemptive rights.

Transfer of shares

Our fully paid ordinary shares are issued in registered form and may be freely transferred under our Articles of Association, unless the transfer is restricted or prohibited by another instrument, applicable law or the rules of a stock exchange on which the shares are listed for trade. The ownership or voting of our ordinary shares by non-residents of Israel is not restricted in any way by our Articles of Association or the laws of the State of Israel, except for ownership by nationals of some countries that are, or have been, in a state of war with Israel.

Election and Removal of Directors

Our Articles of Association provide for a board of directors consisting of no less than three and no more than seven directors, with all directors (other than the external directors, whose appointment is required under the Companies Law, 1999 (the "**Companies Law**"), as described below) divided into three classes with staggered three-year terms, designated as Class I, Class II and Class III, with each class of directors to consist, as nearly as possible, of one-third of the total number of directors other than the external directors. At each annual general meeting of our shareholders thereafter, the election or re-election of directors following the expiration of the term of office of the directors of that class of directors will be for a term of office that expires on the third annual general meeting following such election or re-election. Each director so elected will hold office until the annual general meeting of our shareholders for the year in which his or her term expires, unless the tenure of such director expires earlier pursuant to the Companies Law or unless he or she is removed from office as described below.

Under our Articles of Association our Chief Executive Officer, serves as an ex-officio member of our Board of Directors.

Our Articles of Association allow our board of directors to appoint directors (other than the external directors) to fill vacancies on our board of directors, however created, for a term of office equal to the remaining period of the term of office of the director(s) whose office(s) have been vacated, and to appoint any person to be a director in addition to the existing board of directors, so long as the total number of Directors shall not at any time exceed the maximum number prescribed by our Articles of Association. Any such director appointed by the board of directors shall be placed in a class of directors so that all classes are as nearly equal as possible. A director, appointed by the board of directors, shall be deemed, for all intents and purposes, as having been appointed by the annual general meeting, and, without derogating from the generality of the aforesaid, shall serve as a director until the expiry of the term of office of the class to which he or she was appointed.

Observer

Under our Articles of Association, as approved by our shareholders on November 29, 2018, GTRIMG Investments Ltd. ("**GTRIMG**"), our controlling shareholder, has the right, so long it holds at least 5% of our issued and outstanding share capital, to designate one non-voting observer to our Board of Directors, provided that the observer shall not be a competitor of ours or employed by a competitor of ours.

Chairman of the Board

Under our Articles of Association, as approved by our shareholders on November 29, 2018, GTRIMG, our controlling shareholder, has the right, so long it holds at least 5% of our issued and outstanding share capital, conditioned upon a $2 million investment by GTRIMG following such date, to appoint a director to the Board of Directors who shall also serve as the chairman of the Board, provided that such nominee has the required qualifications under applicable laws, including the stock exchange rules then applicable.

External Directors

Under the Companies Law, companies incorporated under the laws of the State of Israel whose shares are publicly traded are required to appoint at least two external directors who meet the qualification requirements set forth in the Companies Law within three months of the closing of the initial public offering.

The Companies Law provides for special approval requirements for the election of external directors. External directors must be elected by a majority vote of the shares present and voting at a shareholders meeting, provided that either (which we refer to as the "Special Majority"):

- such majority includes at least a majority of the shares held by all shareholders who are not controlling shareholders and do not have a personal interest in such election (other than a personal interest which is not derived from a relationship with a controlling shareholder), present and voting at such meeting, excluding abstainers; or

- the total number of shares of non-controlling shareholders and shareholders who do not have a personal interest in such election (other than a personal interest which is not derived from a relationship with a controlling shareholder) voting against the election of an external director does not exceed 2% of the aggregate voting rights in the company.

After an initial term of three years, an external director may be re-elected to serve in that capacity for up to two additional terms of three years each under one of two alternatives. Under the first alternative, the external director may be nominated by the board of directors, and such external director's re-election is approved by a majority of the shareholders that was required to elect such external director in such director's initial election. Under the second alternative, the external director may be nominated by a shareholder(s) holding 1% or more of the voting power and at the general meeting of shareholders such re-election is approved by a majority of those shares present and voting that are held by shareholders who are non-controlling shareholders and do not have a personal interest in the re-election, provided that such shares represent at least 2% of the total voting power in the company.

Under the Companies Law, an external director cannot be dismissed from office unless the board of directors has learned there is a concern that: (i) the external director no longer meets the statutory requirements for his appointment as an external director; or (ii) the external director is in breach of his or her duty of loyalty to the company. The board of directors shall discuss the matter no later than in the first board of directors meeting convened after the board becomes aware of such circumstances. In the event the board of directors determines that an external director ceased to comply with the requirements set forth under the Companies Law, or that he or she breached his or her duty of loyalty to the company, the board of directors shall convene a general meeting of the shareholders that shall include on the agenda a resolution for the removal from office of such external director. The removal of an external director from office by the shareholders is subject to the same Special Majority requirements for the appointment of external directors (as described above); provided, however, that the external director has been given the opportunity to present his or her position. In addition, a court of law may determine, upon a request by a director or a shareholder, to dismiss the external director after finding that such external director no longer meets the statutory requirements of an external director set forth in the Companies Law or that the external director is in breach of his or her duty of loyalty to the company.

Any committee of the board of directors that is authorized to exercise powers of the board of directors is required to include at least one external director, and the audit and compensation committees are required to all of such company's external directors.

Under the Companies Law, external directors of a company are prohibited from receiving, directly or indirectly, any compensation from the company other than for their services as external directors pursuant to the provisions and limitations set forth in regulations promulgated under the Companies Law (the "**Regulations**"), which compensation is determined prior to their appointment and may not be changed throughout the term of their service as external directors (except for certain exceptions set forth in the Regulations).

The Companies Law provides that a person is not qualified to serve as an external director if, as of the appointment date or at any time during the two years preceding his or her appointment, that person or a relative, partner or employer of that person, any person to whom that person is subordinate (whether directly or indirectly), or any entity under that person's control, had any affiliation or business relationship with the company, any controlling shareholder or relative of a controlling shareholder or an entity that, as of the appointment date is, or at any time during the two years preceding that date was, controlled by the company or by any entity controlling the company.

The term affiliation for this purpose includes (subject to certain exceptions):

- an employment relationship;
- a business or professional relationship maintained on a regular basis;
- control; and
- service as an office holder, excluding service as a director in a private company prior to the first offering of its shares to the public if such director was appointed as a director of the private company in order to serve as an external director following the public offering.

The Companies Law defines the term "office holder" of a company to include a general manager, chief business manager, deputy general manager, vice general manager, any other person assuming the responsibilities of any of these positions regardless of such person's title, a director and any other manager directly subordinate to the general manager.

The following additional qualifications apply to an external director:

- a person may not be elected as an external director if he or she is a relative of a controlling shareholder;
- if a company does not have a controlling shareholder or a holder of 25% or more of the voting power, then a person may not be elected as an external director if he or she (or his or her relative, partner, employer or any entity under his or her control) has, as of the date of the person's election to serve as an external director, any affiliation with the then chairman of the board of directors, chief executive officer, a holder of 5% or more of the issued share capital or voting power, or the most senior financial officer of the company;
- a person may not serve as an external director if he or she (or his or her relative, partner, employer, a person to whom he or she is subordinated or any entity under his or her control) has business or professional relations with anyone with whom affiliation is prohibited as described above, and even if these relations are not on a regular basis (other than immaterial relations); and
- a person may not continue to serve as an external director if he or she accepts, during his or her tenure as an external director, direct or indirect compensation from the company for his or her role as a director, other than the amounts prescribed under the Regulations, indemnification, the company's undertaking to indemnify such person and insurance coverage.

Furthermore, no person may serve as an external director if that person's professional or other activities create, or may create, a conflict of interest with that person's responsibilities as a director or otherwise interfere with that person's ability to serve as an external director or if such person is an employee of the Israel Securities Authority or of an Israeli stock exchange. Following the termination of an external director's membership on the board of directors, such former external director and his or her spouse and children may not be provided a direct or indirect benefit by the company, its controlling shareholder or any entity under its controlling shareholder's control, including serving as an executive officer or director of the company or a company controlled by its controlling shareholder and cannot be employed by or provide professional services to the company for pay, either directly or indirectly, including through a corporation controlled by that former external director, for a period of two years (the prohibition also applies to relatives of the former external director who are not his or her spouse or children, but only for a period of one year).

If at the time an external director is appointed, all members of the board of directors who are not controlling shareholders or their relatives are of the same gender, the external director must be of the other gender. A director of one company may not be appointed as an external director of another company if a director of the other company is acting as an external director of the first company at such time.

In addition, under the Companies Law, our board of directors must determine the minimum number of directors who are required to have financial and accounting expertise and a person may be appointed as an external director only if he or she either has professional qualifications or has accounting and financial expertise, provided, at least one of the external directors must be determined by our board of directors to have accounting and financial expertise. A director with financial and accounting expertise is a director who, by reason of his or her education, professional experience and skill, has a high level of proficiency in and understanding of business accounting matters and financial statements. He or she must be able to thoroughly comprehend the financial statements of the company and initiate debate regarding the manner in which financial information is presented. In determining the number of directors required to have such expertise, the board of directors must consider, among other things, the type and size of the company and the scope and complexity of its operations.

A director with accounting and financial expertise is a director who, due to his or her education, experience and skills, possesses a high degree of proficiency in, and an understanding of, business-accounting matters and financial statements, such that he or she is able to understand the financial statements of the company, in depth, and initiate a discussion about the manner of presentation of the financial data. A director is deemed to have professional qualifications if he or she has any of (i) an academic degree in economics, business management, accounting, law or public administration, (ii) an academic degree or has completed another form of higher education in the primary field of business of the company or in a field which is relevant to his/her position in the company, or (iii) at least five years of experience serving in one of the following capacities, or at least five years of cumulative experience serving in two or more of the following capacities: (a) a senior business management position in a company with a significant volume of business; (b) a senior position in the company's primary field of business; or (c) a senior position in public administration or service. Our board of directors is charged with determining whether a director possesses financial and accounting expertise or professional qualifications.

Dividend and Liquidation Rights

We have never declared or paid any cash dividends on our ordinary shares and do not anticipate paying any cash dividends in the foreseeable future.

We may declare a dividend to be paid to the holders of our ordinary shares in proportion to their respective shareholdings. Under the Companies Law, dividend distributions are determined by the board of directors and do not require the approval of the shareholders of a company unless the company's articles of association provide otherwise. Our Articles of Association do not require shareholder approval of a dividend distribution and provide that dividend distributions may be determined by our board of directors.

Pursuant to the Companies Law, the distribution amount is limited to the greater of retained earnings or earnings generated over the two most recent fiscal years, according to our then last reviewed or audited financial statements, provided that the end of the period to which the financial statements relate is not more than six months prior to the date of the distribution. If we do not meet such criteria, then we may distribute dividends only with court approval. In each case, we are only permitted to distribute a dividend if our board of directors and the court, if applicable, determines that there is no reasonable concern that payment of the dividend will prevent us from satisfying our existing and foreseeable obligations as they become due.

In the event of our liquidation, after satisfaction of liabilities to creditors, our assets will be distributed to the holders of our ordinary shares in proportion to their shareholdings. This right, as well as the right to receive dividends, may be affected by the grant of preferential dividend or distribution rights to the holders of a class of shares with preferential rights that may be authorized in the future.

Exchange Controls

There are currently no Israeli currency control restrictions on remittances of dividends on our ordinary shares, proceeds from the sale of the shares or interest or other payments to non-residents of Israel, except for shareholders who are subjects of countries that are, or have been, in a state of war with Israel.

General Meetings of Shareholders

Under Israeli law, we are required to hold an annual general meeting of our shareholders once every calendar year that must be held no later than 15 months after the date of the previous annual general meeting. All meetings other than the annual general meeting of shareholders are referred to in Articles of Association as special general meetings. Our board of directors may call special general meetings whenever it sees fit, at such time and place, within or outside of Israel, as it may determine. In addition, the Companies Law provides that our board of directors is required to convene a special general meeting upon the written request of (i) any two or more of our directors or one-quarter or more of the members of our board of directors or (ii) one or more shareholders holding, in the aggregate, either (a) 5% or more of our outstanding issued shares and 1% or more of our outstanding voting power or (b) 5% or more of our outstanding voting power. Our Articles of Association contain procedural guidelines and disclosure items with respect to the submission of shareholder proposals for shareholder meetings.

Subject to the provisions of the Companies Law and the regulations promulgated thereunder, shareholders entitled to participate and vote at general meetings are the shareholders of record on a date to be decided by the board of directors, which may generally be between four and 21 days prior to the date of the meeting, and in certain circumstances, between four and 40 days prior to the date of the meeting. Furthermore, the Companies Law requires that resolutions regarding the following matters must be passed at a general meeting of our shareholders:

- amendments to our articles of association;
- appointment or termination of our auditors;
- appointment of external directors;
- approval of certain related party transactions;
- increases or reductions of our authorized share capital;
- a merger; and
- the exercise of our board of director's powers by a general meeting, if our board of directors is unable to exercise its powers and the exercise of any of its powers is required for our proper management.

The Companies Law requires that a notice of any annual general meeting or special general meeting be provided to shareholders at least 21 days prior to the meeting and if the agenda of the meeting includes the appointment or removal of directors, the approval of transactions with office holders or interested or related parties, or an approval of a merger, notice must be provided at least 35 days prior to the meeting. Under the Companies Law and our amended and restated articles of association, shareholders are not permitted to take action by way of written consent in lieu of a meeting.

Voting Rights

All of our ordinary shares have identical voting and other rights in all respects.

Quorum

Pursuant to our amended and restated articles of association, holders of our ordinary shares have one vote for each ordinary share held on all matters submitted to a vote before the shareholders at a general meeting. The quorum required for our general meetings of shareholders consists of at least two shareholders (not in default in payment of any sum) present in person, by proxy or written ballot who hold or represent between or among them at least 25% of the total our issued share capital. If within thirty minutes from the time appointed for the general meeting the requisite quorum is not present, the meeting shall be dissolved, but shall stand adjourned to the same day in the next week at the same time the following week and at the same place or to a later date, if so specified in advance in the notice of the general meeting. All matters for which the general meeting was summoned shall be discussed at the adjourned meeting, and subject to a limited exception, any number of shareholders present in person or by proxy shall constitute a lawful quorum.

Vote Requirements

Our Articles of Association provide that all resolutions of our shareholders require a simple majority vote, unless otherwise required by the Companies Law or by our amended and restated articles of association. Under our Articles of Association, the alteration of the rights, privileges, preferences or obligations of any class of our shares requires a simple majority of the class so affected (or such other percentage of the relevant class that may be set forth in the governing documents relevant to such class), in addition to the ordinary majority vote of all classes of shares voting together as a single class at a shareholder meeting. Our Articles of Association also provide that a change to the provisions related to the committees of our board of directors, the number of directors, the election or removal of any director from office, the proceedings of our board of directors, mergers and business combinations, the winding up of the Company, and the amendment of our Articles of Association, require the vote of at least 60% of our outstanding share capital having the right to vote, voting in person or by proxy at such general meeting.

Access to corporate records

Under the Companies Law, all shareholders generally have the right to review minutes of our general meetings, our shareholder register, including with respect to material shareholders, our articles of association, our financial statements, other documents as provided in the Companies Law, and any document we are required by law to file publicly with the Israeli Companies Registrar or the Israel Securities Authority. Any shareholder who specifies the purpose of its request may request to review any document in our possession that relates to any action or transaction with a related party which requires shareholder approval under the Companies Law. We may deny a request to review a document if we determine that the request was not made in good faith, that the document contains a commercial secret or a patent or that the document's disclosure may otherwise impair our interests.

Acquisitions under Israeli law

Merger

The Companies Law permits merger transactions if approved by each party's board of directors and, unless certain requirements described under the Companies Law are met, by a majority vote of each party's shares, and, in the case of the target company, a majority vote of each class of its shares, voted on the proposed merger at a shareholders meeting. The board of directors of a merging company is required pursuant to the Companies Law to discuss and determine whether in its opinion there exists a reasonable concern that as a result of a proposed merger, the surviving company will not be able to satisfy its obligations towards its creditors, such determination taking into account the financial status of the merging companies. If the board of directors has determined that such a concern exists, it may not approve a proposed merger. Following the approval of the board of directors of each of the merging companies, the boards of directors must jointly prepare a merger proposal for submission to the Israeli Registrar of Companies.

For purposes of the shareholder vote, unless a court rules otherwise, the merger will not be deemed approved if a majority of the shares represented at the shareholders meeting that are held by parties other than the other party to the merger, or by any person (or group of persons acting in concert) who holds (or hold, as the case may be) 25% or more of the outstanding shares or the right to appoint 25% or more of the directors of the other party, vote against the merger. If the transaction would have been approved but for the separate approval of each class or the exclusion of the votes of certain shareholders as provided above, a court may still approve the merger upon the request of holders of at least 25% of the voting rights of a company, if the court holds that the merger is fair and reasonable, taking into account the value of the parties to the merger and the consideration offered to the shareholders. Pursuant to the Companies Law, if a merger is with a company's controlling shareholder or if the controlling shareholder has a personal interest in the merger, then the merger is instead subject to the same special majority approval that governs all extraordinary transactions with controlling shareholders.

In addition, under our Articles of Association, the Company shall not engage in any business combination with any interested shareholder for a period of three years following the time that such shareholder became an interested shareholder, unless either prior to such time the Board of Directors approved either the business combination or the transaction which resulted in the shareholder becoming an Interested Shareholder; or upon consummation of the transaction which resulted in the shareholder becoming an interested shareholder, the interested shareholder owned at least 85% of the voting shares of the Company outstanding at the time the transaction commenced.

Under the Companies Law, each merging company must send a copy of the proposed merger plan to its secured creditors. Unsecured creditors are entitled to receive notice of the merger pursuant to regulations promulgated under the Companies Law. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations the target company. The court may further give instructions to secure the rights of creditors.

In addition, a merger may not be completed unless at least fifty days have passed from the date that a proposal for approval of the merger was filed with the Israeli Companies Registrar and thirty days from the date on which the merger was approved by the shareholders of each party.

Full tender offer

A person wishing to acquire shares of a public Israeli company and who would as a result hold over 90% of the target company's issued and outstanding share capital, or of a certain class of shares, is required by the Companies Law to make a tender offer to all of the company's shareholders or the shareholders who holds shares of the same class for the purchase of all of the issued and outstanding shares of the company or of the same class, as applicable.

If the shareholders who do not respond to or accept the offer hold less than 5% of the issued and outstanding share capital of the company or of the applicable class of the shares, and more than half of the shareholders who do not have a personal interest in the offer accept the offer, all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. However, a tender offer will also be accepted if the shareholders who do not accept the offer hold less than 2% of the issued and outstanding share capital of the company or of the applicable class of shares.

Upon a successful completion of such a full tender offer, any shareholder that was an offeree in such tender offer, whether the shareholder accepted the tender offer or not, may, within six months from the date of acceptance of the tender offer, petition the Israeli court to determine whether the tender offer was for less than fair value and that the fair value should be paid as determined by the court. However, under certain conditions, the offeror may include in the terms of the tender offer that an offeree who accepted the offer will not be entitled to petition the Israeli court as described above.

If the full tender offer was not accepted in accordance with the above alternatives, the acquirer may not acquire shares of the company that will increase its holdings to more than 90% of the company's voting rights or issued and outstanding share capital or of the applicable class from shareholders who accepted the tender offer.

Special tender offer

The Companies Law provides that an acquisition of shares of a public Israeli company must be made by means of a special tender offer if as a result of the acquisition the purchaser would become a holder of at least 25% of the voting rights in the company. This rule does not apply if there is already another holder of at least 25% of the voting rights in the company. Similarly, the Companies Law provides that an acquisition of shares in a public company must be made by means of a tender offer if as a result of the acquisition the purchaser would become a holder of more than 45% of the voting rights in the company, if there is no other shareholder of the company who holds more than 45% of the voting rights in the company, subject to certain exceptions.

A special tender offer must be extended to all shareholders of a company but the offeror is not required to purchase shares representing more than 5% of the voting power attached to the company's outstanding shares, regardless of how many shares are tendered by shareholders. A special tender offer may be consummated only if (i) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror and (ii) the number of shares tendered by shareholders who accept the offer exceeds the number of shares whose holders objected to the offer (excluding the purchaser and its controlling shareholders, holders of 25% or more of the voting rights in the company or any person having a personal interest in the acceptance of the tender offer or any other person acting on their behalf, including relatives and entities under such person's control). If a special tender offer is accepted, then (i) shareholders who did not respond to or that had objected to the offer may accept the offer within four days of the last date set for the acceptance of the offer and they will be considered to have accepted the offer from the first day it was made, and (ii) the purchaser or any person or entity controlling it or under common control with the purchaser or such controlling person or entity may not make a subsequent tender offer for the purchase of shares of the target company and may not enter into a merger with the target company for a period of one year from the date of the offer, unless the purchaser or such person or entity undertook to effect such an offer or merger in the initial special tender offer.

In the event that a special tender offer is made, a company's board of directors is required to express its opinion on the advisability of the offer, or shall abstain from expressing any opinion if it is unable to do so, provided that it gives the reasons for its abstention. In addition, the board of directors must disclose any personal interest each member of the board of directors has in the offer or stems therefrom. An office holder in a target company who, in his or her capacity as an office holder, performs an action the purpose of which is to cause the failure of an existing or foreseeable special tender offer or is to impair the chances of its acceptance, is liable to the potential purchaser and shareholders for damages resulting from his or her acts, unless such office holder acted in good faith and had reasonable grounds to believe he or she was acting for the benefit of the company. However, office holders of the target company may negotiate with the potential purchaser in order to improve the terms of the special tender offer, and may further negotiate with third parties in order to obtain a competing offer.

Shares purchased in contradiction to the tender offer rules under the Companies Law, as described above, will have no rights and will become dormant shares.

Anti-Takeover Measures under Israeli Law

The Companies Law allows us to create and issue shares having rights different from those attached to our ordinary shares, including shares providing certain preferred rights with respect to voting, distributions or other matters and shares having preemptive rights. No preferred shares are currently authorized under our Articles of Association. In the future, if we do authorize, create and issue a specific class of preferred shares, such class of shares, depending on the specific rights that may be attached to it, may have the ability to frustrate or prevent a takeover or otherwise prevent our shareholders from realizing a potential premium over the market value of their ordinary shares. The authorization and designation of a class of preferred shares will require an amendment to our Articles of Association, which requires the prior approval of the holders a majority of more than 50% of all the actual votes cast by the shareholders present (either in person, through proxy or through written ballot), and entitled to vote on the relevant proposal. The convening of the meeting, the shareholders entitled to participate and the majority vote required to be obtained at such a meeting will be subject to the requirements set forth in the Companies Law and our Articles of Association as described above under "—Voting Rights." In addition, we have a classified board structure, which will effectively limit the ability of any investor or potential investor or group of investors or potential investors to gain control of our board of directors.

Borrowing Powers

Pursuant to the Israeli Companies Law and our amended articles of association, our board of directors may exercise all powers and take all actions that are not required under law or under our amended articles of association to be exercised or taken by our shareholders, including the power to borrow money for company purposes.

Changes in Capital

Our amended and restated articles of association enable us to increase or reduce our share capital. Any such changes are subject to Israeli law and must be approved by a resolution duly passed by our shareholders at a general meeting by voting on such change in the capital. In addition, transactions that have the effect of reducing capital, such as the declaration and payment of dividends in the absence of sufficient retained earnings or profits, require the approval of both our board of directors and an Israeli court.

Establishment

We were incorporated under the laws of the State of Israel on June 24, 2009. We are registered with the Israeli Registrar of Companies in Jerusalem.

Transfer Agent and Registrar

The transfer agent and registrar for our ordinary shares is Vstock Transfer, LLC. Its address is 18 Lafayette Place Woodmere, New York 11598, and its telephone number is (212) 828-8436.

Listing

Our Registration Statement on Form F-1 was declared effective by the SEC on September 30, 2015, and a FINRA-registered market maker subsequently filed an application on Form 211 with FINRA to quote the ordinary shares on the OTCQB. On March 31, 2016, the application on Form 211 with FINRA to make a market in our ordinary shares was approved by FINRA, and on December 15, 2016, quotation of our ordinary shares began on the OTCQB under the ticker symbol “PVNNF”. On December 18, 2019, our ordinary shares began to be quoted on the OTC Pink. However, due to lack of available resources, we have not been able to comply in a timely manner with our SEC periodic filing obligations for the years ended December 31, 2020 and 2021. Accordingly, as of September 29, 2021, the public quote for our stock was removed from the OTC Pink. Depending on market and other conditions and the continued development of our products, we will consider applying to have our ordinary shares quoted on the OTC Pink.

Exhibit 4.17

SUBSCRIPTION AGREEMENT

This Subscription Agreement (this "**Agreement**") has been executed by the purchaser set forth on the signature page hereof (the "**Purchaser**") in connection with the private placement offering (the "**Offering**") by **P.V. Nano Cell Ltd.**, a company formed under the laws of the State of Israel (the "**Company**").

R E C I T A L S

A. The Company is making a series of sequential offerings to qualified investors for gross proceeds to the Company of up to $2.8 million, on the terms and conditions hereof.

A. Initially, the Company is offering to qualified accredited investors units of its securities for aggregate gross proceeds to the Company of up to $1.0 million (the "**Initial Offering**"), where each unit is comprised of (each, a "**Unit**" and, collectively, the "**Units**") (i) one (1) ordinary share par value NIS 0.01 per share (the "**Ordinary Shares**"), and (ii) a warrant to purchase an additional two (2) Ordinary Shares, exercisable through the earlier of (i) the closing of a subsequent offering by the Company to qualified investors of Company securities with an effective price per Ordinary Share of at least $0.20 or (ii) the second anniversary of the issuance of such warrant, in each case at a per share exercise price of $0.07, subject to adjustment, and substantially in the form of warrant attached hereto as **Appendix A** (the "**Warrant**"), at a per Unit purchase price of $0.07 (the "**Initial Offering Purchase Price**"). The Initial Offering shall be closed by no later than the close of business on October 3, 2022, at which time the Initial Offering will terminate.

B. Following the closing of the Initial Offering, the Company is offering to qualified accredited investors additional Ordinary Shares for aggregate gross proceeds to the Company of up to additional $1.0 million (the "**Follow on Offering**") at a per share purchase price of $0.07 (the "**Follow On Offering Purchase Price**"), which offering is subject to the achievement by the Company of certain pre-defined milestones as provided in **Schedule A** (the "**Milestones**") to this Agreement on or before December 31st, 2022, subject to a further extension at the discretion of the Company, to a date on or before February 28th, 2023. The Follow on Offering shall be closed by no later than the close of business on the 10th business day after the delivery of notice by the Company to the Purchaser that the Milestones have been achieved

C. Following the closing of the Follow on Offering, the Company is offering to qualified accredited investors additional Ordinary Shares for aggregate gross proceeds to the Company of up to additional $800,000 (the "**Final Offering";** together with the Initial Offering and the Follow On Offering, the "**Offering**") at a per share purchase price of $0.07 (the "**Final Offering Purchase Price**"), which offering will be subject to the achievement by the Company of certain pre-defined milestones set forth on **Schedule B** (the "**Second Level Milestones**"). The Final Offering shall be closed by no later than the close of business on the 30th business day after the delivery of notice by the Company to the Purchaser that the Second Level Milestones have been achieved.

D. Purchasers may participate in one or more Offerings on the terms and conditions provided herein.

E. The Securities (as defined below) subscribed for pursuant to this Agreement have not been registered under the Securities Act of 1933, as amended, the Israeli Securities Law - 1968, or of other similar securities law of another jurisdiction (collectively, the "**Securities Act**"). The Offering is being made on a reasonable best efforts basis to "accredited investors," as defined in Regulation D under the Securities Act in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D and to investors in an offshore transaction exempt from registration under the Securities Act and the appropriate exemptions under Israeli law.

AGREEMENT

The Company and the Purchaser hereby agree as follows:

1. **Subscription**.

1.1 Purchase and Sale of the Securities.

(a) Subject to the terms and conditions of this Agreement, the undersigned Purchaser agrees to purchase, and the Company agrees to sell and issue to such Purchaser, that number of Units or Ordinary Share, as the case may be, set forth on such Purchaser's Signature Page attached hereto.

(b) This Agreement is one of a series of subscription agreements by the Company and purchasers of Units or Ordinary Shares, as the case may be, in connection with the Initial Offering, the Follow on Offering and the Final Offering, as the case may be, for an aggregate gross proceeds of up to $2.8 million with the same terms and conditions set forth in this Agreement (each, a "**Subscription Agreement**", and collectively, the "**Subscription Agreements**").

1.2 Subscription Procedure; Closing.

(a) Closing. Subject to the terms and conditions of this Agreement, the closing of the each Offering shall take place remotely via the exchange of documents and signatures or at such other time and place as fixed by the Company (as defined in Section 2) (each, a "**Closing**").

(b) Subscription Procedure. To complete a subscription for any one or more components of the Offering, the Purchaser must fully comply with the subscription procedure provided in paragraphs a. and b of this Section on or before the applicable Closing:

(i) Subscription Documents. At or before the Closing, the Purchaser shall review, complete and execute the Signature Page to this Agreement, Investor Profile, Anti-Money Laundering Form and Investor Certification, attached hereto following the Omnibus Signature Page (collectively, the "**Subscription Documents**"), if applicable, additional forms and questionnaires distributed to the Purchaser and deliver the Subscription Documents and such additional forms and questionnaires to the party indicated thereon at the address set forth on the signature page below. Executed documents may be delivered to such party by facsimile or .pdf sent by electronic mail (e-mail).

(ii) Purchase Price. (A) Initial Purchase Price. The Purchaser shall remit to the Company the Initial Offering Purchase Price within five (5) business days from the execution and delivery by the Purchaser to the Company of the Subscription Documents by wire transfer of immediately available funds to the bank account designated by the Company, against delivery to the Purchaser of the Ordinary Shares and Warrant instruments underlying the Units. The Initial Offering shall be closed by no later than the close of business on October 3, 2022 at which time the Initial Offering will terminate.

(B) Follow on Offering Purchase Price. Within five (5) business days from the delivery by the Company's chief executive officer of a written statement to the effect that the Company has achieved the milestones specified on Schedule A hereto on or before December 31, 2022, subject to a further extension at the discretion of the Company, to a date on or before February 28, 2023. The Follow on Offering shall be closed by no later than the close of business on the 10th business day after the delivery of notice by the Company to the Purchaser that the Milestones have been achieved, at which time the Follow on Offering will terminate.

(C) Final Offering Purchase Price. Within five (5) business days from the delivery by the Company's chief executive officer of a written statement to the effect that the Company has achieved the milestones specified on Schedule B hereto, the Purchaser and the Company shall enter into good faith negotiations as to any additional milestones to be achieved by the Company as a condition precedent to the Final Offering; the Final Offering Purchase Price shall remit the Follow on Offering Purchase Price by wire transfer of immediately available funds to the Company's designated account within five (5) business days of the agreement as to any additional milestones. The Final Offering shall be closed by no later than the close of business on the 10th business day following the achievement of the Second Level Milestones. The Follow on Offering will terminate on the 30th day following the achievement of the Second Level Milestones.

To allay any doubts, the time frames above are for the existing shareholders. If such shareholders/ investors for whatever reason do not close the offerings in the time frames provided above, then the Company may approach other prospective investors with respect thereto on the same terms and conditions, including an effective per Ordinary Share purchase price of $0.07. In any event, the Offerings will terminate at the first anniversary of the execution of this Subscription Agreement.

2. **Representations and Warranties of the Company**. The Company hereby represents and warrants to the Purchaser, as of the Closing, the following:

a. Organization and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Israel, and has the requisite corporate power to own its properties and to carry on its business as now being conducted. The Company is duly qualified to do business and is in good standing in every jurisdiction in which the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified would not have a material adverse effect on the assets, business, financial condition, results of operations or future prospects of the Company taken as a whole (a "**Material Adverse Effect**").

b. Authorization, Enforcement, Compliance with Other Instruments. (i) The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement, the Warrant and any other documents or instruments in connection herewith(the "**Transaction Documents")** and to issue the Units, the underlying Ordinary Shares and Warrants comprising the Unit and the Ordinary Shares issuable upon exercise of the Warrant (collectively, the "**Securities**"), in accordance with the terms hereof and thereof; (ii) the execution and delivery by the Company of each of the Transaction Documents and the consummation by it of the transactions contemplated hereby and thereby, including, without limitation, the issuance of the Securities, have been, or will be at the time of execution of such Transaction Document by the Company, duly authorized by the Company's Board of Directors, and no further consent or authorization is, or will be at the time of execution of such Transaction Document, required by the Company, its Board of Directors or its stockholders; (iii) each of the Transaction Documents will be duly executed and delivered by the Company; and (iv) the Transaction Documents when executed will constitute the valid and binding obligations of the Company enforceable against the Company in accordance with their terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors' rights and remedies and, with respect to any rights to indemnity or contribution contained in the Transaction Documents, as such rights may be limited by state or federal laws or public policy underlying such laws.

c. Issuance of Securities. The Securities that are being issued to the Purchaser hereunder, when issued, sold and delivered in accordance with the terms and for the consideration set forth in this Agreement, will be duly and validly issued, fully paid and non-assessable, and free of restrictions on transfer other than restrictions on transfer under the Transaction Documents, applicable state and federal securities laws and liens or encumbrances created by or imposed by the Purchaser.

D. No Conflicts. The execution, delivery and performance of each of the Transaction Documents by the Company, and the consummation by the Company of the transactions contemplated hereby and thereby including issuance and sale of the Securities in accordance with this Agreement will not (i) result in a violation of the Memorandum or the Articles of Association (or equivalent constitutive document) of the Company or any of its subsidiaries or (ii) violate or conflict with, or result in a breach of any provision of, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the is a party, except for those which would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including U.S. federal and state securities laws and regulations) applicable to the Company or any subsidiary or by which any property or asset of the Company or any subsidiary is bound or affected, except for those which would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect. The Company is not in violation of or in default under, any provision of its Memorandum or Articles of Association. The Company is not in violation or breach of any term of or in default under any contract, agreement, mortgage, indebtedness, indenture, instrument, judgment, decree or order or any statute, rule or regulation applicable to the Company or any subsidiary, except for any violations, breaches or defaults which would not reasonably be expected to have, individually or on the aggregate, a Material Adverse Effect. Neither the execution and delivery by the Company of the Transaction Documents, nor the consummation by the Company of the transactions contemplated hereby or thereby, will require any notice, consent or waiver under any contract or instrument to which the Company or any subsidiary is a party or by which the Company is bound or to which any of their assets is subject, except for any notices, consents or waivers the absence of which would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

e. Absence of Litigation. There is no action, suit, claim, inquiry, notice of violation, proceeding (including any partial proceeding such as a deposition) or investigation before or by any court, public board, governmental or administrative agency, self-regulatory organization, arbitrator, regulatory authority, stock market, stock exchange or trading facility (an "**Action**") now pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its subsidiaries or any of their respective officers or directors, (i) which, together with all other Actions, would be reasonably likely to adversely affect the validity or enforceability of, or the authority or ability of the Company to perform its obligations under, this Agreement or any of the other Transaction Documents, or (ii) which, together with all other Actions, would be reasonably likely to have a Material Adverse Effect. For the purpose of this Agreement, the knowledge of the Company means the knowledge of the officers of the Company (both actual or knowledge that they would have had upon reasonable inquiry of the personnel responsible for the applicable subject matter).

f. All of the information concerning the Company set forth herein, and any other information furnished by the Company in writing to the Purchaser for use in connection with the transactions contemplated by this Agreement, is true, correct and complete in all material respects as of the date of this Agreement, and, if there should be any material change in such information prior to the Purchaser's purchase of the Securities, the Company will promptly furnish revised or corrected information to the Purchaser.

3. **Representations, Warranties and Agreements of the Purchaser**. The Purchaser, severally and not jointly with any other Purchaser, represents and warrants to, and agrees with, the Company the following:

a. The Purchaser has the knowledge and experience in financial and business matters necessary to evaluate the merits and risks of its prospective investment in the Company, and has carefully reviewed and understands the risks of, and other considerations relating to, the purchase of Securities and the tax consequences of the investment, and has the ability to bear the economic risks of the investment. The Purchaser can afford the loss of his, her or its entire investment.

b. The Purchaser is acquiring the Securities for investment for his, her or its own account and not with the view to, or for resale in connection with, any distribution thereof. The Purchaser understands and acknowledges that the Offering and sale of the Securities have not been registered under the Securities Act or any state securities laws, by reason of a specific exemption from the registration provisions of the Securities Act and applicable state securities laws, which depends upon, among other things, the bona fide nature of the investment intent as expressed herein. The Purchaser further represents that he, she or it does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to any third person with respect to any of the Securities. Subject to the provisions of Section 5 below, the Purchaser understands and acknowledges that the Offering of the Securities will not be registered under the Securities Act nor under the state securities laws on the ground that the sale of the Securities to the Purchaser as provided for in this Agreement and the issuance of securities hereunder is exempt from the registration requirements of the Securities Act and any applicable state securities laws. The Purchaser is an "accredited investor" as defined in Rule 501 of Regulation D as promulgated by the SEC under the Securities Act, for the reason(s) specified on the **Accredited Investor Certification** as completed by Purchaser, and Purchaser shall submit to the Company such further assurances of such status as may be reasonably requested by the Company. The Purchaser resides in the jurisdiction set forth on the Purchaser's Omnibus Signature Page affixed hereto. The Purchaser has not taken any of the actions set forth in, and is not subject to, the disqualification provisions of Rule 506(d)(1) of the Securities Act.

c. The Purchaser (i) if a natural person, represents that he or she is the greater of (A) 21 years of age or (B) the age of legal majority in his or her jurisdiction of residence, and has full power and authority to execute and deliver this Agreement and all other related agreements or certificates and to carry out the provisions hereof and thereof; (ii) if a corporation, partnership, limited liability company, association, joint stock company, trust, unincorporated organization or other entity, represents that such entity was not formed for the specific purpose of acquiring the Securities, such entity is duly organized, validly existing and in good standing under the laws of the state or jurisdiction of its organization, the consummation of the transactions contemplated hereby is authorized by, and will not result in a violation of state law or its charter or other organizational documents, such entity has full power and authority to execute and deliver this Agreement and all other related agreements or certificates and to carry out the provisions hereof and thereof and to purchase and hold the Securities, the execution and delivery of this Agreement has been duly authorized by all necessary action, this Agreement has been duly executed and delivered on behalf of such entity and is a legal, valid and binding obligation of such entity; or (iii) if executing this Agreement in a representative or fiduciary capacity, represents that he, she or it has full power and authority to execute and deliver this Agreement in such capacity and on behalf of the subscribing individual, ward, partnership, trust, estate, corporation, or limited liability company or partnership, or other entity for whom the Purchaser is executing this Agreement, and such individual, partnership, ward, trust, estate, corporation, or limited liability company or partnership, or other entity has full right and power to perform pursuant to this Agreement and make an investment in the Company, and represents that this Agreement constitutes a legal, valid and binding obligation of such entity. The execution and delivery of this Agreement will not violate or be in conflict with any order, judgment, injunction, agreement or controlling document to which the Purchaser is a party or by which it is bound.

d. The Purchaser understands that the Securities are being offered and sold to him, her or it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Purchaser's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Purchaser set forth herein in order to determine the availability of such exemptions and the eligibility of such Purchaser to acquire such securities. The Purchaser further acknowledges and understands that the Company is relying on the representations and warranties made by the Purchaser hereunder and that such representations and warranties are a material inducement to the Company to sell the Securities to the Purchaser. The Purchaser further acknowledges that without such representations and warranties of the Purchaser made hereunder, the Company would not enter into this Agreement with the Purchaser.

e. Unless the Purchaser has completed the Accredited Investor Certification, the Purchaser is not a U.S. Purchaser, the Purchaser is resident outside of the United States and represents;

(i) the Purchaser is knowledgeable of, or has been independently advised as to, the applicable securities laws having application in the jurisdiction in which the Purchaser is resident (the "**International Jurisdiction**") which would apply to the offer and sale of the Securities;

(ii) the Purchaser is purchasing the Securities pursuant to exemptions from prospectus or equivalent requirements under applicable laws of the International Jurisdiction or, if such is not applicable, the Purchaser is permitted to purchase the Securities under applicable securities laws of the International Jurisdiction without the need to rely on any exemptions;

(iii) the applicable laws and regulations of the International Jurisdiction do not and will not require the Company to make any filings or seek any approvals of any kind from any securities regulator of any kind in the International Jurisdiction in connection with the offer, issue, sale or resale of any of the Securities;

(iv) the purchase of the Securities by the Purchaser does not trigger:

A. any obligation to prepare and file a prospectus or similar document, or any other report with respect to such purchase in the International Jurisdiction, or

B. any continuous disclosure reporting obligation of the Companyin the International Jurisdiction, and

(v) the Purchaser will, if requested by the Issuer, deliver to the Company a certificate or opinion of local counsel from the International Jurisdiction which will confirm the matters referred to in subparagraphs (ii), (iii) and (iv) above to the satisfaction of the Issuer, acting reasonably.

f. The Purchaser understands that no public market exists for the Company's shares and that there can be no assurance that any public market for the shares will exist or continue to exist.

g. The Purchaser has received, reviewed and understood the information about the Company, and has had an opportunity to discuss the Company's business, management and financial affairs with the Company's management. The Purchaser understands that such discussions, were intended to describe the aspects of the Company's business and prospects and the Offering which the Company believes to be material, but were not necessarily a thorough or exhaustive description, and except as expressly set forth in this Agreement, the Company makes no representation or warranty with respect to the completeness of such information and makes no representation or warranty of any kind with respect to any information provided by any entity other than the Company. Some of such information may include projections as to the future performance of the Company, which projections may not be realized, may be based on assumptions which may not be correct and may be subject to numerous factors beyond the Company's control. The Purchaser acknowledges that he, she or it is not relying upon any person or entity, other than the Company and its officers and directors, in making its investment or decision to invest in the Company. Each Purchaser has sought such accounting, legal and tax advice as the Purchaser has considered necessary to make an informed investment decision with respect to his, her or its acquisition of the Securities.

h. The Purchaser acknowledges that the Company is not acting as a financial advisor or fiduciary of the Purchaser (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and no investment advice has been given by the Company or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby. The Purchaser further represents to the Company that the Purchaser's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Purchaser and the Purchaser's representatives, as well as the provisions of the Transaction Documents.

i. As of the applicable Closing, all actions on the part of Purchaser, and its officers, directors and partners, if applicable, necessary for the authorization, execution and delivery of this Agreement and the performance of all obligations of the Purchaser hereunder and thereunder shall have been taken, and this Agreement, assuming due execution by the parties hereto and thereto, constitute valid and legally binding obligations of the Purchaser, enforceable in accordance with their respective terms, subject to: (i) judicial principles limiting the availability of specific performance, injunctive relief, and other equitable remedies and (ii) bankruptcy, insolvency, reorganization, moratorium or other similar laws now or hereafter in effect generally relating to or affecting creditors' rights.

j. Purchaser represents that neither it nor, to its knowledge, any person or entity controlling, controlled by or under common control with it, nor any person having a beneficial interest in the Purchaser, nor any person on whose behalf the Purchaser is acting: (i) is a person listed in the Annex to Executive Order No. 13224 (2001) issued by the President of the United States (Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism); (ii) is named on the List of Specially Designated Nationals and Blocked Persons maintained by the U.S. Office of Foreign Assets Control; (iii) is a non-U.S. shell bank or is providing banking services indirectly to a non-U.S. shell bank; (iv) is a senior non-U.S. political figure or an immediate family member or close associate of such figure; or (v) is otherwise prohibited from investing in the Company pursuant to applicable U.S. anti-money laundering, anti-terrorist and asset control laws, regulations, rules or orders (categories (i) through (v), each a "**Prohibited Purchaser**"). The Purchaser agrees to provide the Company, promptly upon request, all information that the Company reasonably deems necessary or appropriate to comply with applicable U.S. anti-money laundering, anti-terrorist and asset control laws, regulations, rules and orders. The Purchaser consents to the disclosure to U.S. regulators and law enforcement authorities by the Company and its Affiliates and agents of such information about the Purchaser as the Company reasonably deems necessary or appropriate to comply with applicable U.S. anti-money laundering, anti-terrorist and asset control laws, regulations, rules and orders. If the Purchaser is a financial institution that is subject to the USA Patriot Act, the Purchaser represents that it has met all of its obligations under the USA Patriot Act. The Purchaser acknowledges that if, following its investment in the Company, the Company reasonably determines that the Purchaser is a Prohibited Purchaser or is otherwise engaged in suspicious activity or refuses to promptly provide information that the Company requests, the Company has the right or may be obligated to prohibit additional investments, segregate the assets constituting the investment in accordance with applicable regulations or immediately require the Purchaser to transfer the Securities. The Purchaser further acknowledges that neither the Purchaser nor any of the Purchaser's Affiliates or agents will have any claim against the Company for any form of damages as a result of any of the foregoing actions.

k. If the Purchaser is Affiliated with a non-U.S. banking institution (a "**Foreign Bank**"), or if the Purchaser receives deposits from, makes payments on behalf of, or handles other financial transactions related to a Foreign Bank, the Purchaser represents and warrants to the Company that: (1) the Foreign Bank has a fixed address, other than solely an electronic address, in a country in which the Foreign Bank is authorized to conduct banking activities; (2) the Foreign Bank maintains operating records related to its banking activities; (3) the Foreign Bank is subject to inspection by the banking authority that licensed the Foreign Bank to conduct banking activities; and (4) the Foreign Bank does not provide banking services to any other Foreign Bank that does not have a physical presence in any country and that is not a regulated Affiliate.

l. The Purchaser or its duly authorized representative realizes that because of the inherently speculative nature of businesses of the kind conducted and contemplated by the Company, the Company's financial results may be expected to fluctuate from month to month and from period to period and will, generally, involve a high degree of financial and market risk that could result in substantial or, at times, even total losses for investors in securities of the Company.

M. The Purchaser has adequate means of providing for its current and anticipated financial needs and contingencies, is able to bear the economic risk for an indefinite period of time and has no need for liquidity of the investment in the Securities and could afford complete loss of such investment.

n. The Purchaser is not subscribing for Securities as a result of or subsequent to any advertisement, article, notice or other communication, published in any newspaper, magazine or similar media or broadcast over television, radio, or the internet, or presented at any seminar or meeting, or any solicitation of a subscription by a person not previously known to the Purchaser in connection with investments in securities generally.

o. The Purchaser acknowledges that no U.S. federal or state agency or any other government or governmental agency has passed upon the Securities or made any finding or determination as to the fairness, suitability or wisdom of any investments therein.

p. All of the information concerning the Purchaser set forth herein, and any other information furnished by the Purchaser in writing to the Company for use in connection with the transactions contemplated by this Agreement, is true, correct and complete in all material respects as of the date of this Agreement, and, if there should be any material change in such information prior to the Purchaser's purchase of the Securities, the Purchaser will promptly furnish revised or corrected information to the Company.

q. The Purchaser has reviewed with its own tax advisors the U.S. federal, state, local and foreign tax consequences of this investment and the transactions contemplated by the Transaction Documents. With respect to such matters, such Purchaser relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. The Purchaser understands that it (and not the Company) shall be responsible for its own tax liability that may arise as a result of this investment or the transactions contemplated by the Transaction Documents.

R. If the Purchaser is not a United States person (as defined by Section 7701(a)(30) of the Internal Revenue Code of 1986, as amended), the Purchaser hereby represents that it has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Securities or any use of this Agreement, including (a) the legal requirements within its jurisdiction for the purchase of the Securities; (b) any foreign exchange restrictions applicable to such purchase; (c) any governmental or other consents that may need to be obtained; and (d) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the Securities. The Purchaser's subscription and payment for and continued beneficial ownership of the Securities will not violate any applicable securities or other laws of the Purchaser's jurisdiction.

S. The Purchaser has not acquired the Securities as a result of, and will not itself engage in, any "directed selling efforts" (as defined in Regulation S) in the United States in respect of any of the Securities which would include any activities undertaken for the purpose of, or that could reasonably be expected to have the effect of, conditioning the market in the United States for the resale of any of the Securities, provided, however, that the Purchaser may sell or otherwise dispose of any of the Securities pursuant to registration of any of the Securities pursuant to the 1933 Act and any applicable securities laws or under an exemption from such registration requirements

t. **(For ERISA plans only)** The fiduciary of the Employee Retirement Income Security Act of 1974 ("**ERISA**") plan (the "**Plan**") represents that such fiduciary has been informed of and understands the Company's investment objectives, policies and strategies, and that the decision to invest "plan assets" (as such term is defined in ERISA) in the Company is consistent with the provisions of ERISA that require diversification of plan assets and impose other fiduciary responsibilities. The Purchaser fiduciary or Plan (a) is responsible for the decision to invest in the Company; (b) is independent of the Company or any of its Affiliates; (c) is qualified to make such investment decision; and (d) in making such decision, the Purchaser fiduciary or Plan has not relied primarily on any advice or recommendation of the Company or any of its Affiliates.

u. Neither the Purchaser nor, to the Purchaser's knowledge, any of its directors, executive officers, other officers that may serve as a director or officer of any company in which it invests, general partners or managing members is subject to any Disqualification Events, except for Disqualification Events covered by Rule 506(d)(2)(ii) or (iii) under the Securities Act, and disclosed in writing in reasonable detail to the Company.

V. The Purchaser understands that there are substantial restrictions on the transferability of the Securities and that the certificates representing the Securities shall bear a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such certificates or other instruments):

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR ANY STATE SECURITIES LAWS, AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE UNDER THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) AN EXEMPTION FROM SUCH REGISTRATION EXISTS AND THE COMPANY RECEIVES AN OPINION OF COUNSEL, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR APPLICABLE STATE SECURITIES LAWS OR (3) SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT.

x. If the Purchaser is an individual, then the Purchaser resides in the state or province identified in the address of the Purchaser set forth on such Purchaser's Omnibus Signature Page to this Agreement; if the Purchaser is a partnership, corporation, limited liability company or other entity, then the office or offices of the Purchaser in which its principal place of business is identified in the address or addresses of the Purchaser set forth on such Purchaser's Omnibus Signature Page to this Agreement.

4. **Conditions to Closing.**

The Company's obligation to complete the sale and issuance of the Securities at each Closing shall be subject to the following conditions to the extent not waived by the Company:

a. Receipt of Payment. The Company shall have received payment, by wire transfer of immediately available funds, of the Initial Purchase Price, the Follow On Purchase Price and the Final Purchase Price, as the case may be, for the Securities then being purchased by such Purchaser at such Closing.

b. Representations and Warranties. The representations and warranties made by the Purchaser in Section 3 hereof shall be true and correct in all respects when made, and shall be true and correct in all respects on the applicable Closing date with the same force and effect as if they had been made on and as of said date.

c. Performance. The Purchaser shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the applicable Closing.

d. Receipt of Executed Documents. The Purchaser shall have executed and delivered to the Company the Signature Page, the Purchaser Questionnaire.

e. Qualifications. All authorizations, approvals or permits, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Securities pursuant to this Agreement shall be obtained and effective as of such Closing except for Blue Sky law permits and qualifications that may be properly obtained after such Closing.

The Purchaser's obligation to purchase the Securities at the Closing shall be subject to the following conditions to the extent not waived by the Purchaser:

(i) Representations and Warranties. The representations and warranties made by the Company in Section 2 hereof shall be true and correct in all respects when made, and shall be true and correct in all respects on the applicable Closing date with the same force and effect as if they had been made on and as of said date.

(ii) Performance. The Company shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the applicable Closing.

(iii) Receipt of Executed Documents. The Company shall have executed and delivered to the Purchaser the Acceptance Page to this Subscription Agreement.

5. Registration. Within 45 business days after the filing of the annual report on Form 20-F with the SEC, the Company shall file a registration statement on Form F-1 under the Securities Act covering the resale by the Purchaser of all Registrable Securities held by the Purchaser.

"Registrable Securities" shall mean (i) the Ordinary Share included in the Units purchased by the Purchaser hereunder and (ii) the shares of Ordinary Shares issuable upon conversion of the Warrants.

The Company shall use its best efforts to cause the Registration Statement to be declared effective under the Securities Act as promptly as practicable after the filing thereof and to keep such Registration Statement continuously effective under the Securities Act until such date as is the earlier of (x) the date when all Registrable Securities covered by such Registration Statement have been sold or (y) the date on which the Registrable Securities may be sold pursuant to Rule 144(k) as determined by the counsel to the Company pursuant to a written opinion letter, addressed to the Company's transfer agent to such effect.

6. **Reserved**.

7. **Non-Revocability; Binding Effect**. The subscription hereunder may not be revoked prior to the Closing thereon provided the Company countersigns this Subscription Agreement within three business days from its receipt thereof. The Purchaser hereby acknowledges and agrees that this Agreement shall survive the death or disability of the Purchaser and shall be binding upon and inure to the benefit of the parties and their heirs, executors, administrators, successors, legal representatives and permitted assigns. If the Purchaser is more than one person, the obligations of the Purchaser hereunder shall be joint and several and the agreements, representations, warranties and acknowledgments herein shall be deemed to be made by and be binding upon each such person and such person's heirs, executors, administrators, successors, legal representatives and permitted assigns. For the purposes of this Agreement, "**Business Day**" means a day, other than a Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

8. **Miscellaneous**.

a. Modification**.** This Agreement shall not be amended, modified or waived except by an instrument in writing signed by the Company and the Purchaser.

b. No Third-Party Beneficiary**.** This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

c. Notices**.** Any notice, consents, waivers or other communication required or permitted to be given hereunder shall be in writing and will be deemed to have been delivered: (i) upon receipt, when personally delivered; (ii) upon receipt when sent by certified mail, return receipt requested, postage prepaid; (iii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party; (iv) when sent, if by e- mail, (provided that such sent e-mail is kept on file (whether electronically or otherwise) by the sending party and the sending party does not receive an automatically generated message from the recipient's e- mail server that such e-mail could not be delivered to such recipient); or (v) one (1) Business Day after deposit with an overnight courier service with next day delivery specified, in each case, properly addressed to the party to receive the same. The addresses, facsimile numbers and email addresses for such communications shall be:

(a) if to the Company, at

P.V. Nano Cell Ltd.
8 Hamasger St., PO Box 236
Migdal Ha-Emek, 2310102, Israel
Email: info@pvnanocell.com

with copies (which shall not constitute notice) to:

Aboudi Legal Group PLLC
745 Fifth Avenue
New York, NY 10151
Attention: David Aboudi

E-mail: david@aboudilegal.com

(b) if to the Purchaser, at the address set forth on the Signature Page hereof (or, in either case, to such other address as the party shall have furnished in writing in accordance with the provisions of this Section). Any notice or other communication given by certified mail shall be deemed given at the time of certification thereof, except for a notice changing a party's address which shall be deemed given at the time of receipt thereof.

d. Assignability**.** This Agreement and the rights, interests and obligations hereunder are not transferable or assignable by the Purchaser, and the transfer or assignment of the Shares shall be made only in accordance with all applicable laws.

e. Applicable Law**.** This Agreement shall be governed by and construed in accordance with the laws of the State of Israel, without reference to the principles thereof relating to the conflict of laws. The parties hereby submit to the exclusive jurisdiction of the appropriate court in the Tel Aviv Jaffa District.

f. RESERVED

g. This Agreement, all exhibits, schedules and attachments hereto and thereto and any confidentiality agreement between the Purchaser and the Company, constitute the entire agreement between the Purchaser and the Company with respect to the Offering and supersede all prior oral or written agreements and understandings, if any, relating to the subject matter hereof. The terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by a written document executed by the party entitled to the benefits of such terms or provisions.

h. If the Securities are certificated and any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, at the Purchaser's expense the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof, or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company and the Company's transfer agent of such loss, theft or destruction and the execution by the holder thereof of a customary lost certificate affidavit of that fact and an agreement to indemnify and hold harmless the Company and the Company's transfer agent for any losses in connection therewith or, if required by the transfer agent, a bond in such form and amount as is required by the transfer agent. The applicants for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs associated with the issuance of such replacement Securities. If a replacement certificate or instrument evidencing any Securities is requested due to a mutilation thereof, the Company may require delivery of such mutilated certificate or instrument as a condition precedent to any issuance of a replacement.

i. Each of the parties hereto shall pay its own fees and expenses (including the fees of any attorneys, accountants, appraisers or others engaged by such party) in connection with this Agreement and the transactions contemplated hereby, whether or not the transactions contemplated hereby are consummated.

j. This Agreement may be executed in one or more original or facsimile or by an e-mail which contains a portable document format (.pdf) file of an executed signature page counterparts, each of which shall be deemed an original, but all of which shall together constitute one and the same instrument and which shall be enforceable against the parties actually executing such counterparts. The exchange of copies of this Agreement and of signature pages by facsimile transmission or in .pdf format shall constitute effective execution and delivery of this Agreement as to the parties and may be used in lieu of the original Agreement for all purposes. Signatures of the parties transmitted by facsimile or by e-mail of a document in pdf format shall be deemed to be their original signatures for all purposes.

k. Each provision of this Agreement shall be considered separable and, if for any reason any provision or provisions hereof are determined to be invalid or contrary to applicable law, such invalidity or illegality shall not impair the operation of or affect the remaining portions of this Agreement.

l. The Purchaser hereby agrees to furnish the Company such other information as the Company may reasonably request prior to the applicable Closing with respect to its subscription hereunder.

m. The representations and warranties of the Company and each Purchaser contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement for a period of one (1) year from the date of the Initial Closing and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the Purchasers or the Company.

n. Public Disclosure**.** Neither the Purchaser nor any officer, manager, director, member, partner, stockholder, employee, Affiliate, Affiliated person or entity of the Purchaser shall make or issue any press releases or otherwise make any public statements or make any disclosures to any third person or entity with respect to the transactions contemplated herein and will not make or issue any press releases or otherwise make any public statements of any nature whatsoever with respect to the Company without the Company's express prior approval (which may be withheld in the Company's sole discretion), except to the extent such disclosure is required by law, request of the staff of the SEC or of any regulatory agency or principal trading market regulations.

o. Independent Nature of Each Purchaser's Obligations and Rights. For avoidance of doubt, the obligations of the Purchaser under this Agreement are several and not joint with the obligations of any other Purchaser, and the Purchaser shall not be responsible in any way for the performance of the obligations of any other Purchaser under any other Subscription Agreement. Nothing contained herein and no action taken by the Purchaser shall be deemed to constitute the Purchaser as a partnership, an association, a joint venture, or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by this Agreement and any other Subscription Agreements. The Purchaser shall be entitled to independently protect and enforce its rights, including without limitation the rights arising out of this Agreement, and it shall not be necessary for any other Purchaser to be joined as an additional party in any proceeding for such purpose.

[Signature page follows.]

SIGNATURE PAGE FOR THE INITIAL OFFERING

IN WITNESS WHEREOF, the Purchaser hereby irrevocably subscribes for and agrees to purchase from Securities in the amount set forth below as of the _ day of _____, 2022.

$ 0.07	=	$
Number of Units $ per Unit		**Purchase Price**

PURCHASER (individual)

Signature

Print Name

Signature (if Joint Tenants or Tenants in Common)

Address of Principal Residence:

Social Security Number(s):

Telephone Number:

Facsimile Number:

E-mail Address:

PURCHASER (entity)

Name of Entity

By:
Signature

Print Name:

Title:

Address of Executive Offices:

IRS Tax Identification Number:

Telephone Number:

Facsimile Number:

E-mail Address:

SIGNATURE PAGE FOR THE FOLLOW ON OFFERING

IN WITNESS WHEREOF, the Purchaser hereby irrevocably subscribes for and agrees to purchase from Securities in the amount set forth below as of the _ day of _____, 2022.

$ 0.07	=	$
Number of Shares $ per Share		**Purchase Price**

PURCHASER (individual)

Signature

Print Name

Signature (if Joint Tenants or Tenants in Common)

Address of Principal Residence:

Social Security Number(s):

Telephone Number:

Facsimile Number:

E-mail Address:

PURCHASER (entity)

Name of Entity

By:
Signature

Print Name:

Title:

Address of Executive Offices:

IRS Tax Identification Number:

Telephone Number:

Facsimile Number:

E-mail Address:

SIGNATURE PAGE FOR THE FINAL OFFERING

IN WITNESS WHEREOF, the Purchaser hereby irrevocably subscribes for and agrees to purchase from Securities in the amount set forth below as of the _ day of _____, 2023.

$ 0.07	=	$
Number of Shares $ per Share		**Purchase Price**

PURCHASER (individual)

Signature

Print Name

Signature (if Joint Tenants or Tenants in Common)

Address of Principal Residence:

Social Security Number(s):

Telephone Number:

Facsimile Number:

E-mail Address:

PURCHASER (entity)

Name of Entity

By:
Signature

Print Name:

Title:

Address of Executive Offices:

IRS Tax Identification Number:

Telephone Number:

Facsimile Number:

E-mail Address:

ACCEPTANCE

The Company hereby accepts the Subscription (as defined herein) on the terms and conditions contained in this private placement subscription agreement (this "**Agreement**") as of the ___ day of _____, 2022 (the "**Closing Date**").

P.V. NANO CELL LTD.

Per: _____
Avi Magid, Chief Executive Officer

P.V. NANO CELL LTD.
ACCREDITED INVESTOR CERTIFICATION
For Individual Investors Only
(all Individual Investors must *INITIAL* where appropriate):

Initial I have a net worth of at least US$1 million either individually or through aggregating my individual holdings and those in which I have a joint, community property or other similar shared ownership interest with my spouse. ***(For purposes of calculating your net worth under this paragraph, (a) your primary residence shall not be included as an asset; (b) indebtedness secured by your primary residence, up to the estimated fair market value of your primary residence at the time of your purchase of the securities, shall not be included as a liability (except that if the amount of such indebtedness outstanding at the time of your purchase of the securities exceeds the amount outstanding 60 days before such time, other than as a result of the acquisition of your primary residence, the amount of such excess shall be included as a liability); and (c) indebtedness that is secured by your primary residence in excess of the estimated fair market value of your primary residence at the time of your purchase of the securities shall be included as a liability.)***

Initial I have had an annual gross income for the past two years of at least US$200,000 (or US$300,000 jointly with my spouse) and expect my income (or joint income, as appropriate) to reach the same level in the current year.

Initial I am a director or executive officer of P.V. Nano Cell Ltd.

For Non-Individual Investors (Entities)
(all Non-Individual Investors must *INITIAL* where appropriate):

Initial The investor certifies that it is a partnership, corporation, limited liability company or business trust that is 100% owned by persons who meet at least one of the criteria for Individual Investors set forth above (in which case each such person must complete the Accreditor Investor Certification for Individuals above as well the remainder of this questionnaire).

Initial The investor certifies that it is a partnership, corporation, limited liability company or business trust that has total assets of at least US$5 million and was not formed for the purpose of investing the Company.

Initial The investor certifies that it is an employee benefit plan whose investment decision is made by a plan fiduciary (as defined in ERISA § 3(21)) that is a bank, savings and loan association, insurance company or registered investment advisor.

Initial The investor certifies that it is an employee benefit plan whose total assets exceed US$5,000,000 as of the date of this Agreement.

Initial The undersigned certifies that it is a self-directed employee benefit plan whose investment decisions are made solely by persons who meet at least one of the criteria for Individual Investors.

Initial The investor certifies that it is a U.S. bank as defined in Section 3(a)(2) of the Securities Act, or any U.S. savings and loan association or other similar U.S. institution as defined in Section 3(a)(5) of the Securities Act acting in its individual or fiduciary capacity.

Initial The undersigned certifies that it is a broker-dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934.

Initial The investor certifies that it is an organization described in Section 501(c)(3) of the Internal Revenue Code with total assets exceeding US$5,000,000 and not formed for the specific purpose of investing in the Company.

Initial The investor certifies that it is a trust with total assets of at least US$5,000,000, not formed for the specific purpose of investing in the Company, and whose purchase is directed by a person with such knowledge and experience in financial and business matters that such person is capable of evaluating the merits and risks of the prospective investment.

Initial The investor certifies that it is a plan established and maintained by a state or its political subdivisions, or any agency or instrumentality thereof, for the benefit of its employees, and which has total assets in excess of US$5,000,000.

Initial The investor certifies that it is an insurance company as defined in Section 2(13) of the Securities Act of 1933, or a registered investment company.

Investor Profile
(Must be completed by Investor)
Section A - Personal Investor Information

Investor Name(s): _____
Individual executing Profile or Trustee: _____
Year of Birth: _____ Investment Experience (Years): _____
Home Street Address: _____
Home City, State & Zip Code: _____
Home Phone: _____ Home Fax: _____ mail: _____
Employer: _____
Employer Street Address: _____
Employer City, State & Zip Code: _____
Bus. Phone: _____ Bus. Fax: _____ Bus. Email: _____
Type of Business: _____
Outside Broker/Dealer:

Section B – Certificate Delivery Instructions

____ Please deliver certificate to the Employer Address listed in Section A.
____ Please deliver certificate to the Home Address listed in Section A.
____ Please deliver certificate to the following address: _____

Section C – Form of Payment –Wire Transfer

___ Wire funds from my outside account according to Section 2(b) of the Subscription Agreement.
___ The funds for this investment are rolled over, tax deferred from _____ within the allowed 60-day window.
Please check if you are a FINRA member or Affiliate of a FINRA member firm: _____

Investor Signature **Date**

ANTI MONEY LAUNDERING REQUIREMENTS

The USA PATRIOT Act

The USA PATRIOT Act is designed to detect, deter, and punish terrorists in the United States and abroad. The Act imposes new anti-money laundering requirements on brokerage firms and financial institutions. Since April 24, 2002 all brokerage firms have been required to have new, comprehensive anti-money laundering programs.

To help you understand these efforts, we want to provide you with some information about money laundering and our steps to implement the USA PATRIOT Act.

What is money laundering?
Money laundering is the process of disguising illegally obtained money so that the funds appear to come from legitimate sources or activities. Money laundering occurs in connection with a wide variety of crimes, including illegal arms sales, drug trafficking, robbery, fraud, racketeering, and terrorism.

How big is the problem and why is it important?
The use of the U.S. financial system by criminals to facilitate terrorism or other crimes could well taint our financial markets. According to the U.S. State Department, one recent estimate puts the amount of worldwide money laundering activity at $1 trillion a year.

What are we required to do to eliminate money laundering?
Under rules required by the USA PATRIOT Act, our anti-money laundering program must designate a special compliance officer, set up employee training, conduct independent audits, and establish policies and procedures to detect and report suspicious transaction and ensure compliance with such laws. As part of our required program, we may ask you to provide various identification documents or other information. Until you provide the information or documents we need, we may not be able to effect any transactions for you.

ANTI-MONEY LAUNDERING INFORMATION FORM

The following is required in accordance with the AML provision of the USA PATRIOT ACT.

(Please fill out and return with requested documentation.)

INVESTOR NAME: _____

LEGAL ADDRESS: _____

INVESTMENT OBJECTIVE: _____

FOR INVESTORS WHO ARE <u>ENTITIES</u>: TYPE OF BUSINESS: _____

<u>IDENTIFICATION & DOCUMENTATION AND SOURCE OF FUNDS:</u>

1. Please submit a copy of non-expired identification for the authorized signatory(ies) on the investment documents, showing name, date of birth, address and signature. **The address shown on the identification document MUST match the Investor's address shown on the Investor Signature Page.**

Current Driver's License or Valid Passport or Identity Card

(Circle one or more)

2. If the Investor is a corporation, limited liability company, trust or other type of entity, please submit the following requisite documents: (i) Certificate of Incorporation, By-Laws, Certificate of Formation, Operating Agreement, Trust or other similar documents for the type of entity; and (ii) Corporate Resolution or power of attorney or other similar document granting authority to signatory(ies) and designating that they are permitted to make the proposed investment.

3. Please advise where the funds were derived from to make the proposed investment:

Investments Savings Proceeds of Sale Other_____

(Circle one or more)

Signature: _____
Print Name: _____
Title (if applicable): _____
Date: _____

Schedule A

Milestones to be achieved by the Company for the remittance of the investment associated with the Follow on Offering (need to meet all the four (4) milestones based on the criteria written regarding each below):

I. Technological/application Milestones: Achievement by the Company of **ONE** of the following milestones

A. Meyer Burger, the following on the Company's printer.

Achieve Line width of 50μm on customer's provided wafers and /or reduce silver usage by 40% vs used today.

B. Avancis, Letter of approval by Avancis of process qualification on R&D printer on actual cells.

C. Tongwei, In house copper line of 20um height and < 7umohmcm

II. Business development/Sales in **ONE** of the following first milestones;

A. Achieving an additional POC in the solar industry POC plan signed and approved by customer

B. Increasing revenues

- Annual blanket order with commercial application

C. New/updated investor presentation

III. Completion and Filing of the June 30, 2022 unaudited interim consolidated Financial statements.

IV. Form F-1 Resale Registration Statement in connection with the previous $3.0 million investment readied for filing.

Schedule B

I. Filing of the FINRA Form 211.

II. And any additional milestones to be agreed upon

Appendix A

FORM OF WARRANT

THESE WARRANTS ARE NOT TRANSFERABLE

NONE OF THE SECURITIES REPRESENTED HEREBY HAVE BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "1933 ACT"), OR ANY U.S. STATE SECURITIES LAWS, AND, UNLESS SO REGISTERED, NONE MAY BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, IN THE UNITED STATES OR TO U.S. PERSONS EXCEPT IN ACCORDANCE WITH THE PROVISIONS OF REGULATION S UNDER THE 1933 ACT, PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE 1933 ACT, OR PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE 1933 ACT AND IN EACH CASE ONLY IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS.

P.V, Nano Cell Ltd.

NON-TRANSFERABLE
WARRANT CERTIFICATE

CERTIFICATE NO. ____(2022) _____

NUMBER OF WARRANTS: **RIGHT TO PURCHASE _____Shares**

THESE NON-TRANSFERABLE WARRANTS WILL EXPIRE AND BECOME NULL AND VOID
EASTERN TIME) ON THE EXPIRY DATE (AS DEFINED IN THE TERMS AND
CONDITIONS ATTACHED TO THIS WARRANT CERTIFICATE.

NON-TRANSFERABLE SHARE PURCHASE WARRANTS
TO PURCHASE ORDINARY SHARES OF P.V. NANO CELL LTD.

THE WARRANTS ARE REPRESENTED BY THIS CERTIFICATE.

This is to certify that, for value received, _____ (the **"Holder"**) has the right to purchase, upon and subject to the terms and conditions attached hereto as Appendix "A" (the **"Terms and Conditions"**) from _____, 2022 to 5:00 p.m. (Eastern Time) on the Expiry Date (as defined in the attached Terms and Conditions), the number of fully paid and non-assessable ordinary shares, par value 0.01 NIS per share (the **"Shares"**) of P.V. NANO CELL LTD (the **"Company"**) set out above, by surrendering to the Company this Warrant Certificate with a Subscription in the form attached hereto as Appendix "B", duly completed and executed, and wire transfer in lawful money of the United States of America in an amount equal to the purchase price per Share multiplied by the number of Shares being purchased (the "**Aggregate Purchase Price**"). Subject to adjustment thereof in the events and in the manner set forth in the Terms and Conditions, the purchase price per Share on the exercise of each Non-Transferable Share Purchase Warrant (**"Warrant"**) evidenced hereby shall be **US $0.07** per Share (subject to adjustment as described in the Terms and Conditions).

These Warrants are issued subject to the Terms and Conditions, and the Holder may exercise the right to purchase Shares only in accordance with the Terms and Conditions.

Nothing contained herein or in the Terms and Conditions will confer any right upon the Holder or any other person to subscribe for or purchase any Shares at any time subsequent to the Expiry Date and from and after such time, these Warrants and all rights hereunder will be void and of no value.

IN WITNESS WHEREOF the Company has caused this Warrant Certificate to be executed.

DATED as of the _____day of _____, 2022.

P.V. NANO CELL LTD.

Per: _____

Name: Avi Magid
Title: Chief Executive Officer

PLEASE NOTE THAT ALL SHARE CERTIFICATES ISSUED TO NON-U.S. PERSONS UPON EXERCISE HEREOF MUST BE LEGENDED AS FOLLOWS:

"THESE SECURITIES WERE ISSUED IN AN OFFSHORE TRANSACTION TO PERSONS WHO ARE NOT U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE 1933 ACT) PURSUANT TO REGULATION S UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "1933 ACT"). ACCORDINGLY, NONE OF THE SECURITIES TO WHICH THIS CERTIFICATE RELATES HAVE BEEN REGISTERED UNDER THE 1933 ACT, OR ANY U.S. STATE SECURITIES LAWS, AND, UNLESS SO REGISTERED, NONE MAY BE OFFERED OR SOLD IN THE UNITED STATES OR, DIRECTLY OR INDIRECTLY, TO U.S. PERSONS EXCEPT IN ACCORDANCE WITH THE PROVISIONS OF REGULATION S UNDER THE 1933 ACT, PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT OR PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE 1933 ACT AND IN EACH CASE ONLY IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. IN ADDITION, HEDGING TRANSACTIONS INVOLVING THE SECURITIES MAY NOT BE CONDUCTED UNLESS IN ACCORDANCE WITH THE 1933 ACT."

PLEASE NOTE THAT ALL SHARE CERTIFICATES ISSUED TO U.S. PERSONS UPON EXERCISE HEREOF MUST BE LEGENDED AS FOLLOWS:

NONE OF THE SECURITIES REPRESENTED HEREBY HAVE BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "1933 ACT"), OR ANY U.S. STATE SECURITIES LAWS, AND, UNLESS SO REGISTERED, NONE MAY BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, IN THE UNITED STATES OR TO U.S. PERSONS EXCEPT IN ACCORDANCE WITH THE PROVISIONS OF REGULATION S UNDER THE 1933 ACT, PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE 1933 ACT, OR PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE 1933 ACT AND IN EACH CASE ONLY IN ACCORDANCE WITH APPLICABLE SECURITIES LAWS.

TERMS AND CONDITIONS

dated as of __, 2022 (the "**Terms and Conditions**"), attached to the Non-Transferable Share Purchase Warrants issued by P.V. NANO CELL LTD..

1. **Definitions**

In these Terms and Conditions, unless there is something in the subject matter or context inconsistent therewith:

(a) "Business Day" means any day other than a Saturday, Sunday, or a day on which banking institutions in the State of Israel are authorized or obligated by law or executive order to close.

(b) "Company" means PV Nano Cell Ltd. |If a successor corporation will have become such as a result of consolidation, amalgamation or merger with or into any other corporation or corporations, or as a result of the conveyance or transfer of all or substantially all of the properties and estates of the Company as an entirety to any other corporation and thereafter "Company" will mean such successor corporation;

(c) "Company's Auditors" means an independent firm of accountants duly appointed as auditors of the Company;

(d) "Exercise Price" means $0.07 per Share, subject to adjustment as provided in the Terms and Conditions;

(e) "Expiry Date" means the *earlier* of (i) the closing of a subsequent offering by the Company to qualified investors of Company securities with an effective price per Ordinary Share of at least $0.20 or (ii) the second anniversary of the issuance of such warrant;

(f) "herein", "hereby" and similar expressions refer to these Terms and Conditions as the same may be amended or modified from time to time; and the expression "Section" followed by a number refer to the specified Section of these Terms and Conditions;

(g) "person" means an individual, corporation, partnership, trustee or any unincorporated organization and words importing persons have a similar meaning;

(h) "Holder" or "Holders" means the holder of the Warrants and its heirs, executors, administrators, successors, legal representatives and assigns;

(i) "Shares" means the shares of common stock in the capital of the Company as constituted at the date hereof and any shares resulting from any subdivision or consolidation of such shares, issued upon exercise of the Warrants;

(j) "Trading Day" means any day on which the Common Stock is traded on the

(k) "Principal Trading Market" the principal trading market or securities market on which the Common Stock is then quoted or traded .

(k) "Warrants" means the Non-Transferable Share Purchase Warrants of the Company issued and presently authorized and for the time being outstanding; and

(l) "1933 Act" means the United States Securities Act of 1933.

2. **Interpretation**

The division of these Terms and Conditions into sections and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation thereof. Words importing the singular number include the plural and vice versa and words importing the masculine gender include the feminine and neuter genders.

3. **Applicable Law**

The rights and restrictions attached to the Warrants shall be construed in accordance with the laws of the State of Nevada.

4. **Additional Issuances of Securities**

The Company may at any time and from time to time do further equity or debt financing and may issue additional shares, warrants, convertible securities, stock options or similar rights to purchase shares of its capital stock.

5. **Replacement of Lost Warrants**

In case this Warrant Certificate shall become mutilated, lost, destroyed or stolen, the Company in its discretion may issue and deliver a new Warrant Certificate of like date and tenure as the one mutilated, lost, destroyed or stolen, in exchange for and in place of and upon cancellation of such mutilated Warrant Certificate, or in lieu of, and in substitution for such lost, destroyed or stolen Warrant Certificate and the substituted Warrant Certificate shall be entitled to all benefits hereunder and rank equally in accordance with its terms with all other Warrants issued or to be issued by the Company.

The applicant for the issue of a new Warrant Certificate pursuant hereto shall bear the cost of the issue thereof and in case of loss, destruction or theft shall furnish to the Company evidence of ownership and of loss, destruction or theft of the Warrant Certificate so lost, destroyed or stolen as shall be satisfactory to the Company and its transfer agent in accordance with its usual policies and procedures and such applicant may also be required to furnish indemnity in the amount and form satisfactory to the Company and its transfer agent in accordance with its usual policies and procedures, and shall pay the reasonable charges of the Company in connection therewith.

6. **Warrant Holder Not a Shareholder**

The holding of a Warrant Certificate will not constitute the Holder as a shareholder of the Company, nor entitle the Holder to any right or interest in respect thereof except as is expressly provided in the Warrant Certificate or these Terms and Conditions.

7. **Warrants Not Transferable**

The Warrants and all rights attached thereto are not transferable.

8. **Notice to Holders**

Any notice required or permitted to be given to the Holder will be in writing and may be given by prepaid registered post, electronic facsimile transmission or other means of electronic communication capable of producing a printed copy to the address of the Holder appearing on the Warrant Certificate or to such other address as any Holder may specify by notice in writing to the Company, and any such notice will be deemed to have been given and received by the Holder to whom it was addressed if mailed, on the third day following the mailing thereof, if by facsimile or other electronic communication, on successful transmission, or, if delivered, on delivery; but if at the time of mailing or between the time of mailing and the third Business Day thereafter there is a strike, lockout, or other labour disturbance affecting postal service, then the notice will not be effectively given until actually delivered.

9. **Notice to the Company**

Any notice required or permitted to be given to the Company will be in writing and may be given by prepaid registered post, electronic facsimile transmission or other means of electronic communication capable of producing a printed copy to the then designated address of the Company set forth below or such other address as the Company may specify by notice in writing to the Holder, and any such notice will be deemed to have been given and received by the Company to whom it was addressed if mailed, on the third day following the mailing thereof, if by facsimile or other electronic communication, on successful transmission, or, if delivered, on delivery; but if at the time or mailing or between the time of mailing and the third Business Day thereafter there is a strike, lockout, or other labour disturbance affecting postal service, then the notice will not be effectively given until actually delivered

10. **Method of Exercise of Warrants**

The right to purchase Shares conferred by the Warrants may be exercised by the Holder of such Warrant by surrendering it to the Company, with a duly completed and executed subscription in the form attached as Appendix "B" and cash, bank draft, certified cheque or money order payable to or to the order of the Company for the Aggregate Purchase Price subscribed for in lawful money of the United States of America.

11. **Effect of Exercise of Warrants**

Upon surrender and payment as aforesaid, the Shares so subscribed for shall be deemed to have been issued and such Holder shall be deemed to have become the holder (or holders) of record of such Shares on the date of such surrender and payment and such Shares shall be issued at the Exercise Price in effect on the date of such surrender and payment.

Within ten Business Days after surrender and payment as aforesaid, the Company shall forthwith cause to be delivered to the person or persons in whose name or names the Shares so subscribed for are to be issued as specified in such subscription or mailed to him or them at his or their respective addresses specified in such subscription, a certificate or certificates for the appropriate number of Shares not exceeding those which the Holder is entitled to purchase pursuant to the Warrant surrendered.

12. **Subscription for Less than Entitlement**

The Holder of any Warrant may subscribe for and purchase a number of Shares less than the number which he is entitled to purchase pursuant to the surrendered Warrant. In the event of any purchase of a number of Shares less than the number which can be purchase pursuant to a Warrant, the Holder, upon exercise thereof, shall be entitled to receive a new Warrant Certificate in respect of the balance of the Shares which he was entitled to purchase pursuant to the surrendered Warrant Certificate and which were not then purchased.

14. **Warrants for Fractions of Shares**

To the extent that the Holder of any Warrant is entitled to receive on the exercise or partial exercise thereof a fraction of a Share, such right may be exercised in respect of such fraction only in combination with another Warrant or other Warrants which in the aggregate entitle the Holder to receive a whole number of such Shares.

14. **Expiration of Warrants**

After the expiration of the Expiry Period, all rights thereunder shall wholly cease and terminate and such Warrants shall be void and of no further force and effect.

15. **Adjustment of Exercise Price**

The Exercise Price and the number of Common Shares deliverable upon the exercise of the Warrants shall be subject to adjustment in the event and in the manner following: (a) If and whenever the Shares at any time outstanding shall be subdivided into a greater or consolidated into a lesser number of Shares, the Exercise Price shall be decreased or increased proportionately, as the case may be, and upon any such subdivision or consolidation, the number of Shares deliverable upon the exercise of the Warrants shall be increased or decreased proportionately, as the case may be; (b) In case of any capital reorganization or of any reclassification of the capital of the Company or in case of the consolidation, merger or amalgamation of the Company with or into any other company or of the sale of the assets of the Company as or substantially as an entirety or of any other company, each Warrant shall, after such capital reorganization, reclassification of capital, consolidation, merger, amalgamation or sale, confer the right to purchase that number of shares or other securities or property of the Company or of the company resulting from such capital reorganization, reclassification, consolidation, merger, amalgamation or to which such sale shall be made, as the case may be, to which the Holder of the shares deliverable at the time of such capital reorganization, reclassification of capital, consolidation, merger, amalgamation or sale had the Warrants been exercised, would have been entitled on such capital reorganization, reclassification, consolidation, merger, amalgamation or sale and in any such case, if necessary, appropriate adjustments shall be made in the application of the provisions set forth in Sections 13 to 20 hereof with respect to the rights and interest thereafter of the Holders of the Warrants to the end that the provisions set forth in Sections 13 to 20 hereof shall thereafter correspondingly be made applicable as nearly as may reasonable be expected in relation to any shares or other securities or property thereafter deliverable on the exercise of the Warrants. The subdivision or consolidation of the Shares at any time outstanding into a greater or lesser number of Shares (whether with or without par value) shall not be deemed to be a capital reorganization or a reclassification of the capital of the Company for the purposes of this Section 16(b).

The adjustments provided for in this Section 16 pursuant to any Warrants are cumulative .and will become effective immediately after the record date for, or, if no record date is fixed, the effective date, of the event which results in such adjustments.

16. **Determination of Adjustments**

If any questions shall at any time arise with respect to the Exercise Price or any adjustments provided for in this Warrant, such questions shall be conclusively determined by the Company's Auditors, from time to time, or, if they decline to so act, any other firm of chartered accountants that the Company may designate and who shall have access to all appropriate records and such determination shall be binding upon the Company and the Holders.

17. **Covenants of the Company**

The Company will reserve and there will remain unissued out of its authorized capital a sufficient number of Shares to satisfy the rights of purchase provided for in the Warrants should the Holders of all the Warrants from time to time outstanding determine to exercise such rights in respect of all Shares which they are or may be entitled to purchase pursuant thereto.

18. **Immunity of Shareholders, etc.**

The Holder hereby waives and releases any right, cause of action or remedy now or hereafter existing in any jurisdiction against any past, present or future incorporator, shareholder, director or officer (as such) of the Company for the issue of Shares pursuant to any Warrant or on any covenant, agreement, representation or warranty by the Company herein contained.

19. **Modification of Terms and Conditions for Certain Purposes**

From time to time the Company may, subject to the provisions of these presents, and it shall, when so directed by these presents, modify the terms, and conditions hereof, for any one or more of any of the following purposes: (a) making such provisions not inconsistent herewith as may be necessary or desirable with respect to matters or questions arising hereunder or for the purpose of obtaining a listing or quotation of the Warrants on any stock exchange or quotation system; (b) adding to or altering the provisions hereof in respect of the registration and transfer of Warrants making provisions for the exchange of Warrants of different denominations; and making any modification in the form of the Warrants which does not affect the substance thereof;

(c) for any other purpose not inconsistent with the terms hereof, including the correction or recertification of any ambiguities, defective provisions, errors or omissions herein; and

(d) to evidence any successions of any corporation and the assumption of any successor of the covenants of the Company herein and in the Warrants contained as provided herein.

20. **United States Restrictions**

These Warrants and the Shares issuable upon the exercise of these Warrants have not been and will not be registered under the 1933 Act as amended or any state securities laws. These Warrants may not be exercised in the United States (as defined in Regulation S under the 1933 Act) unless these Warrants and the Shares issuable upon exercise hereof have been registered under the 1933 Act, and any applicable state securities laws or unless an exemption from such registration is available.

DATED as of the date first above written in these Terms and Conditions.

P.V. NANO CELL LTD.

Per: _____

Name: Avi Magid
Title: Chief Executive Officer

APPENDIX “B”

SUBSCRIPTION FORM

(ONE NON-TRANSFERABLE SHARE PURCHASE WARRANT IS REQUIRED TO SUBSCRIBE FOR EACH COMMON SHARE)

TO: P.V. NANO CELL LTD.

The undersigned, bearer of the attached Non-Transferable Share Purchase Warrants, hereby subscribes for _____of shares of common stock of P.V. NANO CELL LTD.. (the “**Company**”) referred to in the Warrants according to the conditions thereof and herewith makes payment of the purchase price in full for the said number of shares at the price of U.S. $0.07 per share if exercised on or before 5:00 p.m. (Eastern Time) on the Expiry Date (as that term is defined in the Terms and Conditions attached to the Non-Transferable Share Purchase Warrant). The subscription amount has been wired to the Company

Exhibit 4.18

HALPERIN
CPA, FINANCIAL CONSULTING
& MANAGEMENT

May 15, 2023

Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Commissioners:

We have read the statements made by P.V Nano Cell Ltd. in Item 16F of the Form 20-F of P.V Nano Cell Ltd. dated May 15, 2023, which we understand will be filed with the Securities and Exchange Commission. We agree with the statements concerning our Firm in Item 16F of such Form 20-F.

Kind regards,

/s/ *Halperin Ilanit*
Certified Public Accountants

3 Shacham St, B.S.R City, Tower Y, Petach Tikva 4951703 | tel. +972-3-9335474 | fax. +972-3-9335466 | www.halperin-cpa.co.il

Exhibit 4.19

COMPENSATION POLICY

P.V. NANO CELL LTD.

Compensation Policy for Executive Officers and Directors

(As adopted by the shareholders on December 19, 2022)

Table of Contents

A. Overview and Objectives

1. **Introduction**

This document sets forth the Compensation Policy for Executive Officers and Directors (this "**Compensation Policy**" or "**Policy**") of P.V. Nano Cell Ltd. and its subsidiaries (the "**Company**"), in accordance with the requirements of the Companies Law, 5759-1999 (the "**Companies Law**").

Compensation is a key component of the Company's overall human capital strategy to attract, retain, reward, and motivate highly skilled individuals that will enhance The Company's value and otherwise assist The Company to reach its business and financial long-term goals. Accordingly, the structure of this Policy is established to tie the compensation of each officer to The Company's goals and performance.

For purposes of this Policy, "Executive Officers" shall mean "Office Holders" as such term is defined in Section 1 of the Companies Law, excluding, unless otherwise expressly indicated herein, the Company's directors.

This policy is subject to applicable law and is not intended, and should not be interpreted as limiting or derogating from, provisions of applicable law to the extent not permitted.

This Policy shall apply to compensation agreements and arrangements which will be approved after the date on which this Policy is adopted and shall serve as the Company's Compensation Policy for three (3) years, commencing as of its adoption.

The Compensation Committee and the Board of Directors of the Company (the "**Compensation Committee**" and the "**Board**", respectively) shall review and reassess the adequacy of this Policy from time to time, as required by the Companies Law.

2. **Objectives**

The Company's objectives and goals in setting this Policy are to attract, motivate and retain highly experienced leaders who will contribute to the Company's success and enhance shareholder value, while demonstrating professionalism in a highly achievement-oriented culture that is based on merit and rewards excellent performance in the long term, and embedding the Company's core values as part of a motivated behavior. To that end, this Policy is designed, among others:

2.1. To closely align the interests of the Executive Officers with those of the Company's shareholders in order to enhance shareholder value;

2.2. To align a significant portion of the Executive Officers' compensation with the Company's short and long-term goals and performance;

2.3. To provide the Executive Officers with a structured compensation package, including competitive salaries, performance-motivating cash and equity incentive programs and benefits, and to be able to present to each Executive Officer an opportunity to advance in a growing organization;

2.4. To strengthen the retention and the motivation of Executive Officers in the long term;

2.5. To provide appropriate awards in order to incentivize superior individual excellency and corporate performance; and

2.6. To maintain consistency in the way Executive Officers are compensated.

3. **Compensation Instruments**

Compensation instruments under this Policy may include the following:

3.1. Base salary;

3.2. Benefits;

3.3. Cash bonuses;

3.4. Equity based compensation; and

3.5. Retirement and termination terms.

4. **Overall Compensation - Ratio Between Fixed and Variable Compensation**

4.1. This Policy aims to balance the mix of "Fixed Compensation" (comprised of base salary and benefits) and "Variable Compensation" (comprised of cash bonuses and equity-based compensation) in order to, among other things, appropriately incentivize Executive Officers to meet the Company's short- and long-term goals while taking into consideration the Company's need to manage a variety of business risks.

4.2. The total annual bonus and equity-based compensation of each Executive Officer shall not exceed 90% of the total compensation package of such Executive Officer on an annual basis.

5. **Inter-Company Compensation Ratio**

5.1. In the process of drafting and updating this Policy, the Company's Board and Compensation Committee have examined the ratio between employer cost associated with the engagement of the Executive Officers, including directors, and the average and median employer cost associated with the engagement of the Company's other employees (including contractor employees as defined in the Companies Law) (the "**Ratio**").

5.2. The possible ramifications of the Ratio on the daily working environment in the Company were examined and will continue to be examined by the Company from time to time in order to ensure that levels of executive compensation, as compared to the overall workforce will not have a negative impact on work relations in the Company.

B. <u>Base Salary and Benefits</u>

6. **Base Salary**

6.1. A base salary provides stable compensation to Executive Officers and allows the Company to attract and retain competent executive talent and maintain a stable management team. The base salary varies among Executive Officers, and is individually determined according to the educational background, prior vocational experience, qualifications, company's role, business responsibilities and the past performance of each Executive Officer.

6.2. Since a competitive base salary is essential to the Company's ability to attract and retain highly skilled professionals, the Company will seek to establish a base salary that is competitive with base salaries paid to Executive Officers in a peer group of other companies operating in technology sectors which are similar in their characteristics to the Company's, as much as possible, while considering, among others, such companies' size and characteristics including their revenues, profitability rate, number of employees and operating arena (in Israel or globally), the list of which shall be reviewed and approved by the Compensation Committee at least every three years. To that end, the Company shall utilize as a reference, comparative market practices.

6.3. The Compensation Committee and the Board may periodically consider and approve base salary adjustments for Executive Officers. The main considerations for salary adjustment are similar to those used in initially determining the base salary, but may also include change of role or responsibilities, recognition for professional achievements, regulatory or contractual requirements, budgetary constraints or market trends. The Compensation Committee and the Board will also consider the previous and existing compensation arrangements of the Executive Officer whose base salary is being considered for adjustment.

7. **Benefits**

7.1. The following benefits may be granted to the Executive Officers in order, among other things, to comply with legal requirements:

7.1.1. Vacation days in accordance with market practice;

7.1.2. Sick days in accordance with applicable law;

7.1.3. Convalescence pay according to applicable law;

7.1.4. The Company may contribute a monthly remuneration for a study fund, as allowed by applicable law and with reference to the Company's practice and the practice in peer group companies;

7.1.5. The Company shall contribute on behalf of the Executive Officer to an insurance policy or a pension fund, as allowed by applicable law and with reference to the Company's policies and procedures and the practice in peer group companies; and

7.1.6. The Company may contribute on behalf of the Executive Officer towards work disability insurance, as allowed by applicable law and with reference to the Company's policies and procedures and to the practice in peer group companies.

7.2. Non-Israeli Executive Officers may receive other similar, comparable or customary benefits as applicable in the relevant jurisdiction in which they are employed. Such customary benefits shall be determined based on the methods described in Section 6.2 of this Policy (with the necessary changes).

7.3. In the event of relocation of an Executive Officer to another geography, such Executive Officer may receive other similar, comparable or customary benefits as applicable in the relevant jurisdiction in which he or she is employed or additional payments to reflect adjustments in cost of living. Such benefits shall include reimbursement for out of pocket one-time payments and other ongoing expenses, such as housing allowance, car allowance, and home leave visit, etc.

7.4. The Company may offer additional benefits to its Executive Officers, which will be comparable to customary market practices, such as, but not limited to: cellular and land line phone benefits, company car and travel benefits, reimbursement of business travel including a daily stipend when traveling and other business related expenses, insurances, other benefits (such as newspaper subscriptions, academic and professional studies), etc., provided, however, that such additional benefits shall be determined in accordance with The Company's policies and procedures.

C. <u>Cash Bonuses</u>

8. **Annual Cash Bonuses - The Objective**

8.1. Compensation in the form of an annual cash bonus is an important element in aligning the Executive Officers' compensation with the Company's objectives and business goals. Therefore, a pay-for-performance element, as payout eligibility and levels are determined based on actual financial and operational results, as well as individual performance.

8.2. An annual cash bonus may be awarded to Executive Officers upon the attainment of pre-set periodical objectives and individual targets determined by the Compensation Committee (and, if required by law, by the Board) at the beginning of each calendar year, or upon engagement, in case of newly hired Executive Officers, taking into account the Company's short and long-term goals, as well as its compliance and risk management policies. The Compensation Committee and the Board shall also determine applicable minimum thresholds that must be met for entitlement to the annual cash bonus (all or any portion thereof) and the formula for calculating any annual cash bonus payout, with respect to each calendar year, for each Executive Officer. In special circumstances, as determined by the Compensation Committee and the Board (e.g., regulatory changes, significant changes in the Company's business environment, a significant organizational change and a significant merger and acquisition events), the Compensation Committee and the Board may modify the objectives and/or their relative weights during the calendar year.

8.3. In the event the employment of an Executive Officer is terminated prior to the end of a fiscal year, the Company may pay such Executive Officer a full annual cash bonus or a prorated one. Such bonus will become due on the same scheduled date for annual cash bonus payments by the Company.

8.4. The actual annual cash bonus to be awarded to Executive Officers shall be approved by the Compensation Committee and the Board.

9. **Annual Cash Bonuses - The Formula**

Executive Officers other than the CEO

9.1. The annual cash bonus of the Company's Executive Officers, other than the chief executive officer (the "**CEO**"), will be based on performance objectives and a discretionary evaluation of the Executive Officer's overall performance by the CEO and subject to minimum thresholds. The performance objectives will be approved by the Compensation Committee at the commencement of each calendar year (or upon engagement, in case of newly hired Executive Officers or in special circumstances as indicated in Section 8.2 above) on the basis of, but not limited to, company, division and individual objectives. The performance measurable objectives, which include the objectives and the weight to be assigned to each achievement in the overall evaluation, will be based on:

9.1.1. Overall company performance measures, which are based on actual financial and operational results, such as revenues, sales, operating income and cash flow. At least 20% of the annual cash bonus of the Company's Executive Officers will be based on overall Company performance measures; and

9.1.2. Divisional objectives which may include operational objectives, such as market share, initiation of new markets and products and operational efficiency, customer focus objectives, such as system availability requirements and customer satisfaction, project milestones objectives, such as product implementation in production, product acceptance and new product penetration, and investment in human capital objectives, such as employee satisfaction, employee retention and employee training and leadership programs.

9.2. The target annual cash bonus that an Executive Officer, other than the CEO, will be entitled to receive for any given calendar year, will not exceed three (3) monthly salaries of such Executive Officer's monthly base salary, as determined annually by the Compensation Committee and the Board.

9.3. The maximum annual cash bonus including for overachievement performance that an Executive Officer, other than the CEO, will be entitled to receive for any given calendar year, will not exceed five (5) monthly salaries of such Executive Officer's monthly base salary, as determined annually by the Compensation Committee and the Board.

CEO

9.4. The annual cash bonus of the Company's CEO will be mainly based on performance measurable objectives and subject to minimum thresholds as provided in Section 8.2 above. Such performance measurable objectives will be determined annually by the Company's Compensation Committee (and, if required by law, by the Company's Board) at the commencement of each calendar year (or upon engagement, in case of newly hired CEO or in special circumstances as indicated in Section 8.2 above) on the basis of, but not limited to, company and personal objectives. These performance measurable objectives, which include the objectives and the weight to be assigned to each achievement in the overall evaluation, will be categorized as described below:

9.4.1. Between 40%-60% will be based on overall Company performance measures, which are based on actual financial and operational results, such as revenues, sales, operating income and cash flow; and

9.4.2. Between 20%-50% will be based on goals set forth in the Company's annual operating plan and long-term plan, such as expansion of the Company's organic growth engines and achieving strategic technology objectives.

9.5. The less significant part of the annual cash bonus granted to the Company's CEO, and in any event not more than 30% of the annual cash bonus, may be based on a discretionary evaluation of the CEO's overall performance by the Compensation Committee and the Board based on quantitative and qualitative criteria.

9.6. The target annual cash bonus that the CEO will be entitled to receive for any given calendar year, will not exceed five (5) monthly salaries of such CEO's monthly base salary, as determined annually by the Compensation Committee and the Board.

9.7. The maximum annual cash bonus including for overachievement performance that the CEO will be entitled to receive for any given calendar year, will not exceed seven (7) monthly salaries of such CEO's monthly base salary, as determined annually by the Compensation Committee and the Board.

10. **Other Bonuses**

10.1. Special Bonus. The Company may grant its Executive Officers a special bonus as an award for special achievements (such as in connection with mergers and acquisitions, offerings, achieving target budget or business plan under exceptional circumstances or special recognition in case of retirement) at the Compensation Committee and Board's discretion, subject to any additional approval as may be required by the Companies Law (the "**Special Bonus**"). In the case of an Executive Officer (other than the CEO), the Special Bonus will not exceed four (4) monthly salaries of the Executive Officer's total compensation package on an annual basis, and in the case of the CEO, the Special Bonus will not exceed six (6) monthly salaries of the CEO's total compensation package on an annual basis.

10.2. Signing Bonus. The Company may grant a newly recruited Executive Officer a signing bonus at the Compensation Committee and Board's discretion), subject to any additional approval as may be required by the Companies Law (the "**Signing Bonus**"). The Signing Bonus will not exceed two (2) monthly entry base salaries of the Executive Officer.

10.3. Relocation Bonus. The Company may grant its Executive Officers a special bonus in the event of relocation of an Executive Officer to another geography (the "**Relocation Bonus**"). The Relocation bonus will include customary benefits associated with such relocation and its monetary value will not exceed three (3) monthly entry base salaries of the Executive Officer.

11. **Compensation Recovery ("Clawback")**

11.1. In the event of an accounting restatement, The Company shall be entitled to recover from its Executive Officers the bonus compensation or performance-based equity compensation in the amount in which such compensation exceeded what would have been paid under the financial statements, as restated, provided that a claim is made by The Company prior to the second anniversary of fiscal year end of the restated financial statements.

11.2. Notwithstanding the aforesaid, the compensation recovery will not be triggered in the following events:

11.2.1. The financial restatement is required due to changes in the applicable financial reporting standards; or

11.2.2. The Compensation Committee has determined that Clawback proceedings in the specific case would be impossible, impractical or not commercially or legally efficient.

11.3. Nothing in this Section 11 derogates from any other "Clawback" or similar provisions regarding disgorging of profits imposed on Executive Officers by virtue of applicable securities laws.

D. Equity Based Compensation

12. **The Objective**

12.1. The equity-based compensation for the Company's Executive Officers is designed in a manner consistent with the underlying objectives in determining the base salary and the annual cash bonus, with its main objectives being to enhance the alignment between the Executive Officers' interests with the long-term interests of the Company and its shareholders, and to strengthen the retention and the motivation of Executive Officers in the long term. In addition, since equity-based awards are structured to vest over several years, their incentive value to recipients is aligned with longer-term strategic plans.

12.2. The equity-based compensation offered by the Company is intended to be in a form of share options and/or other equity based awards, such as RSUs, in accordance with the Company's equity incentive plan in place as may be updated from time to time.

12.3. All equity-based incentives granted to Executive Officers shall be subject to vesting periods in order to promote long-term retention of the awarded Executive Officers. Unless determined otherwise in a specific award agreement approved by the Compensation Committee and the Board, grants to Executive Officers other than directors shall vest gradually over a period of between three (3) to five (5) years or based on performance. The exercise price of options shall be determined in accordance with the Company's Equity-Based Compensation Policy, the main terms of which shall be disclosed in the annual report of the Company.

12.4. All other terms of the equity awards shall be in accordance with the Company's incentive plans and other related practices and policies. Accordingly, the Board may, following approval by the Compensation Committee, extend the period of time for which an award is to remain exercisable and make provisions with respect to the acceleration of the vesting period of any Executive Officer's awards, including, without limitation, in connection with a corporate transaction involving a change of control, subject to any additional approval as may be required by the Companies Law.

13. **General Guidelines for the Grant of Awards**

13.1. The equity-based compensation shall be granted from time to time and be individually determined and awarded according to the performance, educational background, prior business experience, qualifications, role and the personal responsibilities of the Executive Officer.

13.2. In determining the equity-based compensation granted to each Executive Officer, the Compensation Committee and Board shall consider the factors specified in Section 13.1 above, and in any event the total equity-based compensation of each grant shall not exceed: (i) with respect to the CEO - 3% the Company's share capital on a fully diluted basis; and (ii) with respect to each of the other Executive Officers – 1.5% the Company's share capital on a fully diluted basis.

E. Retirement and Termination of Service Arrangements

14. **Advanced Notice Period**

14.1. The Company may provide an Executive Officer, other than the CEO, according to his or her seniority in the Company, contribution to the Company's goals and achievements and the circumstances of retirement a prior notice of termination of up to three (3) months, during which the Executive Officer may be entitled to all of the compensation elements, and to the continuation of vesting of his or her options.

14.2. The Company may provide the CEO, a prior notice of termination of up to six (6) months, during which the CEO may be entitled to all of the compensation elements, and to the continuation of vesting of his or her options.

15. **Adjustment Period**

15.1. The Company may provide an additional adjustment period of up to three (3) months to an Executive Officer, other than the CEO, according to his/her seniority in the Company, his or her contribution to the Company's goals and achievements and the circumstances of retirement, during which the Executive Officer may be entitled to all of the compensation elements, and to the continuation of vesting of his or her options.

15.2. The Company may provide an additional adjustment period of up to three (6) months to the CEO, during which the CEO may be entitled to all of the compensation elements, and to the continuation of vesting of his or her options.

16. **Additional Retirement and Termination Benefits**

16.1 The Company may provide additional retirement and terminations benefits and payments as may be required by applicable law (e.g., mandatory severance pay under Israeli labor laws), or which will be comparable to customary market practices.

16.2 The Company may extend the exercise period of outstanding options or other equity-based awards up to an additional period of two years.

17. **Non-Compete Grant**

Upon termination of employment and subject to applicable law, the Company may grant to its Executive Officers a non-compete grant as an incentive to refrain from competing with the Company for a defined period of time. The terms and conditions of the non-compete grant shall be decided by the Board and shall not exceed such Executive Officer's monthly base salary multiplied by six (6).

18. **Limitation Retirement and Termination of Service Arrangements**

The total non-statutory payments under Section 14-17 above shall not exceed the Executive Officer's monthly base salary multiplied by twelve (12).

F. <u>Exculpation, Indemnification and Insurance</u>

19. **Exculpation**

The Company may exempt its directors and Executive Officers in advance for all or any of his/her liability for damage in consequence of a breach of the duty of care vis-a-vis the Company, to the fullest extent permitted by applicable law.

20. **Insurance and Indemnification**

20.1. The Company may indemnify its directors and Executive Officers to the fullest extent permitted by applicable law, for any liability and expense that may be imposed on the director or the Executive Officer, as provided in the indemnity agreement between such individuals and the Company, all subject to applicable law and the Company's articles of association.

20.2. the Company will provide directors' and officers' liability insurance (the **"Insurance Policy")** for its directors and Executive Officers as follows:

20.2.1. The annual premium to be paid by the Company shall not exceed $100,000 of the aggregate coverage of the Insurance Policy;

20.2.2. The limit of liability of the insurer shall not exceed $40 million; and

20.2.3. The Insurance Policy, as well as the limit of liability and the premium for each extension or renewal shall be approved by the Compensation Committee (and, if required by law, by the Board), which shall determine that the sums are reasonable considering the Company's exposures, the scope of coverage and the market conditions and that the Insurance Policy reflects the current market conditions, and it shall not materially affect the Company's profitability, assets or liabilities.

20.3. Upon circumstances to be approved by the Compensation Committee (and, if required by law, by the Board), the Company shall be entitled to enter into a "run off" Insurance Policy of up to seven (7) years, with the same insurer or any other insurance, as follows:

20.3.1. The limit of liability of the insurer shall not exceed $40 million; and

20.3.2. The annual premium shall not exceed 400% of the last paid annual premium; and

20.3.3. The Insurance Policy, as well as the limit of liability and the premium for each extension or renewal shall be approved by the Compensation Committee (and, if required by law, by the Board), which shall determine that the sums are reasonable considering the Company's exposures covered under such policy, the scope of cover and the market conditions, and that the Insurance Policy reflects the current market conditions and that it shall not materially affect the Company's profitability, assets or liabilities.

20.4. The Company may extend the Insurance Policy in place to include cover for liability pursuant to a future public offering of securities as follows:

20.4.1. The additional premium for such extension of liability coverage shall not exceed 50% of the last paid annual premium; and

20.4.2. The Insurance Policy, as well as the additional premium shall be approved by the Compensation Committee (and if required by law, by the Board) which shall determine that the sums are reasonable considering the exposures pursuant to such public offering of securities, the scope of cover and the market conditions and that the Insurance Policy reflects the current market conditions, and it does not materially affect the Company's profitability, assets or liabilities.

G. Arrangements upon Change of Control

21. The following benefits may be granted to the Executive Officers in addition to the benefits applicable in the case of any retirement or termination of service upon a "Change of Control":

21.1. Vesting acceleration of outstanding options or other equity-based awards;

21.2. Extension of the exercising period of options for the Company's Executive Officer for a period of up to two (2) year in case of an Executive Officer and the CEO, following the date of employment termination; and

21.3. Up to an additional six (6) months of continued base salary and benefits following the date of employment termination (the "**Additional Adjustment Period**"). For avoidance of doubt, such additional Adjustment Period shall be in addition to the advance notice and adjustment periods pursuant to Sections 14 and 15 of this Policy, but subject to the limitation set forth in Section 18 of this Policy.

21.4. A cash bonus not to exceed 100% of the Executive Officer's annual base salary in case of an Executive Officer other than the CEO and 150% in case of the CEO.

H. Board of Directors Compensation

22. The compensation of the Company's directors shall be in accordance with the Companies Regulations (Rules Regarding the Compensation and Expenses of an External Director), 5760-2000, as amended by the Companies Regulations (Relief for Public Companies Traded in Stock Exchange Outside of Israel), 5760-2000, as such regulations may be amended from time to time.

23. Notwithstanding the provisions of Sections 22 above, in special circumstances, such as in the case of a professional director, an expert director or a director who makes a unique contribution to the Company, such director's compensation may be different than the compensation of all other directors and may be greater than the maximal amount allowed under Section 22.

24. Each of the Company's non-employee directors may be granted an annually equity based grant of up to 0.5% of the Company's shares capital for each such grant. The equity based award shall vest annually over a period of between three (3) to four (4) years. The fair market value of the equity-based compensation for the directors will be determined according to acceptable valuation practices at the time of grant.

25. All other terms of the equity awards shall be in accordance with the Company's incentive plans and other related practices and policies. Accordingly, the Board may, following approval by the Compensation Committee, extend the period of time for which an award is to remain exercisable and make provisions with respect to the acceleration of the vesting period of any awards, including, without limitation, in connection with a corporate transaction involving a change of control, subject to any additional approval as may be required by the Companies Law.

26. In addition, members of the Company's Board may be entitled to reimbursement of expenses in connection with the performance of their duties.

27. It is hereby clarified that the compensation (and limitations) stated under this Section H will not apply to directors who serve as Executive Officers.

I. Miscellaneous

28. Nothing in this Policy shall be deemed to grant any of the Company's Executive Officers or employees or any third party any right or privilege in connection with their employment by the Company. Such rights and privileges shall be governed by the respective personal employment agreements. The Board may determine that none or only part of the payments, benefits and perquisites detailed in this Policy shall be granted, and is authorized to cancel or suspend a compensation package or part of it.

29. In the event that new regulations or law amendment in connection with Executive Officers and directors compensation will be enacted following the adoption of this Policy, the Company may follow such new regulations or law amendments, even if such new regulations are in contradiction to the compensation terms set forth herein.

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This Policy is designed solely for the benefit of the Company and none of the provisions thereof are intended to provide any rights or remedies to any person other than the Company.

Exhibit 12.1

CERTIFICATIONS

I, Avi Magid, certify that:

1. I have reviewed this annual report on Form 20-F of P.V. Nano Cell Ltd. for the year ended December 31, 2022;

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 consolidated 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 company as of, and for, the periods presented in this report;

4. The company'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 company 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 company, 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 consolidated financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company'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 company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company'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 company'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 company's internal control over financial reporting.

Date: May 15, 2023

By: /s/ Avi Magid
Avi Magid
Chief Executive Officer

Exhibit 12.2

CERTIFICATIONS

I, Evyatar Cohen, certify that:

1. I have reviewed this annual report on Form 20-F of P.V. Nano Cell Ltd. for the year ended December 31, 2022;

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 consolidated 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 company as of, and for, the periods presented in this report;

4. The company'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 company 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 company, 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 consolidated financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company'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 company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company'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 company'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 company's internal control over financial reporting.

Date: May 15, 2023

By: /s/ Evyatar Cohen
Evyatar Cohen
Chief Financial Officer

Exhibit 13.1

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

In connection with the Annual Report of P.V. Nano Cell Ltd. (the "Company") on Form 20-F for the period ending December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify that to the best of our knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

By: /s/ Avi Magid
Avi Magid
Chief Executive Officer

By: /s/ Evyatar Cohen
Evyatar Cohen
Chief Financial Officer
Date: May 15, 2023

The certification set forth above is being furnished as an exhibit solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and is not being filed as part of the Annual Report on Form 20-F for the period ended December 31, 2022, or as a separate disclosure document of the Company or the certifying officers.