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, 2021

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**

Commission file number 001-36187

EVOGENE LTD.

(Exact name of Registrant as specified in its charter)

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

Israel
(Jurisdiction of incorporation or organization)

13 Gad Feinstein Street, Park Rehovot, Rehovot
P.O. Box 4173, Ness Ziona, 7414002, Israel
(Address of principal executive offices)

Ofer Haviv
President and Chief Executive Officer
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13 Gad Feinstein Street, Park Rehovot, Rehovot
P.O. Box 4173, Ness Ziona, 7414002, Israel
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Ordinary shares, par value NIS 0.02 per share	**EVGN**	**Nasdaq Stock Market LLC**

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: **None.**

Indicate the number of outstanding 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: **As of December 31, 2021, the registrant had outstanding 41,170,168 ordinary shares, par value NIS 0.02 per share.**

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 shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions 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. ☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

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. ☐

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 ☒

EVOGENE LTD.

FORM 20-F
ANNUAL REPORT FOR THE FISCAL YEAR ENDED DECEMBER 31, 2021

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CERTAIN TERMS AND CONVENTIONS

In this annual report, unless the context otherwise requires:

- references to "Evogene," "we," "us," "our," "our company" and "the company" refer to Evogene Ltd. and its consolidated subsidiaries, consisting of AgPlenus Ltd., or AgPlenus, Biomica Ltd., or Biomica, Canonic Ltd., or Canonic, Casterra Ag Ltd., or Casterra, Evogene Inc., Lavie Bio Ltd., or Lavie Bio, and their consolidated subsidiaries;
- references to "U.S. dollars," "USD," "$" or "dollars" are to United States dollars;
- references to "NIS" or "shekels" are to New Israeli Shekels;
- references to the "U.S." are to the United States;
- references to "ordinary shares," "our shares" and similar expressions refer to our Ordinary Shares, par value NIS 0.02 per share;
- references to the "articles of association" are to our Amended and Restated Articles of Association, which became effective upon the closing of the U.S. initial public offering, as subsequently amended;
- references to the "Companies Law" are to the Israeli Companies Law, 5759-1999, as amended;
- references to the "Securities Act" are to the Securities Act of 1933, as amended;
- references to the "Exchange Act" are to the Securities Exchange Act of 1934, as amended;
- references to the "NYSE" are to the New York Stock Exchange;
- references to the "Nasdaq" are to the Nasdaq Stock Market LLC;
- references to the "TASE" are to the Tel Aviv Stock Exchange; and
- references to the "SEC" are to the United States Securities and Exchange Commission.

Unless derived from our financial statements or otherwise noted, amounts presented in this annual report are translated at the rate of NIS 3.11 = USD 1.00, the exchange rate between the NIS and the U.S. dollar reported by the Bank of Israel as of December 31, 2021.

This annual report includes other statistical, market and industry data and forecasts which we obtained from publicly available information and independent industry publications and reports that we believe to be reliable sources. Some data is also based on our good faith estimates, which are derived from management's knowledge of the industry and independent sources. These publicly available industry publications and reports generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy or completeness of the information. Although we believe that these sources are reliable and are not aware of any misstatements regarding the industry data presented in this annual report, we have not independently verified the information contained in such publications. Certain estimates and forecasts involve uncertainties and risks and are subject to change based on various factors, including those discussed under the headings "—Special Note Regarding Forward-Looking Statements" and "Item 3. Risk Factors—D. Risk Factors" in this annual report.

Throughout this annual report, we refer to various trademarks, service marks and trade names that we use in our business. The "Evogene" design logo, "Evogene" and other trademarks or service marks of Evogene Ltd. and its subsidiaries appearing in this annual report are the property of Evogene Ltd. or of its subsidiaries, as applicable. We have several other registered trademarks, service marks and pending applications relating to our computational technologies. Other trademarks and service marks appearing in this annual report are the property of their respective holders. Solely for convenience, the trademarks and trade names in this annual report are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend the use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

In addition to historical facts, this annual report contains forward-looking statements within the meaning of Section 27A of the Securities Act, Section 21E of the Exchange Act, and the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations and projections about future events. Forward-looking statements include information concerning our possible or assumed future results of our business, financial condition, results of operations, liquidity, anticipated growth strategies, anticipated trends in our industry, market size, our potential growth opportunities, plans and objectives. Forward-looking statements include all statements that are not historical facts and can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" or similar expressions that convey uncertainty of future events or outcomes and the negatives of those terms.

Our actual future results, performance or achievements may differ materially from what is expressed or implied by those forward-looking statements due to a variety of factors, some of which are beyond our control, including the following factors:

- the extent to which we continue to maintain our holdings in our subsidiary companies;
- the extent to which our discoveries and product candidates will have the desired effect so as to reach the stage of commercialization;
- whether we are able to achieve commercialization of our product candidates;
- whether we and our collaborators are able to allocate the resources needed to develop commercial products from our discoveries and product candidates;
- the length and degree of complexity of the process of our developing commercial products based on our discoveries and product candidates and the probability of our success, and the success of our collaborators, in developing such products;
- whether we are able to efficiently produce and scale up the production of our products, whether ourselves or through third party contractors, to achieve our commercialization targets;
- the degree of success of third parties upon whom we rely to conduct certain activities, such as field-trials and pre-clinical studies;
- whether we are able to comply with regulatory requirements;
- whether we and our subsidiaries are able to meet expected timelines in the performance of our activities (or are delayed, including as a result of the effect of COVID-19);
- the extent of the future growth of the agriculture, human health and industrial application industries in which we operate;
- whether we can maintain our current business models;
- the actual commercial value of our key product candidates;
- whether we or our collaborators receive regulatory approvals for the product candidates developed by us or our collaborators;
- whether products and product candidates containing or based on our discoveries are commercialized and earn us revenues or royalties;
- whether we are able to recruit, retain and develop knowledgeable or specialized personnel to perform our research and development work;
- the degree of our success at adapting to the continuous technological changes in our industries;

- whether we can maintain our collaboration agreements with our current collaborators or enter into new collaboration agreements and expand our research and development to new fields;
- whether we can improve our existing, or develop and launch new, computational technologies and screening and validation systems;
- whether we can patent our discoveries and protect our trade secrets and proprietary know-how; and
- the duration, degree of severity of, and strength of recovery from, the global COVID-19 pandemic, including government decisions implemented to limit its spread.

A number of additional important factors could cause our actual results to differ materially from those indicated by our forward-looking statements, including, but not limited to, those factors described in "Item 3. Key Information—D. Risk Factors," "Item 4. Information on the Company" and "Item 5. Operating and Financial Review and Prospects."

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that future results, levels of activity, performance and events and circumstances reflected in the forward-looking statements will be achieved or will occur. All of the forward-looking statements that we have included in this annual report are based on information available to us on the date of this annual report. Except as required by law, we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, changes in our expectations or otherwise.

SUMMARY RISK FACTORS

The risk factors described below are a summary of the principal risk factors associated with an investment in us. These are not the only risks we face. You should carefully consider these risk factors, together with the risk factors set forth in Item 3D. of this annual report and the other reports and documents filed by us with the SEC.

- If our equity holdings in our subsidiary companies are diluted, the benefits recognized by our shareholders from the value that may be created in such subsidiary companies may be substantially reduced.
- Our discoveries and product candidates may not achieve the desired effect required in order to create commercially viable products. In addition, our product development cycle is lengthy and uncertain and various factors may delay or prevent commercialization of our product candidates. We may never sell or earn royalties on the sale of commercial products based on our discoveries.
- Due to mergers and consolidations, there is a reduced number of companies in the agriculture industry with which we might establish strategic partnerships, and we rely on a limited number of collaborators to develop and commercialize product candidates containing our seed trait, ag-chemical and ag-biological product candidates. In addition, a decrease in research expenditures by the major companies in our target markets may jeopardize the continuation, or scope, of our collaborations with such companies and adversely impact our ability to continue or extend existing collaborations or enter into new collaborations on favorable financial terms.
- If we are unable to efficiently produce and scale up the production of our products, whether ourselves or through third party contractors, we may be unable to achieve our commercialization targets.
- We or our collaborators may fail to perform obligations under the collaboration agreements.
- We are operating in multiple industries, each of which consists of multiple companies with much greater resources than us. If we are unable to compete effectively, our financial resources will be diluted and our financial results will suffer.
- We are working to develop and commercialize novel ag-biological products, ag-chemical products, seed-trait products, human microbiome-based therapeutic product candidates, medical cannabis products, and our efforts with respect to any of these products may be unsuccessful.
- We are working to develop and commercialize castor seeds for industrial applications, and our efforts may be unsuccessful in achieving a commercial presence in this market.

- If Lavie Bio is unable to establish successful distribution and retail channels for the commercialization of its products, it will not be able to meet its commercialization plans.
- If Canonic is unable to establish successful marketing and distribution channels for the commercialization of its products, it will not be able to meet its commercialization plans.
- Biomica's product candidates are based on microbiome therapeutics, which is an unproven approach to therapeutic intervention.
- Even if we are, or believe we are, entitled to royalties from our collaborators, we may not actually receive these royalties.
- Each of us and our subsidiaries depends on our key personnel and, if we are not able to attract and retain qualified scientific, technological, business and managerial personnel, we may not be able to grow our business or develop and commercialize our product candidates.
- We develop certain discoveries independent om our collaborators, and we may need to finance the cost of the development of such technologies product candidates ourselves.
- Our business is subject to various government regulations and, if we or our collaborators are unable to obtain the necessary regulatory approvals, we may not be able to continue our operations.
- Our medical cannabis activity exposes us to legal and reputational risks associated with the cannabis industry.
- If the cost we incur of Directors and Officers, or D&O, liability insurance continues to increase, it will have an adverse effect on our results of operations.
- Disruption to our information technology, or IT, system could adversely affect our reputation and have a material adverse effect on our business and results of operations.
- The COVID-19 pandemic, or any other pandemic, epidemic or outbreak of an infectious disease has adversely impacted us and may continue to adversely impact our operating results and financial condition.
- Consumer and government resistance to genetically modified organisms, or GMOs, may negatively affect our public image and reduce sales of plants containing our traits.
- We have a history of operating losses and negative cash flow, and we may never achieve or maintain profitability.
- The licenses we grant to our collaborators are in most cases exclusive with respect to a specified discovery, product type or market area. This may limit our opportunities to enter into additional licensing or other arrangements with respect to such discoveries, product types or market areas.
- We may be required to pay substantial damages as a result of uninsured product liability claims.
- Changes in laws and regulations to which we are subject, or to which we may become subject in the future, may materially increase our costs of operation, decrease our operating revenues and disrupt our business.
- Our success depends on our ability to protect our intellectual property and our proprietary technologies. If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed. In addition, we may not be able to protect our intellectual property rights throughout the world.
- If we or one of our collaborators are sued for infringing the intellectual property rights of a third party, such litigation could be costly and time consuming and could prevent us or our collaborators from developing or commercializing our product candidates.
- Our employment agreements with our employees and other agreements with our collaborators and third parties may not adequately prevent disclosure of trade secrets, know-how and other proprietary information. In addition, we may not be able to fully enforce covenants not to compete with our key employees.
- Conditions in Israel could adversely affect our business.
- Any appreciation of the NIS relative to the U.S. dollar would adversely impact our financial results.
- Interest rate fluctuations may devalue our investments and could have an adverse impact on our financial condition.
- The terms of our Israeli government grants for certain of our research and development activities may require us to satisfy specified conditions in order to manufacture products and transfer technologies supported by such grants outside of Israel. In addition, in some circumstances, we may be required to pay penalties in addition to repaying the grants.
- The market price of our ordinary shares could be highly volatile and may fluctuate substantially as a result of many factors. In addition, our ordinary shares are traded on more than one market and this may result in price variations. We believe we were a passive foreign investment company, PFIC, for U.S. federal income tax purposes in 2021, and there is significant risk we will be a PFIC in 2022 as well.

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 SEC, including the following risk factors which we face and which are faced by the industries in which we operate. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. This report also contains forward-looking statements that involve risks and uncertainties. Our results could materially differ from those anticipated in those forward-looking statements, as a result of certain factors, including the risks described below and elsewhere in this report and our other SEC filings. See "Special Note Regarding Forward-Looking Statements" on page 5.

Risks Related to Our Business and Industry

If our equity holdings in our subsidiary companies are diluted, the benefit recognized by our shareholders from value that may be created in such subsidiary companies may be substantially reduced.

We initiated a new corporate strategy and structure at the beginning of 2018, with the intent to make product development and go-to-market more efficient and to better reflect the individual value of each of our market focused business units. Under the new corporate structure, we operate with Evogene acting as a technology hub and, below it, a growing group of divisions and subsidiaries that benefit from the unique capabilities of Evogene's Computational Predictive Biology, or CPB platform and its technological engines. Each such subsidiary is responsible for advancing its product development and pipeline, establishing its "go-to-market" strategy via direct sales or through existing and new collaborations, and securing additional financial resources, if and when required. Due to our limited financial resources and other investment considerations, our subsidiaries may obtain financing from external sources. External financing may result in a decrease of our percentage shareholdings in our subsidiaries, which, in turn, may reduce the benefit we (and, indirectly, our shareholders) recognize from value established in such subsidiaries, and potentially negatively affect our results of operations, financial condition, our long-term growth strategy and the value of our shares.

Our discoveries and product candidates may not achieve the desired effect required in order to create commercially-viable products.

Our success depends on our ability to develop products that have the desired effects: in our agriculture activity, on plants, in our human health activity, on humans, and in our industrial applications activity, on the relevant industrial inputs. Research and development in these industries entails considerable uncertainty. We may spend many years developing product candidates that will never be commercialized. The science underlying the development of our product candidates is highly complex and, although we use innovative approaches, there is no certainty that our discoveries will result in product candidates that satisfy market requirements. Except for our first products in our medical cannabis and ag-biologicals activities and in our castor oil activity, none of our discoveries and product candidates has completed the development process and become commercially available so far and may never reach commercialization. If our discoveries and product candidates will not have the desired effects, we and our collaborators may not develop commercial products that are based on them, which could materially and adversely affect our results of operations and our long-term growth strategy.

Various factors may delay, hinder, or prevent commercialization of our product candidates.

Our success depends in part on our ability to identify discoveries that will improve crop performance, in our agriculture activity, obtain clinical benefits, in our human health activity, or improve industrial inputs, in our industrial applications activity. To develop these discoveries and product candidates into commercial products, we either license them to collaborators or develop them independently. Pursuant to our collaboration agreements in our agriculture activity, we are usually entitled, subject to certain conditions, to receive royalties on products that are based on, or integrate, these discoveries. In addition, certain of our agreements in our agriculture activity entitle us to upfront fees, research and development payments and milestone payments in the event that specified milestones are met. Except for Casterra's castor seed varieties and our first products in our medical cannabis and ag-biologicals activities, none of our product candidates has completed the development process and become commercially available, and there can be no guarantee that any of our current or future product candidates will ever reach commercialization. Therefore, we currently do not earn royalties, nor do we have significant sales revenues from the sale of products based on our discoveries and product candidates. Nevertheless, our long-term growth strategy is based in large part on the expectation that such royalties and revenues from product sales will comprise a significant portion of our revenues in the future. If we or our collaborators are not successful in commercializing products based on our discoveries, we will not realize revenues from sales or royalties and may not earn a profit on our discoveries, which could materially and adversely affect our results of operations, financial condition and our long-term growth strategy and could cause us to cease operations.

The manner in which we and our collaborators develop our product candidates in our various fields of activity affects the period that will pass until such products are commercialized, if ever. Product candidates based on our discoveries may never become commercialized for any of the following reasons:

- our discoveries and product candidates may not be successfully validated or may not have the desired effect required in order to become, or to be incorporated into, commercial products;
- the process of developing product candidates based on our discoveries is lengthy and expensive, and we or our collaborators may not be able to allocate the resources needed to complete such development within the desired timeline;
- we or our collaborators may decide to discontinue, pause, reduce, or alter the scope of the development efforts for our product candidates;
- we may fail to satisfy, in a timely manner or at all, relevant milestones under our agreements with our collaborators;
- regulatory conditions related to our product candidates may change in different territories, thus negatively affecting the relevant development processes and extending their length or limiting the commercialization of such product candidates;
- we or our collaborators may be unable to obtain the requisite regulatory approvals for product candidates based on our discoveries;
- our competitors may launch competing or more effective products;
- we or our collaborators may be unable to fully develop and commercialize product candidates containing our discoveries or may decide, for whatever reason, not to commercialize, or to delay the commercialization of, such product candidates;
- a market may not exist for products containing our discoveries or such products may not be commercially successful or relevant;
- we may be unable to protect the intellectual property underlying our discoveries in the necessary jurisdictions; and
- we may encounter production and scale-up challenges with respect to our product candidates that hinder their commercialization.

Our product development cycle is lengthy and uncertain, and we may never sell or earn royalties on the sale of commercial products based on our discoveries.

Research and development in our fields of activity is expensive and prolonged and entails considerable uncertainty. We may spend many years and dedicate significant financial and other resources developing product candidates that will never be commercialized. The process of discovering, developing and commercializing ag-chemicals, ag-biologicals, seed traits, human microbiome-based therapeutics, medical cannabis products or castor varieties involves several phases and a long development period. The timelines for development of product candidates by us or by our collaborators may extend beyond our expectations for many reasons, such as:

- we or our collaborators may not be able to allocate the resources needed to develop product candidates based on our discoveries;
- we or our collaborators may revise the process of product development or make other decisions regarding the product development pipelines that may extend the development period;
- we or our collaborators may prioritize other development activities ahead of development activities with respect to the product candidates on which we collaborate;
- our discoveries may not be successfully validated or may not have the desired effect sought by us or by our collaborators; and
- we or our collaborators may be unable to obtain the requisite regulatory approvals for the product candidates based on our discoveries within expected timelines or at all.

Most of the product candidates we or our collaborators are developing are in early development stages. We have little to no certainty as to which and when, if any, any of these product candidates will eventually reach commercialization. Because of the long product development cycle and the complexities and uncertainties associated with research in our fields of activity, there is significant uncertainty as to whether we will ever generate significant revenues or royalties, if any, from the product candidates that we or our collaborators are developing. For more information on the product development cycle of the product candidates we develop and a description of the phases of development, see the 'Product Development Cycle' paragraph under the description of each of our activity divisions and subsidiaries in "Item 4. Information on the Company—B. Business Overview".

If we are unable to efficiently produce and scale up the production of our products, whether ourselves or through third party contractors, we may be unable to achieve our commercialization targets.

When we introduce a product to the market, and in certain cases even in later stages of product development, we need to establish efficient production capabilities for our products. In most cases, our products are, or are expected to be, produced by third party producers with whom we contract for such purpose. The production of our products, and the scale up of such production, are complicated processes that require expertise. If we or our third party contractors are unable to efficiently produce and scale up production as needed to meet the demand for our products, we may be unable to achieve our commercialization targets, which may, in turn, materially and adversely affect our future results of operations.

Due to mergers and consolidations, there is a reduced number of companies in the agriculture industry with which we might establish strategic partnerships, and we rely on a limited number of collaborators to develop and commercialize product candidates containing our seed trait, ag-chemical and ag-biological product candidates.

The agriculture markets are highly consolidated and dominated by a relatively small number of large companies. In our agriculture operations, we are currently undertaking collaborations with several of these companies to develop improved seed traits, ag-chemical and ag-biological product candidates. Due to the small number of major companies in this industry, there are limited opportunities for us to grow our business with new collaborators. In addition, if we fail to develop or maintain our relationships with any of our current collaborators, we could not only lose our opportunity to work with that collaborator, but we could also suffer a reputational risk that could impact our relationships with other collaborators in what is a relatively small industry community.

In our agriculture operations, we are currently working either with collaborators or on independent projects to research and develop our different seed trait, ag-chemical and ag-biological product candidates. While we seek to expand our portfolio of product candidates in the future, the research and development required to discover and develop new product candidates is costly, time-intensive and requires significant infrastructure resources. If we are unable to enter into new collaborations, or if we do not have the resources to develop the capabilities or resources necessary to discover and develop such product candidates independently, we may not be able to expand our portfolio of these product candidates, which could have a material adverse effect on our business prospects.

A decrease in research expenditures by the major companies in our target markets may jeopardize the continuation, or scope, of our collaborations with such companies and adversely impact our ability to continue or extend existing collaborations or enter into new collaborations on favorable financial terms.

The research and development expenditures of our existing and potential collaborators in the agriculture, human health, and industrial applications markets we operate in may be reduced for reasons beyond our control. For example, a global crisis or economic recession, a decrease in the prices of agricultural commodities, or the consolidation trend in the seeds and ag-chemicals industries may result in decreased research and development expenditures in the markets relevant for our seed trait, ag-biological and ag-chemical product candidates. Such developments may, in turn, adversely impact our ability to maintain or extend our existing collaborations or enter into new collaborations on favorable financial terms. For example, we may not be able to enter into new collaborations under which our collaborators cover our expenses through research and development payments.

We or our collaborators may fail to perform obligations under the collaboration agreements.

We are obligated under our collaboration agreements to perform research activities over a particular period of time. If we fail to perform our obligations under these agreements, in some cases our collaborators may terminate our agreements with them and in other cases our collaborators' obligations may be reduced and, as a result, our anticipated revenues may decrease. In addition, any of our collaborators may fail to perform their obligations, which may hinder development and commercialization of products containing the product candidates we develop and materially and adversely affect our future results of operations. Furthermore, the various payments we receive from our collaborators are currently our primary source of revenues. If our collaborators do not make these payments, either due to financial hardship, disagreement under the relevant collaboration agreement or for any other reason, our results of operations and business could be materially and adversely affected. If disagreements with a collaborator arise, any dispute with such collaborator may negatively affect our relationship with one or more of our other collaborators and may hinder our ability to enter into future collaboration agreements, each of which could negatively impact our business and results of operations.

We are operating in multiple industries, each of which consists of multiple companies with much greater resources than us. Competition in our industries is intense and requires continuous technological development. If we are unable to compete effectively, our financial resources will be diluted and our financial results will suffer.

We currently face significant competition in the markets in which we operate. The agriculture, human health and industrial applications markets in which we operate are intensely competitive and rapidly changing. Many companies engage in research and development of products in such markets, and speed in getting a new product candidate to market can be a significant competitive advantage. In most segments of our operations, the number of products available to the consumer is steadily increasing as new products are introduced. We may be unable to compete successfully against our current and future competitors, which may result in lower prices and margins and the inability to achieve market acceptance for our products. In addition, many of our competitors have substantially greater financial, marketing, sales, distribution and technical resources than us and some of our collaborators are significantly larger than us and have more experience in research and development, regulatory matters, manufacturing and marketing. We anticipate increased competition in the future as new companies enter these markets and new technologies become available. Our technologies may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors or collaborators, which will prevent or limit our ability to receive any associated research and development payments or generate revenues from the commercialization of our product candidates.

We are working to develop and commercialize novel ag-biological products, and our efforts may be unsuccessful.

Our majority-owned subsidiary, Lavie Bio, is developing ag-biological product candidates, currently focused mainly on microbial-based bio-stimulants and bio-pesticides, through a novel approach, focused on plant-microbiome relationship. In certain of its ag-biological product programs, Lavie Bio funds its early stages of research and development efforts, while in others it funds the entire development program towards launch of a commercial product. Lavie Bio's efforts to develop and commercialize novel ag-biological product candidates may fail for a variety of reasons, including:

- failure to establish the requisite infrastructure to enable the discovery and development of microbial bio-stimulants;
- failure to identify and develop microbial candidates that enhance plant performance at the desired efficacy and stability;
- failure to successfully complete development of microorganisms to achieve cost-effective and commercially viable products;
- failure to obtain and maintain patent and trade secret protection for its product candidates;
- failure to operate without infringing or violating the valid and enforceable patents or other intellectual property rights of third parties;
- inability to obtain sufficient funding to fully execute its business plan;
- failure to meet regulatory requirements;
- failure to establish efficient and reliable production and scale up capabilities of Lavie Bio's products through third party contractors; and
- failure to establish cost-effective go-to-market models for selling its products.

If Lavie Bio's efforts to develop and commercialize ag-biological product candidates are unsuccessful, our results of operations could be negatively impacted.

We are working to develop and commercialize novel ag-chemical products, and our efforts may be unsuccessful.

Our subsidiary, AgPlenus, is currently developing solutions for crop protection through chemistry, or ag-chemistry. AgPlenus is developing these product candidates through a novel approach, focused on biologically significant proteins called "targets". AgPlenus' efforts to develop novel ag-chemical product candidates may fail for a variety of reasons, including:

- failure of its relatively novel target-based approach to lead to an effective product candidate or failure to identify chemical compounds that will display required level of performance;
- failure to establish cost-effective production of AgPlenus' product candidates;
- failure to obtain and maintain patent and trade secret protection for its product candidates;
- failure to operate without infringing or violating the valid and enforceable patents or other intellectual property rights of third parties;
- inability to obtain sufficient funding to fully execute its ag-chemical business plan; and
- failure to meet regulatory requirements.

If AgPlenus' efforts to develop ag-chemical product candidates are unsuccessful, our results of operations could be negatively impacted.

We are working to develop and commercialize seed-trait products, and our efforts may be unsuccessful.

We are developing seed-trait and insect control product candidates in our internal Ag-Seeds division. Our efforts to develop novel product candidates may fail for a variety of reasons, including:

- failure to identify and develop candidate genomic elements having the desired effect on the target trait in the plant of interest;
- failure to identify and develop toxin candidates having the desired effect on the target insects when inserted into the plants of interest;
- failure to obtain and maintain patent and trade secret protection for our product candidates;
- failure to operate without infringing or violating the valid and enforceable patents or other intellectual property rights of third parties;
- inability to obtain sufficient funding to fully execute the business plan;
- failure to successfully complete development of our seed trait product candidates; and
- our failure to meet regulatory requirements for seed trait and insect control product candidates.

Furthermore, even if we are able to discover and begin to develop effective product candidates, we may not be successful if we are unable to find collaborators for further development and commercialization of the product candidates. If our efforts to develop seed trait product candidates are unsuccessful, our results of operations could be negatively impacted.

We are working to develop human microbiome-based therapeutic product candidates, and our efforts may be unsuccessful.

Our subsidiary, Biomica, is developing microbiome-based therapeutic product candidates and is heavily dependent on the success of such product candidates, which are in pre-clinical and clinical development stages. If Biomica is unable to advance its current or future product candidates through clinical trials, obtain marketing approval and ultimately commercialize any product candidates it develops, or experiences significant delays in doing so, our business will be materially harmed. Biomica's product development efforts may be unsuccessful for a variety of reasons, including the following:

- failure to complete pre-clinical studies and clinical trials with positive results in which the FDA agrees with the design, endpoints or implementation;
- failure to receive regulatory approvals or authorizations for conducting our planned clinical trials or future clinical trials;
- failure to obtain sufficient financing for the development and commercialization of its product candidates;
- failure to obtain and maintain patent and trade secret protection and regulatory exclusivity for its product candidates.
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems;
- failure to launch commercial sales of its products, if and when approved, whether alone or in collaboration with others.
- failure to enter into new collaborations throughout the development process as appropriate, from pre-clinical studies through to commercialization;
- failure to achieve acceptance of its products, if and when approved, by patients, the medical community and third-party payors;

- failure to effectively compete with companies developing and commercializing other therapies for the indications that Biomica's product candidates target;
- failure to obtain and maintain coverage and adequate reimbursement by third-party payors, including government payors, for its products, if approved;
- failure to protect its rights in its intellectual property portfolio;
- failure to operate without infringing or violating the valid and enforceable patents or other intellectual property rights of third parties;
- failure to maintain a continued acceptable safety profile of the products following approval; and
- failure to maintain and develop an organization of scientists and business people who can develop and commercialize its products and technology.

If Biomica's efforts to develop microbiome-based human therapeutics are unsuccessful, our results of operations could be negatively impacted.

We are working to develop and commercialize medical cannabis products, and our efforts may be unsuccessful.

Canonic, our subsidiary, is developing medical cannabis products. Canonic's efforts to develop and commercialize medical cannabis products may fail for a variety of reasons, including:

- failure to develop cannabis varieties having desired efficacy and stability;
- failure to meet regulatory requirements;
- failure to engage with, and successfully operate, contractors, in Israel and abroad, for performing cultivation and production services;
- failure to establish successful distribution channels, in Israel and abroad, for its medical cannabis products;
- failure to satisfy the requirements for the export of seeds, seedlings of finished products;
- failure to meet patients' satisfaction;
- inability to obtain sufficient funding to fully execute its business plan;
- failure to secure cannabis cultivation facilities;
- failure to establish efficient and reliable production capabilities for Canonic's medical cannabis products through third party contractors; and
- the market for medical cannabis products is relatively new and suffers from high uncertainty in many aspects, including demand, supply, pricing, regulation, customer preferences, etc.

If Canonic's efforts to develop and commercialize medical cannabis products are unsuccessful, our results of operations could be negatively impacted.

We are working to develop and commercialize castor seeds for industrial applications, and our efforts may be unsuccessful in achieving a commercial presence in this market.

Our subsidiary, Casterra, is developing improved, high-yield castor bean seeds for use as a source of non-edible feedstock for industrial uses of castor oil. The supply chain in the market of castor oil for industrial uses is not well established and is evolving. In order for Casterra's castor bean seeds to be an attractive feedstock for oil for industrial uses, it will need to demonstrate on a commercial scale that its castor beans can reliably be used as a cost-efficient feedstock for castor oil production. Casterra's efforts to develop castor been seeds for industrial uses may fail for a variety of reasons, including:

- failure to reach desired yields of its castor seed varieties on a commercial scale to secure economic viability as bio-based oil feedstock;
- failure to establish an efficient mechanical harvest solution;
- failure to establish a cost-effective production of castor bean grains, allowing grower profitability;
- failure to reach large scale adoption of castor by growers, including the successful management of diseases and pests;
- failure to address the health and environmental risks posed by castor bean seeds, which contain ricin, a naturally occurring poison;
- failure to comply with any regulatory requirement related to sales of castor beans, and in particular those related to the import of such beans and the potential effects of ricin; and
- failure to establish efficient and reliable production and scale up capabilities of castor seeds, independently or through third party contractors.

Casterra is operating in a new industry, with limited understanding of the dynamics involved in producing and selling castor seeds. Casterra has made initial commercial sales of castor seeds; however, we are unable to foresee as to when significant sales will commence. If Casterra is unable to adequately address any of these challenges, we may not find a market for our castor bean seeds and our results of operations could be materially and adversely affected.

If Lavie Bio is unable to establish successful distribution and retail channels for the commercialization of its products, it will not be able to meet its commercialization plans.

Our majority-owned subsidiary, Lavie Bio, intends to commercialize part of its future ag-biological product portfolio through distribution and retail channels. Lavie Bio has little experience in establishing such channels and may be unsuccessful in doing so. In addition, Lavie Bio will be dependent on its distributers in introducing its products to the market. If Lavie Bio or its distributors are unsuccessful in their efforts to penetrate the market, our revenues and financial results will be adversely affected.

If Canonic is unable to establish successful marketing and distribution channels for the commercialization of its products, it will not be able to meet its commercialization plans.

Our subsidiary, Canonic, commercializes its medical cannabis products through licensed distributors and pharmacies. Canonic has little experience in establishing such channels and may be unsuccessful in doing so. In addition, Canonic will be dependent on its distribution and marketing channels in introducing its products to the market. If Canonic is unsuccessful in its efforts to penetrate the market, our revenues and financial results will be adversely affected.

Biomica's product candidates are based on microbiome therapeutics, which is an unproven approach to therapeutic intervention.

Biomica's product candidates are based on microbiome therapy, a therapeutic approach that is designed to treat disease by restoring the function of a dysbiotic microbiome. To our knowledge, no company has received regulatory approval for a therapeutic based on this approach. We cannot be certain that our approach will lead to the development of approvable or marketable products. In addition, the FDA or other regulatory agencies may lack experience in evaluating the safety and efficacy of products based on microbiome therapeutics, which could result in a longer than expected regulatory review process or evolving FDA standards and guidance, increase Biomica's expected development costs and delay or prevent commercialization of its product candidates. Regulatory requirements governing microbiome therapies are still developing and may change in the future, which may lengthen the regulatory review process, require us to perform additional preclinical studies or clinical trials, increase our development costs, delay or prevent approval and commercialization of our current or future product candidates or lead to significant post-approval limitations or restrictions.

Even if we are entitled to royalties from our collaborators, we may not actually receive these royalties, or we may experience difficulties in collecting the royalties that we believe we are entitled to, potentially resulting in costly litigation and loss of reputation.

If and when our collaborators launch commercial products containing our licensed discoveries, we will rely on our collaborators to report to us the sales they earn from these products and to accurately calculate the royalties we are entitled to, a process that will involve complicated calculations. Although we seek to address these concerns in our collaboration agreements, such provisions may not be effective. Additionally, we may not be able to achieve our long-term goal of generating revenues from royalties, and in the coming years our revenues will be entirely dependent on fees we earn for our research and development services and milestone payments from our collaborators.

In addition, our ability to generate royalty payments from our collaboration agreements depends on our ability to clearly delineate our intellectual property rights under those agreements. We often license patented discoveries and product candidates to our collaborators, who use them to develop and commercialize products. However, a collaborator may use our intellectual property without our permission, dispute our ownership of certain intellectual property rights or argue that our intellectual property does not cover their marketed product. If a dispute arises, it may result in costly litigation, and our collaborator may refuse to pay us royalty payments while the dispute is ongoing. Furthermore, regardless of any resort to legal action, a dispute with a collaborator over intellectual property rights may damage our relationship with that collaborator, and may also harm our reputation in the industry.

Each of us and our subsidiaries depends on our key personnel and, if we are not able to attract and retain qualified scientific, technological, business and managerial personnel, we may not be able to grow our business or develop and commercialize our product candidates.

The vast majority of our workforce is involved in research and development. Our business is therefore dependent on our ability to recruit and maintain a highly skilled and educated workforce with expertise in a range of disciplines, including biology, chemistry, plant genetics, agronomics, entomology, mathematics, computer science and other fields relevant to our operations. The number of qualified and highly educated personnel in the fields upon which our business focuses in Israel, where most of our operations are located, is limited and competition for the services of such persons is intense. Although we have employment agreements with all of our employees, most of these agreements may be terminated upon short notice. The failure to hire and retain skilled and highly educated personnel could limit our growth and hinder our research and development efforts.

Competition for highly skilled scientific, technical and other personnel is intense, and as a result we may fail to attract, recruit, retain and develop qualified employees, which could materially and adversely impact our business, financial condition and results of operations.

We compete for personnel in a market characterized by rapidly changing technologies and an evolving competitive landscape. In order for us to successfully compete and grow, we must attract, recruit, retain and develop personnel with requisite qualifications to provide expertise across the entire spectrum of our intellectual capital and business needs.

Our principal research and development activities are conducted at our facilities in Israel, where we face significant competition. While there has been intense competition for qualified human resources in the Israeli high-tech and bio-tech industries historically, these industries experienced record growth and activity in 2021. This flurry of growth and activity has caused a sharp increase in job openings in Israeli high-tech and bio-tech companies, intensifying competition between these employers to attract qualified employees in Israel. As a result, these industries in Israel have experienced significant levels of employee attrition and are currently facing a severe shortage of skilled human capital, including research and development professionals.

Many of the companies with which we compete for qualified personnel have significant resources, and we may not succeed in recruiting additional experienced or professional personnel, retaining personnel or effectively replacing current personnel who may depart with qualified or effective successors. In addition, our employees may be increasingly targeted for recruitment by competitors and other companies in the bio-tech industry, which may make it more difficult for us to retain employees and may increase retention costs. Training of new employees with limited or no prior relevant experience could be time-consuming, expensive and require significant resources.

In addition, as a result of the intense competition for qualified human resources, the high-tech and bio-tech markets have also experienced and may continue to experience significant wage inflation. Accordingly, our efforts to attract, retain and develop personnel may also result in significant additional expenses, which could adversely affect our profitability. Furthermore, in making employment decisions, particularly in the high-tech and bio-tech industries, job candidates often consider the value of the equity they are to receive in connection with their employment, which may force us to increase the amount of equity awards we grant in order to recruit and retain talent.

In light of the foregoing, there can be no assurance that qualified employees will remain in our employ or that we will be able to attract and retain qualified personnel in the future. Failure to retain or attract qualified personnel could have a material adverse effect on our business, financial condition and results of operations.

We develop certain discoveries independent of our collaborators, and we may need to finance the cost of the development of such product candidates ourselves.

We develop certain discoveries and product candidates independent of our collaborators, with a goal of making such discoveries available to collaborators in later phases or developing and commercializing end products. While we believe this will allow us to obtain more favorable license or commercialization terms with respect to such discoveries, product candidates and products, the up-front cost to us of developing programs without a collaborator (and therefore without external funding for the research and development expenditures we incur) in these early phases involves higher risks, since we need to fund the research and development of such programs ourselves. If we are unsuccessful in discovering promising product candidates after having invested significant funds, or if we are unable to find collaborators who are interested in such results and willing to fund subsequent phases of development and commercialization, such failures could have a material and adverse effect on our business, financial condition and results of operations. Regardless of the outcome of our research and development efforts, traditional financing sources such as bank financing or public debt or equity financing, if available to us, could carry with them certain drawbacks, such as imposition of covenants restricting our ability to operate, or substantial dilution to our existing shareholders.

Our business is subject to various government regulations and, if we or our collaborators are unable to obtain the necessary regulatory approvals, we may not be able to continue our operations.

Our business is generally subject to two types of regulations: regulations that apply to how we operate and regulations that apply to product candidates and products. We may fail to comply with all currently applicable regulations, and we may become subject to new or revised regulations or approvals in the future. Furthermore, any violation of these regulations could expose us to civil and criminal penalties.

The relevant regulatory regimes may be particularly onerous; for example, the U.S. federal government's regulation of biotechnology is divided among the United States Environmental Protection Agency, which regulates activity related to the invention of plant pesticides and herbicides, the United States Department of Agriculture, which regulates the import, field testing and interstate movement of specific technologies that may be used in the creation of transgenic plants, and the United States Food and Drug Administration, or the FDA, which regulates foods derived from new plant varieties. If we or our collaborators are unable to obtain the requisite regulatory approvals or there is a delay in obtaining such approvals as a result of negative market perception or heightened regulatory standards, such product candidates will not be commercialized, which would negatively impact our business and results of operations.

Our medical cannabis activity exposes us to legal and reputational risks associated with the cannabis industry.

Our involvement in cannabis-related activity may expose us to legal and reputational risks. Such risks include:

- activities in the field of cannabis are subject to enhanced regulation in Israel and worldwide. For example, Israeli regulation requires that we obtain a specific permit for each of the following activities: research, propagation, cultivation, production, marketing and distribution and use;
- changes in laws, regulations and guidelines related to cannabis may result in significant additional compliance costs for us or limit our ability to operate in certain jurisdictions;
- certain banks will not accept deposits from or provide other bank services to businesses involved with cannabis;
- third parties with whom we do business may perceive that they are exposed to reputational risk as a result of our cannabis-related business activities and may ultimately elect not to do business with us;
- certain investors or investment banks are reluctant to work with companies affiliated with activity in the cannabis industry;

- future sales of medical cannabis products may expose us to consumer complaints or legal claims with respect to product quality or activity; and
- increased premiums under our D&O liability insurance policies.

Any of the foregoing factors could adversely affect our business and results of operations

The cost we incur in procuring a D&O liability insurance has substantially increased during the last years. If this trend continues, it will have an adverse effect on our results of operations.

D&O liability insurance is intended to cover the liability of the individuals serving as our directors and management, from losses incurred as a result of such service, our liability to indemnify such individuals for such losses and to protect us from certain securities claims. During the last years, there has been a significant increase in the cost of D&O insurance for smaller, dual-listed public companies such as our Company. These increases have been tied to perceived heightened levels of risk for D&O insurers. Insurers have been increasing their level of compensation (in the form of premiums), which they believe has not been commensurate with the risk being taken by them. In parallel, there has been an increase in the amounts of the deductibles payable by public companies in situations in which an insurable event occurs. In addition, several insurers are restricted from writing policies for companies active in the area of cannabis, which restricts the number of insurers that can provide us with a D&O liability insurance and limits our ability to negotiate the terms of such insurance. If these trends continue, it will increase our operational expenses and have a negative effect on our financial results.

Disruption to our information technology, or IT, system could adversely affect our reputation and have a material adverse effect on our business and results of operations.

Our computational technologies rely on our IT system to collect and analyze the biological and chemical data we collect and discover. We store significant amounts of data, and to date, have compiled several petabytes of data. There can be no assurance that our back-up storage arrangements will be effective if it becomes necessary to rely on them. Furthermore, we can provide no assurance that our current IT system is fully protected against third-party intrusions, viruses, hacker attacks, information or data theft or other similar threats. Disruption or failure of our IT system due to technical reasons, cyberattacks, natural disasters or other unanticipated catastrophic events, including power interruptions, storms, fires, floods, earthquakes, terrorist attacks and wars could significantly impair our internal development efforts and materially and adversely affect our collaborations, our business and our results of operations.

As we continue to develop our computational technologies and expand our datasets, we may need to update our IT system and storage capabilities. However, if our existing or future IT system does not function properly, or if the IT system proves incompatible with our new technologies, we could experience interruptions in data transmissions and slow response times, preventing us from completing routine research and business activities, which could adversely affect our business and results of operations.

Development of our product candidates, particularly during our validation and testing activities, may be adversely affected by circumstances caused by us or those beyond our control.

The industries we are engaged in are subject to various factors that make our operations relatively unpredictable from period to period. For example, the testing of our product candidates may be adversely affected by circumstances both caused by us and those that are beyond our control. Factors caused by us include any failure by us or our collaborators to follow proper agronomic practice or suggested protocols for conducting our experiments, and failure to successfully complete such experiments. Factors beyond our control include weather and climatic variations, such as droughts or heat stress, or other factors we are unable to identify. For example, if there was prolonged or permanent disruption to the electricity, climate control or water supply operating systems in our greenhouses or laboratories, the plants and pests on which we test our discoveries and product candidates and the samples we store in freezers, both of which are essential to our research and development activities, would be severely damaged or destroyed, adversely affecting our research and development activities and thereby our business and results of operations. We have experienced these kind of failures in the past for unknown reasons, causing delays in our achievement of milestones and delivery of results, and necessitating that we re-start the trials. Any test failure we may experience is not covered by our insurance policy, and therefore could result in increased cost of the trials and development of our product candidates, which may negatively impact our business and results of operations.

The COVID-19 pandemic has caused and may continue to cause disruption in certain of our activities.

The COVID-19 pandemic has caused states of emergency to be declared in various countries, travel restrictions imposed globally, quarantines established in certain jurisdictions and various institutions and companies being closed. Numerous government regulations and public advisories, as well as shifting social behaviors, temporarily and from time to time limited or closed non-essential transportation, government functions, business activities and person-to-person interactions, and the duration of such trends is difficult to predict.

The COVID-19 pandemic has lead to increased absences of our employees due to illness and isolation requirements of our employees and their immediate family members. While we have facilitated remote work for our employees, part of our activities, mainly laboratory and testing operations, cannot be conducted remotely, and are negatively affected in times of increased employee absence, which may cause delays in our laboratory and experimental operations. Such delays may, in turn, negatively affect our ability to meet our work plans, our contractual obligations and our targets.

While certain COVID-19 mitigation actions have been relaxed, no assurance can be made that such actions, or other measures, will not be reimposed in the future. Although to date these restrictions have not materially impacted our operations other than an increase in absences of our employees due to illness and isolation requirements, the effect on our business, from the spread of COVID-19 and the COVID-19 mitigation actions implemented by the governments of the State of Israel, the United States and other countries, may worsen over time. The extent to which COVID-19 impacts our business will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others.

Consumer and government resistance to GMOs may negatively affect our public image and reduce potential sales of plants containing our traits.

A certain part of our seed traits activity includes research and development of genetically modified, or GM, seeds. Foods made from such seeds are not accepted by many consumers and in certain countries production of certain GM crops is effectively prohibited, including throughout the European Union, due to concerns over such products' effects on food safety and the environment. The high public profile of biotechnology agriculture, especially in food production, and lack of consumer acceptance of products to which we have devoted substantial resources could negatively affect our public image and results of operations. For example, the prohibition on the production of certain GM crops in select countries and the current resistance from consumer groups, particularly in Europe, to GM crops not only limits our access to such markets but also has the potential to spread to and influence the acceptance of products developed through biotechnology in other regions of the world and may also influence regulators in other countries to limit or ban production of GM crops, which could limit the commercial opportunities to exploit biotechnology.

GM crops are grown principally in the United States, Brazil and Argentina where there are fewer restrictions on the production of GM crops. If these or other countries where GM crops are grown enact laws or regulations that ban the production of such crops or make regulations more stringent, we could experience a longer product development cycle for our product candidates and may even have to abandon projects related to certain crops or geographies, both of which would negatively affect our business and results of operations and could cause us to have to cease operations. Furthermore, any changes in such laws and regulations or consumer acceptance of GM crops could negatively impact our collaborators, who in turn might terminate or reduce the scope of their collaborations with us or seek to alter the financial terms of our agreements with them.

We have a history of operating losses and negative cash flow, and we may never achieve or maintain profitability.

We have a history of losses, and incurred operating losses of $31.0, $24.8 million, and $21.2 million for the years ended December 31, 2021, 2020, and 2019, respectively. There is no assurance that our efforts in developing our product candidates will result in commercially successful products. We expect to continue to incur losses in future periods, until we begin earning significant revenues or royalties on our products, the product candidates we are currently developing or any new product candidates we develop in the future, if at all. Because we will incur significant costs and expenses for these efforts before we obtain any incremental revenues from them, our losses in future periods could be significant. In addition, we may find that these efforts are more expensive than we anticipate or that they do not result in profitability in the time period we anticipate, which would further increase our losses. For example, if governments across the globe continue to implement actions that limit movement and activity, as a result of the COVID-19 pandemic or otherwise, we could face increased costs in order to meet our product development timeline. If we are unable to adequately control the costs associated with operating our business, including our costs of development and sales, we may deplete our cash resources and may be unable to continue to finance our business from our existing cash resources, and, our business, financial condition, operating results and prospects will suffer. For more information concerning our cash resources, please see "Liquidity and Capital Resources" in Item 5.B below.

The licenses we grant to our collaborators to use our discoveries are in most cases exclusive with respect to a specified discovery, product type or market area. This may limit our opportunities to enter into additional licensing or other arrangements with respect to such discoveries, product types or market areas.

Most of the licenses we grant our collaborators to our product candidates or to use specific discoveries we have made are exclusive in the area of the license. That means that once these discoveries are licensed to a collaborator, we are generally prohibited from licensing those discoveries to any third party for use in such area. The limitations imposed by these exclusive licenses could prevent us from expanding our business and increasing our exposure to new licensees, both of which could adversely affect our business and results of operations.

We may be required to pay substantial damages as a result of uninsured product liability claims.

Once products integrating our discoveries and product candidates reach commercialization, if ever, product liability claims will be a commercial risk for our business, particularly as some of the products that we develop can be harmful to humans or the environment. Courts have levied substantial damages in the United States and elsewhere against a number of companies in the agriculture and human health industries in past years based upon claims for injuries allegedly caused by the use of their products. Product liability claims against us or our collaborators selling products that contain our product candidates or allegations of product liability relating to products containing our discoveries could damage our reputation, harm our relationships with our collaborators, and materially and adversely affect our business, results of operations, financial condition and prospects. We currently do not have product liability insurance coverage. Any such insurance we may obtain in the future may be expensive and may not cover our potential liability in full. Furthermore, while our collaboration agreements typically require that our collaborators indemnify us for the cost of product liability claims brought against us, such indemnification provisions may not always be enforced, and we may receive no indemnification if our own misconduct led to the claims.

Our facilities, in Israel and in the U.S., are located on leased properties. Termination of any of the leases, changes in lease terms, and long-term leases that may not be terminated at will may jeopardize our activity and materially affect our financial condition or results of operations.

Our office spaces, labs, facilities, and farm are all situated on properties that we lease pursuant to lease agreements, in Israel and in the U.S. Once a lease agreement ends, we may not be able to renew it on favorable terms, or not at all, which may require us to increase our lease payments or take a new lease in another property, adversely affecting our business and results of operations. In addition, a long-term lease may mean no or limited possibility to terminate the lease at will before the completion of the lease period, which may lead to continued holding of an un-needed space or entry into a sub-lease, which may adversely affect our results of operations. For more information regarding our facilities, please see "Item 4. Information on the Company—D. Property, Plants and Equipment."

Lavie Bio's research and development facility in the U.S., our contracts with foreign businesses and any other current or future operations outside of Israel expose us to additional market and operational risks, and failure to manage these risks may adversely affect our business and operating results.

Lavie Bio's research and development facility in St. Louis, Missouri may expose us to some of such operational risks, including:

- fluctuations in foreign currency exchange rates;
- potentially adverse tax consequences;
- difficulties in staffing and managing foreign operations;
- hiring and retention of employees and/or consultants under foreign employment laws which are not familiar to us;
- laws and business practices that sometimes favor local business;

- compliance with foreign legislation, being subject to laws, regulations and the court systems of multiple jurisdictions; and
- tariffs, trade barriers and other regulatory or contractual limitations on our ability to develop (and, when applicable in the future, sell) our solutions in certain foreign markets.

Failure to manage the market and operational risks associated with international operations effectively could limit the future growth of our business and adversely affect our operating results.

Our operations are subject to various health and environmental risks associated with our use, handling and disposal of potentially toxic materials.

Our operations involve various health and environmental risks. For example, as part of our seed traits operations, we assist in the development of GM crops by inserting new genes into the genomes of certain plants. Though we introduce these genes in order to improve plant traits, we cannot always predict the effect that these genes may have on the plant. In some cases, the genes may render the plant poisonous or toxic, or they may cause the plant to develop other dangerous characteristics that could harm the plant's surrounding environment. Furthermore, while we comply with relevant environmental laws and regulations, there is a risk that, when testing genetically modified plants, the seeds of these plants may escape the greenhouse or field in which they are being tested and contaminate nearby fields. Poisonous or toxic plants may therefore be inadvertently introduced into the wild, or possibly enter the food production system, harming the people and animals who come in contact with them.

Moreover, as part of Lavie Bio's operations, it develops novel product candidates based on microbes in order to improve plants traits. Although microbes exist naturally in the environment, we cannot always predict the effect that microbes have on the plant and its environment. There may be cases where the microbes render the plant poisonous or toxic, or they may cause the plant to develop other dangerous characteristics that could harm the plant's surrounding environment.

Similar risks are relevant to our ag seeds operations, especially with respect to GM seeds, AgPlenus' ag-chemicals operations, Canonic's cannabis operations and Casterra's castor bean operations.

Changes in laws and regulations to which we are subject, or to which we may become subject in the future, may materially increase our costs of operation, decrease our operating revenues and disrupt our business.

Laws and regulatory standards and procedures that impact our business are continuously changing. Responding to these changes and meeting existing and new requirements may be costly and burdensome. Changes in laws and regulations may occur that could:

- impair or eliminate our ability to research and develop our product candidates, including validating our product candidates through lab, greenhouse, field or clinical trials;
- increase our compliance and other costs of doing business through increases in the cost to patent or otherwise protect our intellectual property or increases in the cost to our collaborators to obtain the necessary regulatory approvals to commercialize and market the product candidates we develop with them;
- require significant product redesign or systems redevelopment;
- render our product candidates less profitable, obsolete or less attractive compared to competing products;
- affect our collaborators' willingness to do business with us;
- jeopardize import or export of raw material or end products, such as with respect to medical cannabis seeds, seedlings and products;
- reduce the amount of revenues we receive from our collaborators through milestone payments or royalties; and
- discourage our collaborators from offering, and consumers from purchasing, products that incorporate our discoveries.

Any of these events could have a material adverse effect on our business, results of operations and financial condition. For example, legislators and regulators have increased their focus on plant biotechnology in recent years, with particular attention paid to GM crops as well as on ag-chemicals.

While none of our product candidates are currently available for sale, other than Casterra's castor seeds, our future growth relies on our ability and the ability of our collaborators to commercialize and market our product candidates, and any restrictions on such activities could materially and adversely impact our business and results of operations. Any changes in regulations in countries where our product candidates are used could result in our collaborators being unable or unwilling to develop, commercialize or sell products that incorporate our discoveries. In addition, we rely on patents and other forms of intellectual property protection. Legislation and jurisprudence on patent protection in the key target markets where we seek patent protection, such as the United States and the European Union, is evolving and changes in laws could affect our ability to obtain or maintain patent protection for our product candidates. Any changes to these existing laws and regulations may materially increase our costs of operation, decrease our operating revenues and disrupt our business. For more information please see 'Government Regulation of our Operations' and 'Government Regulation of Product Candidates' paragraphs under the description of each of our activity divisions and subsidiaries under "Item 4. Information on the Company—B. Business Overview."

Risks Related to Our Intellectual Property Rights

Our success depends on our ability to protect our intellectual property and our proprietary technologies.

Our commercial success depends in part on our ability to obtain and maintain patent protection and trade secret protection for our proprietary computational and experimental technologies, our discoveries and their uses, as well as our ability to operate without infringing upon the proprietary rights of others. If we do not adequately protect our intellectual property, competitors may be able to use our technologies and erode or negate any competitive advantage we may have, which could harm our business and ability to achieve profitability.

While we expect our patent applications to receive approval, we cannot be certain that we will obtain such results. Despite our efforts to protect our proprietary rights, unauthorized third parties may attempt to use, copy or otherwise obtain and market or distribute our intellectual property rights or technology or otherwise develop products or solutions with the same functionality as our solutions. In addition, the laws of some foreign countries provide less protection for proprietary rights than U.S. law. We face the occasional risk, moreover, that third parties may assert copyright, trademark and other intellectual property rights against us. Such claims may result in direct or indirect liability as we have contractually agreed to indemnify certain parties for any damages suffered as a result of infringement by us of any third-party intellectual property rights.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

We treat our proprietary computational and experimental technologies, including unpatented know-how and other proprietary information, as trade secrets. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with any third parties who have access to them, such as our consultants, independent contractors, advisors, corporate collaborators and outside scientific collaborators. We also enter into confidentiality and invention or patent assignment agreements with employees and certain consultants. Any party with whom we have executed such an agreement may breach that agreement and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such third party, or those to whom it communicates that technology or information, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, or if we otherwise lose protection for our trade secrets or proprietary know-how, the value of this information may be greatly reduced and our business and competitive position could be harmed.

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

Filing, prosecuting, maintaining and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States are less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we are unable to prevent third parties from using our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the jurisdictions in which we do not have patent protection. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products, and we may be unable to prevent such competitors from importing those infringing products into territories where we have patent protection but enforcement is not as strong as in the United States. These products may compete with our product candidates and our patents and other intellectual property rights may not be effective or sufficient to prevent them from competing in those jurisdictions. Moreover, farmers or others in the chain of commerce may raise legal challenges against our intellectual property rights or may infringe upon our intellectual property rights, including through means that may be difficult to prevent or detect. For example, the practice by some farmers of saving seeds from non-hybrid crops (such as soybeans, canola and cotton) containing biotechnological traits may prevent us from realizing the full value of our intellectual property in countries outside of the United States.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions, including China, where we have filed patent applications. The legal systems of certain countries, including China, have not historically favored the enforcement of patents or other intellectual property rights, which could hinder us from preventing the infringement of our patents or other intellectual property rights and result in substantial risks to us. Proceedings to enforce our patent rights in the United States or foreign jurisdictions 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 patent infringement or other 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 from third parties.

If we or one of our collaborators are sued for infringing the intellectual property rights of a third party, such litigation could be costly and time consuming and could prevent us or our collaborators from developing or commercializing our product candidates.

Our ability to generate significant revenues from our product candidates depends on our and our collaborators' ability to develop, market and sell our product candidates and utilize our proprietary technology without infringing the intellectual property and other rights of any third parties. In the United States and abroad there are numerous third party patents and patent applications that may be applied toward our proprietary technology, business processes or product candidates, some of which may be construed as containing claims that cover the subject matter of our product candidates or intellectual property. Because of the rapid pace of technological change, the confidentiality of patent applications in some jurisdictions, and the fact that patent applications can take many years to issue, there may be currently pending applications that are unknown to us that may later result in issued patents upon which our product candidates or proprietary technologies infringe. Similarly, there may be issued patents relevant to our product candidates of which we are not aware. These patents could reduce the value of the product candidates we develop or, to the extent they cover key technologies on which we have unknowingly relied, require that we seek to obtain licenses or cease using the technology, no matter how valuable to our business. We may not be able to obtain such a license on commercially reasonable terms. There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology industry generally. If any third party patent or patent application covers our intellectual property or proprietary rights and we are not able to obtain a license to it, we and our collaborators may be prevented from commercializing products containing our discoveries.

As the biotechnology industry continues to develop, we may become party to, or threatened with, litigation or other adverse proceedings regarding intellectual property or proprietary rights in our technology, processes or product candidates. Third parties may assert claims based on existing or future intellectual property rights and the outcome of any proceedings is subject to uncertainties that cannot be adequately quantified in advance. Any litigation proceedings could be costly and time consuming and negative outcomes could result in liability for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. There is also no guarantee that we would be able to obtain a license under such infringed intellectual property on commercially reasonable terms or at all. A finding of infringement could prevent us or our collaborators from developing, marketing or selling a product candidate or force us to cease some or all of our business operations. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel may be diverted as a result of these proceedings, which could have a material adverse effect on us. Claims that we have misappropriated the confidential information or trade secrets of third parties could similarly have a negative impact on our business.

We may be required to pay royalties to employees who develop inventions that have been or will be commercialized by us, even if the rights to such inventions have been assigned to us and the employees have waived their rights to royalties or other additional compensation.

A significant portion of our intellectual property has been developed by our employees in the course of their employment for us. Under the Israeli Patent Law, 5727-1967, or the Patent Law, inventions conceived by an employee in the course and as a result of or arising from his or her employment with a company are regarded as "service inventions," which belong to the employer, absent a specific agreement between the employee and employer giving the employee proprietary rights. The Patent Law also provides under Section 134 that if there is no agreement between an employer and an employee as to whether the employee is entitled to consideration for service inventions, and to what extent and under which conditions, the Israeli Compensation and Royalties Committee, or the Committee, a body constituted under the Patent Law, shall determine these issues. Section 135 of the Patent Law provides criteria for assisting the Committee in making its decisions. According to decisions of the Committee, an employee's right to receive consideration for service inventions is a personal right and is entirely separate from the proprietary rights in such invention. Therefore, this right must be explicitly waived by the employee. A decision handed down in May 2014 by the Committee clarifies that the right to receive consideration under Section 134 can be waived and that such waiver can be made orally, in writing or by behavior like any other contract. The Committee will examine, on a case by case basis, the general contractual framework between the parties, using interpretation rules of the general Israeli contract laws. Further, the Committee has not yet determined one specific formula for calculating this remuneration, nor the criteria or circumstances under which an employee's waiver of his right to remuneration will be disregarded. Similarly, it remains unclear whether waivers by employees in their employment agreements of the alleged right to receive consideration for service inventions should be declared as void being a depriving provision in a standard contract. All of our employees execute invention assignment agreements upon commencement of employment, in which they assign their rights to potential inventions and acknowledge that they will not be entitled to additional compensation or royalties from commercialization of inventions. Although our employees have agreed to assign to us service invention rights and have specifically waived their right to receive any special remuneration for such service inventions beyond their regular salary and benefits, we may face claims demanding remuneration in consideration for assigned inventions.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

As is the case with other biotechnology companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing biotechnology patents involves technological and legal complexity, and is costly, time consuming, and inherently uncertain. In addition, the U.S. Supreme Court has ruled on several patent cases, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the U.S. Patent and Trademark Office, the laws and regulations governing patents could change in unpredictable ways that may weaken or undermine our ability to obtain new patents or to enforce our existing patents and patents we might obtain in the future.

Our employment agreements with our employees and other agreements with our collaborators and third parties may not adequately prevent disclosure of trade secrets, know-how and other proprietary information.

A substantial portion of our technologies and intellectual property is protected by trade secret laws. We rely on a combination of patent and other intellectual property laws as well as our employment agreements with our employees and other agreements with our collaborators and third parties to protect and otherwise seek to control access to, and distribution of, our proprietary information. These measures may not prevent disclosure, infringement or misappropriation of our confidential information. Our confidentiality, nondisclosure and assignment agreements or covenants may be breached, and we may not have adequate remedies for such a breach that would effectively prevent the further dissemination of our confidential information. We have limited control over the protection of trade secrets used by our collaborators and could lose future trade secret protection if any unauthorized disclosure of such information occurs. In addition, others may independently discover our trade secrets and proprietary information, and in such cases we could not assert any trade secret rights against such parties. Laws regarding trade secret rights in certain markets where we operate may afford little or no protection of our trade secrets. Failure to obtain or maintain trade secret protection could adversely affect our business, sales and competitive position.

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 key employees, which include executive officers, 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 one year. Under applicable U.S. and Israeli laws, we may be unable to enforce these provisions. If we cannot enforce the non-compete provisions with our key 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. The defection of one or more of our employees to a competitor could materially adversely affect our business, results of operations and ability to capitalize on our proprietary information.

Risks Relating to Our Incorporation and Location in Israel

Conditions in Israel could adversely affect our business.

We are incorporated under Israeli law and our principal offices and research and development facilities are located in Israel. Accordingly, political, economic and military conditions in Israel directly affect our business. Since the State of Israel was established in 1948, a number of armed conflicts have occurred between Israel and its Arab neighbors. In recent years there has been an increase in unrest and terrorist activity, and several times since 2005 (when Israel withdrew from the Gaza Strip) conflicts arose due to Hamas' rocket attacks against Israeli civilian targets, during which Israel responded to rocket attacks by engaging in an armed conflict with Hamas in the Gaza Strip. Our principal place of business is located in Rehovot, Israel, which is approximately 30 miles from the nearest point of the border with the Gaza Strip. There can be no assurance that attacks launched from the Gaza Strip will not reach our facilities, or that hostilities will not otherwise cause a significant disruption to our operations, such as preventing our employees from reaching our facilities and limiting our ability to monitor and otherwise conduct the crop and other experiments we conduct at the facilities.

Several countries still restrict doing business with Israel and Israeli companies, and 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 sell our product candidates to companies in these countries. 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 research and development, cause our revenues to decrease and adversely affect the share price of publicly traded companies having operations in Israel, such as ours. Further, 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. In addition, there have been increased efforts by activists to cause companies and consumers to boycott Israeli goods for political reasons. Such actions, particularly if they become more widespread, may adversely impact our ability to conduct business.

Furthermore, our business insurance does not cover losses that may occur as a result of events associated with the security situation in the Middle East. Although the Israeli government currently covers the reinstatement value of direct damages that are caused by terrorist attacks or acts of war, we cannot assure that this government coverage will be maintained. Any losses or damages incurred by us could have a material adverse effect on our business and financial condition.

Our operations may be disrupted by the obligations of personnel to perform military service.

Many Israeli citizens are obligated to perform several days, and in some cases more, of annual military reserve duty each year until they reach the age of 40 (or older, for reservists who are military officers or who hold certain military positions) and, in the event of a military conflict, may be called to active duty. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists. It is possible that there will be military reserve duty call-ups in the future. Our operations could be disrupted by such call-ups, which may include the call-up of our key employees and members of our management. Such disruption could materially adversely affect our business, financial condition and results of operations.

Exchange rate fluctuations between the U.S. dollar and the NIS may negatively affect our financial results.

The Company's reporting currency is U.S. dollars. In view that a substantial part of our expenses is in NIS, any appreciation of the NIS relative to the U.S. dollar would adversely impact our financial results. The appreciation of the NIS in relation to the U.S. dollar amounted to 3.3%, 7.0% and 7.8% for the years ended December 31, 2021, 2020 and 2019, respectively. If we enter into hedging contracts in the future, we may be unsuccessful in protecting against currency exchange rate fluctuations. See "Item 11. Quantitative and Qualitative Disclosure About Market Risk—Foreign Currency Risk."

Interest rate fluctuations may devalue our investments and could have an adverse impact on our financial condition.

From time to time we hold corporate bonds and government treasury notes denominated in New Israeli Shekels and in U.S. dollars. These investments expose us to the risk of interest rate fluctuations. An increase in Israeli or in U.S. interest rates could cause the fair value of these investments to decrease.

We have received Israeli government grants for certain of our research and development activities. The terms of these grants may require us to satisfy specified conditions in order to manufacture products and transfer technologies supported by such grants outside of Israel. In addition, in some circumstances, we may be required to pay penalties in addition to repaying the grants.

Our research and development operations have been partly financed through certain governmental grants. Certain of these grants are royalty-bearing grants under the terms of which we are committed to pay royalties at a rate of 3.0% on sales proceeds from our products that were developed under Israeli National Authority for Technological Innovation, or the IIA, programs up to the total amount of grants received, linked to the U.S. dollar and bearing interest at an annual rate of LIBOR applicable to U.S. dollar deposits. In September 2021, the Bank of Israel, which determines annual interest rates, published a directive which stated that annual interest at a variable rate linked to the LIBOR rate for loans in U.S. dollars will be replaced by the Secured Overnight Financing Rate, or the SOFR, in June 2023. While it is not currently possible to determine precisely whether, or to what extent, the replacement of LIBOR with SOFR would affect us, the implementation of SOFR may increase our financial liabilities to the IIA. Management continues to monitor the status and discussions regarding SOFR. We are not yet able to reasonably estimate the expected impact.

In addition, these Israeli governmental grants impose certain restrictions on the transfer outside of Israel of the underlying know-how and the manufacturing or manufacturing rights of the underlying products and technologies. As of December 31, 2021, we had received from the IIA approximately $8.6 million (including accrued interest). We may not receive the required approvals should we wish to transfer the know-how, technology or manufacturing rights related to such government grants outside of Israel in the future or, if we receive such required approvals, they may be subject to certain conditions and payment obligations. See "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Government Grants."

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

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

Your rights and responsibilities as our shareholder will be governed by Israeli law, which may differ in some respects from the rights and responsibilities of shareholders of U.S. corporations.

Since we are incorporated under Israeli law, the rights and responsibilities of our shareholders are governed by Israeli law and by our articles of association. These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders of 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 the general meeting 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. See "Item 6. Directors, Senior Management and Employees—C. Board Practices—Shareholder Duties." Since Israeli corporate law underwent extensive revisions approximately 19 years ago, the parameters and implications of the provisions that govern shareholder behavior have not been clearly determined. 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.

Provisions of Israeli law may delay, prevent or make undesirable an acquisition of all or a significant portion of our shares or assets.

Certain provisions of Israeli law and our articles of association could have the effect of delaying or preventing a change in control and may make it more difficult for a third party to acquire us or for our shareholders to elect different individuals to our board of directors, even if doing so would be beneficial to our shareholders, and may limit the price that investors may be willing to pay in the future for our ordinary shares. For example, Israeli corporate law regulates mergers and requires that a tender offer be effected when certain thresholds of percentage ownership of voting power in a company are exceeded (subject to certain conditions). 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 numerous 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. See Exhibit 2.1 to this annual report.

Furthermore, under 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, guidelines, rules, procedures and benefit tracks thereunder, collectively, the Innovation Law, to which we are subject due to our receipt of grants from the IIA, a recipient of IIA grants such as our company must report to the IIA regarding any change in the holding of any means of control of our company which transforms any non-Israeli citizen or resident into an "interested party", as defined in the Israeli Securities Law 5728-1968, and that such non-Israeli citizen or resident shall execute an undertaking in favor of IIA, in a form prescribed by IIA.

Risks Related to Our Ordinary Shares and the Ownership and Trading of Our Ordinary Shares

The price of our ordinary shares may fluctuate significantly.

Our ordinary shares were first offered publicly in the United States after our public offering in the United States in November 2013, at a price of $14.75 per share, and our ordinary shares have subsequently traded on the NYSE (until December 2016) and on the Nasdaq (since December 2016) as high as $19.80 per share and as low as $0.75 and as of March 30, 2022 were trading at $1.36 per share.

The market price of our ordinary shares could be highly volatile and may fluctuate substantially as a result of many factors, including:

- our inability to obtain additional funding
- any delay in filing a regulatory submission for any of our product or product candidates and any adverse development or perceived adverse development with respect to the review of that regulatory submission by the applicable regulatory body
- actual or anticipated fluctuations in our results of operations;
- variance in our financial performance from the expectations of market analysts;
- announcements by us or our competitors of significant business developments, changes in relationships with our collaborators, acquisitions or expansion plans;
- our involvement in litigation;
- our sale, or the sale by our significant shareholders, of ordinary shares or other securities in the future;
- failure to publish research or the publishing of inaccurate or unfavorable research;
- market conditions in our industry and changes in estimates of the future size and growth rate of our markets;
- changes in key personnel;
- the trading volume of our ordinary shares; and
- general economic and market conditions, including as a result of the scope and duration of the COVID-19 pandemic.

Although our ordinary shares are listed on Nasdaq, an active trading market on Nasdaq for our ordinary shares may not be sustained. If an active market for our ordinary shares is not sustained, it may be difficult to sell ordinary shares in the U.S.

In addition, the stock markets have recently experienced extreme price and volume fluctuations, including as a result of the COVID-19 pandemic. Broad market and industry factors may materially harm the market price of our ordinary shares, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted against that company. If we were involved in any similar litigation, we could incur substantial costs and our management's attention and resources could be diverted.

Our ordinary shares are traded on more than one market and this may result in price variations.

Our ordinary shares have been traded on the TASE since 2007, and are currently listed on Nasdaq. Trading in our ordinary shares on these markets will take place in different currencies (U.S. dollars on Nasdaq and NIS on the TASE), and at different times (resulting from different time zones, trading days and public holidays in the United States and Israel). The trading prices of our ordinary shares on these two markets may differ due to these and other factors. Any decrease in the price of our ordinary shares on the TASE could cause a decrease in the trading price of our ordinary shares on Nasdaq or vice versa.

We could become subject to parallel reporting obligations in Israel and the United States, which could increase compliance costs and divert management attention.

On July 28, 2013, our shareholders approved our plan to transition solely to U.S. reporting standards under the rules and regulations of the SEC. However, should this change in the future, we may become subject to parallel reporting obligations in Israel and the United States. While similar in many respects, certain differences between Israeli and U.S. reporting schemes may impose on us disclosure obligations that are more stringent than those generally applied to foreign private issuers whose securities are listed only in the United States. In addition, a requirement to comply with the separate reporting obligations under U.S. and Israeli securities laws would require additional management attention and could burden us with additional costs.

The requirements of being a public company in the United States and Israel may strain our resources and distract our management, which could make it difficult to manage our business.

Changing laws, regulations and standards, in the United States or Israel, relating to corporate governance and public disclosure and other matters, may be implemented in the future, which may increase our legal and financial compliance costs, make some activities more time consuming and divert management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed. Being a publicly traded company in the United States and Israel and being subject to U.S. and Israeli rules and regulations make it more expensive for us to obtain D&O insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee, and qualified executive officers.

As a public company whose ordinary shares are listed in the United States, we will continue to incur significant accounting, legal and other expenses, including costs associated with our reporting requirements under the Exchange Act. We also incur additional costs associated with corporate governance requirements, including requirements under Section 404 and other provisions of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, rules implemented by the SEC and the Nasdaq, and provisions of Israeli corporate and securities laws applicable to public companies. The Exchange Act requires that we file annual and certain other reports with respect to our business and financial condition. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. These rules and regulations could continue to increase our legal and financial compliance costs, such as the cost of hiring consultants or testing compliance processes, and make some activities more time-consuming and costly. These activities may divert management's attention from other business concerns, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

As a foreign private issuer we are not subject to the provisions of Regulation FD or U.S. proxy rules and are exempt from filing certain Exchange Act reports.

As a foreign private issuer, we are exempt from compliance with the rules and regulations 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. In addition, we are not required under the Exchange Act to file annual and certain other reports and financial statements with the SEC as frequently or as promptly as U.S. domestic companies whose securities are registered under the Exchange Act, we are permitted to disclose limited compensation information for our executive officers on an individual basis and we are generally exempt from filing quarterly reports with the SEC under the Exchange Act. Moreover, we are not required to comply with Regulation FD, which restricts the selective disclosure of material nonpublic information to, among others, broker-dealers and holders of a company's securities under circumstances in which it is reasonably foreseeable that the holder will trade in the company's securities on the basis of the information. These exemptions and leniencies will reduce the frequency and scope of information and protections to which you may otherwise have been eligible in relation to a U.S. domestic issuer.

As a foreign private issuer, we have elected to follow home country corporate governance practices instead of certain Nasdaq corporate governance requirements, which may result in less protection than is accorded to investors under rules applicable to domestic U.S. issuers.

As a foreign private issuer whose shares are listed on the Nasdaq Global Market, we are permitted to follow certain home country corporate governance practices instead of those otherwise required under the corporate governance standards for U.S. domestic issuers listed on Nasdaq. We currently follow Israeli home country practices, rather than the requirements under the Nasdaq corporate governance rules, with regard to the (i) quorum requirement for shareholder meetings, (ii) executive sessions for independent directors and non-management directors and (iii) the requirements to obtain shareholder approval for certain dilutive events (such as for the establishment or amendment of certain equity-based compensation plans, issuances that will result in a change of control of the company, certain transactions other than a public offering involving issuances of a 20% or more interest in the company and certain acquisitions of the stock or assets of another company). See "Item 16G. Corporate Governance." Furthermore, we may in the future elect to follow Israeli home country practices with regard to other matters such as the requirement to have a majority independent board of directors, have a compensation committee and have a nominating committee. Accordingly, our shareholders may not be afforded the same protection as provided under Nasdaq corporate governance rules. Following our home country governance practices as opposed to the requirements that would otherwise apply to a United States company listed on Nasdaq may provide less protection than is accorded to investors of domestic issuers. For further discussion, see "Item 16G. Corporate Governance."

We may lose our status as a foreign private issuer, which would increase our compliance costs and could thereby negatively impact our results of operations.

We would lose our foreign private issuer status if (a) a majority of our outstanding voting securities were either directly or indirectly owned of record by residents of the United States and (b)(i) a majority of our executive officers or directors were United States citizens or residents, (ii) more than 50 percent of our assets were located in the United States, or (iii) our business were administered principally outside the United States. Our loss of foreign private issuer status would make U.S. regulatory provisions mandatory. The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly higher. If we are not a foreign private issuer, we will be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. We would also be required to follow U.S. proxy disclosure requirements, including the requirement to disclose, under U.S. law, more detailed information about the compensation of our senior executive officers on an individual basis. We may also be required to modify certain of our policies to comply with accepted governance practices associated with U.S. domestic issuers. Such conversion and modifications will involve additional costs. In addition, we would lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers, as described in the previous risk factor above.

If a United States person is treated as owning at least 10% of our ordinary shares, such holder may be subject to adverse U.S. federal income tax consequences.

If a United States person is treated as owning (directly, indirectly or constructively) at least 10% of the value or voting power of our ordinary shares, such person may be treated as a "United States shareholder" with respect to each "controlled foreign corporation" in our group (if any). If our group includes one or more U.S. subsidiaries, certain of our non-U.S. subsidiaries could be treated as controlled foreign corporations (regardless of whether we are or are not treated as a controlled foreign corporation). A United States shareholder of a controlled foreign corporation may be required to annually report and include in its U.S. taxable income its pro rata share of "Subpart F income", "global intangible low-taxed income" and investments in U.S. property by controlled foreign corporations, whether or not we make any distributions. An individual that is a United States shareholder with respect to a controlled foreign corporation generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a United States shareholder that is a U.S. corporation. A failure to comply with these reporting obligations may subject you to significant monetary penalties and may prevent the statute of limitations with respect to your U.S. federal income tax return for the year for which reporting was due from starting. We cannot provide any assurances that we will assist investors in determining whether any of our non-U.S. subsidiaries are treated as a controlled foreign corporation or whether such investor is treated as a United States shareholder with respect to any of such controlled foreign corporations or furnish to any United States shareholders information that may be necessary to comply with the aforementioned reporting and tax paying obligations. A United States investor should consult their own advisors regarding the potential application of these rules to its investment in the ordinary shares.

We believe we were a PFIC for U.S. federal income tax purposes in 2021, and there is significant risk we will be a PFIC in 2022 as well. U.S. shareholders who held our ordinary shares at any time during a taxable year in which we are a PFIC may suffer adverse tax consequences.

Generally, if for any taxable year 75% or more of our gross income is passive income, or at least 50% of the average quarterly value of our assets (which may be determined in part by the market value of our ordinary shares, which is subject to change) are held for the production of, or produce, passive income, we would be characterized as a passive foreign investment company, or PFIC, for United States federal income tax purposes. According to these rules, a publicly traded non-U.S. corporation may treat the aggregate fair market value of its assets as being equal to the sum of the aggregate value of its outstanding shares, or Market Capitalization, and the total amount of its liabilities. We intend to take the position that the excess of our Market Capitalization plus liabilities over the book value of all of our assets may generally be treated as attributable to non-passive assets. Based on the book value of our assets and liabilities and our Market Capitalization in 2021, we believe that we met the PFIC asset test described above for 2021 and, as a result, we were classified as a PFIC in 2021. Furthermore, because we currently hold, and expect to continue to hold, a substantial amount of cash and cash equivalents and other passive assets used in our business, and because our Market Capitalization is currently below the level necessary to avoid PFIC status for 2022, there is substantial risk we will be classified as a PFIC for the 2022 taxable year as well. However, because PFIC status is determined after the close of each taxable year, we will not be able to determine whether we will be a PFIC for the 2022 taxable year or for any future taxable year until after the close of such year.

U.S. shareholders who held our ordinary shares at any time in 2021 or during any other taxable year in which we are a PFIC may suffer adverse tax consequences, including having gains realized on the sale of our ordinary shares treated as ordinary income, rather than capital gain, the loss of the preferential rate applicable to dividends received on our ordinary shares by individuals who are U.S. Holders (as defined in "Item 10. Additional Information—E. Taxation—United States Federal Income Taxation"), and having interest charges apply to distributions by us and the proceeds of share sales. Certain elections may be available that would alleviate some of the adverse consequences of PFIC status and result in an alternative treatment (such as mark-to-market treatment) of our ordinary shares; however, we do not intend to provide the information necessary for U.S. holders to make qualified electing fund elections. See "Item 10. Additional Information—E. Taxation—United States Federal Income Taxation—Passive Foreign Investment Company Considerations."

General Risk Factors

Any inability to meet the Nasdaq listing requirements may have an adverse effect on our share price and lead to our delisting from Nasdaq.

We are required to meet the continued listing requirements of Nasdaq, including those regarding minimum share price. In particular, we are required to maintain a minimum bid price for our listed ordinary shares of $1.00 per share. If we do not meet Nasdaq's continued listing requirements, Nasdaq could initiate delisting proceedings and our ordinary shares could be delisted.

If Nasdaq initiates delisting proceedings or delists our ordinary shares from trading on its exchange, we could face significant material adverse consequences including: reduced liquidity with respect to our ordinary shares; limited amount of news and analyst coverage for our company; reputational damage; diminished investor, supplier and employee confidence; and decreased ability to issue additional securities or obtain additional financing in the future.

If we fail to maintain effective internal control over financial reporting, the price of our ordinary shares may be adversely affected.

Our internal control over financial reporting may have weaknesses and conditions that could require correction or remediation, the disclosure of which may have an adverse impact on the price of our ordinary shares. We are required to establish and maintain appropriate internal control over financial reporting. Failure to establish those controls, or any failure of those controls once established, could adversely affect our public disclosures regarding our business, prospects, financial condition or results of operations. In addition, management's assessment of internal control over financial reporting may identify weaknesses and conditions that need to be addressed in our internal control over financial reporting or other matters that may raise concerns for investors. In addition, as a "non-accelerated filer," we are exempt from the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that independent registered public accounting firms provide an attestation report on the effectiveness of internal control over financial reporting. Decreased disclosures in our SEC filings due to our status as a "non-accelerated filer" may make it harder for investors to analyze our results of operations and financial prospects and may make our ordinary shares a less attractive investment. Any actual or perceived weaknesses and conditions that need to be addressed in our internal control over financial reporting or disclosure of management's assessment of our internal control over financial reporting may have an adverse impact on the price of our ordinary shares.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Our History

We are a leading computational biology company aiming to revolutionize life-science product discovery and development across several market segments, including human health, agriculture, and other industrial applications.

Our company was founded on October 10, 1999 as Agro Leads Ltd., a subsidiary of Compugen Ltd. In 2002, our company was spun-off as an independent corporation under the laws of the State of Israel, and changed its name to Evogene Ltd.

In 2018 and 2019, we reorganized certain of our divisions into wholly owned subsidiaries of the Company, as described in this annual report.

Our shares have been listed for trading on the TASE since 2007 and were listed for trading on the NYSE commencing with our U.S. initial public offering in November 2013, until December 2016, when we transferred the listing to Nasdaq.

We are registered with the Israeli Registrar of Companies in Jerusalem. Our registration number is 51-283872-3. Our purpose as set forth in our articles of association is to engage in any lawful business. Our principal executive offices are located at 13 Gad Feinstein Street, Park Rehovot, Rehovot P.O. Box 4173 Ness Ziona, 7414002, Israel, and our telephone number is +972-8-931-1900.

Our authorized representative in the United States and agent for service of process in the United States, Puglisi & Associates, is located at 850 Library Avenue, Suite 204, Newark, Delaware 19711. Information contained on, or that can be accessed through, our website does not constitute a part of this annual report and is not incorporated by reference herein.

The SEC maintains an internet site, http://www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Our internet address is www.evogene.com. Neither such internet addresses are a part of this annual report.

Principal Capital Expenditures

Our capital expenditures for fiscal years 2021, 2020 and 2019 amounted to $0.8 million, $0.7 million and $0.9 million, respectively. Our capital expenditures during those years consisted of investments in property, plant and equipment. We anticipate our capital expenditures in fiscal year 2022 to include payments for maintenance and improvements of our facilities in Israel in order to support our activities, which we anticipate we will finance with our currently available cash. For a description of our principal capital expenditures and divestitures for the three years ended December 31, 2021 and for those currently in progress, see Item 5. “Operating and Financial Review and Prospects—Liquidity and Capital Resources.”

B. Business Overview

Overview

We are a leading computational biology company aiming to revolutionize life-science product development across several market segments, including human health, agriculture, and other industries, by utilizing cutting edge computational technologies.

The main challenge in product development in the life science industry is finding the winning candidates out of a vast number of possible prospects that address a complex myriad of criteria to reach successful products. We believe that by utilizing an advanced computational biology platform to identify the most promising candidates addressing multiple development challenges towards successful life-science products, we can increase the probability of success while reducing time and cost.

To achieve this mission, we established our unique Computational Predictive Biology, or CPB, platform, leveraging big data and artificial intelligence and incorporating deep multidisciplinary understanding in life sciences. The CPB platform is the basis for three technology engines, each focused on the direction and acceleration of the discovery and development of products based on one of the following core components: Microbes – *MicroBoost AI*, Small molecules – *ChemPass AI*, Genetic elements – *GeneRator AI*.

We use our technological engines to support the development of products for the life science industry through dedicated subsidiaries and with strategic partners. Currently, our main subsidiaries utilize the technological engines to develop human microbiome-based therapeutics by Biomica, medical cannabis products by Canonic, ag-chemicals by AgPlenus and ag-biologicals by Lavie Bio.

Business Model

Since 2015, the Company's main business model is product development through specific market-oriented divisions. At that time, Evogene began using its technology to develop its own product pipelines, each focusing on a specific industrial segment. When such a division and product pipeline reach a certain level of maturity, the activity is spun into a dedicated subsidiary. Each subsidiary focuses on continued development of its pipeline and adding new products to its commercial offering, while using Evogene's technology as its core competitive advantage.

Currently, Evogene has four main subsidiaries, each focused on a different type of product and target market. Each subsidiary has its own board of directors, management team, scientific advisory board, research and development, or R&D, and business development teams that focus on developing its own pipeline and go-to-market activities. At the same time, each subsidiary benefits from using Evogene's technology under an exclusive license from Evogene to use the CPB platform's discovery and development engines that are relevant to the subsidiary's field of activity. The terms of these licenses provide that the subsidiary owns the discoveries and product candidates that result from the utilization of the CPB platform, while Evogene retains all rights to the CPB platform itself. According to the characteristics of the end-market, the subsidiaries can decide to commercialize their products independently or in collaboration with partners.

Another business model, which was our main business model until 2014, is product development through collaborations. In this business model Evogene engages with partners for joint development of defined products, requested by the partners. In this frame, Evogene typically conducts the initial R&D activity, discovery and early-stage development, while later stage development and commercialization are carried out by the partner. Under this model, Evogene's potential revenues include R&D funding for activities that Evogene conducts in the collaboration, milestone payments for when the candidates advance in our partners' pipelines and revenue sharing from the end-product.

Until 2014, Evogene engaged in several collaborations of this type with Bayer, Monsanto, DuPont and Syngenta, focused on improving seed traits using genetic modification, or GM, approach. Today, Evogene has a number of smaller scale collaborations, and we aim to engage in additional collaborations in the future.

Fields of Activity

Given the broadly applicable capabilities of our technology, as provided through our three engines, we can potentially enhance and improve product development in a variety of life science industries, including human health and agriculture. Today, Evogene is applying its MicroBoost AI engine to direct and accelerate the discovery and development of two types of products: human-microbiome based therapeutics in human health and ag-biological products in agriculture. The ChemPass AI engine is used for the discovery and development of two types of products: drugs based on small molecules in human health and ag-chemicals, such as herbicides and insecticides, in agriculture. The GeneRator AI engine is mainly applied for the discovery and development of medical cannabis products in human health and improved seed traits in agriculture.

Evogene continuously evaluates new substantial industries with well-recognized development roadblocks for which we can leverage our capabilities and assets for the development of next-generation products. We will select the most suitable markets to focus on, based on a number of criteria, including: (i) market size; (ii) a well-recognized, unmet need for next-generation products; (iii) an understanding of the scientific or technical road-blocks that challenge others from developing next-generation products; and (iv) most importantly, the expectation that our technological engines and unique approach can provide a significant competitive advantage in addressing these road-blocks.

Subsidiaries

As described above, since 2015 Evogene has used its three engines to develop diverse product types through dedicated divisions and subsidiaries. In the area of human health, we established two subsidiaries: Biomica, focusing on developing microbiome-based therapeutics, and Canonic, focusing on developing medical cannabis products. In Agriculture, we established two subsidiaries: Lavie Bio focusing on developing ag-biologicals and AgPlenus focusing on ag-chemicals. In other industries, we established one subsidiary, Casterra, focusing on developing ag-solutions for castor oil production.

Revenues

During 2021, except for initial sales of medical Cannabis products by Canonic and seed sales by Casterra, our revenues consisted primarily of R&D payments under various R&D collaborations we and our subsidiaries are engaged in, mainly in the fields of seed traits, ag-biologicals and ag-chemicals. A breakdown of our revenues by business activity and geographic markets for each of the last three financial years is provided in "Item 5. Operating and Financial Review and Prospects—Key Performance Indicators—Revenues." In the future, we expect that we and our subsidiaries will receive milestone payments and royalty revenues under such collaborations, as well as revenues from the sale of end-products or commercialization of product candidates.

In 2022, through our subsidiaries or directly, we expect to continue to develop our product pipelines and initiate new collaborations with an increased focus on strategic relationships for joint product development. We also expect to continue to evolve our organization and to continue to examine new areas in which our technology engines can serve as a competitive advantage and additional value can be created in a relatively short period of time.

Technology

Technology highlight

Our CPB platform aims to disrupt conventional life science product discovery and development methodology, currently challenged by inefficiencies, such as long and expensive product development process and low probability of success. By computational selection of the most relevant core components for life-science products, such as microbes, small molecules and genes, and then computational optimization, we are aiming to reduce time, cost and most importantly increase the probability of success to develop life-science based products. We provide these discovery and development capabilities through three dedicated engines: MicroBoost AI for products based on microbes, ChemPass AI for products based on small molecules and GeneRator AI for products based on changes in genetic elements.

The discovery phase, based on product definition, requires the identification and selection of a reasonable number of candidates to initiate the development process. The challenge is that out of a vast number of possible product candidates and numerous criteria that these candidates must address, finding the winning combination for a successful product is extremely complex. Evogene believes that this complexity should be addressed using computational predictive biology. Evogene's technology, the CPB platform and its three engines, was designed to predict the most promising candidates that hold true potential for a successful product. Through computationally screening databases, according to specific product criteria, candidates can be narrowed down to focus on those most promising.

In addition to the selection of the candidates in the discovery phase, the CPB platform is also used in the development phase. In the development phase, the chosen candidates undergo various validation processes on the way to becoming a commercial product with certain desired attributes. In this process, the candidates' ability to pass the validation criteria is improved, as required, by using our technology. Our technology is able to identify the best optimization proposal for a product candidate, improving a specific attribute of a product with minimal impairment of any of the other attributes.

CPB Platform

As described above, the mission of the CPB platform is to revolutionize the product discovery and development approach in life science industries by decoding the biological world using computational biology. This platform is the outcome of over a decade long multidisciplinary effort to integrate scientific concepts with big data and advanced computational analytics in order to develop predictions of potential product candidates that later undergo experimental validation and optimization toward commercialization. We believe that the uniqueness of our computational prediction approach stems from our ability to successfully address multiple product attributes at the beginning of the discovery process, and during the optimization phase.

These efforts have been enabled by two parallel revolutions taking place over the last decades: first, the data revolution – allowing the creation of enormous amounts of high-quality biological and chemical data in a cost-effective manner; and second, the computational processing revolution – allowing the analysis of data with advanced algorithms such as machine learning and other artificial intelligence methods.

The CPB platform represents a revolutionary approach for the design and prediction of novel products, based on four pillars: first, computationally modeling the specific biological challenges in the discovery and development of each product into pre-defined criteria, based on profound scientific understanding and know-how; second, designing genomic, chemical and microbial databases holding diverse types of curated data specifically aimed at addressing the biological challenges identified; third, developing state of the art computational tailored analytics, including artificial intelligence algorithms, designed to provide more accurate predictions to those challenges; and fourth, utilizing screening and validation systems, comprised of multiple tailored bioassays, to validate the product candidates and assist in their optimization.

Proprietary Databases

Our databases leverage multiple types of tailored big data from various sources in order to support the different research and development activities powered by our technological engines. Specifically, we focus on four different entities: microbial organisms, microbial genes, small molecules and plant genes. Our databases on different entities are rich and highly interconnected, enabling our analysis platforms to maximize their predictive power. Our databases draw in part from the public domain, and in part compile increasing amounts of proprietary data, generated either in-house or received from our collaborators.

Discovery and Development Engines

The CPB platform is the foundation for Evogene's three technological engines boosting the discovery and development of novel life science products. At the core of our engines are unique computational analysis platforms, which are comprised of algorithms designed to address a vast number of parameters required for a product. These computational analysis platforms, which increasingly utilize artificial intelligence, machine learning driven approaches and other sophisticated algorithms, are designed to deliver innovative solutions to key bottlenecks in the product development process, such as efficacy and stability. As our predictions undergo validation via dedicated validation systems, we continuously improve our predictions by feeding back these results into our systems.

MicroBoost AI employs an innovative function-based approach based on a proprietary microbial function catalog for the identification of novel microbial candidates. This engine not only aims to identify candidates with high potential for a specific product, but also pinpoints the biological reasoning behind its selection, improving the chances of the initial microbial candidate to pass the subsequent optimization and development phases.

ChemPass AI combines a large, well-organized, database of over 20 billion known molecules as well as a set of AI-based algorithms and innovative chemo-informatics tools which invent, prioritize and analyze new small molecules prior to their expensive synthesis and testing phase. This platform is used to drive and accelerate the small molecule product development process by using a set of high-end, validated tools and algorithms for virtual screening for the identification of small molecule hits meeting multiple end-product attributes.

GeneRator AI aims to develop life science products via targeting and modifying genetic elements. By using a set of computational and advanced AI tools and end-to-end discovery and development pipelines, GeneRator AI identifies genomic elements of interest that can be then applied through genome editing, genetic engineering, as biomarkers, or through additional applications.

We are constantly working to improve and expand our engines capabilities. For example, we are working to improve the GeneRator AI engine through participating in the CRISPR-IL consortium. This consortium, funded by the Israeli Innovation Authority, or IIA, aims to develop an artificial intelligence-based system, "Go-Genome", providing users improved genome-editing workflows. The system aims to provide end-to-end solutions from user interface to an accurate measurement tool and is expected to include the computational design of on-target DNA modification with minimal accidental, off-target modifications, improve modification efficiency and provide an accurate measuring tool to ensure the desired modification was made.

Validation and screening systems

Our experimental technologies include bioassays as well as screening and validation pipelines (i.e., sets of bioassays organized in a cascade of tests). They relate to diverse scientific fields, including molecular biology and biochemistry, microbiology, organic chemistry, plant tissue culture and plant pathology, in laboratories, greenhouses and field settings. All processes are accompanied by precise data gathering and are coordinated by pipeline management and quality assurance.

Our validation and screening systems support three key aspects of our research and development approach: first, generating data sets to enable development and proof of concept of tailored computational modules and their prediction performance evaluation; second, transforming computational-based recommendation to a physical entity output; and third, validating and screening selected product candidates by the relevant scientific teams.

Major Occurrences and Developments

The following are major occurrences and developments in the Company during 2021 and until the date of this annual report, reflecting advancement in all areas of activity:

Evogene

- CRISPR-IL consortium (January 2021) – we announced a 2020 year-end update for the CRISPR-IL consortium.
- At-the-market, or ATM, offering (February 2021) – we completed a $28 million ATM offering and entered into a new ATM offering sales agreement for the sale of up to $50 million of our ordinary shares.
- Appointment of new Chairperson of the board (June 2021), Ms. Sarit Firon, replacing Mr. Martin Gerstel.
- CRISPR-IL consortium (November 2021) – we announced participation in the second research period of the CRISPR-IL consortium.

Lavie Bio

- Go-to-Market (September 2021) – Lavie Bio and United Agronomy signed a distribution agreement for Lavie Bio's inoculant product.
- Bio-stimulant program (November 2021) – announced commercial launch of its first microbiome-based product for yield improvement – result™.
- Bio-pesticide program (December 2021) – reported advancement in its bio-fungicide program for fruit rot.

AgPlenus

- Herbicide program (July 2021) – announced positive results for an herbicide resistance trait for its leading candidate APH1.

Biomica

- Immuno-oncology program (April 2021) – positive pre-clinical results, demonstrating efficacy of BMC128 in Melanoma.
- Immuno-oncology program (October 2021) – Biomica and Rambam Health Care Campus signed agreement for clinical trial of Biomica's microbiome-based immuno-oncology drug candidate.
- Inflammatory Bowel Disorder (IBD) program (November 2021) – announced positive pre-clinical results.
- Immuno-oncology program (January 2022) – announced clearance for first-in-human Phase I study of BMC-128 in combination with Bristol Myers Squibb's Anti-PD-1 Opdivo®.

Canonic

- Precise product family (February 2021) – entered into a collaboration agreement with Tikun Olam-Cannbit Pharmaceuticals Ltd. for the development of novel medical cannabis products.
- MetaYield product family (March 2021) – announced identification of leading cannabis varieties to be further developed into commercial varieties, towards expected commercial launch in Israel in 2022.
- Go-to-market strategy (March 2021) – entered into agreements with Tikun Olam-Cannbit Pharmaceuticals Ltd. for production, packaging and distribution of medical cannabis products under Canonic's brand.
- Commercialization (August 2021) – announced pre-launch of its first-generation medical cannabis products in Israel.
- Commercialization (October 2021) – announced full commercial launch of its first medical cannabis products in Israel.
- Precise product family (January 2022) – announced positive results in pre-clinical studies identifying specific cannabis varieties with anti-inflammatory and pain relief properties.

Ag-Seeds Division

- Novel insect control traits (March 2021) – entered a collaboration agreement with Plastomics Inc. targeting novel insect control traits for soybean. Evogene's insect control genes demonstrating new modes of action (MoAs) will be introduced into soybeans using Plastomics chloroplast technology.

Market Segments

Agriculture

Lavie Bio Ltd.

Overview

In 2015, we initiated our activity for developing ag-biological products as a division within Evogene and early in 2019 it was organized under Lavie-Bio Ltd., an independent company that upon establishment was wholly owned by Evogene.

Lavie Bio aims to improve food quality, sustainability and agricultural productivity through the introduction of microbiome-based ag-biologicals. Ag-biologicals are externally-applied products from biological sources, such as microbial (micro-organisms) and naturally derived biochemistries, designed to improve crop productivity. A sub-segment within the microbial biologicals is the "microbiome", the microbial population living close or within the plant or other organisms, such as pests.

Lavie Bio is focused on developing two main types of products: (i) bio-pesticides, which are ag-biologicals for crop protection, addressing biotic stresses such as insects, diseases, and weeds and (ii) bio-stimulants, which are ag-biologicals for crop enhancement, directly impacting crop yield or abiotic stress tolerance.

In August 2019, Corteva Agriscience invested in Lavie Bio in a transaction that included the exchange of all shares of Corteva's wholly owned subsidiary, Taxon Biosciences, along with a $10 million equity investment by Corteva in Lavie Bio in consideration of approximately 28% of Lavie Bio's equity. The assets of Taxon Biosciences including, among others, a large microbial collection, were integrated into Lavie Bio's microbial collection, technology platform and pipeline. In addition, Corteva received certain commercial rights with respect to rights to Lavie Bio's candidate products, mainly in corn and soy.

Market

The market for ag-biological products was estimated at $10.6 billion in 2021[1] and is a growing segment in the approximately $250 billion agricultural input market, which includes the seed, crop protection and fertilizers segments. The sales of ag-biological products significantly grew in past years, expanding from a market size of $3.2 billion in 2015 to its current size following a shift in growers and consumer preferences to more sustainable and healthier practices, while driving agriculture productivity. According to market estimates, this market is forecasted to reach sales of $18.5 billion in 2026[2], anticipated to be driven by improvement of the product attributes of ag-biologicals, such as efficacy, stability and commercial viability.

Companies in this market can be generally divided into three groups: (i) major seed and ag-chemical companies, such as BASF, Bayer, ChemChina and Corteva, with internal research and development units dedicated to development of ag-biological products, (ii) small to mid-size biotech companies specializing in ag-biologicals with their own product development programs, and (iii) academic and agricultural research institutions that pursue research activities in the field, typically focusing on early stage activities.

Business Model

Lavie Bio has defined two main models for market access:

(i) **Direct sales model –** in fragmented markets Lavie Bio expects to complete product development of its products independently, while establishing a tailored market access strategy per specific product and territory, such as commercialization through distribution channels. Under this model, the production of Lavie Bio's products is achieved through third party toll manufacturers. Revenues may include sales to distributors.

[1] https://www.reportlinker.com/p04680744/Top-10-Trends-in-Agricultural-Biologicals-Market-Industry-Global-Forecast-to.html.
[2] According to industry publications.

Under the direct sales model, during the fourth quarter of 2021 Lavie Bio launched its inoculant Result™ towards the 2022 spring sowing season.

(ii) **Collaboration model –** Lavie Bio offers tailored solutions to potential partners. In this model, Lavie Bio's partner produces and commercializes the products being developed. Lavie Bio's revenues in such engagements may include research and development payments, payments upon achievement of development milestones and royalties. The scope of collaboration may differ:

- **Broad collaboration model** – in markets where Lavie Bio identifies strategic partners that can drive the go-to-market for its products, the aim is to gain market access through collaborations with such partners. Such collaborations would typically commence with candidate strains discovered and developed by Lavie Bio, which will then undergo co-development with the partner towards commercialization.

- **Narrow collaboration model** – where Lavie Bio utilizes its platform to optimize product candidates in different stages of development. Such optimization may include addressing challenges of efficacy (such as impact against pests), consistency (such as stability of field performance) and commercial viability (such as shelf life). Such collaborations may commence with a partner's strain candidate, which would undergo optimization to meet market commercial needs.

Product Development Programs

Scientific Approach

Lavie Bio's approach is focused on *'Biology Driven Design'* for the discovery, optimization and development of effective, stable and cost-effective microbial-based ag-biologicals. Lavie Bio's approach is based on converging the plant, microbial and environmental factors to decode their complex interactions in order to enable the amplification of the positive, elimination of the negative and retrieval of lost interactions within the biological system.

Lavie Bio's Biology Driven Design, or BDD, facilitates and accelerates the design and development of microbiome-based products through the decoding of complex microbiome/host interactions and the identification of the key genetic elements (functions) governing these interactions. This decoding, which enables amplification of positive, elimination of negative, and the retrieval of lost interactions, is powered by big data and artificial intelligence, provides the basis for products design. The enabling technologies for the establishment of the BDD platform are Evogene's MicroBoost AI tech engine and the Taxonia platform, which harnesses genomics and informatics to develop transformative applications to agriculture, acquired as part of the Taxon Biosciences acquisition.

Product Development Cycle

Lavie Bio estimates that developing an ag-biological product based on microbial sources takes, on average, between six to eight years. The length of the process may vary depending on several factors, such as product type, target market and applicable regulatory or registration regime, type of application, type of natural source serving as active ingredient, as well as number of active ingredients within the final products, which impacts the development activities required to reach a commercially viable product.

The development process for microbial-based ag-biologicals is generally divided into four steps, or phases, which include *discovery*, *pre-development*, *development*, *pre-commercialization*, and ending with registration approval and commercial launch. As this is a relatively young industry, the process is not yet well established and standardized and the below outline is established based on our experience and estimations.

- ***Discovery:*** The identification of a candidate microbial strain, or microbial strain teams, having the potential to improve the target trait. A collection of selected microbial candidates is typically tested on the crop(s) of choice in greenhouse screens or limited field experiments for various efficacy, stability and commercial viability criteria. Candidates that meet the testing criteria are referred to as "Hits". Typically, the duration of the discovery phase is approximately 12-18 months.

- ***Pre-development:*** Promising Hits are advanced to pre-development phase, in order to further assess and optimize performance criteria such as shelf life, efficacy and stability. Successfully performing microbial candidates are referred to as "Advanced Hits". Typically, the duration of this phase is approximately 12-18 months.

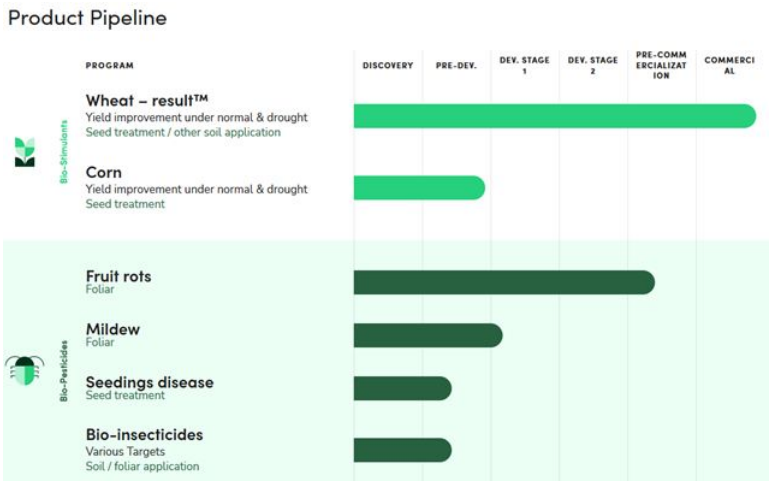
- ***Development:*** This phase is usually divided into Development Stage 1, resulting with a "Lead", and Development Stage 2, resulting with a "Pre-Product". In this phase, the fermentation and formulation procedures are further optimized to allow for further testing and validation of efficacy and stability in the field as well as for commercial scale production, addressing cost of good targets and compatibility with other agricultural inputs. Based on industry benchmarks and our estimates, Lavie Bio estimates the duration of this stage to be approximately 24 months.

- ***Pre-commercialization:*** In this phase, extensive field tests are undertaken to demonstrate the effectiveness of product candidates in enhancing the target trait, including production of data to support product positioning. Additional activities towards launch are performed, including packaging development, upscale manufacturing protocol, registration and regulation. Based on industry benchmarks and our estimates, in the U.S. Lavie Bio expects the duration of this stage to be approximately 24 months for bio-stimulants and 36-48 months for bio-pesticides due to longer regulation processes.

- ***Commercial:*** After initial commercialization of a product, different scale-up activities are undertaken, such as production under toll-manufacturing agreements and deployment of end-product at point of sale. Toll manufacturing involves development of production protocols for large fermentation vessels and down-stream-process protocol with the toll manufacturer.

Product Development Pipeline

The following table sets forth Lavie Bio's main product development programs:



With respect to its Bio-stimulants program for spring wheat, in November 2021, Lavie Bio announced the commercial launch of its first product, LAV.211, an inoculant for yield improvement, under the brand name result™. Initial market penetration for result™ is planned for the 2022 spring wheat season and will be limited to target regions in North Dakota, under a distribution agreement with United Agronomy. Following the initial commercial introduction, Lavie Bio intends to expand through additional distribution channels and to evaluate the opportunities for result™ in additional territories for spring wheat, and for application to additional cereals.

With respect to its Bio-pesticides program against fruit rots, in December 2021, Lavie Bio announced advancement to the pre-commercial stage and prioritization of LAV.311 for final development and submission of a regulatory dossier expected to be filed with the federal U.S. Environmental Protection Agency, or EPA, and California EPA during 2022.

Key Collaborations

Corteva (originally with DuPont-Pioneer)

In July 2017, Evogene entered a multiyear collaboration with DuPont-Pioneer (now Corteva), for the research and development of novel microbial bio-stimulant seed treatments for the improvement of corn productivity globally. Following the establishment of Lavie Bio, the collaboration agreement was assigned from Evogene to Lavie Bio. Under the agreement, Lavie Bio is entitled to milestone payments for advancement of candidate strains, and royalties from product sales. Corteva and Lavie Bio prioritized certain product programs to be executed by Lavie Bio, and Lavie Bio committed to allocate a certain part of its research and development budget to these programs.

Intellectual Property

Lavie Bio files for patents to cover the use of microbial strains, or strain teams, that are the core active ingredients of the products we develop, as well as enabling technologies. Other innovative and proprietary technologies that we develop (such as computational predictive and design technologies), are typically protected as ‘trade secrets’.

Raw Materials

Lavie Bio does not significantly rely upon any sources of raw materials for its operations.

Seasonality

Lavie Bio's sale cycles are dependent on crop seasonality as growing and harvest periods depend on crop seasonality. Also, R&D activities are dependent on crop seasonality, as field trials are highly dependent on crop seasonality and the time windows for conducting such trials are rigid.

Government Regulation of our Operations and of Product Candidates

In general, the regulatory landscape in the evolving field of ag-biological products is still developing. As a result, it may face additional changes in the next few years. Complexity of regulatory processes varies between bio-stimulants and bio-pesticides and between regulatory organizations.

In the U.S., the key focus market for the ag-biological products Lavie Bio is currently developing, the Animal and Plant Health Inspection Service within the Department of Agriculture, or USDA APHIS, is responsible for importation and field release permits for ag-biological products, and the EPA is in charge of the registration of plant protection products. Most U.S. states also require certain registration processes for such products, which vary among states. Both U.S. and European regulators are in the process of establishing a more defined regulation process for bio-stimulants. Under current EPA guidance, bio-stimulants are regarded as plant inoculants, which currently does not require any regulatory action at the federal level but requires registration at the state level. Bio-pesticides require registration at both federal and the state level.

In the European Union, bio-stimulants are currently regulated as fertilizers, and bio-pesticides are regulated and registered as plant protection products.

AgPlenus Ltd.

Overview

In 2015, we initiated our activity for developing ag-chemical products as a division within Evogene, and in 2018, we announced that it had been organized under AgPlenus Ltd., a separate company, wholly owned by Evogene upon establishment. AgPlenus aims to design effective and sustainable crop protection products (crop protection refers to the science and practice of managing risks of weed, plant diseases, and insects that damage agricultural crops and forestry) by leveraging computational predictive biology and chemistry. AgPlenus’ activities focus on discovery and development of new MoA crop protection products. During 2021, AgPlenus focused its efforts on its leading herbicide products under development.

Market

According to industry publications, the crop protection chemicals market was estimated at approximately $63 billion in 2019 and is expected to grow to over $90 billion by 2026.[3] Lack of available solutions for pest control and increasing resistance to existing crop protection solutions lead to a pressing need for novel crop protection products. However, due to current technological limitations and increasing regulatory requirements, the development of crop protection products is lengthy, complicated and expensive.

Competition

The ag-chemical R&D market, as described above, can be classified into four key groups of companies: (i) major seed and ag-chemical companies, such as BASF, Bayer, ChemChina and Corteva, with internal research and development units dedicated to development of ag-chemical products, (ii) mid-size ag-chemical companies, mainly Japanese companies focused on the Japanese market, that develop crop protection products, (iii) small to mid-size biotech companies that undertake new approaches to research and development of novel crop protection products, and (iv) academic and agricultural research institutions, typically focusing on early stage activities.

Business Model

AgPlenus' business model is based on two commercialization avenues:

Licensing of product candidates – when product candidates advance towards what is referred to in the industry as a *Lead*, at the end of the discovery stage, or further along the development pipeline, these product candidates gain increased value and can be candidates for licensing to ag-chemical companies. A typical licensing agreement can include upfront payments, payments upon achievement of pre-defined development milestones, and royalties from product sales.

R&D collaborations – early-stage collaborations, providing a tailored product offering per partner and product type, in order to build long-term research and development relationships and to mitigate the risk associated with building an independent pipeline. A typical collaboration agreement may include R&D payments, payments upon achievement of pre-defined development milestones, and royalties from product sales, which would typically be lower than the royalties under licensing agreements.

Currently, AgPlenus' revenues are derived from research and development payments under early-stage collaborations. In the longer term we expect that: (i) as AgPlenus' product candidates advance through development in our partners' pipelines, and to the extent that they are commercialized by AgPlenus' collaboration partners, revenues are expected to include milestone payments and royalty payments; and (ii) as its internal pipeline product candidates further advance, AgPlenus will license its product candidates.

Product Development Programs

Scientific Approach

AgPlenus' approach is based on the disruption of the traditional methods of ag-chemical discovery and optimization by implementing a target-based approach for identifying and developing new MoA crop protection products to address the growing resistance of pests (weeds, insects, and fungi) to existing commercial products. AgPlenus utilizes mainly Evogene's ChemPass AI tech engine, as well as other advanced computational technologies and know-how, to drive its ag-chemical discovery.

AgPlenus' approach typically begins with the computational and research-driven identification of protein 'targets', which are proteins that are essential to the function of performance of the relevant weed, insect or fungi. Following the identification and validation of such targets, AgPlenus identifies candidate Hits, which are chemical compounds (small molecules) that potentially inhibit these targets. AgPlenus screens candidate Hits to identify those displaying effect on the pest of focus. Hits displaying confirmed activity in the initial validation screens, enter the Hit-to-Lead process, which includes computational optimization and additional, more advanced, validation experiments.

[3] Facts & Factors - https://www.globenewswire.com/news-release/2021/02/02/2168067/0/en/Crop-Protection-Chemicals-Market-Size-Share-Will-Reach-to-USD-90-Billion-by-2026-Facts-Factors.html

In addition, these capabilities are also used independently of each other to discover new Hits for known targets, to optimize an existing Hit-to-Lead and to optimize a commercial molecule.

Product Development Cycle

The product development cycle for ag-chemical products is generally comprised of several stages, described as follows:

Discovery stage

- Identification of Targets – identification and validation of vital targets or proteins that when inhibited (for instance by a chemical), lead to weed, insect or fungi death.
- Identification of Hits – screening of chemical compounds for the identification of candidate Hits that potentially inhibit identified vital targets and are capable of achieving the desired impact on the weeds, insects or fungi of interest. The discovery process includes *in-silico* as well as biological screening and validation activities.
- Hit-to-Lead process – Hits displaying confirmed activity in the initial validation screens will enter the Hit-to-Lead process, including several optimization cycles, each constructed of compound design (in our case, focusing on computational optimization), synthesis of compounds and validation experiments. This stage ends with a 'Lead' compound, which is a validated Hit that has confirmed activity in advanced validation screens proving field translation in initial trials.

Lead optimization

- In this stage, multiple field trials are conducted in diverse geographies, as well as greenhouse experiments on resistant weed biotypes and on commercial crops, and the compound structure and formulation are finalized. Lead optimization also entails initial toxicology tests, process engineering on the molecule and a significantly detailed cost of goods analysis.

Pre-development stage

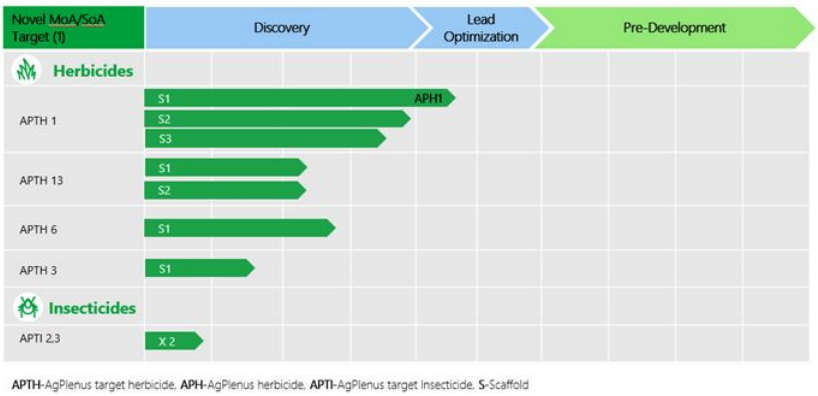
- In this stage, field trials to validate all commercial cases are conducted, including testing product mixtures, as well as additional safety trials. This stage ends with a 'Pre-Development' compound.

Development, Regulation & Registration stage

- In the final development phases, new chemical products are registered with the proper regulatory authorities and then launched for commercialization. We expect that these last stages of development will be conducted by our collaboration partners or licensor of our product candidates.

Product Development Pipeline

The following table sets forth AgPlenus' main internal product development programs:



Note: The table does not present product development programs undertaken with collaborators that are subject to confidentiality restrictions.

In 2021, AgPlenus reached proof-of-concept for an herbicide tolerance trait for a 'Lead' herbicide under its new MoA herbicide program.

Key Collaborations

Corteva – Herbicides

Overview

In March 2020, AgPlenus entered into a multi-year collaboration with Corteva for the discovery and development of novel herbicides. Under the terms of the collaboration agreement, AgPlenus and Corteva work together to optimize herbicide product candidates originating from AgPlenus' pipeline. Successful candidates from this collaboration are expected to be further developed by Corteva.

License & Consideration

Pursuant to the collaboration agreement, Corteva obtained a worldwide, royalty-bearing, exclusive license to use and modify chemical compounds identified under the collaboration to develop and commercialize weed control products containing such compounds. Moreover, AgPlenus is entitled to research and development payments, milestone payments upon achievement of certain development milestones as well as royalty payments from sales of products developed under the collaboration.

Intellectual Property

AgPlenus is seeking patent protection for intellectual property rights covering its leading product candidates.

Government Regulation of our Operations

AgPlenus' activities are performed at labs in Israel and are regulated by the provisions of several Israeli governmental agencies. Violation of these regulations may expose us to criminal or civil actions and may impose liability on us.

Government Regulation of Product Candidates

Regulatory approvals are required prior to the commercialization and importation of ag-chemical products in most countries. Most of the key target markets where AgPlenus anticipates its collaborators to sell products containing its compounds, including the U.S., the European Union, Brazil and Argentina, will require such regulatory approvals prior to the commercialization of such products. Pursuant to AgPlenus' collaboration agreements, its collaborators are responsible for product regulation.

Among other regulatory requirements, our collaborators may need to test new active ingredients for assessment of potential effects on mammals. These include tests on acute toxicity, carcinogenicity, mutagenicity and reproduction. The results of these tests may impact the chemistry and formulation development stages.

In order to sell a crop protection ag-chemical product in most countries, both the product and its active ingredient first need to be registered. This process may require the submission of over 100 toxicology and ecotoxicology studies, as well as detailed information on the chemistry of the active ingredient and the product. In the United States, collaborators may need to seek regulatory approval from the EPA, which regulates the marketing and use of new plant pesticides and herbicides. In addition, in Brazil, the commercialization of ag-chemical products is regulated by Anvisa, the federal agency in charge of evaluating pesticide health risks. The approval process involves data collection and analysis, environmental impact assessments and public hearings on certain products, and is similarly costly and time-intensive.

Raw Materials

AgPlenus does not significantly rely upon any sources of raw materials for its operations.

Seasonality

The field testing of AgPlenus' leading product candidates, which have reached advanced stages of product development, are highly dependent on crop seasonality.

Currently, AgPlenus does not have any commercialized products and therefore its revenues are not subject to variations based on seasonality. However, our expectation is that, in the future, sales cycle of the products AgPlenus develops will be dependent on crop seasonality.

Ag-Seeds Division

Overview

The global population will expand to approximately 9.7 billion, pushing food demand up 70%, by 2050[4,5]. Our seed traits activity is focused on the development of seed traits that have a direct impact on crop productivity through the use of non-GM and GM approaches, aiming to fulfill such growing demand. We mainly target key commercial crops such as corn, soy, wheat, rice and cotton.

The activities of this division are divided into four categories: (i) yield & abiotic stress tolerance, or Y&ABST – increase crop performance and productivity by enhancing yield, tolerance to abiotic stresses such as drought, heat and salinity and fertilizer use efficiency; (ii) disease resistance – increase crop resistance to diseases such as fungi and nematodes; (iii) insect control – increase crop tolerance to pests; and (iv) quality traits – increase production of natural plant products such as pigments and anti-aging agents.

In general, we utilize several biotechnology approaches with the goal of improving plant traits, including: (i) genome editing technologies, enabling deletion or modification of specific genomic regions in the crop's genome without inserting foreign DNA to the plant, (ii) genetic modification of plants, which involves the direct manipulation of a plant's genome by inserting a gene into the plant's DNA, and (iii) advanced breeding methods, whereby plants with favorable characteristics are selectively crossed through genomic-guided breeding schemes.

In recent years, the CRISPR genome editing technology has been gaining popularity and is considered to have the potential to revolutionize the product development of new seed traits, while overcoming environmental and other challenges, and is expected to expand the global crop industry by $110 billion between now and 2025 with an expected growth of 25%[6].

[4]The future of food and agriculture, trends and challenges: http://www.fao.org/3/i6583e/i6583e.pdf.

[5] The United Nations World Water Development Report. Wastewater: The Untapped Resource, UNESCO. 2017: https://unesdoc.unesco.org/ark:/48223/pf0000247153.

[6] CRISPR Genome-Editing- Market Opportunity And Key Players: https://research.ark-invest.com/hubfs/1_Download_Files_ARK-Invest/White_Papers/ARK%20Invest_081318_White%20Paper_CRISPR%20Opportunity.pdf?hsCtaTracking=3e9ae410-326d-4658-9a4a-fd6c4cb7b263%7Cfa54a728-0144-4138-a518-b0051eae3b7f

Market

According to industry publications, in 2020 the GM seeds market size was estimated at approximately $27.9 billion and is projected to reach to $45 billion by 2027. The GMO crops and seeds market in the U.S. were estimated at $7.5 billion in the year 2020, while China is forecast to reach a projected market size of $10 billion by the year 2027[7]. According to industry publications, the market potential for traits addressing plant insects and diseases was estimated to be between $7.5 billion to $8.5 billion, out of which the commercial value of insect control products was approximately $4.5 billion.

Business Model

In the Ag Seeds activity, we collaborate with seed companies in the development of improved seed traits. Our partners include world-leading seed companies, including Bayer and Corteva, as well as regional seed companies such as Tropical Melhoramento & Genética S/A, or TMG. Typically, under these collaborations we perform the discovery phase, during which we discover and validate candidate trait-improving genetic elements. Subsequently, our collaborators, under license from us, test and further develop these discoveries in their product development pipelines, starting Phase I, with the goal of introducing them into commercial crop seeds. For more information on the product development pipeline, please see "—Product Development Pipeline" below.

In most cases, we expect to generate revenue from our collaboration agreements at two different points: first, we expect to receive milestone payments when certain specified results are achieved, such as when a product candidate containing our traits is submitted for regulatory approval; second, we expect to receive royalty payments once a commercial product containing our traits is launched into the market. Under several collaboration agreements, we also receive research and development service payments to cover the costs of our research.

In the Ag-Seeds division, we currently generate revenues from research and development payments for our activities. All of our product development programs under our Ag-Seeds activity are currently either in the Discovery or in Phase I stages. For more information on our product development programs in this field, see "— Product Development Programs."

Product Development Programs

Scientific Approach

The division uses our expertise in plant and bacterial science and genomics to improve commercial seed traits. Evogene's proprietary CPB platform, specifically, the GeneRator AI, validation techniques and other capabilities enable us to identify and optimize promising genetic elements that have the potential to improve our traits of interest in target crops.

We have accumulated substantial scientific knowledge on plant, diseases and insect mechanisms associated with yield, abiotic stress, fertilizer use efficiency, disease resistance traits and insect control traits. We maintain a large proprietary genomic data from over 200 different plant species as well as large microbial data tailored for insect and disease control. We have also established proprietary plant, disease and insect validation systems.

Product Development Cycle

The length of the process of developing and integrating seed traits may vary depending on the technology being applied, the complexity of the trait and the type of crop involved. The development process for seed traits is typically divided into discrete steps, or phases, as follows:

- ***Discovery***: The identification of target genetic elements for enhancing specified plant traits. We test these elements in different validation systems to determine their ability to enhance the specified trait. In our experience, the Discovery phase takes approximately 6-18 months. The target genetic elements may be applicable to product development through different technological approaches (i.e. genome editing, GM or advanced breeding). In our collaborations, we typically undertake this phase.

[7] https://www.globenewswire.com/news-release/2020/09/14/2092784/0/en/Global-GMO-Crops-and-Seeds-Industry.html.

- ***Phase I, or "Proof of Concept"***: Validated candidate genetic elements are advanced to Phase I. In this phase, they are tested in target plants through greenhouse trials, field trials, or both, for their efficacy in improving plant performance. Phase I may be conducted by us or by our collaborators, and in our experience, may last between two and five years for a GM product or, three years for a genome editing or advanced breeding product. For products developed through genome editing, deregulation process for classifying a product as non-GM is typically initiated during Phase I.

- ***Phase II, or "Early Development"***: In this phase, the field tests are expanded, and our collaborators evaluate the genetic elements on multiple geographical locations and varieties, to reach commercially viable success rates. We estimate the duration of Phase II is between two to four years. For a GM product, by the end of this phase, a specific product candidate will be selected to advance to Phase III. For genome editing and advanced breeding products, the end of this phase will lead straight to Phase IV (Pre-Launch).

- ***Phase III, or "Advanced Development and Regulation"***: This phase is relevant only for the development of GM products. Extensive field trials are performed to test the effectiveness of the selected product candidate across locations, and regulatory approvals are obtained, including potential environmental impact assessments, toxicity and allergenicity. We estimate the duration of Phase III is between one to two years.

- ***Phase IV, or "Pre-Launch"***: This phase involves preparation for commercial launch. The range of activities here includes preparing the seeds for commercial sales, formulation of a marketing strategy and preparation of marketing materials. We estimate the duration of Phase IV is between one to two years.

As indicated, the estimated timeframes of phase duration are based on our experience and estimates according to available information. The total development time for a particular product may be longer or shorter than the duration presented above depending on a range of factors.

Product Development Pipeline

The following table sets forth our key product development programs in the AgSeeds division:

Program	Crop	Trait	Technology	Collaborator	Development Phase
Y&ABST Programs:					
1	Corn	YABST	GM	Bayer	Phase I, at collaborator under license.
2	(1)	YABST	Advanced breeding	A consumer goods company (1)	Undisclosed, at collaborator under license.
Disease Resistance Programs:					
1	Corn	Fusarium	GM & genome editing	Bayer	Undisclosed, at collaborator under license.
2	Soybean	Asian Soybean Rust	GM	Corteva	Undisclosed, at collaborator under license.
3	Soybean	Nematodes	Genome editing	TMG	Discovery
4	Banana	Black Sigatoka	GM	Rahan Meristem	Phase I, at collaborator under license.
Insect control Programs:					
1	Corn, Soybean, Cotton	Lepidoptera	GM	Internal program	Phase I
2	Corn, Cotton	Coleoptera	GM	Internal program	Phase I
3	Soybean	Hemiptera	GM	Internal program	Phase I

(1) Crop and collaborator name not disclosed.

Key Collaborations

Bayer (originally with Monsanto)

In August 2008, we entered into a Collaboration and License Agreement with Monsanto (now Bayer, following the completion of the acquisition of Monsanto by Bayer in June 2018 and a later assignment of the agreement from Monsanto to Bayer CropScience LP), which was amended several times during collaboration and license phases.

Yield and Abiotic Stress Tolerance Program

Pursuant to the agreement, Monsanto funded a research program under which we identified and optimized genes with the potential to improve yield and abiotic stress tolerance in corn, soybean, cotton and canola, and candidate genes have entered Phase I in Monsanto's product development pipeline. In July 2017, we announced completion of candidate gene discovery stage in this collaboration.

Biotic Stress Program - Fusarium

As part of the October 2013 amendment of the agreement, we identified genes providing resistance to Fusarium, a type of fungi that is a main pathogen responsible for Stalk Rot disease in corn (a widespread, yield-reducing disease). In July 2017, we announced that we had reached an important milestone in the collaboration with the demonstration of positive Fusarium resistance results with Evogene-discovered genes. In July 2019, we announced that the collaboration was being refocused on the identification of genome editing targets for evaluation against a broad range of corn diseases.

License & Consideration

We have granted Monsanto an exclusive, royalty-bearing, worldwide license under our patents and know-how to commercially exploit and conduct research on the genes and other genetic elements we discovered under the collaboration, in the specified crops.

Monsanto provided us with research and development payments, and undertook to provide us with development milestone payments, if and when our product candidates reach significant milestones in its product development pipeline, as well as royalty payments on any sales or other transfers of products it develops containing our licensed genes.

Corteva (Originally with DuPont-Pioneer)

In 2011, we entered a multi-year research and development collaboration with DuPont-Pioneer (now Corteva, following the merger of Dow Chemicals and DuPont in September 2017), to improve resistance to Asian Soybean Rust, or ASR, a devastating fungal disease in soybean. We amended and expanded the agreement in October 2013. Under this collaboration, we identified relevant genes having the potential to improve in-plant resistance to ASR.

DuPont-Pioneer holds a worldwide, royalty-bearing, exclusive license to develop and commercialize soybean products containing our licensed genes. Our compensation under the agreement is in the form of milestone payments and royalty payments based on the sales of resulting products. Each party funded its expenses in performing its activities using its own resources and a grant from the Israel-U.S. Binational Industrial Research and Development Foundation, or BIRD.

TMG

In December 2018, we entered into a multi-year collaboration and license agreement with TMG, a major Brazilian developer and marketer of soybean varieties, for the development of nematode-resistant soybean varieties using genome editing technologies. Under the agreement, we identified genomic elements for editing to attribute nematode resistance in soybean and perform such edits on TMG’s commercial soybean germplasm. In turn, TMG validates the efficacy of the edited soybean varieties in greenhouse assays and field trials in Brazil and for incorporation in its breeding pipeline.

Under the agreement, TMG obtained a worldwide, royalty-bearing license to incorporate genome edits originating from the collaboration in its soybean varieties. Evogene, on the other hand, obtains a non-exclusive, royalty-bearing license to commercialize such genome edits and soybean lines, subject to certain exclusivity restrictions. According to the agreement, each party is entitled to receive royalty payments from the other party when the products of the collaboration are commercialized. In addition, Evogene is entitled to success-based payments upon achievement of pre-defined development milestones.

Intellectual Property

In the AgSeeds division, we seek to obtain patent protection for the use of the genes and genetic elements that we identify as linked to desired traits. In certain cases patent protection determines our eligibility to receive royalties for seed traits under the licenses we grant our collaborators. To date, we have sought and obtained patent protection for hundreds of plant genes in target territories.

Government Regulation of Product Candidates

In most of the key target markets where we anticipate our collaborators will sell seeds containing our traits, including the United States, the European Union, Brazil and Argentina, regulatory approvals are required prior to the commercialization and importation of biotechnologically enhanced seeds. Additional regulatory approvals are required in countries importing grain produced from seeds containing our traits, such as China, India and certain countries in the European Union. Pursuant to our collaboration agreements in the field of seed traits, our collaborators are typically responsible for applying for all requisite regulatory approvals prior to commercialization of the product candidates we develop with them.

The regulatory status of products developed via genome editing technologies is currently defined in most countries with the exception of the EU. In the United States, de-regulatory approvals are required by the USDA prior to field testing of genomic edited seeds. Several 'non-regulated organism' approvals have been issued by the USDA as well as the regulatory authorities of Japan and Argentina for products that are being commercialized or under development.

Government Regulation of our Operations

The business of the AgSeeds division is subject to regulation related to agriculture, health and the environment. To operate, we must obtain various permits and licenses from government authorities and municipalities in jurisdictions where we are active, and we must maintain our compliance with the terms of those permits, licenses and other government standards as necessary. These laws and regulations, particularly in relation to biotechnology, are not fully settled, but continue to evolve in order to keep pace with technological advances.

Our operations are carried out mainly in Israel and accordingly are regulated by the Israeli Ministry of Agriculture and Rural Development, or ISARD, and more specifically by the ISARD's Plants Protection and Inspection Services. Our activities are subject to various laws, regulations, orders and procedures, which require us, among other things, to obtain permits for conducting experiments on genetically enhanced plants and to satisfy special conditions determined by the ISARD regarding the growing procedures of such seeds and plants. Violation of these regulations may expose the company to criminal penalties. Pursuant to these regulations, we are also obligated to obtain separate permits to own and operate our greenhouses and testing fields in Israel and we are routinely inspected by ISARD.

Raw Materials

Our AgSeeds division does not significantly rely upon any sources of raw materials for our operations.

Seasonality

In general, seasonality has limited effect on up-stream research activities, focused on computational discovery, laboratory work and greenhouse testing. Field trials, which are a central activity in more advanced development stages, is dictated by crop seasonality.

Human Health

Biomica Ltd.

Overview

In 2017, we established Biomica, a subsidiary focused on the discovery and development of innovative human microbiome-based therapeutics. The human microbiome is an array of more than 100 trillion microorganisms that live on and in our bodies, creating a community of symbiotic, commensal and pathogenic bacteria, all of which call the human body home. These microbes have numerous beneficial functions relevant to supporting life, such as digesting food, preventing disease-causing pathogens from invading the body, and synthesizing essential nutrients and vitamins. Numerous studies have shown the connection between the human microbiome and various medical disorders, and the search for microbiome therapies and treatments is a rapidly growing focus for biotherapeutics research and development.

Biomica focuses on the development of human-microbiome based therapies utilizing either rationally-designed microbial consortia or small molecule approaches for (i) immuno-oncology (ii) gastrointestinal inflammatory, or GI related disorders, and (iii) antimicrobial resistance, or AMR, an antibiotic resistant bacteria.

Market

Biomica's product development is currently focused in three main markets:

Immune-Oncology

In oncology, checkpoint inhibitor antibodies, including those targeting the programmed cell death protein/ligand 1, or PD-1/PD-L1 pathways, block the tumor's ability to suppress the immune response. They have significantly improved the treatment of many cancers. The cancer immunotherapy market size was estimated at $84 billion in 2018 and is expected to reach a market size of $243 billion by 2026 according to a report published on July 17, 2019 by Reports and Data.[8]

Even in cancers, where checkpoint inhibition is considered the frontline standard of care, a significant percentage of the patients do not respond to PD-1 + CTLA-4 inhibitor combination and a portion of responders relapse within a few years. In all approved cancer indications, agents with differentiated immune mechanisms of action may be complementary to checkpoint inhibitors by both augmenting existing effects and testing alternative pathways of immunotherapy in checkpoint inhibitor non-responsive tumor types and patients.

Given a growing body of literature, it is becoming increasingly clear that modulation of the gut microbiota may represent a novel and important adjunct to current anti-cancer therapeutic modalities.

GI related disorders

- *Irritable Bowel Syndrome (IBS)* is a common disorder that affects the large intestine. Signs and symptoms include cramping, abdominal pain, bloating, gas, and diarrhea or constipation, or both. It is estimated that the total market for IBS reached $1.5 billion in 2018, with 45 million patients in the U.S. alone and is expected to reach $3.3 billion in 2026[9,10]. Existing drugs for IBS mainly treat the symptoms of the condition, leaving patients exposed to cycles of remission and relapse that characterize this chronic condition.

- *Inflammatory Bowel Disease (IBD)* is a group of GI diseases, mainly comprised of Ulcerative colitis and Crohn's disease. IBDs cause long term chronic as well as severe inflammation in the gastrointestinal tract without any known cause. According to the Centers for Disease Control and Prevention, or CDC, in 2015 an estimated 3.1 million people (1.3% of the entire population) in the United States were diagnosed either with Crohn's disease or with Ulcerative Colitis. The global IBD drug market is estimated to grow from $15.9 billion in 2018 to $22.4 billion in 2026.[11]

[8] https://www.globenewswire.com/news-release/2019/07/17/1884118/0/en/Cancer-Immunotherapy-Market-To-Reach-USD-242-86-Billion-By-2026-Reports-And-Data.html.
[9] https://www.grandviewresearch.com/industry-analysis/irritable-bowel-syndrome-ibs-treatment-market.
[10] https://www.bloomberg.com/press-releases/2019-07-23/ibs-treatment-market-size-worth-3-3-billion-by-2026-cagr-10-1-grand-view-research-inc.
[11] https://www.benzinga.com/pressreleases/19/10/ab14683304/inflammatory-bowel-disease-treatment-market-is-projected-to-reach-22-4-billion-by-2026-grand-view.

AMR (antimicrobial resistance)

- *Clostridium Difficile Infection (CDI)* – The CDC has identified CDI as one of the top three most urgent antibiotic-resistant bacterial threats in the United States. CDI is most often caused by the use of broad-spectrum antibiotics which induce dysbiosis of the microbiome causing susceptibility to infection by C. difficile, a spore forming bacterium. It is the most common cause of hospital acquired infection in the United States.

  CDI is responsible for the deaths of approximately 29,000 Americans each year. Based on an epidemiological study conducted by the CDC, the incidence of CDI in the U.S. was estimated to be over 600,000. CDI space across the seven major markets of the U.S., France, Germany, Italy, Spain, the UK and Japan is set to grow from just under $630 million in 2016 to almost $1.7 billion by 2026, representing a compound annual growth rate of 10.2%. The global CDI market is expected to approach $1.7 billion by 2026.[12]

- *Methicillin-Resistant Staphylococcus Aureus (MRSA)* – One of the most common Staphylococcus aureus infections is caused by MRSA, which is a multi-drug resistant bacterium, responsible for several difficult-to-treat infections in humans, leading to tens of thousands of annual cases of mortality in the U.S. MRSA is the leading causative agent for hospital acquired infections and has recently been documented as community-acquired as well as livestock-acquired. Current medical treatments include broad spectrum antibiotics that are becoming increasingly ineffective. The current MRSA market was valued at approximately $922 million in 2018 and is projected to reach over $1.3 billion by 2026.[13]

Competition

The biotechnology and pharmaceutical industries are characterized by rapid growth and a dynamic landscape of proprietary therapeutic candidates. The development and commercialization of new drug and biologic products is highly competitive and is characterized by rapid and substantial technological development and product innovations. While we believe that our computational platform and microbial drug candidates, coupled with our resources and industry expertise, give us a competitive advantage in the field, we face competition from a variety of institutions, including larger pharmaceutical companies with more resources. Specialty biotechnology companies, academic research institutions, governmental agencies, as well as public and private institutions are also potential sources of competitive products and technologies.

In both inflammatory diseases and oncology, we anticipate intensifying competition as new therapies are approved and advanced technologies become available. Many of our competitors, either alone or with strategic partners, have considerably greater financial, technical, and human resources than we do.

Significant competition exists in the immuno-oncology and inflammatory diseases field, where we are developing our first drug candidates in oncology and IBD. Although our rationally-designed microbial consortium approach is unique relative to most other existing or investigational therapies in immuno-oncology, we will need to compete with all currently or imminently available therapies within the indications where our development is focused. Although there is a wide range of potentially competitive mechanisms, possible synergies between these and rationally-designed microbial consortia will also be evaluated.

Business Model

Biomica's goal is to become a leading biopharmaceutical company developing and commercializing microbiome therapeutics to address significant unmet medical needs, through strategic collaborations with world-leading pharmaceutical companies.

[12] https://www.globaldata.com/global-clostridium-difficile-infections-market-approach-1-7-billion-2026/.
[13] https://www.bloomberg.com/press-releases/2019-09-24/global-methicillin-resistant-staphylococcus-aureus-mrsa-drugs-market-to-surpass-us-1-3-billion-by-2026.

Product Development Programs

Scientific Approach

Biomica aims to identify unique microbiome-based therapeutic entities through multilayered analysis and integration of high resolution big-data originating from the human gut microbiome. Employing a holistic approach, Biomica combines a profound understanding of the microbiome and its functions and their intricate relations with the human host.

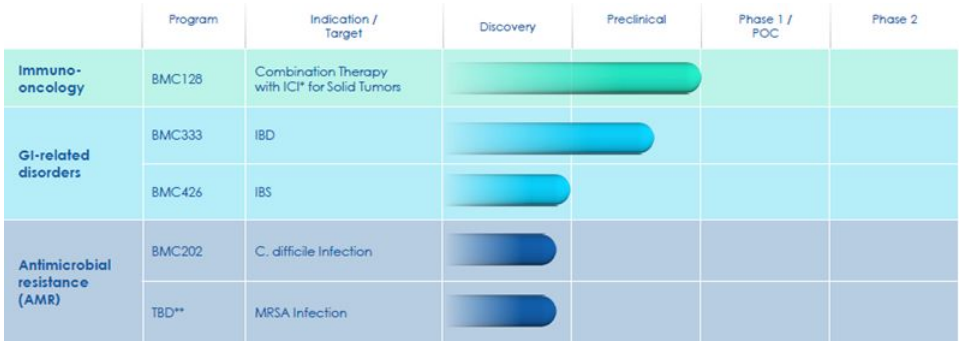
Biomica's approach relies on a multi-layered analysis of omic and clinical / phenotypic data using an extensive nexus of modules in four key areas: (i) creation of microbial classifications – enabling high-resolution taxonomy analysis of the microbial community down to the strain level, (ii) identification of microbial functions – functional-level microbial community analysis profiling microbial genes, pathways and metabolites, (iii) identification of host genomics – profiling of patients' genomic information (genetics and expression patterns), and (iv) clinical data – integrate relevant phenotypic and physiological information manifested in patient.

Biomica's discovery and development efforts are powered by the predictive, high resolution, integrative selection of microbes, or PRISM, platform, which is powered by Evogene's MicroBoost AI engine. PRISM is a proprietary metagenomics analysis platform for functional genomics profiling, utilizing internal comprehensive databases. These databases have been specifically developed to allow the processing of large amounts of sequencing data, obtain high-resolution profiling of microbial communities both at the taxonomic and the functional levels, and correlate them with specific clinically relevant host expression and phenotypic profiles, enabling Biomica to achieve each of the below analyses:

- At the taxonomic level Biomica's analysis allows strain-level resolution and relies on an extensive proprietary strain database.
- At the functional level, Biomica's proprietary resources rely on a comprehensive catalog of microbial genes enabling mapping of an average of 90% of the functions of the human gut microbiome obtained through metagenomics sequencing.

In addition to its comprehensive computational solutions to profile the microbiome, Biomica also utilizes Evogene's ChemPass AI engine, for virtual screening of small molecular inhibitors to specifically target bacterial proteins of interest. This platform combines the physiochemical requirements for binding a specific protein target and utilizes a comprehensive proprietary database of over 20 billion known molecules for the discovery of potential therapeutics.

Product Development Pipeline



Immune-Oncology

BMC128 is an optimized consortium, which consists of four bacterial strains derived from Biomica's BMC121 and BMC127 (rationally-designed consortia that were identified using our computational analysis and predictive capabilities designed to enhance an anti-tumor immune activity). BMC128 is a rationally-designed live biotherapeutic product, comprised of unique bacterial strains, natural inhabitants of the human intestinal tract, that harbor specific functional capabilities with the potential to enhance immunological therapeutic responses and facilitate anti-tumor immune activity though multiple biological processes.

During 2021, Biomica continued the pre-clinical studies of BMC128, obtaining positive results, and completed scale-up development and the first GMP batch production of its drug candidate, conducted by Biose Industrie (Aurillac, France). The pre-clinical mice data showed that BMC128 administered prior to and in combination with an anti-PD1 demonstrated a 48% increase in anti-tumor objective response rate in a breast tumor model. Biomica reported additional positive pre-clinical data in the use of BMC128 in treating melanoma demonstrating the potential efficacy of its microbiome therapeutics in the treatment of different types of solid cancer tumors.

Biomica entered a clinical trial agreement with Rambam Health Care Campus for initiating a first in-human proof-of-concept for BMC128 and in January 2022 Biomica received clearance to conduct such a trial from the Israeli Ministry of Health. In 2022, Biomica expects to reach readout of this study.

GI Disorders

In the IBD program, BMC333 is an optimized consortium, which consists of four bacterial strains derived from Biomica's BMC321 and BMC322 (rationally-designed consortia that were identified using Biomica's computational analysis and predictive capabilities designed with specific emphasis on the anti-inflammatory activity of these strains and their potential as novel therapeutic modality for IBD). During 2021, Biomica conducted pre-clinical trials pointing to reduction of inflammation following treatment with BMC321 and BMC322. Following the insights provided by these pre-clinical studies, Biomica developed BMC333, which also underwent pre-clinical trials and demonstrated BMC333's ability to significantly reduce intestinal tissue damage resulting from inflammation. During 2022, Biomica intends to initiate scale-up for GMP production of its drug candidate for IBD.

In the IBS program, we utilize proprietary data from several clinical trials conducted in the U.S. to develop a novel microbiome-based drug. Biomica aims to push the barriers posed by existing therapies and address the underlying cause of the disorder, rather than the symptoms, using bacteria or bacterial-associated factors affecting symptoms and underlying pathophysiology.

AMR (antimicrobial resistance)

CDI – Using Biomica's microbiome therapeutics platform, we are developing a small-molecule drug candidate (BMC201), designed to target the main toxin secreted by the bacterium and hence repair dysbiosis in the colonic microbiome in the setting of primary or recurrent CDI. BMC201 is being developed as an orally available drug.

MRSA – Biomica is engaged in a collaboration with the Weizmann Institute of Science to develop a selective treatment against antibiotic resistant strains of Staphylococcus aureus infection, in a microbiome focused approach. The company has in-licensed Prof. Ada Yonath's, Nobel Prize laureate, work and discoveries in high-resolution crystal structure of the large ribosomal subunit of the pathogenic Staphylococcus aureus for the design and development of new types of selective, narrow spectrum antibiotics agents.

Intellectual Property

Biomica aims to protect the proprietary intellectual property that it believes is important to Biomica's business, including seeking international patent protection for its product candidates and promptly file patent applications for new commercially valuable inventions of Biomica's business. Biomica also relies on trade secrets to protect aspects of its business that it does not consider appropriate for patent protection. Biomica's success will depend on its ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business, as well as defend and enforce any patents that we may obtain.

Raw Materials

Biomica does not significantly rely upon any sources of raw materials for its operations.

Seasonality

Biomica's business in general is not subject to variations based on seasonality.

Government Regulation of our Operations

The FDA and other regulatory authorities at federal, state and local levels, as well as in other countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring and post-approval reporting of drugs and biologics such as those Biomica is developing. Biomica, along with its contract manufacturers, will be required to navigate the various pre-clinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which it wishes to conduct studies or seek approval for its product candidates. The process of obtaining regulatory approvals and ensuring subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources.

Government Regulation of Product Candidates

The development of therapeutic products targeting the underlying biology of the human microbiome is an emerging field, and it is possible that the FDA and other regulatory authorities could issue regulations or new policies in the future affecting our microbiome therapeutics that could adversely affect Biomica's product candidates. All of Biomica's product candidates are based on microbiome therapy, a therapeutic approach that is designed to treat disease by restoring or providing the targeted functions to a dysbiotic microbiome. Biomica has not, nor to its knowledge has any other company, received regulatory approval for a therapeutic based on this approach.

Canonic Ltd.

Overview

In April 2019, we announced the establishment of Canonic, a wholly owned subsidiary, focusing on the development and commercialization of precise and stable medical cannabis products for better therapeutic effects using computational biology. In October 2021, Canonic began the commercialization of its first products in Israel.

Market

The global spending in the legal cannabis market is forecasted to reach $42 billion in 2024[14]. In 2019 the industry saw an increase of approximately 45.7% in market size compared to 2018, reaching approximately $14.9 billion. In North America alone, the size of this market increased to greater than $13 billion in 2019 and is estimated to reach $37 billion in 2024[15]. The global legal cannabis market is rapidly growing due to changes in regulatory acceptance and is divided into recreational and medical products. According to industry publications, the market segment attributed to medical cannabis products is estimated to be 60% of the overall market in 2024

In Israel alone, the Israeli Ministry of Health reported more than 100,000 medical cannabis patients at the end of 2021[16] and overall annual market of 40 tons that is estimated at an approximate market size of $260 million per year. According to industry estimations, the number of patients is estimated to triple by 2025[17].

Canonic has identified three main challenges in the medical cannabis market:

- **Variety stability –** Current cannabis varieties demonstrate high variability in active compound concentration and other desired traits. Patients continuously seek more reliable consistent products.

- **Cannabinoid yield –** Yield in cannabis refers to the active compounds or metabolites found in the plant. Currently, low yield leads to higher production costs and subsequently higher costs for the patients. With the increasing legalization of cannabis in more and more countries, the competition in the market is increasing, which leads to a price reduction per gram of cannabis. The decreasing selling price of cannabis has made this product more sensitive to the cost of production, making yield of active compounds per growing area a significant factor.

14 State of legal cannabis markets, 2020, the Arcview group and BDS analytics.
15 State of legal cannabis markets, 2020, the Arcview group and BDS analytics.
16 https://www.health.gov.il/Subjects/cannabis/Documents/licenses-status-september-2020.pdf (the source is in Hebrew).
17 https://www.bizportal.co.il/capitalmarket/news/article/786443 (the source is in Hebrew).

- **Cannabinoid specificity –** Cannabis is known to contain hundreds of active compounds, and a critical need is to connect specific active compounds to the relevant medical indication and to develop cannabis varieties and products that include these specific active compounds in a stable and consistent manner. The lack of clinical data demonstrating correlation between medical indications and the genomic and cannabinoid profile of cannabis plants creates difficulties to develop indication-specific products.

We believe that Canonic's combination of assets and capabilities in the use of computational technology, together with deep understanding of plant genomics and analysis of big data, can address these challenges.

Competition

Canonic's competitors include plant genomics companies aiming to improve the properties of medical cannabis varieties, as well as companies commercializing medical cannabis products.

Business Model

Canonic markets its medical cannabis products under its own label to pharmacies through distributors in Israel. Canonic's medical cannabis products are sold at over 50% of all licensed cannabis pharmacies across Israel (approximately 90 out of a total of approximately 180 licensed pharmacies). After establishing its brand in the Israeli market, Canonic intends to expand its activities to Europe and North America, where it intends to collaborate with local partners.

Canonic has established a value chain from genomics to product, with certain parts of the chain, such as cultivation, production and distribution, being outsourced to contractors. Canonic aims to focus on aspects in which it has a competitive advantage, such as the development of improved cannabis varieties having commercially desirable traits. In executing its business model, Canonic has entered multiple production and distribution agreements, to support production and commercialization of its products. In Israel, Canonic has executed this strategy in 2020 and 2021, as demonstrated by the launch of its first two products.

Canonic expects to enter the European market with first products in 2023. For this purpose, Canonic intends to establish a similar go-to-market strategy as in Israel and engage with cultivators, producers, and distributers in Europe. In January 2022, Canonic announced that it has shipped a first batch of its cannabis varieties to Portugal, following receiving approval to export from the Israeli Ministry of Health and Ministry of Agriculture. In the short term, Canonic intends to grow its varieties in Portugal in a semi-commercial scale for lab testing and regulatory examinations, as required by European regulation, before initiating commercial sales. Starting in 2023, Canonic intends that the site in Portugal will be its production site for its sales to Europe.

Scientific Approach

Canonic is focused on the development of precise and stable medical cannabis products based on proprietary cannabis varieties with unique genomic profiles. Leveraging Evogene's GeneRator AI tech engine and high throughput screening capabilities, Canonic has established a unique cannabis database, which is based on its diverse genetic collection. It has so far characterized more than 1,500 cannabis lines for their genetic and chemotype phenotype. This proprietary database, coupled with genetic marker screening, has enabled the development of first cannabis varieties under the MetaYield program that exhibit desired commercial attributes.

Similar methodology will enable Canonic in its Precise program to identify genomic markers that correlate with desired active compounds in the cannabis plant, for the purpose of developing medical grade cannabis products aimed at specific clinical indications. These genomic markers, which are used to screen our varieties for desired medical traits, along with other advanced breeding techniques, reduce trial and error and guide Canonic while utilizing high throughput systems to identify leading varieties for its pre-clinical testing stage.

Product Development

Canonic's product development efforts include the following main stages:

- **Development of varieties –** pre-breeding and breeding activities of tailored cannabis varieties (i.e., selective crossing of cannabis varieties) to achieve desired properties. During this stage Canonic also performs pre-clinical trials to support and direct its medical product development pipeline.
- **Pre-production and pre-commercialization –** testing of cannabis varieties, as well as upscaling propagation and cultivation activities.
- **Production and commercialization –** production of Canonic's products through contractors and distribution through regional distributors.
- **Post commercial data collection** – this stage includes collecting patients' feedback on Canonic's products in order to optimize traits and clinical effects for its future products.

Product Development Pipeline

Canonic has two product families under development.

- **MetaYield** – focused on consumer traits and enhancement of total active compounds in the plant. In this program, Canonic is developing various types of products, among which is the G-innovation series. In October 2021, Canonic began the sale of its first MetaYield products, part of G-innovation series in Israel, following positive feedback received from patients during Canonic's pre-launch campaign:
  - G150 – marketed under the T15/C3 category (11%-19% THC[18] & 0.5%-5.5% CBD), as defined by the Israeli Ministry of Health; and
  - G200 – marketed under the T20/C4 category (17%-24% THC & 1%-7% CBD), as defined by the Israeli Ministry of Health.

  Canonic is continuing the development of next generation product candidates under this family of products.
- **Precise** – focused on the enhancement of specific active compounds in the plant. The first-generation products Canonic is developing in this program target anti-inflammatory and pain management properties. Canonic is planning commercial launch of a first Precise commercial variety in 2023, in Israel.

  In December 2020, Canonic announced positive results in pre-clinical studies in inflammatory and pain model systems conducted by Hadassah Medical Center and by Migal - Galilee Research Institute. The results support the identification of specific cannabis varieties with heightened anti-inflammatory and pain relief properties for Canonic's medical cannabis Precise product line and have led to a patent application filing.

Key Agreements

Cultivation Agreement – Telcann

In December 2020 Canonic entered an agreement with Telcann Ltd, a licensed Israeli medical cannabis cultivator, for the provision of plant growth services in Israel.

Collaboration Agreement – Cannbit, a subsidiary of Tikun Olam-Cannbit

In February 2021 Canonic entered a collaboration agreement with Cannbit Ltd, a subsidiary of Tikun Olam-Cannbit Ltd., a leading Israeli medical cannabis company, for joint development of novel medical cannabis products. The development of the new products will be performed at Canonic's R&D facility and will be based on cannabis strains that both companies will contribute to the collaboration. According to the agreement, each company will have full commercial rights to the products arising from the collaboration, and there will be cross royalties by each to the other company.

[18] Tetrahydrocannabinol (THC) is the principal psychoactive constituent of cannabis and one of at least 113 total cannabinoids identified in the plant.

Production and Distribution Agreements – Tikun Olam Production (Israel) & Tikun Olam Supply and Distribution (Israel), subsidiaries of Tikun Olam-Cannbit

In March 2021, Canonic entered into agreements for the production and distribution in Israel of Canonic's medical cannabis products with Tikun Olam Production (Israel) and Tikun Olam Supply and Distribution (Israel). The agreement is not exclusive for either party and consideration paid will be based on the scope of production and related services provided.

Distribution Agreement – Novolog

In August 2021, Canonic entered into an agreement for the distribution in Israel of Canonic's medical cannabis products with Novolog. According to the agreement, Novolog distributes Canonic's medical cannabis products in Israel through its distribution channels, on a consignment basis to licensed pharmacies, under the Canonic brand. Consideration to be paid by Canonic will be based on a percentage of sales and for related services.

Production Agreement – Cannasure

In November 2021, Canonic entered into an agreement for the production of Canonic's medical cannabis products with Cannasure. According to the agreement, Cannsure produces Canonic's medical cannabis products at its factory complying with good manufacturing practices, or GMP, standards of the Israeli Medical Cannabis Agency, or IMCA. The agreement is not exclusive for either party and consideration paid will be based on the scope of production and related services provided.

Intellectual Property

Canonic expects its intellectual property to include three layers:

- Evogene's existing patent portfolio – patents regarding the use of plant genes for the improvement of plant traits and the development of genetic markers, which is licensed exclusively to Canonic for cannabis;
- Breeders' rights – plant variety protection rights to be filed for cannabis varieties developed by Canonic. During 2021, Canonic has filed breeders' rights applications in Israel for several of its leading varieties; and
- Patents – relating to the therapeutic attributes of active compounds within the cannabis plant, resulting from pre-clinical or clinical trials conducted by Canonic. During 2021, Canonic has filed a provisional patent application for the pre-clinical activity of the Precise products under development.

Raw Materials

Canonic is producing its own reproductive materials, and therefore it does not rely on external sources for that matter.

Seasonality

Canonic's cultivation activities are performed under controlled environments, which permit cultivation year-round, although in wintertime crop yield and active compound concentration may be negatively affected.

Government Regulation of our Operations and Product Candidates

All cannabis related activities in Israel (including R&D, cultivation, manufacturing, distribution, import and export) are regulated by the IMCA. Every company with cannabis-related activity in Israel is subject to the IMCA's regulation and is required to obtain annually the relevant IMCA certifications for its activities. Relevant certifications may include one or more of the following: (i) Good Security Practice, or GSP, (ii) Good Agriculture Practice, or GAP, (iii) Good Manufacturing Practice, or GMP, (iv) Good Distribution Practice, or GDP, (v) Good Consumption Practice, or GCP, and (vi) Good Waste Disposal Practice, or GWDP, depending on the specific activity undertaken by the company. In order to be eligible for a certain certification, a company may be required to obtain certain preliminary approvals or licenses.

Canonic operates under the IMCA's guidelines and has received GSP certification, approval for its R&D work plan, as well as IMC-GAP certification for its propagation farm. In addition, Canonic has obtained relevant possession licenses, seed import permits and seedlings export permits.

Under the guidelines of the IMCA, medical cannabis can be manufactured and marketed in Israel and exported to countries that permit the import of cannabis. Main potential target markets include Europe and North America. In Europe, each country establishes its own regulations. In North America, Canada has legalized cannabis for both medical and recreational use. In the U.S. regulation is established out on a state by state basis, while under federal law, the use and possession of cannabis remains illegal.

Industrial Applications

Casterra Ag Ltd.

Overview

Our activities related to castor beans were initiated in 2007 and in 2012 were organized under a wholly owned subsidiary, originally named Evofuel Ltd., and in 2019 re-named Casterra Ag Ltd., or Casterra. Casterra focuses on the development of an integrated solution for castor cultivation, including advanced non-GMO high-yielding castor bean varieties, growth protocols, and compatible agricultural machinery. Casterra's main target market is Brazil, where large scale castor agriculture and industry are well established, and it is also active in other selected markets.

Market

Castor beans are grown today for their high-quality oil, which is used for the production of bio-polymers and lubricants for various industries such as the cosmetics, electronics, automotive and aerospace industries. Currently treated as a "low-tech" crop in its key production areas around the world (for example, in India the castor bean is grown using traditional techniques such as hand picking), according to industry estimations, the castor oil extracted from the castor bean plant may hold great promise as an input for industrial markets. According to industry publications, the castor oil market is expected to witness market growth at a rate of 6.7% between 2021 to 2028 and is expected to reach $3 billion by 2028.[19]

Competition

Casterra's competition includes a few relatively small companies that supply castor seeds to growers worldwide. During 2021, Casterra improved its competitive advantage by developing a proprietary dehulling machine for castor grain. Farmers who use Casterra's castor seed varieties gain access to Casterra's dehulling machine as well as to a mechanical harvester developed and marketed by Casterra's partner.

Business Model

Casterra's business model is to sell proprietary improved castor seed varieties, together with targeted agro-technical growth protocols, to castor growers. These seed varieties and growth protocols are adapted and targeted to localized characteristics. Casterra's offering includes high yielding varieties with plant structure suitable for mechanized harvest, best practices for large-scale castor growing, and advanced compatible mechanical harvest and dehulling solutions.

Key agreements

Fantini s.r.l.

In October 2018, Casterra announced a breakthrough achieved in the mechanical harvesting of castor beans with Fantini s.r.l., or Fantini, a leading manufacturer and distributor of agricultural equipment. The lack of an available solution for mechanical harvesting has been a major challenge in the conversion of castor to a fully modernized commercial crop, and the combination of the Fantini's harvester with Casterra's proprietary varieties demonstrated significant improvement in yield loss in field trials. The harvester is commercialized by Fantini to Casterra's global partners.

[19] https://www.databridgemarketresearch.com/reports/global-castor-oil-market.

Intellectual Property

Casterra's policy is to register relevant castor varieties in destination territories. To date Casterra has registered several of its varieties in several Latin America countries, including Brazil. In addition, Casterra filed a patent application with respect to the dehulling machine it developed.

Government Regulation of our Operations

Casterra's activities in Israel in the field of seeds are regulated by the Israeli Ministry of Environmental Protection. Pursuant to these regulations, Casterra is required, among other things, to obtain toxins permits, which allow it to conduct experiments using "hazardous materials," as such term is defined in the applicable regulations, and to follow specific rules regarding waste disposal. Violation of these regulations may expose Casterra to criminal penalties, administrative sanctions and responsibility to compensate those injured for any environmental damages.

Government Regulation of Product Candidates

All seed production designated for export to Casterra's partners is subject to field and warehouse inspection by the regulator in the country of destination for compliance with the local regulations, including sampling and inspection for pests and diseases.

Raw Materials

Casterra does not significantly rely upon any sources of raw materials for its operations.

Seasonality

Casterra's castor seed business in general, and revenues in particular, generated from sales of castor seeds and related agro-technical services to local castor growers, are subject to variations based on crop seasonality. The timing of Casterra's seed production, as well as the delivery of castor seeds to its partners and revenue recognition with respect to such seed sales, derive substantially from the seasonality of castor growing in the locations where it produces seeds and in its target markets.

C. Organizational Structure

The legal name of our company is Evogene Ltd. and we are organized under the laws of the State of Israel. As of the date of this report, we held directly and indirectly the percentage indicated of the outstanding capital stock of the following significant subsidiaries:

Name of Subsidiary	Jurisdiction	Ownership Interest
AgPlenus Ltd.	Israel	98.3% (1)
Biomica Ltd.	Israel	93.2% (2)
Canonic Ltd.	Israel	100%
Casterra Ag Ltd. (formerly known as Evofuel Ltd.).	Israel	100%
Lavie Bio Ltd.	Israel	70.7% (3)

(1) The remaining 1.7% of AgPlenus Ltd.'s outstanding share capital is held by AgPlenus' former Chief Executive Officer and current director as a result of exercise of options.
(2) The remaining 6.8% of Biomica Ltd.'s outstanding share capital is held by Biomica's Chief Technology Officer.
(3) The remaining 29.3% of Lavie Bio Ltd.'s outstanding share capital is held by (i) Pioneer Hi-Bred International, Inc. (also known by the name Corteva), who holds 27.3%, and (ii) Lavie Bio's former Chief Executive Officer, who holds 2.0% as a result of exercise of options.

D. Property, Plants and Equipment

Our principal facility is located in Rehovot, Israel and consists of 3,209 square meters (approximately 34,500 square feet) of leased office space accommodating our corporate offices and our molecular, microbial and crop protection labs. The lease for this facility will expire December 31, 2024. A portion (500 square meters, or approximately 5,382 square feet) of the leased space is subleased to two unaffiliated companies.

We perform most of our testing in plants, or *in-planta* testing, at our "Evogene Farm", located on two adjacent lots that we lease outside Rehovot, which also hosts Canonic's cannabis R&D facility. The first lease covers approximately 13,500 square meters (approximately 145,000 square feet) of land, and expires on July 21, 2025, and we hold an option to renew such lease for an additional 36-month period. The second lease covers approximately 10,000 square meters (approximately 108,000 square feet) of land and expires on May 14, 2026, and we hold an option to renew such lease for an additional 24-month period.

The Evogene Farm contains greenhouses, which are used for various *in-planta* experiments of the company and its subsidiaries. During 2019, we converted part of the Evogene Farm to a designated area for cannabis greenhouse as part of the activities of Canonic, our subsidiary which is focused on the area of medical cannabis. In addition, the Evogene Farm contains warehouses, office facilities and seed banks.

Until October 2021, we leased approximately 5,750 square feet lab facility in BRDG Park, at the Donald Danforth Plant Science Center in St. Louis, Missouri, of which approximately 1,200 square feet were subleased since December 2017. Starting March 2020, the facility accommodated the activities of Lavie Bio Inc., a wholly owned subsidiary of our subsidiary Lavie Bio. As of October 2021, Lavie Bio Inc. moved its operations to a subleased research and development facility located in the City Foundry STL Project in St. Louis, Missouri, consisting of approximately 4,050 square feet, under a three-year sublease agreement, expiring on September 30, 2024.

Unless otherwise stated, all of our facilities are fully utilized. We have no material tangible fixed assets apart from the leased properties described above. We believe that our currently leased facilities meet our needs for the short and mid-terms.

ITEM 4A. UNRESOLVED STAFF COMMENTS

There are no unresolved staff comments.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The information contained in this section should be read in conjunction with our consolidated financial statements as of, and for the year ended, December 31, 2021 and related notes and the information contained elsewhere in this annual report. Our financial statements have been prepared in accordance with IFRS as issued by the IASB. This discussion contains forward-looking statements that are subject to known and unknown risks and uncertainties. As a result of many factors, such as those set forth under "Item 3. Key Information—D. Risk Factors" and "Special Note Regarding Forward-Looking Statements," our actual results may differ materially from those anticipated in these forward-looking statements.

Summary

We are a leading computational biology company aiming to revolutionize life-science product development across several market segments, including human health, agriculture, and other industries, by utilizing cutting edge computational technologies.

The main challenge in product development in the life science industry is finding the winning candidates out of a vast number of possible prospects that address a complex myriad of criteria to reach successful products. We believe that by utilizing an advanced computational biology platform to identify the most promising candidates addressing multiple development challenges towards successful life-science products, we can increase the probability of success while reducing time and cost.

To achieve this mission, we established our unique Computational Predictive Biology, or CPB, platform, leveraging big data and artificial intelligence and incorporating deep multidisciplinary understanding in life sciences. The CPB platform is the basis for three technology engines, each focused on the direction and acceleration of the discovery and development of products based on one of the following core components: Microbes – *MicroBoost AI*, Small molecules – *ChemPass AI*, Genetic elements – *GeneRator AI*.

We use our technological engines to support the development of products for the life science industry through dedicated subsidiaries and with strategic partners. Currently, our main subsidiaries utilize the technological engines to develop human microbiome-based therapeutics by Biomica, medical cannabis products by Canonic, ag-chemicals by AgPlenus and ag-biologicals by Lavie Bio.

Since 2015, the Company's main business model is product development through specific market-oriented divisions. At that time, Evogene began using its technology to develop its own product pipelines, each focusing on a specific industrial segment. When such a division and product pipeline reach a certain level of maturity, the activity is spun into a dedicated subsidiary. Each subsidiary focuses on continued development of its pipeline and adding new products to its commercial offering, while using Evogene's technology as its core competitive advantage.

Currently, Evogene has four main subsidiaries, each focused on a different type of product and target market. Each subsidiary has its own board of directors, management team, scientific advisory board, research and development, or R&D, and business development teams that focus on developing its own pipeline and go-to-market activities. At the same time, each subsidiary benefits from using Evogene's technology under an exclusive license from Evogene to use the CPB platform's discovery and development engines that are relevant to the subsidiary's field of activity. The terms of these licenses provide that the subsidiary owns the discoveries and product candidates that result from the utilization of the CPB platform, while Evogene retains all rights to the CPB platform itself. According to the characteristics of the end-market, the subsidiaries can decide to commercialize their products independently or in collaboration with partners.

Another business model, which was our main business model until 2014, is product development through collaborations. In this business model Evogene engages with partners for joint development of defined products, requested by the partners. In this frame, Evogene typically conducts the initial R&D activity, discovery and early-stage development, while later stage development and commercialization are carried out by the partner. Under this model, Evogene's potential revenues include R&D funding for activities that Evogene conducts in the collaboration, milestone payments for when the candidates advance in our partners' pipelines and revenue sharing from the end-product.

Until 2014, Evogene engaged in several collaborations of this type with Bayer, Monsanto, DuPont and Syngenta, focused on improving seed traits using genetic modification, or GM, approach. Today, Evogene has a number of smaller scale collaborations, and we aim to engage in additional collaborations in the future.

Given the broadly applicable capabilities of our technology, as provided through our three engines, we can potentially enhance and improve product development in a variety of life science industries, including human health and agriculture. Today, Evogene is applying its MicroBoost AI engine to direct and accelerate the discovery and development of two types of products: human-microbiome based therapeutics in human health and ag-biological products in agriculture. The ChemPass AI engine is used for the discovery and development of two types of products: drugs based on small molecules in human health and ag-chemicals, such as herbicides and insecticides, in agriculture. The GeneRator AI engine is mainly applied for the discovery and development of medical cannabis products in human health and improved seed traits in agriculture.

As described above, since 2015 Evogene has used its three engines to develop diverse product types through dedicated divisions and subsidiaries. In the area of human health, we established two subsidiaries: Biomica, focusing on developing microbiome-based therapeutics, and Canonic, focusing on developing medical cannabis products. In Agriculture, we established two subsidiaries: Lavie Bio focusing on developing ag-biologicals and AgPlenus focusing on ag-chemicals. In other industries, we established one subsidiary, Casterra, focusing on developing ag-solutions for castor oil production.

Key Performance Indicators

Revenues

Our revenues are principally derived from research and development payments under our collaboration agreements and related arrangements with our collaborators. Some of our agreements with collaborators also provide for success-based payments, such as milestone payments paid by our collaborators upon the occurrence of certain specified events and royalty revenues based on the sales or transfer of products our collaborators develop that contain, or are based on, our discoveries, which we license to them. We have not yet generated revenues from royalty payments. In October 2021, Canonic, our subsidiary in the field of medical cannabis, began the commercialization of its first products to pharmacies in Israel.

Breakdown of Revenues by Operating Segment:

The following table presents a breakdown of net revenues by operating segment for the periods indicated.

	Year ended December 31,		
Operating Segment:	**2021**	**2020**	**2019**
	(U.S. dollars, in thousands)		
Agriculture	$ 628	$ 862	$ 651
Industry	40	33	26
Human	183	75	-
Unallocated	79	70	76
Total	**$ 930**	**$ 1,040**	**$ 753**

Geographical Breakdown of Net Revenues

The following table presents net revenues by geographic breakdown of customers as a percentage of our total net revenues for the periods indicated. This data refers to the location of the customer and does not take into consideration the location of the end-user (to the extent it is different).

	Year ended December 31,		
Geographical Region:	**2021**	**2020**	**2019**
United States	56%	65%	33%
Israel	38%	22%	35%
Brazil	2%	11%	28%
Other	4%	2%	4%
Total	**100%**	**100%**	**100%**

Cost of Revenues

Cost of revenues primarily consists of development costs incurred in conjunction with our collaborations, which include: salaries and related personnel costs for our research and development employees working on the collaborations; payments to third party suppliers that assist us in producing genomic data; and the cost of disposable materials (such as seeds, laboratory supplies, fertilizer, water and soil), and expenses related to retaining advisors, who primarily consist of biological experts.

Operating Expenses

Research and Development Expenses, net: Research and development expenses primarily consist of costs related to our internal or independent research and development activities, as opposed to development costs incurred in connection with our collaborations (which are included in cost of revenues). These independent activities of ours include the further development of our product pipeline, enhancement and expansion of our CPB platform and improvement of our computational, scientific and validation technologies, know-how and capabilities used by our subsidiaries and product divisions. Research and development costs include: salaries and related personnel costs (including share-based compensation); payments to third party suppliers and subcontractors, including scale-up development of GMP batch production of drug candidate, field-trials and pre-clinical studies carried out by third parties; cost of disposable materials; expenses associated with participation in professional conferences; operational overhead costs, which include costs related to leasing and operating our office, laboratory facilities and greenhouses; depreciation of property, plant and equipment; and amortization of intangible assets. Expenses related to our intellectual property, such as legal and other costs associated with patent applications, are also included as research and development expenses. We expect that our research and developments expenses will increase during 2022 due to the expected advancement in the pipeline of our subsidiaries and expansion in our product development activities.

Business Development Expenses: Business development expenses consist of costs primarily related to commercialization activities of our subsidiaries for product launch and maintaining our relationships with our collaborators and establishing new collaborations. These costs include salaries and related personnel costs (including share-based compensation) and expenses related to legal and professional services. We expect our business development expenses will increase during 2022 due to expansion of our commercialization efforts. Travel expenses and other related expenses may increase if COVID-19 ceases to be a global pandemic.

General and Administrative Expenses: General and administrative expenses mainly consist of salaries and related personnel costs (including share-based compensation) for our general and administrative employees; legal, D&O liability insurance, and professional services; expenses related to HR activities and employee benefits and welfare; expenses for consulting; and other expenses associated with being a U.S. publicly listed company. We expect that our general and administrative expenses will remain at the current level during 2022.

In view of the COVID-19 pandemic, which has disrupted our operations since March 2020, we adjusted our work plans and budget, reducing and delaying certain activities. The impact of these changes has been minimal and by the end of 2020 and during 2021 we had resumed our full activities. With respect to 2022, we expect that the impact of the COVID-19 pandemic on our operations (assuming the pandemic to be at the level as of the date of this annual report) will be minimal.

Financing Income and Expenses

Financing income primarily consists of interest income on our cash bank deposits and securities; income related to a revaluation of the marketable securities we hold, which consist of money market funds, corporate bonds and government treasury notes; and foreign currency exchange income.

Financing expenses primarily consist of issuance expenses and revaluation of pre-funded warrants issued as part of our November 2020 $12 million fundraising; expenses related to bank charges and commissions; expenses related to a revaluation of the marketable securities we hold; interest expense for our operating lease liability; and foreign currency exchange expense. The interest due on government grants is also considered a financial expense and is recognized beginning on the date on which we receive the grant until the date on which the grant is expected to be repaid.

Taxes on Income

We do not generate taxable income in Israel, as we have historically incurred operating losses resulting in carryforward tax losses totaling approximately $164 million as of December 31, 2021, to be carried forward indefinitely to future tax years. Accordingly, we do not expect to pay taxes in Israel for the foreseeable future, until we have taxable income after the full utilization of our carryforward tax losses.

Our U.S. subsidiaries, Evogene Inc., Lavie Bio Inc., Lavie Bio Tec Inc., Taxon Biosciences Inc. and AgPlenus Inc. are subject to U.S. income taxes. In 2021, the tax rates applicable to those companies were approximately 21% and 6.5% (federal tax and state tax, respectively, where those companies operate).

Segment Data

We divide our operations into three operating segments – agriculture, human health and industrial applications, as follows:

- *Agriculture*: our agriculture segment includes our division and subsidiaries engaged in agricultural activities, including seed traits activity, ag-chemicals activity (through our subsidiary AgPlenus) and ag-biologicals activity (through our subsidiary Lavie Bio).
- *Human Health:* our human health segment focuses mainly on discovery and development of human microbiome-based therapeutics (through our subsidiary Biomica) and cannabis activity (through our subsidiary Canonic).
- *Industrial Applications*: our industrial applications segment focuses on the development and commercialization of improved castor bean seeds for industrial uses (through our subsidiary Casterra).

The following table presents our revenues and operating loss by segment for the periods presented:

	Agriculture	Industrial Applications	Human Health	Unallocated	Total
			(in thousands)		
Year ended December 31, 2021					
Revenues	$ 628	$ 40	$ 183	$ 79	$ 930
Operating loss	(12,248)	(169)	(10,087)	(8,449)	(30,953)
Year ended December 31, 2020					
Revenues	$ 862	$ 33	$ 75	$ 70	$ 1,040
Operating loss	(8,687)	(333)	(4,669)	(11,125)	(24,814)
Year ended December 31, 2019					
Revenues	$ 651	$ 26	$ -	$ 76	$ 753
Operating loss	(10,062)	(419)	(3,219)	(7,466)	(21,166)

A. Operating Results

The following table sets forth our overall results of operations (on an unsegmented basis) for the years ended December 31, 2019, 2020 and 2021. The below discussion of our results of operations omits a comparison of our results for the years ended December 31, 2019 and 2020. In order to view that discussion, please see "Item 5. Operating and Financial Review and Prospects—A. Operating Results—Comparison of Period-to-Period Results of Operations" in our Annual Report on Form 20-F for the year ended December 31, 2020, which we filed with the SEC on April 2, 2021.

	2021	2020	2019
Consolidated Statements of Comprehensive loss:			
(*U.S. dollars, in thousands*)			
Total Revenues	$ 930	$ 1,040	$ 753
Cost of revenues	767	574	334
Gross profit	163	466	419
Operating Expenses:			
Research and development, net	21,125	17,287	15,791
Business development	2,738	2,672	2,029
General and administrative	7,253	5,321	3,765
Total operating expenses	31,116	25,280	21,585
Operating loss	(30,953)	(24,814)	(21,166)
Financing income	1,935	1,591	2,630
Financing expenses	(1,414)	(2,951)	(555)
Loss before taxes on income	(30,432)	(26,174)	(19,091)
Taxes on income	13	32	24
Loss	$ (30,445)	$ (26,206)	$ (19,115)

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenues

Our total revenues decreased by $0.1 million, or 10.6%, to $0.9 million for the year ended December 31, 2021 from $1.0 million for the year ended December 31, 2020. The decrease was primarily related to a decrease in the revenues in the agriculture segment, partially offset by revenues from initial product sales in the human health segment.

Cost of Revenues

Cost of revenues increased by $0.2 million, or 33.6%, to $0.8 million for the year ended December 31, 2021 from $0.6 million for the year ended December 31, 2020. The increase was primarily related to an increase in the revenues in the human health segment as well as changes in the composition of our revenues under our collaboration agreements in the agriculture segment.

Gross Profit

Gross profit decreased by $0.3 million, or 65.0%, to $0.2 million for the year ended December 31, 2021 from $0.5 million for the year ended December 31, 2020, due to the combined impact of changes in our revenues and cost of revenues, as described above.

Operating Expenses

Research and Development Expenses, Net. Research and development expenses increased by $3.8 million, or 22.2%, to $21.1 million for the year ended December 31, 2021 from $17.3 million for the year ended December 31, 2020. This increase was attributable to payments made to third parties for (i) pre-clinical studies conducted for Biomica, (ii) Biomica's GMP microbe drug production for its first-in-human proof-of-concept study in the immuno-oncology program; (iii) field trials conducted in target locations for Lavie Bio and (iv) a decrease in participation in respect of government grants to cover certain research and development expenses.

Business Development Expenses. Business development expenses increased by $0.1 million, or 2.4%, to $2.73 million for the year ended December 31, 2021 from $2.67 million for the year ended December 31, 2020. This increase was attributable to our subsidiaries' efforts to commercialize their products.

General and Administrative Expenses. General and administrative expenses increased by $2 million, or 36.3%, to $7.3 million for the year ended December 31, 2021 from $5.3 million for the year ended December 31, 2020. This increase was attributable to (a) the impact of an industry-wide increase in the cost of D&O liability insurance and (b) an increase in salary-based expenses due to an increase in market demand for highly skilled workers.

Financing Income and Expenses

Financing Income. Financing income increased by $0.3 million, or 21.6%, to $1.9 million for the year ended December 31, 2021 from $1.6 million for the year ended December 31, 2020. This increase was attributable to the change in the fair value of marketable securities and exchange rate differences between the USD and NIS.

Financing Expenses. Financing expenses decreased by $1.6 million, or 52.1%, to $1.4 million for the year ended December 31, 2021 from $3.0 million for the year ended December 31, 2020. This decrease was primarily attributable to the revaluation of pre-funded warrants in 2021.

Taxes on Income

For the years ended December 31, 2021 and 2020, we recorded insignificant amounts for taxes on income in Israel and an insignificant amount of taxes with respect to U.S. subsidiaries.

Loss

The amount of our overall loss increased by 16.2% to $30.4 million for the year ended December 31, 2021, from $26.2 million for the year ended December 31, 2020. This increase reflected the cumulative effect of all of the above-described line items from our consolidated statements of comprehensive loss.

B. Liquidity and Capital Resources

Our working capital requirements generally reflect the growth in our business and have historically been provided by cash raised from our investors, payments from our collaborators and government grants. As of December 31, 2021, we had cash, short term bank deposits and marketable securities of $53.9 million, of which $29.6 million were attributable to equity financing, net, and working capital of $50.0 million, which is calculated by subtracting our current liabilities from our current assets. As of December 31, 2021, we had $4.3 million of outstanding long-term indebtedness related to government grants.

Capital Resources

In 2021, our primary sources of liquidity were cash on hand, cash proceeds raised from public offering of our ordinary shares and the exercise of options, proceeds from collaboration agreements and revenues from the selling of medical cannabis products. We used these funds primarily to finance our business operations.

Public Offerings of Ordinary Shares

Cantor Controlled Equity Offering℠ Sales Agreement

On January 14, 2021 and February 19, 2021, we entered into Controlled Equity Offering℠ Sales Agreements, or the January Sales Agreement and February Sales Agreement, respectively, with Cantor Fitzgerald & Co., or the Agent, pursuant to which the Company could offer and sell, from time to time, its ordinary shares, through the Agent in an ATM offering, as defined in Rule 415(a)(4) promulgated under the Securities Act, for aggregate offering price of up to $28.0 million and $50.0 million, respectively. In February 2021, we completed the sales of ordinary shares under the January Sales Agreement and issued 3,803,594 ordinary shares, with a weighted average selling price of $7.36 per share, resulting in gross proceeds of approximately $28 million. Subsequently the company entered into the February Sales Agreement. As of December 31, 2021, we sold 726,832 ordinary shares with a weighted average selling price of $3.64 per share, resulting in gross proceeds of approximately $2.6 million. We are not obligated to make any sales of ordinary shares under the February Sales Agreement and no assurance can be given that we will sell any ordinary shares under such agreement, or, if we do, as to the price or number of such shares that we will sell or the dates on which any such sales will take place.

Registered Direct Offerings

On September 2, 2020, we issued 5,882,353 ordinary shares in a registered direct offering. Each ordinary share was sold at $1.70 per share resulting in gross proceeds of $10 million. On November 2, 2020, we completed a second registered direct offering with certain institutional investors for the purchase of 3,920,000 ordinary shares at a share price of $2.50 per ordinary share and 883,534 pre-funded warrants with an exercise price of $0.01 per share at price of $2.49 per warrant (which were exercised in the beginning of January 2021), resulting in gross proceeds of $12 million.

Shelf Registration Statement

On February 19, 2021, we filed a shelf registration statement on Form F-3 with the SEC under which we may offer and sell from time to time in one or more offerings, our ordinary shares, debt securities, rights, warrants and units having an aggregate offering price of up to $200 million. We registered up to $50 million under this Form F-3 in connection with for the February Sales Agreement. We may seek additional capital or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans.

Collaboration Agreements

Under our R&D collaboration agreements, our revenues typically include R&D funding for activities that we conduct in the collaboration, as well as milestone payments for when the candidates advance in our partners' pipelines and revenue sharing from the end-product.

We expect that our sources of liquidity for 2022 will include cash on hand, proceeds raised from the public offering of our ordinary shares and the exercise of options, proceeds from collaboration agreements and revenues from the selling of medical cannabis products, cash held in our bank accounts, including bank deposits and marketable securities, proceeds generated from agreements with collaborators, proceeds from grants and financing transactions.

In the future, cash may serve us in effecting M&A transactions for achieving inorganic growth in our different segments of operation. We believe that our existing cash as of December 31, 2021 will be sufficient to meet our projected cash requirements for at least 12 months. Nevertheless, in order to accelerate our subsidiaries growth and to strengthen their position as independent companies, we are in different levels of discussions with potential strategic and financial investors towards potential fundraisings.

Although we have sufficient cash, cash equivalents, short-term bank deposits, and marketable securities that we believe will enable us to fund our operations during the next 12-month period at current annual expenditures, our ability to fund our capital needs depends on our ongoing ability to generate cash from existing and future collaborations, our revenues, and from our ability to raise additional funds. To the extent that existing cash, and cash equivalents, short-term bank deposits, and marketable securities are insufficient to fund our future activities, we may need to raise additional funding through debt and equity financing. Additional funds may not be available when we need them on terms that are acceptable to us, or at all.

If adequate funds are not available to us on a timely basis, we may be required to delay, limit, scale back or cease our research and development activities, establishment and maintenance of sales and marketing capabilities or other activities that may be necessary to commercialize our product candidates.

Cash Flows

The following table presents the major components of net cash flows used in or provided by (as applicable) operating, investing and financing activities for the periods presented. For a discussion of our net cash flows for the year ended December 31, 2019, please see "Item 5. Operating and Financial Review and Prospects— B. Liquidity and Capital Resources— Cash Flows" in our Annual Report on Form 20-F for the year ended December 31, 2020, which we filed with the SEC on April 2, 2021:

(*U.S. dollars, in thousands*)	**2021**	**2020**	**2019**
Net cash used in operating activities	$ (24,716)	$ (19,514)	$ (17,666)
Net cash provided by (used in) investing activities	(20,566)	9,415	37,139
Net cash provided by financing activities	30,276	20,374	9,306
Exchange rate differences - cash and cash equivalents balances	1,102	1,206	159
Increase (decrease) in cash and cash equivalents	$ (13,904)	$ 11,481	$ 28,938

Cash Used in Operating Activities

Cash used in operating activities for the year ended December 31, 2021 was $24.7 million and primarily reflects our overall loss of $30.4 million, as adjusted downwards to eliminate certain non-cash items that were taken into account in calculating, and that increased, our overall loss, including $2.6 million of share-based compensation expenses, $1.3 million of depreciation expenses and $0.9 million amortization of intangible assets and the movement in balance sheet items of $1.7 million. These downwards adjustments to cash used were partially offset by $0.9 million of non-cash net financing income.

Cash used in operating activities for the year ended December 31, 2020 was $19.5 million and primarily reflected our overall loss of $26.2 million, as adjusted downwards to eliminate certain non-cash items that were taken into account in calculating, and that increased, our overall loss, including $4.1 million of share-based compensation expenses, $1.8 million of depreciation expenses, $1.0 million of net financing income, and $0.9 million amortization of intangible assets. These downwards adjustments to cash used were partially offset by the movement in balance sheet items, including an increase in other receivables of $1.3 million.

Cash Provided by (Used In) Investing Activities

Cash used in investing activities was $20.6 million for the year ended December 31, 2021. That primarily reflects $23.1 million of net cash invested in the purchase of marketable securities, $1.0 million of cash withdrawal from bank deposits and $0.8 million of cash used for the purchase of property, plant and equipment, offset by $4.4 million of net cash proceeds from the sale of marketable securities.

Cash provided by investing activities was $9.4 million for the year ended December 31, 2020. That primarily reflects $2.1 million of net cash proceeds from the sale of marketable securities and $8.0 million of cash withdrawal from bank deposits, partially offset by $0.7 million of cash used for the purchase of property, plant and equipment.

Cash Provided by Financing Activities

Cash provided by financing activities was $30.3 million for the year ended December 31, 2021. That was primarily attributable to $29.6 million of cash provided by the sale of newly-issued ordinary shares in connection with the Controlled Equity Offering℠ Sales Agreements, the net proceeds of government grants of $0.8 million and $0.5 million proceeds from exercise of options, partially offset by $0.6 million for the repayment of an operating lease liability.

Cash provided by financing activities was $20.4 million for the year ended December 31, 2020. That was primarily attributable to $18.7 million of net cash provided by the sale of newly issued ordinary shares, $2.0 million for the sale of pre-funded warrants and the net proceeds of government grants of $0.3 million, partially offset by the use of $0.6 million for the repayment of an operating lease liability.

Government Grants

Our research and development efforts have been financed, in part, through grants from IIA, BIRD, CIIRDF and the EU. From our inception through 2021, we received grants totaling $8.6 million (including accrued interest) from the IIA, and repaid $3.5 million, in respect of refundable projects. We also received an additional $4.3 million from the IIA in respect of several non-refundable projects. We have received grants totaling approximately $1 million (linked to the U.S. Consumer Price Index) from BIRD and have repaid $0.5 million, whereas the amount of $0.4 million of grants from BIRD have been cancelled, as we decided to withdraw from the relevant project, as detailed in Note 12 to the financial statements included in this annual report under Item 18. We have received grants totaling $1.1 million from the EU, which are not required to be repaid. As of December 31, 2021, we had two active research grants under which we have received funding from the IIA.

See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Incorporation and Location in Israel—We have received Israeli government grants for certain of our research and development activities. The terms of these grants may require us to satisfy specified conditions in order to manufacture products and transfer technologies supported by such grants outside of Israel. We may be required to pay penalties in addition to repayment of the grants."

IIA Grants

Under the Innovation Law, research and development programs that meet specified criteria and are approved by a committee of the IIA are eligible for grants. The grants awarded are typically up to 50% of a project's expenditures, as determined by the IIA committee and subject to the benefit track under which the grant was awarded. A company that receives a grant from the IIA is typically required to pay 3% royalties to the IIA on income generated from products incorporating know-how developed using that grant (including income derived from services associated with such products), until 100% of the U.S. dollar-linked grant, plus interest at the annual London Interbank Offered Rate, or LIBOR, is repaid. Certain benefit tracks do not require payment of royalties.

The obligation to pay royalties is contingent on actual income generated from such products and services. In the absence of such income, no payment of royalties is required. It should be noted that the restrictions under the Innovation Law, including restrictions on the sale, transfer or assignment outside of Israel of know-how developed as part of the programs under which the grants were given will continue to apply even after the repayment of such royalties in full.

The terms of the grants under the Innovation Law also require 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 prior written approval is received from the 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 manufacturing (in which case only notification is required)), and additional payments are required to be made to the IIA, as described below. It should be noted that this does not restrict the export of products that incorporate the funded know-how.

Ordinarily, as a condition to obtaining approval to manufacture outside Israel, we may be required to pay royalties at an increased rate, and up to an increased cap amount of up to three or six times the total amount of the relevant IIA grant, plus interest accrued thereon, depending on the manufacturing volume to be performed outside of Israel.

The Innovation Law restricts the ability to transfer know-how funded by the IIA. Transfer of IIA-funded know-how outside of Israel requires prior approval and is subject to payment of a redemption fee to the IIA calculated according to a formula provided under the Innovation Law. A transfer for the purpose of the Innovation Law is generally interpreted very broadly and includes, inter alia, any actual sale of the IIA-funded know-how, any license to develop the IIA-funded know-how or the products resulting from such IIA-funded know-how or any other transaction, which, in essence, constitutes a transfer of the IIA-funded know-how.

The IIA approval to transfer know-how created, in whole or in part, in connection with an IIA-funded project to a third party outside Israel is subject to payment of a redemption fee to the IIA calculated according to a formula provided under the Innovation Law that is based, in general, on the value of the transferred know-how, multiplied by the amount of grants received from the IIA (including the accrued interest), divided by the total amounts expended by the grant recipient on R&D. To the extent any royalties were paid on account of the grants, such royalties will be deducted from the calculation. The redemption fee is subject to a cap of six times the total amount of the IIA grants, plus interest accrued thereon, namely the total liability to the IIA, including the accrued interest, multiplied by six. If the grant recipient undertakes that for a period of not less than three years, at least 75% of its relevant R&D positions will remain in Israel, then the cap will be reduced to three times (rather than six times) the total liability to the IIA, calculated as set out above.

Subject to prior approval of the IIA, we may transfer the IIA-funded know-how to another Israeli company. If the IIA-funded know-how is transferred to another Israeli entity, the transfer would still require IIA approval but will not be subject to the payment of the redemption fee (although there will be an obligation to pay royalties to the IIA from the income of such sale transaction as part of the royalty payment obligation). In such case, the acquiring company would have to assume all of the selling company's restrictions and obligations towards the IIA (including the restrictions on the transfer of know-how and manufacturing capacity outside of Israel) as a condition to IIA approval.

We are required to pay up to 100% of the amount of grants received by us from the IIA, plus interest at the LIBOR. In addition to paying any royalty due, we must abide by other restrictions associated with receiving such grants under the Innovation Law. Those restrictions may impair our ability to outsource development of products containing our traits, engage in change of control transactions or otherwise transfer our know-how outside of Israel and may require us to obtain the approval from the IIA for certain actions and transactions and pay additional royalties and other amounts to the IIA. We cannot be certain that any approval of the IIA will be obtained on terms that are acceptable to us, or at all. We may not receive the required approvals should we wish to transfer IIA-funded know-how, manufacturing and/or development outside of Israel in the future. Furthermore, in the event that we undertake a transaction involving the transfer to a non-Israeli entity of know-how developed with IIA-funding pursuant to a merger or similar transaction, the consideration available to our shareholders may be reduced by the amounts we are required to pay to IIA. Any approval, if given, will generally be subject to additional financial obligations. Failure to comply with the requirements under the Innovation Law may subject us to mandatory repayment of grants received by us (together with interest and penalties), as well as expose us to criminal proceedings. In addition, the IIA may from time to time conduct royalties audits and such audits may lead to additional royalties being payable on additional products. Such grants may be terminated or reduced in the future, which would increase our costs. IIA approval is not required for the marketing of products resulting from the IIA-funded research or development in the ordinary course of business.

In January 2018, we announced participation in a three-year IIA-sponsored Phenomics Consortium to develop tools and systems for precision agriculture and innovative development of agriculture products. In addition to Evogene, the Phenomics Consortium consists of several Israeli industrial companies and academic institutions. The goal of the consortium is to develop plant phenotyping technologies, including the generation of comprehensive agricultural 'Big-Data' and the development of artificial intelligence algorithms for real time analysis of phenotypic data. The grant for the consortium was originally approved for calendar year 2018 in an amount of approximately $5 million, of which approximately $1.4 million was granted to Evogene. By the end of 2018, the grant was extended by an additional six months to a total period of 18 months until mid-2019, and the grant amount was updated to approximately $7.6 million total, of which approximately $2.5 million was granted to Evogene. In June 2019, the IIA approved the continuation of the consortium following such 18-month period, until the end of 2020, which would complete a three-year workplan, and granted an additional amount of approximately $7.5 million, of which approximately $1.9 million was granted to Evogene.

In June 2020, we announced participation in a three-year workplan, IIA-sponsored CRISPR-IL Consortium to develop an artificial intelligence based, end-to-end system for genome-editing to be used in multi-species including human, plant, and certain animal DNA, applicable to market segments in pharma, agriculture and aquaculture. In addition to Evogene, the CRISPR-IL Consortium consists of several Israeli industrial companies and academic institutions. The goal of the consortium is to develop an artificial intelligence-based system, "Go-Genome", providing users improved genome-editing workflows. The system aims to provide end-to-end solutions, from user interface to an accurate measurement tool. The total budget for the consortium was approved for the first 18 months in an amount of approximately $10.2 million, of which approximately $1.3 million was allocated to us. After the first 18 months, the consortium was extended to an additional 18 months with an approved budget allocated to the Company of $1.8 million. Participation in the IIA-sponsored consortium programs as described above does not obligate us to pay royalties to the IIA; however, the know-how developed in such consortium programs is subject to the provisions and restrictions under the Innovation Law.

In March 2020 and March 2021, Lavie Bio obtained an IIA approval to receive a grant for its third and fourth year programs, respectively, for bio fungicides for mildew in fruit and vegetables. The total approved budgets for each of the third and fourth year programs were NIS 3.9 million (approximately $1.1 million for the third year and approximately $1.2 for the fourth year).

In 2020, AgPlenus obtained IIA approval to receive a grant for its first-year program for development of novel herbicides. The total budget was approved for NIS 3.1 million (approximately $1.0 million).

We entered into agreements with certain of our subsidiaries in the framework of which they were granted permission to use our technology and related know how, which was funded by the IIA. Evogene remains responsible to the IIA for the obligations regarding such IIA funding.

BIRD Grants

We have received two BIRD grants, covering the following programs: (i) a joint development program with DuPont-Pioneer (now Corteva) of research and development improvements to soybean rust resistance, which the Company has repaid in full; and (ii) a joint research and development program with Marrone Bio Innovations, or MBI, for discovery of novel modes of biological action for insect control, which the Company has decided to withdraw from.

Under the MBI BIRD program, the grant for the joint development will be repaid: (a) from revenues received for the licensing of products developed under the project; (b) from revenues generated from sales of products developed under the project; (c) from proceeds received from the outright sale of the technology developed under the project; (d) if we and our partner have concluded the development of a product within the period of development defined under each of the programs; or (e) if within 60 months from the original grant date we and MBI did not conclude the development of a product but nevertheless decide to continue the project. In each such case, the repayment will be in an amount of up to 150% of the total grant received, depending on the timing of the repayment.

CIIRDF Grant

The CIIRDF grant that we have received was also provided to us as part of a previous joint project of ours with Saskatchewan Wheat Pool Inc., operating under the name of Viterra, to develop canola with improved yield and abiotic stress tolerance. This grant will be repaid from income resulting from the commercialization of a product developed pursuant to the grant project, at a rate of 2.5% of royalties on sales of such product, in an amount up to 100% of the total grant received. Alternatively, we may repay the grant as royalties of 2.5% of the income we receive from licensing the product developed pursuant to the grant. Payment of such royalties is not required if commercial revenues are not generated as a result of the project.

EU Grant

In early 2016, a grant application for a consortium for research in photosynthesis in which we participate within the EU Horizon 2020 Program for Research and Innovation was confirmed. The consortium's research program is focused on an innovative approach to modulate photosynthesis related pathways aiming to improve photosynthetic efficiency. Beyond us, the consortium includes academic institutions such as the Max Planck Institute of Molecular Plant Physiology and the Institute of Terrestrial Microbiology, the Weizmann Institute of Science, and the Imperial College of Science, Technology and Medicine. Overall, we received a total amount of €0.9 million for our participation in the consortium during the five-year project.

C. Research and Development, Patents and Licenses, etc.

We continuously invest, and have for at least the last three years historically invested, in maintaining the technological capabilities of our CPB platform, which includes tailored 'big-data' databases, interconnected data hubs and proprietary analysis and prediction algorithms. We also maintain laboratories, greenhouses and fields for conducting biological validation activities for our computational predictions.

Our ongoing research and development activities are funded mainly by internal resources, collaboration research and development payments and governmental grants. As of December 31, 2021, 96 of our employees, representing approximately 72% of our entire work force, were engaged in research and development on a full-time basis. For more information regarding our research and development activities, intellectual property and licenses, please see Item 4.B. "Information on the Company—Business Overview."

D. Trend Information

D&O insurance

In recent years we experienced an increase in the cost we incur for procuring D&O liability insurance, resulting from a general increase in the cost of D&O liability insurance for smaller, dual-listed public companies such as us. This general increase has been tied to perceived heightened levels of risk for D&O insurers. Insurers have been increasing their level of compensation, in the form of premiums, which they believe have not been commensurate with the risk being taken by them. In parallel, there has been an increase in the amounts of the deductibles payable by public companies in situations in which an insurable event occurs. If this trend continues, it will increase our operational expenses and have a negative effect on our financial results.

Exchange rate

A significant portion of our expenses is denominated in currencies other than the U.S. dollar. The Company is therefore subject to non-U.S. currency risks and non-U.S. exchange exposure, especially the NIS. Exchange rates can be volatile and a substantial change of foreign currencies against the U.S. dollar could increase or reduce the Company's expenses and net loss and impact the comparability of results from period to period. The devaluation of the U.S. dollar against the NIS was 3.3%, 7.0% and 7.8% in 2021, 2020 and 2019, respectively. For example, for the year ended December 31, 2021, assuming a 10% devaluation of the U.S. dollar against the NIS, we would have experienced a decrease in our net loss of approximately $1.3 million, while assuming a 10% appreciation of the U.S. dollar against the NIS, we would experience an increase in our net loss of approximately $1.3 million.

Other than as described immediately above or disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events during our current fiscal year that are reasonably likely to have a material effect on our net revenue, income, profitability, liquidity or capital resources, or that would cause the financial information included in this annual report to be not necessarily indicative of our future operating results or financial condition.

E. Critical Accounting Estimates

Application of Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in conformity with IFRS. Our accounting policies affecting our financial condition and results of operations are more fully described in our consolidated financial statements included elsewhere in this annual report. The preparation of our financial statements requires management to make judgments, estimates and assumptions that affect the amounts reflected in the consolidated financial statements and accompanying notes, and related disclosure of contingent assets and liabilities. We base our estimates upon various factors, including past experience, where applicable, external sources and on other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions and could have a material adverse effect on our reported results.

In many cases, the accounting treatment of a particular transaction, event or activity is specifically dictated by accounting principles and does not require management's judgment in its application, while in other cases, management's judgment is required in the selection of the most appropriate alternative among the available accounting principles, that allow different accounting treatment for similar transactions.

We believe that the accounting policies discussed below are critical to our financial results and to the understanding of our past and future performance as these policies relate to the more significant areas involving management's estimates and assumptions. We consider an accounting estimate to be critical if: (1) it requires us to make assumptions because information was not available at the time or it included matters that were highly uncertain at the time we were making our estimate; and (2) changes in the estimate or different estimates that we could have selected may have had a material impact on our financial condition or results of operations.

Revenue Recognition

We recognize revenues when the control over the goods or services is transferred to the customer. The transaction price is the amount of the consideration that is expected to be received based on the contract terms, excluding amounts collected on behalf of third parties (such as taxes).

We have entered into research collaboration and license agreements under which we grant to our collaborators an exclusive license to intellectual property rights for the development and commercialization of our proprietary product candidates. The agreements contain multiple performance obligations, including funding from periodic payments for research and development services, payments based on achievement of specified milestones and royalties on sales of products sold by our collaborators that include the licensed traits.

Revenues from research and development services as part of our research collaboration and license agreements are recognized over time, during the period the customer simultaneously receives and consumes the benefits provided by our performance. Recognition of the service is throughout the services period and is determined based on the proportion of actual costs incurred for each reporting period to the estimated total costs, subject to the enforceable rights. We charge our customers based on payment terms agreed upon in specific agreements. When payments are made before or after the service is performed, we recognize the resulting contract asset or liability.

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations such as licenses, services, royalties and milestone events require an allocation of the transaction price to each performance obligation based on a relative standalone selling price, or SSP, basis. The Company establishes SSP based on management judgment, considering internal factors such as margin objectives, pricing practices and historical sales.

Revenues from milestone events stipulated in the agreements are recognized upon the occurrence of event or achievement of the milestone specified in the agreement.

Share-Based Compensation

We account for share-based compensation in accordance with the fair value recognition provision of IFRS guidance on share-based compensation. Under these provisions, share-based compensation is measured at the grant date based on the fair value of the award and is recognized as an expense, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Share-based compensation expense was $2.6 million, $4.1 million and $1.6 million in 2021, 2020 and 2019, respectively. We selected the binomial option-pricing model as the most appropriate method for determining the estimated fair value of our share-based compensation. The determination of the grant date fair value of options using an option-pricing model is affected by estimates and assumptions regarding a number of complex and subjective variables. These variables include the estimated period of time that we expect employees to hold their options, the expected volatility of our share price over the expected term of the options (estimated using historical data from prior years, including historical forfeiture rates), share option exercise and cancellation behaviors, risk-free interest rates, expected dividend yields (assumed to be zero as we have historically not paid and do not intend to pay dividends on our ordinary shares) and the price of our ordinary shares. In addition, our compensation expense is affected by our estimate of the number of awards that will ultimately vest. In the future, if the number of equity awards that are forfeited by employees is lower than expected, the expense recognized in future periods will be higher.

Government Grants

Government grants received from the IIA are recognized as a liability if future economic benefits are expected from the projects that will result in royalty-bearing sales.

A liability for a grant is first measured at fair value using a discount rate that reflects a market rate of interest. The difference between the amount of the grant received and the fair value of the liability is accounted for as a government grant and recognized as a reduction of research and development expenses. After initial recognition, the liability is measured at amortized cost using the effective interest method. Royalty payments we make to repay the grant are treated as a reduction of the liability. If no economic benefits are expected from the research activity, the grant receipts are recognized as a reduction of research and development expenses, in which case, the royalty obligation is treated as a contingent liability.

There is uncertainty regarding the estimates of future cash flows and the estimate of the capitalization rate that is used for determining the amount of the liability recognized. At the end of each reporting period, we evaluate whether there is reasonable assurance that the liability recognized, in whole or in part, will not be repaid (since we will not be required to pay royalties) based on the best estimate of future sales, and if so, the appropriate amount of the liability is recognized as a reduction of research and development expenses.

Leases

We cannot readily determine the interest rate implicit in our operating lease for our principal facility in Rehovot, Israel. We therefore use our incremental borrowing rate, IBR, to measure lease liabilities. The IBR is the rate of interest that we would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what we 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease.

We estimate the IBR using observable inputs (such as market interest rates) when available and we are required to make certain entity-specific estimates (such as the Company's stand-alone credit rating).

Intangible assets

On August 6, 2019, Corteva invested in the Company's agriculture biologicals subsidiary, Lavie Bio, by way of a contribution of all Corteva's holdings in its wholly owned subsidiary Taxon Biosciences, which included several intangible assets, and payment of an amount of $10 million in cash.

The fair value of intangible assets received through the Corteva investment is determined upon initial recognition by either one of three traditional methods in valuating an asset. These methods include the market approach, the income approach and the cost approach. The pipeline products and potential products were valued by applying the income approach and the Microorganisms collection was valued using the cost approach.

The Company's significant estimates in this analysis included, but were not limited to, future cash flow projections, the weighted average cost of capital, the terminal growth rate, and the tax rate. The Company believes the current assumptions and estimates utilized were both reasonable and appropriate. Future cash flow estimates are, by their nature, subjective and actual results may differ materially from the Company's estimates. If the Company's ongoing estimates of future cash flows are not met, the Company may have to record impairment charges in future periods. The Company's estimates of future cash flows are based on current regulatory and economic climates, recent operating results, and planned business strategy. These estimates could be negatively affected by changes in federal, state, or local regulations or economic downturns.

The useful economic life of the intangible assets acquired by us in this transaction was determined through years of development until final year of projected sales. When applying the income approach, the cash flows expected to be generated by intangible assets are discounted to their present value equivalent using a rate of return that reflects the relative risk of the investment, as well as the time value of money. For each intangible asset, a specific discount rate was valuated using "Modified CAPM Build-Up Method".

The Company evaluates the need to record an impairment of non-financial assets whenever events or changes in circumstances indicate that the carrying amount is not recoverable. If the carrying amount of non-financial assets exceeds their recoverable amount, the assets are reduced to their recoverable amount. The recoverable amount is the higher of fair value less costs of sale and value in use. In measuring value in use, the expected future cash flows are discounted using a pre-tax discount rate that reflects the risks specific to the asset. The recoverable amount of an asset that does not generate independent cash flows is determined for the cash-generating unit to which the asset belongs. Impairment losses are recognized in profit or loss.

Impact of Israeli Tax Policies and Government Programs on Our Operating Results

Tax regulations have a material impact on our business, particularly in Israel where we have our headquarters. The following summary describes the current tax structure applicable to companies in Israel, with special reference to its effect on us.

General Corporate Tax Structure in Israel

Israeli companies are generally subject to corporate tax on their taxable income. In 2021, the corporate tax rate was 23%. Capital gains derived by an Israeli company are generally subject to tax at the prevailing regular corporate tax rate.

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

The Law for the Encouragement of Industry (Taxes), 5729-1969, generally referred to as the Industry Encouragement Law, provides several tax benefits for an "Industrial Company".

The Industry Encouragement Law defines an "Industrial Company" as an Israeli resident company which was 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" owned by it and located in Israel. An "Industrial Enterprise" is defined as an enterprise that is held by an Industrial Company whose principal activity in a given tax year is industrial production.

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

- amortization over an eight-year period of the cost of purchased know-how and patents and rights to use a patent and 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 together with Israeli Industrial Companies controlled by it; and
- expenses related to a public offering are deductible in equal amounts over a three-year period, commencing in the year of the offering.

Eligibility for benefits under the Industry Encouragement Law is not contingent upon the approval of any governmental authority. 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 continue to 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) by "Industrial Enterprises" (as defined under the Investment Law).

The Investment Law was significantly amended effective April 1, 2005 (which we refer to as the 2005 Amendment), further amended as of January 1, 2011 (which we refer to as the 2011 Amendment) and further amended as of January 1, 2017 (which we refer to as 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 2005 Amendment. 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 introduced new benefits for Technological Enterprises, alongside the existing tax benefits.

On October 24, 2010, we received a tax ruling from the Israel Tax Authority, according to which, among other things, our activity has been qualified as an "industrial activity", as defined in the Investment Law and is also eligible to tax benefits as a Beneficiary Enterprise, which will apply to the turnover attributed to such enterprise. The benefit period under this tax ruling ended in 2018, and since we did not generate any taxable income in tax year 2018, we were not entitled to any tax benefits under this tax regime.

In addition, we have reviewed and evaluated the implications and effect of the benefits under the 2011 and 2017 Amendments, and, while potentially eligible for such benefits, we have not yet chosen to be subject to the tax benefits introduced by the 2011 or the 2017 Amendments.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following table sets forth the name, age and position of each of our executive officers and directors as of the date of this annual report.

Name	Age	Position
Executive officers		
Mr. Ofer Haviv	55	President and Chief Executive Officer
Dr. Nir Arbel	42	Chief Product Officer
Dr. Brian Ember	46	Chief Executive Officer of AgPlenus Ltd.
Dr. Elran Haber	41	Chief Executive Officer of Biomica Ltd.
Dr. Arnon Heyman	45	Chief Executive Officer of Canonic Ltd.
Mr. Mark Kapel	45	Chief Technology Officer
Ms. Dorit Kreiner	50	Chief Financial Officer
Mr. Sassi Masliah	43	Executive Vice President Corporate Development
Directors		
Ms. Sarit Firon[3][4]	55	Chairperson of the Board
Mr. Dan Falk[1][2][4]	77	Director
Mr. Ziv Kop[1][2][3][4]	50	Director
Dr. Adrian Percy[4]	56	Director
Mr. Leon Y. Recanati[3][4]	73	Director
Dr. Oded Shoseyov[1][2][4]	65	Director

(1) Member of our Audit Committee.
(2) Member of our Compensation and Nominating Committee.
(3) Member of our Corporate Development Committee.
(4) Independent director under the Nasdaq Listing Rules.

Executive Officers

Mr. Ofer Haviv has served as Evogene's President and Chief Executive Officer since December 2004 after having joined the company in January 2002 as Chief Financial Officer. Mr. Haviv serves as Chairperson of the Board of Directors of our subsidiaries. From 2006 to 2007, Mr. Haviv served as a director of the company. Mr. Haviv is a Certified Public Accountant and holds a BA in Accounting and Economics from Tel-Aviv University, Israel.

Dr. Nir Arbel has served as Chief Product Officer of Evogene since August 2021. Dr. Arbel has over ten years of experience in biotechnology and medical technology companies in product development and commercialization. Prior to joining the Company, Dr. Arbel served as Chief Executive Officer and Co-Founder of Carmentix Pte Ltd, Singapore, a company focused on high-risk pregnancy prognosis, from 2015 to 2020, and as the Operating Partner in Esco Ventures, a medical technology fund based in Singapore, from 2016 to 2020. Dr. Arbel holds a Ph.D. in Biochemistry from Ben-Gurion University, Israel.

Dr. Brian Ember has served as Chief Executive Officer of AgPlenus Ltd., a subsidiary of Evogene, since December 2021. Dr. Ember has previously held various senior leadership roles, including, during 2021, Head of Global Portfolio Management and Head of Marketing and Business Development, Americas for Biotalys, an agricultural technology company focused on reinventing food protection with protein-based biocontrol solutions; Senior Director, Business Development for AgriMetis, an innovative crop protection company, between 2018 and 2021; and various management roles at BASF from 2012 to 2018 and Syngenta from 2008 to 2012. Dr. Ember holds a B.Sc. in Chemistry from the University of Florida, Gainesville, Florida; a Ph.D. in Organic Chemistry from the University of Georgia, Athens, Georgia; and an MBA from Kenan-Flagler Business School at the University of North Carolina, Chapel Hill, North Carolina.

Dr. Elran Haber has served as Chief Executive Officer of Biomica Ltd., a subsidiary of Evogene, since January 2018. Dr. Haber previously served as Chief Executive Officer of Therapix Biosciences Ltd. (now known as SciSparc Ltd.) (NASDAQ: SPRC) beginning in November 2015. Prior to that, from March 2014, Dr. Haber served as our Vice President of Business Strategy and Innovation. Dr. Haber served for more than 10 years as Chairperson and board member of several publicly traded and privately held companies, including Issta Lines Ltd. (TASE: ISTA) from 2007 to 2012, and American Express Global Business Travel – Israel (Histour-Eltive Ltd.) from 2010 to 2012, and has been a member of various board committees and has served in senior executive roles in various life science companies. Dr. Haber holds a Ph.D. in Pharmaceutical Science and an MBA in Finance & Financial Engineering, both from The Hebrew University of Jerusalem, Israel.

Dr. Arnon Heyman has served as Chief Executive Officer of Canonic Ltd., a subsidiary of Evogene, since April 2019. He previously served as Vice President & General Manager of Ag-Seeds and as director of project management crop protection from 2018. Prior to Evogene, Dr. Heyman served as Chief Technology Officer of BondX Technologies Ltd. from 2009-2014. Dr. Heyman holds a Ph.D. in Biotechnology from The Hebrew University of Jerusalem, Israel, and an MBA from the College of Management, Israel.

Mr. Mark Kapel was appointed as Executive Vice President Technology in February 2018, previously serving as Director of Information Technologies & Data Management from 2013. Mr. Kapel joined Evogene in 2005 and has held various positions in the company over the years. Mr. Kapel holds a B.Sc. in Physics & Computers from the Ben Gurion University of Negev, Israel, an MBA specializing in Management of Technology from Tel-Aviv University's Faculty of Management – Recanati Graduate School of Business Administration, Israel.

Ms. Dorit Kreiner has served as Chief Financial Officer of Evogene since February 2019. Ms. Kreiner has previously served as CFO of a number of companies, including NRGene (TASE: NRGN) between 2014 and 2018 and Therapix Biosciences Ltd. (now known as SciSparc Ltd.) (NASDAQ: SPRC) between 2011 and 2014. Ms. Kreiner also previously filled the position of Director of Finance of Evogene between 2004 and 2011. Ms. Kreiner holds a B.A. in accounting and economics and an MBA in Finance and Marketing from the Tel-Aviv University, Israel, and an LL.B. from the College of Management, Israel.

Mr. Sassi Masliah has served as Executive Vice President Corporate Development since February 2022. Mr. Masliah has held various positions within Evogene over the last 11 years, most recently as Evogene's Vice President for Legal Affairs and Corporate Secretary. Mr. Masliah holds an LL.B. and B.A. in economics from the Tel-Aviv University, Israel.

Directors

Mr. Dan Falk has served as a director of our Company since he was appointed by the Board in November 2021. Mr. Falk has extensive experience of more than 20 years in serving as a financial expert on public and private company boards, most recently on the boards of Nice Ltd. (NASDAQ: NICE), Ormat Technologies Inc. (NYSE: ORA) and Innoviz Technologies Ltd. (NASDAQ: INVZ). Additionally, in the past Mr. Falk held various executive positions in Orbotech Ltd. between 1985 and 1999, and Sapiens International Corporation (NASDAQ: SPNS) between 1999-2001. Mr. Falk holds a B.A. in Economics and Political Sciences, and an M.A. in Business Administration both from the Hebrew University of Jerusalem, Israel.

Ms. Sarit Firon has served as a director of our Company since she was appointed by the Board in August 2016, and as chairperson since August 2021. Ms. Firon is managing partner of Team8 Group and co-founder and managing partner of Team8 Capital, the investment arm of Team8 Group, which invests in early-stage technology startups. Previously, she was a managing partner of Cerca Partners, an Israeli venture capital fund. She has served at Extreme Reality Ltd., as its Chief Executive Officer from December 2012 to November 2014 and as a director since December 2014. From November 2011 to November 2012, Ms. Firon was the Chief Financial Officer of Kenshoo Ltd. From November 2007 to October 2011, Ms. Firon was the Chief Financial Officer of MediaMind Technologies Inc., a Nasdaq listed company which was acquired by DG, Inc. in August 2011. From May 2005 to June 2007, Ms. Firon was the Chief Financial Officer of OliveSoftware and from January 2000 to October 2004, she was the CFO of P-Cube, a private company which was acquired in October 2004 by Cisco Systems, Inc. (Nasdaq: CSCO). From October 2004 to January 2005, Ms. Firon was employed by Cisco to be responsible for the post-merger integration of P-Cube. From January 1995 to December 1999, Ms. Firon served in various positions at Radcom Ltd. (Nasdaq: RDCM), including as its Chief Financial Officer from September 1997 to December 1999. Since July 2015, she has served as chairperson of the board of directors of myThings Israel Ltd. Since June 2014, Ms. Firon has served as a director of Mediwound Ltd. (Nasdaq: MDWD), and since June 2012, Ms. Firon has served as a director of Datorama Ltd. From October 2000 to December 2006, Ms. Firon served as a director of MetaLink Ltd. (OTCMKTS: MTLK). Ms. Firon holds a B.A. in Accounting and Economics from Tel-Aviv University, Israel.

Mr. Ziv Kop has served as a director of our Company since January 2014. Mr. Kop serves as a director of Outbrain Inc. and Outbrain Ltd. Mr. Kop currently serves as Managing Partner at OG Tech Partners. From 2017 to 2019, Mr. Kop served as Partner at Marker/Innovation Endeavors venture capital fund. From February 2014 to June 2016, Mr. Kop served as Chief Operating Officer and board member of Outbrain Inc. a web-based content discovery platform. Previously, and since its inception in 2003 until June 2013, Mr. Kop was a Managing Partner at GlenRock Israel., a private equity investment firm, where he managed a portfolio of growth companies in the fields of advanced technologies and healthcare, and served on the board of more than ten private and public companies. Prior to his role at GlenRock, Mr. Kop served as Chief Executive Officer of POC Management Consulting, a leading Israeli consultancy in the field of strategic planning. Mr. Kop holds an LL.B. from the Tel-Aviv University Law School and Business School, Israel, and is a graduate of INSEAD's Young Managers Program, France.

Dr. Adrian Percy has served as a director of our Company since February 2019. Dr. Percy serves on the board of directors of BioLumic, HiFidelity Genetics and FA Bio. He is a member of the science and technology boards of Terramera, Oerth Bio, Harpe Bio, Biotalys and Rothamsted Research. Dr. Percy is currently a venture partner with Finistere Ventures and frequently acts as an advisor to companies through his own consultancy company, Nomad Technology Consulting. From 2019-2021, Dr. Percy served as Chief Technology Officer at UPL Ltd. From 2014-2018, he served as the head of research and development for the Crop Science division of Bayer as part of its executive committee. During his 16-year tenure at Bayer, he also led regulatory affairs activities across the entire division of Crop Science between 2013 and 2014 and crop protection development activities for Bayer in North America between 2011 and 2013. Dr. Percy has held positions in the research and development departments of Aventis CropScience between 2000 and 2002, Rhone Poulenc between 1996 and 2000, and Bayer in France, Germany and the United States. Dr. Percy earned a bachelor's degree in pharmacology at the University of Liverpool, England, as well as a master's degree in toxicology and a doctorate in biochemistry at the University of Birmingham, England.

Mr. Leon Y. Recanati has served as a director of our Company since May 2005. Mr. Recanati has served as chairperson and chief executive officer of GlenRock Israel Ltd. since 2003. Previously, Mr. Recanati was chief executive officer or chairperson positions at IDB Holding Corporation, Clal Industries, Azorim Investment Development and Construction Co., Delek Israel Fuel Corporation, and Super-Sol. He also founded Clal Biotechnologies Industries, a biotechnology investment company operating in Israel. Mr. Recanati holds an MBA from The Hebrew University of Jerusalem, Israel, and Honorary Doctorates from the Technion Institute of Technology, Israel, and Tel-Aviv University, Israel.

Dr. Oded Shoseyov has served as a director of our Company since November 2018. Dr. Shoseyov is the scientific founder of 15 companies, including: Futuragene Ltd., Collplant Ltd., Biobetter Ltd., GemmaCert Ltd., SP-Nano materials Ltd., Melodea Ltd., Valentis Nanotech. Ltd., Paulee CleanTec Ltd., Smart Resilin Ltd., Sensogenic Ltd., SavorEat Ltd. and Karme Yosef Winery. Dr. Shoseyov is a faculty member of The Hebrew University of Jerusalem, Israel, where he conducts research in plant molecular biology protein engineering and nano-biotechnology. His group's focus is on Bio-Inspired Nanocomposite materials. He has authored or co-authored more than 300 scientific publications and is the inventor or co-inventor of 94 patents. Dr. Shoseyov is a TED speaker and a co-owner and winemaker of Bravdo winery. Dr. Shoseyov received the Outstanding Scientist Polak Award for 2002, the 1999 and 2010 Kay Award for Innovative and Applied Research, the 2012 Israel Prime Minister Citation for Entrepreneurship and Innovation, and the 2018 Presidential Award for his contribution to the Economy and Society of Israel. Dr. Shoseyov holds a B.Sc., an M.Sc. and a Ph.D. from The Hebrew University of Jerusalem, Israel.

Arrangements for Election of Directors and Members of Management; Family Relationships

There are no arrangements or understandings with major shareholders, customers, suppliers or others related to the election of our board of directors or the appointment of members of our senior management. There are furthermore no family relationships among any directors or members of our senior management.

B. Compensation

Aggregate and Individual Compensation of Officers and Directors

The aggregate compensation, including non-cash share-based compensation (consisting of expenses related to option grants), accrued by us in respect of the year ended December 31, 2021 to all persons who served as directors and/or executive officers during that year, was approximately $3.5 million. That amount includes approximately $0.4 million of gross compensation set aside or accrued for executive officers for purposes of pension, severance, retirement, car, phone or similar benefits or expenses, but does not include business travel, relocation, professional and business association dues and expenses reimbursed to executive officers, and other expenses commonly reimbursed by companies in Israel. These amounts include the partial-year compensation paid to five executive officers and two directors, who served in their positions over the course of 2021 and whose employment as directors or executive officers either was terminated or has commenced during 2021.

During 2021, we granted to our executive officers and directors an aggregate amount of 440,500 options, of which 175,000 were granted with an exercise price of NIS 8.45 ($2.72), 240,000 were granted with an exercise price of NIS 9.17 ($2.95), 2,500 were granted with an exercise price of NIS 12.75 ($4.10), 2,500 were granted with an exercise price of NIS 15.49 ($4.98), 2,500 were granted with an exercise price of NIS 20.61 ($6.63), and 18,000 were granted with an exercise price of $2.98. The options detailed above expire within ten years from the date of grant. The option grants detailed above include grants to one executive officer, who served in his position over the course of 2021 and whose employment terminated in 2022 before the date of this report. In addition, during 2021, one executive officer, who serves as chief executive officer in one of our subsidiaries, was granted options to purchase equity of such subsidiary, which are not detailed above.

The following table presents information regarding compensation accrued in our financial statements for the year ended December 31, 2021 for our five most highly compensated executive officers, as required under Israeli Securities Law 5728-1968 and the regulations promulgated thereunder.

	(in thousands, US$)(1)			
Name and Position	**Salary and related benefits**	**Bonus(2)**	**Value of Options Granted(3)**	**Total**
Ofer Haviv *President and Chief Executive Officer*	420	52	58	530
Ido Dor *CEO Lavie Bio*	249	-	153	402
Dr. Elran Haber *CEO of Biomica*	256	31	197	484
Mark Kapel *EVP Technology*	266	29	14	309
Douglas A. Eisner *Former CEO of AgPlenus*	179	-	185	364

(1) All amounts reported in the table are in terms of cost to the Company, as recorded in our financial statements.

(2) Bonus amounts shown in this table reflect bonuses that were paid in 2022 relating to the office holders' service in our Company in 2021, as approved by our compensation and nominating committee and board of directors, and, to the extent required, also by our shareholders.

(3) Consists of amounts recognized as non-cash expenses in our statement of profit or loss for the year ended December 31, 2021 in respect of option grants. Some of our office holders were granted options to purchase equity of our subsidiaries for which they serve as officers, for which the related expenses were recorded in our statement of profit or loss.

Compensation Policy

As required by the Companies Law, we have adopted a policy regarding the terms of engagement of office holders, or a compensation policy. Under the Companies Law, the term "office holders" includes directors and certain officers, including the general manager (i.e., chief executive officer, or CEO), chief business manager, deputy CEO, vice CEO, any other person assuming the responsibilities of any of the foregoing positions without regard to such person's title, and any director or manager who reports directly to the CEO. The compensation policy serves as the basis for determining the financial terms of employment or engagement of office holders, including exculpation, insurance, indemnification or any monetary payment or obligation of payment in respect of employment or engagement. The compensation policy must relate to certain factors specified in the Companies Law, including advancement of the company's objectives, the company's business and its long-term strategy, and creation of appropriate incentives for executives. It must also consider, among other things, the company's risk management, size and the nature of its operations. The Companies Law describes what factors have to be considered by, and what principles must be included in, the compensation policy.

Our current compensation policy was adopted in August 2021, at an annual general meeting of our shareholders, following the recommendation of our compensation committee and our board of directors.

Approvals Required for Compensation of Directors and Officers

Under the Companies Law, the compensation of each of our directors and our CEO requires the approval of our compensation committee, the subsequent approval of the board of directors and, unless exempted under the regulations promulgated under the Companies Law, the approval of our shareholders at a general meeting (in the case of our CEO, the shareholder approval must include the special majority described under "Item 6. Directors, Senior Management and Employees— C. Board Practices— Approval of Related Party Transactions under Israeli Law— Disclosure of Personal Interests of an Office Holder and Approval of Certain Transactions"). The compensation of any other office holder (who is neither a director nor our Chief Executive Officer), if consistent with our compensation policy, requires the approval of our compensation committee, followed by our board of directors. Compensation of any such office holder that deviates from our compensation policy also requires shareholders approval, including by the special majority described under "Item 6. Directors, Senor Management and Employees— C. Board Practices— Approval of Related Party Transactions under Israeli Law— Disclosure of Personal Interests of an Office Holder and Approval of Certain Transactions."

Compensation of Executive Officers

Our compensation for our executive officers is paid pursuant to written employment agreements that we have entered with each of our executive officers and is based, in part, on each executive officer's personal contribution to our management, operations and success. Such compensation is determined consistent with our compensation policy. For more information on our compensation policy, please see "—Compensation Policy" above.

Each executive officer's entitlement to an annual bonus is determined according to a formula that links financial and qualitative target-based goals and metrics related to the specific objectives within the responsibility of the relevant executive officer. In the case of executive officers who are also office holders, their annual bonus is also required to be consistent with our compensation policy. The goals and objectives of Evogene Ltd.'s office holders are determined by the compensation and nominating committee and our board of directors. For each fiscal year, our compensation and nominating committee and board of directors determine the maximum target bonus for each of our office holders, including our CEO. Further, for our CEO, all terms of employment, including bonus terms, require, in general, approval by a majority of our shareholders present and voting (in person or by proxy) at a meeting of shareholders, subject to fulfillment of one of the two additional conditions described in "Item 6. Directors, Senior Management and Employees—C. Board Practices—Approval of Related Party Transactions under Israeli Law—Disclosure of Personal Interests of an Office Holder and Approval of Certain Transactions."

Each of the employment agreements with our executive officers contains provisions regarding non-competition, confidentiality of information and assignment of inventions. The non-competition provision applies for a period that is generally 12 months following termination of employment. The enforceability of covenants not to compete in Israel and in the United States is subject to limitations. The employment agreement of each executive officer is terminable at will upon 60 days written notice by either party to the agreement, except for the employment agreement with Mr. Ofer Haviv, our President and CEO, which is terminable at will upon 90 days written notice, by either party to the agreement.

Director Compensation

Our directors are entitled to cash compensation and equity compensation as follows:

Cash Compensation of Directors

All of our directors receive annual fees and per-meeting fees for their service on our board and its committees, in the following amounts:

- Annual fees in an amount of approximately $19,200 for directors not classified as experts and approximately $25,600 for directors classified as experts; and
- Per-meeting fees in an amount of approximately $1,000 for directors not classified as experts and approximately $1,300 for directors classified as experts; 60% of such amounts for participation in meetings via telecommunication and 50% of such amounts for resolutions adopted in writing.

Such amounts are within the range for cash compensation for external and unaffiliated directors of a company of our size (based on level of shareholders' equity) under the Companies Law.

Cash Compensation of Chairperson of the Board

In accordance with shareholders' approval from August 2021, a chairperson of the board who is determined by the Board to be an "active chairperson" in light of increased involvement in our activities and increased time investment in the performance of the duties accompanying the chairperson's position compared to the other directors, shall be entitled to increased compensation relative to our other directors of approximately $7,700 per month (equal to NIS 25,000). Our Board has determined that Ms. Sarit Firon, our chairperson of the board, is an active chairperson, and accordingly her fees as active chairperson are as aforesaid.

Equity Compensation of Directors

In accordance with our shareholders' approval from August 2021, and in compliance with our compensation policy, each non-employee director is granted options to purchase 18,000 ordinary shares of the Company on the date of our annual general shareholders meeting at which such director is elected or re-elected to the board. The chairperson of our board is granted options to purchase 36,000 ordinary shares. These options vest over a period of one year, with 25% of the options vesting at the end of each successive three-month period following the director's appointment or re-appointment (as applicable) by the general meeting of shareholders, subject to continued service through each vesting date.

All option grants to directors following the approval of our 2021 Share Incentive Plan by our shareholders (i.e., as of August 10, 2021), are subject to the terms of our 2021 Share Incentive Plan and are granted at an exercise price equal to the average closing sales price per ordinary share on the TASE over the thirty day calendar period preceding the subject date (utilizing all trading days during such 30 calendar day period) (but not less than "fair market value" with respect to grantees subject to U.S. tax). All option grants to directors prior to August 10, 2021, are subject to the terms of our 2013 Share Option Plan and were granted at an exercise price equal to the higher of (i) the average closing price of our ordinary shares on the TASE during the 30 trading days prior to the date of option allocation, plus 5% and (ii) the closing price of our ordinary shares on the TASE on the date of option allocation. All such options expire 10 years following the date of grant thereof.

Information regarding the options to purchase our ordinary shares (including number of options, exercise price and expiration date of all such options) held by each of our directors and executive officers who beneficially owns our ordinary shares, after including ordinary shares underlying options held by them, which, as of March 20, 2022, were exercisable or exercisable within 60 days, appears in the beneficial ownership table in Item 7.A below and in the footnotes thereto.

Share Option and Incentive Plans

Company Option and Incentive Plans

We maintain four share option and incentive plans: Evogene Ltd. 2002 Share Option Plan, Evogene Ltd. 2003 Key Employee Share Incentive Plan, Evogene Ltd. 2013 Share Option Plan, and Evogene Ltd. 2021 Share Incentive Plan, or the 2021 Plan. No new grants will be made under the first three plans, although outstanding awards under those plans remain subject to the terms of those plans. All such option and incentive plans provide for the grant of options to purchase our ordinary shares, and the 2021 Plan also provides for the issuance of restricted shares, the grant of restricted shares units, or RSUs, and the issuance or grant of other equity-based awards.

As of March 20, 2022, options to purchase 4,029,644 ordinary shares, having a weighted average exercise price of NIS 17.12 per share, and 217,912 RSUs, having no exercise price, were outstanding under our option and incentive plans, of which, options to purchase 2,665,732 ordinary shares were exercisable and 16,613 RSUs were vested. An additional 1,291,659 ordinary shares remained available for future grant under our 2021 Plan as of that date.

Among other types of equity-based awards, our share option and incentive plans provide for granting awards in compliance with Section 102 of the Israeli Income Tax Ordinance [New Version], 5721-1961 (the "Tax Ordinance"), which provides to employees, directors and officers, who are not controlling shareholders (*i.e.*, who hold less than 10% of our share capital) and are Israeli residents, favorable tax treatment for compensation in the form of shares, options, RSUs or other types of equity awards issued or granted, as applicable, to a trustee under the "capital gains track" for the benefit of the relevant employee, director or officer and are held by the trustee for at least two years after the date of grant or issuance. Under the "capital gains track", we are not allowed to deduct an expense with respect to the grant or issuance of the relevant equity-based awards.

The 2021 Plan also permits us to grant equity-based awards to U.S. residents, in accordance with the applicable provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code.

Awards granted under our plans may be subject to vesting schedules. Options to purchase our ordinary shares granted under our plans expire 10 years from the grant date. The plans address the treatment of vested and unvested awards upon the termination of employment of the award holder as well as upon consummation of a merger or consolidation of our company, or sale of all or substantially all of our shares or assets.

Subsidiary Equity Incentive Plans

In addition to the share option and incentive plans at our parent company level, each of our subsidiaries has adopted its own equity incentive plan. The following table presents information regarding our subsidiaries' equity incentive plans, including the percentage of the equity of those companies that may be issued or granted as equity incentives to employees, directors or service providers of those companies and the percentage of that equity that has been issued or granted as of March 20, 2022 (in both cases, after including shares underlying options).

Subsidiary	Percentage of Subsidiary's Equity Issuable as Equity Incentives	Percentage of Equity Granted to Date as Equity Incentives
AgPlenus	9.1%	4.2%
Biomica	22.1%	18.7%
Casterra	8.0%	3.6%
Canonic	9.1%	7.1%
Lavie Bio	10.7%	10.2%

Grants under our subsidiaries' equity incentive plans may qualify for favorable treatment under the tax law provisions of the United States or Israel.

The share-based payments under our subsidiary equity incentive plans are presented as non-controlling interests in the financial statements and were valued at $1.7 million in 2021, as detailed in Note 17.f. to the financial statements included in this annual report under Item 18.

C. Board Practices

Board of Directors

Under the Companies Law and our articles of association, the supervision of the management of our business 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 executive management. Our Chief Executive Officer (referred to as a "general manager" under the Companies Law) is responsible for our day-to-day management. Our Chief Executive Officer is appointed by, and serves at the discretion of, our board of directors, subject to the employment agreement that we have entered into with him. All other executive officers are appointed by the Chief Executive Officer and are subject to the terms of any applicable employment agreements that we may enter into with them.

Under our articles of association and the Companies Law, our board of directors must consist of not less than three and no more than seven directors. Currently our board of directors consists of six directors.

Our directors are elected annually, by a simple majority vote of holders of our voting shares participating and voting at the annual meeting of our shareholders, for a one-year term, from the annual general meeting of our shareholders at which they are elected until the next annual general meeting and until their respective successors are elected and qualified or until their earlier removal by our shareholders at a general meeting, or upon the occurrence of certain events, in accordance with the Companies Law and our articles of association. The duration of service of each of our current directors can be found in their respective biographies in Item 6.A. above.

In addition, under our articles of association, our board of directors may appoint directors to fill vacancies or as new directors for a term of office that lasts until the next annual meeting of our shareholders. In the event of a vacancy resulting in the board consisting of less than the minimum number of directors required by our articles of association, our board of directors may only act in order to convene a general meeting of our shareholders for the purpose of electing such additional number of directors.

Pursuant to the terms of a put option agreement we entered into with Monsanto (now Bayer) in October 2013, Monsanto has the right to nominate a non-voting observer to our board of directors so long as Monsanto holds at least 5% of our voting rights. In addition, pursuant to a share purchase agreement we entered into with Bayer in December 2010 and as amended in June 2013, Bayer also has the right to appoint one observer to our board of directors so long as Bayer holds at least 3% of our issued and outstanding shares. In each case, the observer is entitled to be advised reasonably in advance of board meetings and is to receive copies of all material distributed in connection with such meetings. The observer would not have any voting rights. To date, neither Monsanto nor Bayer has appointed an observer.

Chairperson of the Board

Our articles of association provide that the chairperson of the board is appointed by the members of the board of directors and serves as chairperson of the board throughout his term as a director, unless resolved otherwise by the board of directors. Under the Companies Law, the general manager (i.e., the Chief Executive Officer) or a relative of the general manager may not serve as the chairperson of the board of directors, and the chairperson or a relative of the chairperson may not be vested with authorities of the general manager, in each case without shareholder approval consisting of a majority vote of the shares present and voting at a shareholders meeting, provided that either:

- such majority includes at least 2/3 of the shares held by all shareholders who are not controlling shareholders and do not have a personal interest in such appointment, present and voting at such meeting; or
- the total number of shares of non-controlling 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.

In addition, a person subordinated, directly or indirectly, to the general manager may not serve as the chairperson of the board of directors; the chairperson of the board may not be vested with authorities that are granted to those subordinated to the general manager; and the chairperson of the board may not serve in any other position in the company or a controlled company, except that he may serve as a director or chairperson of a subsidiary.

External Directors

In general, under the Companies Law, the board of directors of an Israeli public company (such as ours) is required to include at least two external directors. According to regulations promulgated under the Companies Law, a person may be appointed as an external director if such person has either professional qualifications or accounting and financial expertise. In addition, at least one of the external directors must be determined by our board of directors to have accounting and financial expertise.

However, pursuant to regulations enacted under the Companies Law in 2016, the board of directors of a company whose shares are listed on certain non-Israeli stock exchanges (including the Nasdaq Global Market), which company does not have a controlling shareholder (as such term is defined in the Companies Law), may elect not to comply with the requirements of the Companies Law relating to the election of external directors and to the composition of the audit committee and compensation committee. Such an election may be made by the board of directors, and is contingent upon the company's satisfaction, in an ongoing manner, of the applicable foreign country stock exchange rules that apply to companies organized in that country relating to the appointment of independent directors and the composition of the audit and compensation committees.

Because our company did not have, in May 2016, and still does not have, a controlling shareholder, and as we comply with the Nasdaq Listing Rules applicable to domestic U.S. companies with respect to a majority of our directors being independent and with respect to the composition of our audit committee and compensation committee, our board of directors determined, in May 2016, to opt-out of the requirement to elect external directors. If in the future we were to have a controlling shareholder, we would likely again be required to comply with the Companies Law requirements relating to external directors and composition of the audit committee and compensation committee.

The term controlling shareholder, as used in the Companies Law for purposes of all matters related to external directors and for certain other purposes, means a shareholder that has the ability to direct the activities of the company, other than by virtue of being an office holder. For purposes of all matters related to external directors, a shareholder is presumed to be a controlling shareholder if the shareholder holds 50% or more of the voting rights in the company or has the right to appoint the majority of the directors of the company or its general manager (chief executive officer).

Directors' Service Contracts

There are no arrangements or understandings between us, on the one hand, and any of our directors, on the other hand, providing for benefits upon termination of their service as directors of our company.

Financial Statements Review and Audit Committee

Our financial statements review and audit committee, or audit committee, consists of Mr. Dan Falk, Mr. Ziv Kop and Dr. Oded Shoseyov. Mr. Falk serves as the Chairperson of the audit committee.

Requirements as to Composition

Following the promulgation of the regulations described above, we may comply with the requirements of the Companies Law by appointing an audit committee whose composition complies with the Nasdaq Listing Rules. Under the Nasdaq Listing Rules, we are required to maintain an audit committee consisting of at least three independent directors, each of whom is financially literate and at least one of whom has accounting or related financial management expertise.

All members of our audit committee meet the requirements for independence and financial literacy under the Nasdaq Listing Rules. Our board of directors has determined that each of Mr. Dan Falk and Mr. Ziv Kop is furthermore an audit committee financial expert, as defined by the SEC rules, and has the requisite financial experience required under the Nasdaq Listing Rules.

Each of the members of the audit committee is also "independent" as required by, and as such term is defined in, Rule 10A-3(b)(1) under the Exchange Act, which is different from the general test for independence of board and committee members under the Nasdaq Listing Rules.

Audit Committee Role

Our board of directors (following the approval by our audit committee) has adopted an audit committee charter setting forth the required composition, meeting procedures and other matters related to the terms of operation of the committee. The charter also describes the responsibilities of the audit committee consistent with the rules of the SEC and the Nasdaq Listing Rules, which include, among others:

- retaining and terminating the services of our independent auditors, subject to the approval of the board of directors and shareholders;
- pre-approval of audit and non-audit services to be provided by the independent auditors;
- reviewing with management and our independent directors our financial reports prior to their submission to the SEC; and
- approval of certain transactions with office holders and other related-party transactions.

The charter of the audit committee is available on our website. The contents of that website do not constitute a part of this annual report.

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.

Additionally, under the Companies Law, an audit committee is required, among other things, to (i) identify deficiencies in the administration of the company (including by consulting with the internal auditor), and recommend remedial actions with respect to such deficiencies, (ii) review and approve certain related party transactions, including determining whether or not such transactions are extraordinary transactions or insignificant transactions, and (iii) adopt procedures with respect to processing employee complaints in connection with deficiencies in the administration of the company, and the appropriate means of protection afforded to such employees. In addition, the audit committee is responsible for overseeing the internal control procedures of the company. Under the Companies Law, the approval of the audit committee is required for specified actions and transactions with office holders and controlling shareholders. See "—Approval of Related Party Transactions under Israeli Law."

Compensation and Nominating Committee

Our compensation and nominating committee, or compensation committee, consists of Mr. Dan Falk, Mr. Ziv Kop and Dr. Oded Shoseyov. Mr. Kop serves as the Chairperson of the committee.

Requirements as to Composition

Following the promulgation of the regulations described above, we may comply with the requirements of the Companies Law by appointing a compensation committee whose composition complies with the Nasdaq Listing Rules. Under the Nasdaq Listing Rules, we are required to maintain a compensation committee consisting of at least two members, each of whom qualifies as an independent director (as defined under the Nasdaq Listing Rules). Each compensation committee member must furthermore be deemed by our board of directors to meet the enhanced independence requirements for members of the compensation committee under the Nasdaq Listing Rules, which require that our board of directors consider (among other things) the source of each such committee member's compensation in determining whether he or she is independent.

Our board of directors has determined that each of the members of our compensation committee is considered "independent" under the Nasdaq Listing Rules and meets the enhanced independence requirements for members of the compensation committee under the Nasdaq Listing Rules and Rule 10C-1 under the Exchange Act.

Compensation and Nominating Committee Role

Our board of directors (following approval by our compensation committee) has adopted a compensation and nominating committee charter setting forth the required composition, meeting procedures and other matters related to the terms of operation of the committee. The charter also describes the responsibilities of the compensation committee consistent with the Nasdaq Listing Rules and the Companies Law, which include, among others:

- reviewing and recommending an overall compensation policy with respect to our Chief Executive Officer and other executive officers, as described above under "Item 6. Directors, Senior Management and Employees—B. Compensation—Compensation Policy";
- reviewing and approving corporate goals and objectives relevant to the compensation of our Chief Executive Officer and other executive officers, including evaluating their performance in light of such goals and objectives;
- reviewing and recommending to our board of directors to approve the granting of options and other incentive awards;
- reviewing, evaluating and making recommendations regarding the compensation and benefits for our non-employee directors; and
- advising our board of directors in selecting individuals who are best able to fulfill the responsibilities of a director or executive officer of our company.

The charter of the compensation and nominating committee is available on our website. The contents of that website do not constitute a part of this annual report.

Corporate Development Committee

Our board of directors has formed a corporate development committee, of which Ms. Sarit Firon, Mr. Ziv Kop and Mr. Leon Recanati serve as members. Ms. Firon serves as the Chairperson of the committee. The corporate development committee assists our board of directors in fulfilling its oversight responsibilities across the principal areas of corporate development for our company and its subsidiaries. This committee may also assist the board of directors by reviewing such matters as corporate and division strategy and M&A opportunities and making recommendations for consideration by our board of directors.

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. Under the Companies Law, the internal auditor may be an employee of the company but not an office holder, an affiliate, or a relative of an office holder or affiliate, and may not be the company's independent accountant or its representative.

The role of the internal auditor is to examine, among other things, our compliance with applicable law and orderly business procedures. The audit committee is required to oversee the activities and to assess the performance of the internal auditor as well as to review the internal auditor's work plan. Mr. Yisrael Gewirtz, CPA, has been appointed as our internal auditor. Mr. Gewirtz is a certified internal auditor and a partner of Fahn Kanne Control Management Ltd., an affiliate of Grant Thornton LLP.

Our internal auditor also provides management and the audit committee ongoing assessments of our risk management processes and our internal controls.

Approval of Related Party Transactions under Israeli Law

Fiduciary Duties of Directors and Executive Officers

The Companies Law codifies the fiduciary duties that office holders owe to a company. Many of the executive officers listed in the table under "Item 6. Directors, Senior Management and Employees— A. Directors and Senior Management" are also office holders under the Companies Law. An office holder's fiduciary duties consist of a duty of care and a duty of loyalty. 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 loyalty requires that an office holder act in good faith and in the best interests of the company. The duty of care includes a duty to use reasonable means to obtain (i) information on the appropriateness of a given action submitted 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 loyalty includes a duty to (i) refrain from any conflict of interest between the performance of his or her duties in the company and his or her personal affairs; (ii) refrain from any activity that is competitive with the business of the company; (iii) refrain from exploiting any business opportunity of the company in order to receive a personal gain for himself or herself or others; and (iv) 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.

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

The Companies Law requires that an office holder promptly disclose to the board of directors any conflict of interest (referred to under the Companies Law as a "personal interest") that he or she may have and all related material information known to him or her concerning any existing or proposed transaction with the company. If it is determined that an office holder has a personal interest in a 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. Our articles of association provide that for non-extraordinary interested party transactions, the board of directors may delegate its approval, or may provide a general approval to certain types of non-extraordinary interested party transactions. Every interested party transaction requires that our board of directors determine affirmatively that the transaction is favorable to the company. Approval first by the company's audit committee and subsequently by the board of directors is required for an extraordinary transaction, meaning any transaction that is not in the ordinary course of business, not on market terms or that is likely to have a material impact on the company's profitability, assets or liabilities. A director and any other office holder who has a personal interest in a transaction which is considered at a meeting of the board of directors or the audit committee may generally (unless it is with respect to a transaction which is not an extraordinary transaction) not be present at such a meeting or vote on that matter unless a majority of the directors or members of the audit committee, as applicable, have a personal interest in the matter. If a majority of the members of the audit committee or the board of directors has a personal interest in the approval of such a transaction then all of the directors may participate in deliberations of the audit committee or board of directors, as applicable, with respect to such transaction and vote on the approval thereof and, in such case, shareholder approval is also required.

Pursuant to the Companies Law, extraordinary transactions with our office holders who are not directors require audit committee approval and subsequent approval by our board of directors. Compensation, insurance, indemnification or exculpation arrangements for office holders who are not directors require approval by our compensation committee, followed by our board of directors and, if deviating from our compensation policy, our shareholders as well, via a special majority. Compensation arrangements with directors, including in their capacities as executive officers, or with our Chief Executive Officer, as well as insurance (unless exempted under the applicable regulations), indemnification or exculpation of directors or our Chief Executive Officer, require the approval of the compensation committee, the board of directors and our shareholders, in that order. In the case of our Chief Executive Officer, the shareholder approval must fulfill, in addition to an ordinary majority, one of the following two special majority requirements:

- at least a majority of the voting rights in the company held by non-controlling shareholders who have no conflict of interest (referred to under the Companies Law as a "personal interest") in the transaction or arrangement and who are present and voting (in person or by proxy) at the general meeting, must be voted in favor of approving the transaction or arrangement (for this purpose, abstentions are disregarded); or

- the voting rights held by non-controlling, non-conflicted shareholders (as described in the previous bullet point) who are present and voting (in person or by proxy) at the general meeting, and who vote against the transaction, do not exceed two percent of the voting rights in the company.

As described above (concerning votes related to external directors), a shareholder is presumed to be a controlling shareholder if the shareholder holds 50% or more of the voting rights in the company or has the right to appoint the majority of the directors of the company or its general manager (chief executive officer). In addition, as it relates to the approval of related party transactions, a controlling shareholder is furthermore deemed to include any shareholder possessing 25% or more of the voting rights if no other shareholder possesses more than 50% of the voting rights.

If the transaction or compensation arrangement of the office holder brought for approval amends an existing arrangement, then only the approval of the audit committee or compensation committee (as appropriate) is required if that committee determines that the amendment is not material in relation to the existing arrangement.

Disclosure of Personal Interests of Controlling Shareholders 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. In the case of an extraordinary transaction between a public company and a controlling shareholder, or in which a controlling shareholder has a personal interest, the shareholder approval requirement—by a special majority—that applies to a compensation arrangement for the chief executive officer (as described above) also applies to the extraordinary transaction (except that a controlling shareholder's vote is not excluded from the special majority determination, unless the controlling shareholder possesses a conflict of interest/ personal interest). We currently do not have a controlling shareholder.

Shareholder Duties

Pursuant to the Companies Law, a shareholder has a duty to act in good faith and in a customary manner toward the company and other shareholders and to refrain from abusing his, her or its power with respect to the company, including, among other things, in voting at a general meeting and at shareholder class meetings with respect to the following matters: (i) an amendment to the company's articles of association; (ii) an increase of the company's authorized share capital; (iii) a merger; or (iv) an interested party transaction that requires shareholder approval.

In addition, a shareholder has a general duty to refrain from discriminating against other shareholders. Certain shareholders also have a duty of fairness toward the company. These shareholders include any controlling shareholder, any shareholder who knows that it has the power to determine the outcome of a shareholder vote and any shareholder who has the power to appoint or to prevent the appointment of an office holder of the company or exercise any other rights available to it under the company's articles of association with respect to the company. The Companies Law does not define the substance of this 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 of fairness. Israeli courts have not yet interpreted the scope or nature of any of these duties.

Approval of Private Placements

Under the Companies Law, a significant private placement of securities requires approval by the board of directors and the shareholders by a simple majority. A private placement is considered a significant private placement if it results in a person becoming a controlling shareholder, or if all of the following conditions are met: (i) the securities issued amount to 20% or more of the company's outstanding voting rights before the issuance; (ii) some or all of the consideration is other than cash or listed securities or the transaction is not on market terms; and (iii) the transaction will increase the relative holdings of a shareholder who holds 5% or more of the company's outstanding share capital or voting rights, or will cause any person to become, as a result of the issuance, a holder of more than 5% of the company's outstanding share capital or voting rights.

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. An Israeli 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 duty of care but only if a provision authorizing such exculpation is included in its articles of association. Our articles of association include such a provision. An Israeli company may not exculpate a director from liability arising out of a prohibited dividend or distribution to shareholders.

An Israeli company may indemnify an office holder in respect of the following liabilities and expenses incurred for acts performed as an office holder, either in advance of an event or following an event, provided a provision authorizing such indemnification is contained in its articles of association:

- financial liability imposed on him or her in favor of another person pursuant to a judgment, 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 an undertaking must be limited to 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 abovementioned events and amount or criteria;

- reasonable litigation expenses, including attorneys' fees, incurred by the office holder 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, such as a criminal penalty, 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

- 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.

An Israeli company may insure an office holder against the following liabilities incurred for acts performed as an office holder if and to the extent provided in the company's articles of association: (i) 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 prejudice the company; (ii) a breach of the duty of care to the company or to a third party, including a breach arising out of the negligent conduct of the office holder; (iii) a financial liability imposed on the office holder in favor of a third party; (iv) a financial liability imposed on the office holder in favor of a third party harmed by a breach in an administrative proceeding; and (v) reasonable litigation expenses, including attorneys' fees, incurred by the office holder as a result of an administrative proceeding instituted against him or her.

An Israeli company may not indemnify or insure an office holder against any of the following: (i) a breach of the duty of loyalty, except to the extent that the office holder acted in good faith and had a reasonable basis to believe that the act would not prejudice the company; (ii) a breach of the duty of care committed intentionally or recklessly, excluding a breach arising out of the negligent conduct of the office holder; (iii) an act or omission committed with intent to derive illegal personal benefit; or (iv) a fine or forfeit levied against the office holder.

Under the Companies Law, exculpation, indemnification and insurance of office holders must be approved by the compensation and nominating committee and the board of directors and, with respect to directors and our Chief Executive Officer, also by our shareholders (in the case of our Chief Executive Officer, by a special majority, as described above under "—Approval of Related Party Transactions under Israeli Law—Disclosure of Personal Interests of an Officer Holder and Approval of Certain Transactions", unless an applicable exemption applies).

Our articles of association allow us to indemnify and insure our office holders for any liability imposed on them as a consequence of an act which was performed by virtue of being an office holder. Our shareholders have approved an amendment to our articles of association that extends such indemnification and insurance to cover omissions by our office holders (in their role as such) as well. Our office holders are currently covered by a directors' and officers' insurance policy.

We have entered into agreements with each of our directors and executive officers. Each such agreement exculpates our director or officer, to the fullest extent permitted by law, from liability to us for damages caused to us as a result of a breach of duty of care and undertaking to indemnify them to the fullest extent permitted by law. This indemnification is limited to events determined as foreseeable by the board of directors based on our activities, and to an amount or according to criteria determined by the board of directors as reasonable under the circumstances.

The maximum indemnification amount set forth in such agreements is limited to an amount equal to 25% of our shareholders' equity as reflected in our most recent consolidated financial statements prior to the date on which the indemnity payment is made. If the amount equal to 25% of our shareholders' equity is insufficient to cover all indemnity amounts payable with respect to all indemnifiable directors and executive officers, such amount will be allocated among our directors and executive officers pro rata, in accordance with their relative culpabilities, as finally determined by a court with respect to a particular claim. The maximum amount set forth in such agreements is in addition to any amount paid (if paid) under insurance and/or by a third party pursuant to an indemnification arrangement. In the opinion of the SEC, indemnification of directors and office holders for liabilities arising under the Securities Act is against public policy and therefore unenforceable.

D. Employees

The total number of employees in Evogene and its subsidiaries as of December 31, 2019, 2020 and 2021 was 143, 130 and 141, respectively. As of December 31, 2021, our research and development activities involved 96 employees amounting to approximately 72% of our total full-time workforce, of which 51 were employed by Evogene and 45 were employed by our subsidiaries. Our staff possesses multidisciplinary and wide-ranging expertise, with employees specializing in biology, chemistry, plant genetics, agronomics, mathematics, computer and data science and other related fields and 44 of our employees hold a Ph.D. As of March 20, 2022, the total number of employees in Evogene and its subsidiaries was 149.

As of the date hereof, all of our employees are based in Israel, except for eight U.S.-based employees. Of our eight U.S.-based employees, seven are employed by Lavie Bio Inc., a U.S. subsidiary of Lavie Bio Ltd., the majority of whom are based at Lavie Bio's U.S. research and development site in St. Louis, Missouri. In addition, AgPlenus Inc.'s CEO is located in North Carolina. In addition, during 2021, we had, on average, approximately 27 hourly employees who are based in Israel. The following table shows the breakdown of our employees by division/category of activity and by location as of December 31, 2019, 2020 and 2021, excluding hourly employees:

	As of December 31, 2019			As of December 31, 2020			As of December 31, 2021		
	Israel	**U.S.**	**Total**	**Israel**	**U.S.**	**Total**	**Israel**	**U.S.**	**Total**
Executive management	4	-	4	4	-	4	5	-	5
Lavie Bio Ltd.	15	-	15	17	5	22	17	7	24
AgPlenus Ltd.	16	-	16	11	1	12	11	1	12
Ag-Seeds division	5	-	5	2	-	2	2	-	2
Casterra Ag Ltd.	2	-	2	1	-	1	1	-	1
Biomica Ltd.	7	-	7	7	-	7	13	-	13
Canonic Ltd.	4	-	4	6	-	6	10	-	10
Technology platform	57	4	61	48	-	48	41	-	41
General and administrative	25	-	25	28	-	28	33	-	33
Total	139	4	143	124	6	130	133	8	141

Israeli labor laws govern the length of the workday, minimum wages for employees, procedures for hiring and dismissing employees, determination of severance pay, annual leave, sick days, advance notice of termination of employment, equal opportunity and anti-discrimination laws and other conditions of employment. Subject to 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 employees have pension plans that comply with the applicable Israeli legal requirements.

While none of our employees is party to any collective bargaining agreements, certain provisions of the collective bargaining agreements between the "*Histadrut*" (the General Union of Workers in Israel) and the Coordination Bureau of Economic Organizations (including the Industrialists' Associations) are applicable to our employees in Israel by order of the Israeli Ministry of the Economy and Industry. These provisions primarily concern pension fund benefits for all employees, insurance for work-related accidents, recuperation pay and travel expenses.

None of our employees is represented by a labor union or covered under a collective bargaining agreement. We have never experienced any employment-related work stoppages and believe our relationships with our employees are good.

The employees of our U.S. subsidiaries are subject to the U.S. labor laws and have insurance coverage, health benefits and are covered by certain plans, such as (i) medical and dental care; (ii) long term disability protection plans; (iii) life insurance; and (iv) a 401(k) savings plan.

E. Share Ownership

For information regarding the share ownership of our directors and executive officers, please refer to the table in "Item 7. Major Shareholders and Related Party Transactions—A. Major Shareholders." For information regarding our equity incentive plans, see Item 6.B. "*Director, Senior Management and Employees—Compensation—Equity Incentive Plans.*"

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

The following table sets forth information with respect to the beneficial ownership of our shares as of March 20, 2022 (unless otherwise indicated) by: (i) each person or entity known by us to own beneficially more than 5% of our outstanding shares; (ii) each of our directors and executive officers individually; and (iii) all of our executive officers and directors as a group.

The beneficial ownership of ordinary shares is determined in accordance with the rules of the SEC, and generally includes any ordinary shares over which a person exercises sole or shared voting or investment power, or the right to receive the economic benefit of ownership. For purposes of the table below, we deem shares subject to options that are currently exercisable or exercisable within 60 days of March 20, 2022, to be outstanding and to be beneficially owned by the person holding the options 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 shares beneficially owned by any shareholder has been calculated based on 41,188,280 ordinary shares outstanding as of March 20, 2022. Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares, except to the extent that authority is shared by spouses under community property laws.

Unless otherwise noted below, each shareholder's address is c/o Evogene Ltd., 13 Gad Feinstein Street, Park Rehovot, Rehovot P.O. Box 4173, Ness Ziona, 7414002, Israel. The shareholders listed below (including our directors and executive officers) do not have any different voting rights than any of our other shareholders. We know of no arrangements that would, at a subsequent date, result in a change of control of our company. A description of any material relationship that our principal shareholders have had with us or any of our predecessors or affiliates within the past year is included under "Item 7. Major Shareholders and Related Party Transactions —B. Related Party Transactions."

Name of Beneficial Owner	Shares Beneficially Held	
	Number	Percentage of Class
Principal Shareholders		
ARK Investment Management LLC [1]	2,515,657	6.11%
Executive Officers and Directors		
Ofer Haviv	860,000[2]	2%
Dr. Nir Arbel	0	*
Lazer Bezdin	0(**)	*
Ido Dor	255,500[3](**)	
Douglas A. Eisner	0(**)	*
Brian N. Ember	0	*
Dr. Eyal Emmanuel	71,204[4](**)	
Dr. Elran Haber	15,624[5]	*
Dr. Arnon Heyman	103,000[6]	*
Mark Kapel	163,382[7]	*
Dorit Kreiner	117,739[8]	*
Sassi Masliah	97,125[9]	*
Martin S. Gerstel	636,506[10](**)	1.5%
Dan Falk	0	*
Sarit Firon	41,375[11]	*
Ziv Kop	34,125[12]	*
Dr. Adrian Percy	21,625[13]	*
Leon Y. Recanati	869,234[14]	2.1%
Dr. Oded Shoseyov	22,875[15]	*
All directors and executive officers as a group (19 persons**)	3,309,314	7.4%

* Less than 1%.

** The engagement of each of Mr. Bezdin, Mr. Dor, Mr. Eisner and Dr. Emmanuel as executive officers and of Mr. Gerstel as a director ended during 2021. Beneficial ownership information for such persons is based on our own internal records as of the date on which their engagement ended.

(1) This information is based upon a Schedule 13G/A filed by ARK Investment Management LLC with the SEC on February 9, 2022. ARK Investment Management LLC is a Delaware limited liability company and possesses sole voting and dispositive power over these ordinary shares. The principal address for ARK Investment Management LLC is 3 East 28th Street, 7th Floor, New York, NY 10016.

(2) Consists of 860,000 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 215,000 on July 17, 2023, 170,000 on March 22, 2025, 225,000 on August 8, 2027 and 250,000 on April 21, 2030. The weighted average exercise price of these options is NIS 25.86.

(3) Ido Dor served as the CEO of our subsidiary company Lavie Bio, and as such, he holds options to purchase shares of Lavie Bio. In addition, Mr. Dor also holds options to purchase 255,500 ordinary shares of Evogene that are currently exercisable or exercisable within 60 days of March 20, 2021, which expire on November 20, 2022. The exercise price of these options is NIS 35.58 per ordinary share.

(4) Consists of 71,204 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 35,602 on November 13, 2028, and 35,602on December 23, 2028. The weighted average exercise price of these options is NIS 10.16.

(5) Consists of 15,624 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, which expire on September 1, 2031. The exercise price of these options is NIS 9.17 per ordinary share. Elran Haber serves as the CEO of our subsidiary company Biomica, and as such, also holds options to purchase shares of Biomica. For a description of our subsidiaries' equity incentive plans, please see Item 6 "Directors, Senior Management and Employees—B. Compensation—Share Option and Incentive Plans—Subsidiary Equity Incentive Plans".

(6) Consists of 103,000 ordinary shares of Evogene that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 10,000 on November 9, 2024, 18,000 on May 18, 2026, 50,000 on August 8, 2027, and 25,000 on February 26, 2028. The weighted average exercise price of these options is NIS 21.27. Arnon Heyman serves as the CEO of our subsidiary company Canonic Ltd., and as such, also holds options to purchase shares of Biomica. For a description of our subsidiaries' equity incentive plans, please see Item 6 "Directors, Senior Management and Employees—B. Compensation—Share Option and Incentive Plans—Subsidiary Equity Incentive Plans".

(7) Consists of 163,382 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 13,500 on July 15, 2023, 12,000 on March 22, 2025, 23,000 on August 8, 2027, 60,000 on February 26, 2028, 24,375 on February 4, 2029, 24,057 on July 30, 2029 and 6,250 on November 16, 2031. The weighted average exercise price of these options is NIS 16.63.

(8) Includes 116,239 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 28,433 on February 4, 2029, 86,244 on July 30, 2029 and 1,562 on November 16, 2031. The weighted average exercise price of these options is NIS 6.45. Also includes 1,500 ordinary shares held by a trustee in favor of Ms. Kreiner. As previously reported, Ms. Kreiner's engagement with the Company is expected to terminate on March 31, 2022. In the context of such termination, the exercise period of all of Ms. Kreiner's options that are vested on the date of such termination shall be extended, such that, unless exercised earlier, all such options shall expire 12 months following such termination.

(9) Includes 97,125 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 5,000 on July 15, 2023, 17,000 on March 22, 2025, 18,000 on August 8, 2027, 3,125 on May 28, 2028, 6,250 on February 4, 2029, 16,500 on July 30, 2029, 18,750 on September 22, 2030 and 12,500 on November 16, 2031. The weighted average exercise price of these options is NIS 16.33.

(10) Includes 636,506 ordinary shares, consisting of: (a) 37,500 ordinary shares held by a trustee in favor of Mr. Gerstel; (b) 383,815 ordinary shares held by Martin Gerstel; and (c) 215,191 ordinary shares held by Shomar Corporation with respect to which Martin Gerstel and his wife Mrs. Shoshana Gerstel possess voting and investment power.

(11) Consists of 41,375 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 10,000 on August 10, 2026, 2,500 on August 8, 2027, 1,875 on August 6, 2028 and 27,000 on September 1, 2031. The weighted average exercise price of these options is NIS 14.11.

(12) Consists of 34,125 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 10,000 on March 20, 2024, 2,500 on March 22, 2025, 2,500 on February 28, 2026, 2,500 on January 12, 2027, 2,500 on January 11, 2028, 625 on February 4, 2029 and 13,500 on September 1, 2031. The weighted average exercise price of these options is NIS 32.40.

(13) Consists of 21,625 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 8,125 on December 23, 2028 and 13,500 on August 10, 2031. The weighted average exercise price of these options is USD $2.82.

(14) Includes 838,859 ordinary shares held by Mr. Recanati. Also includes 30,375 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 2,500 on June 11, 2022, 2,500 on September 15, 2023, 2,500 on August 17, 2024, 2,500 on July 2, 2025, 2,500 on May 18, 2026, 2,500 on May 16, 2027, 1,875 on June 25, 2028 and 13,500 on September 1, 2031. The weighted average exercise price of these options is NIS 23.23.

(15) Consists of 22,875 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of March 20, 2021, of which options to purchase the following number of shares expire on the following dates, respectively: 8,750 on November 13, 2028, 625 on December 19, 2029 and 13,500 on September 1, 2031. The exercise price of these options is NIS 9.65.

Changes in Percentage Ownership by Major Shareholders

Over the course of 2021, there was a decrease in the percentage ownership of a significant shareholder (which we define as a holder of at least 5% of our issued and outstanding share capital), ARK Investment Management LLC (from 11.4% to 6.01%). In addition, over the course of 2021, based on publicly available information, we believe that entities affiliated with Waddell & Reed Financial, Inc. were acquired by Macquarie Group Ltd. or its affiliates. Macquarie Group Ltd. filed with the SEC a Schedule 13G/A dated February 11, 2022 to report that it had decreased its ownership of our ordinary shares and has ceased to be the beneficial owner of more than 5% of our ordinary shares. Waddell & Reed Financial, Inc. and its affiliates had previously reported on a Schedule 13G/A ownership of 6.8% of our issued and outstanding share capital.

Over the course of 2020, there were increases in the percentage ownership of ARK Investment Management LLC (from below 5% to 11.4%). On the other hand, there were decreases in the percentage ownership of some of our former significant shareholders, each of which fell below 5% beneficial ownership of our issued and outstanding share capital from the following ownership percentage levels, including: (i) entities affiliated with Phoenix Holdings Ltd. (formerly 7.6%), (ii) entities affiliated with Senvest Management, LLC, (formerly 8.5%), (iii) Monsanto Company (formerly 6.4%), (iii) entities affiliated with UBS Group AG (formerly 5.3%), and (iv) Alpha Capital Anstalt (formerly 8.8%).

Over the course of 2019, there were increases in the percentage ownership of some of our major shareholders at the time, including entities affiliated with (i) The Phoenix Holdings Ltd. (from 6.8% to 7.6%) and (ii) Senvest Management, LLC, which first reported in April 2019 that they held 6.8%, and as of December 31, 2019 held 8.5%. On the other hand, there were decreases in the percentage ownership of entities affiliated with (x) our former significant shareholder, Migdal Insurance & Financial Holdings Ltd. (from 7.6% to 0.2%) and (y) Waddell & Reed Financial, Inc. (from 10.9% to 10.7%).

The information above regarding changes in percentage ownership by major shareholders during the years ended December 31, 2019 through 2021 is based solely on information contained in Schedule 13Gs (as may be amended) filed by such persons with the SEC.

Record Holders

As of March 20, 2022, all of our issued and outstanding ordinary shares were held of record in the United States, in the name of a single record shareholder — Cede & Co., as nominee for the Depository Trust Company. The number of record holders is not representative of the number of beneficial holders of our ordinary shares, nor is it representative of where such beneficial holders reside, since the shares held in the name of Cede & Co. are listed for trading on Nasdaq and the TASE and are beneficially owned by a wide range of underlying beneficial shareholders who hold their shares in "street name," including Israeli and other non-U.S. shareholders.

B. Related Party Transactions

Except as described below or elsewhere in this annual report, since January 1, 2021, we have had no transaction, nor do we have any presently proposed transaction, and neither we nor our subsidiaries have had any loan, nor do we or our subsidiaries have any presently proposed loan, involving any related party described in Item 7.B. of this annual report.

Agreements with Directors and Officers

Employment Agreements

We have entered into written employment agreements with all of our executive officers. Each of these agreements contains provisions regarding non-competition, confidentiality of information and assignment of inventions. The non-competition provision applies for a period that is generally 12 months following termination of employment. The enforceability of covenants not to compete in Israel and in the United States is subject to limitations.

Equity Awards

See "Item 6. Directors, Senior Management and Employee—B. Compensation—Share Option and Incentive Plans."

Indemnification Agreements

Our articles of association allow us to indemnify and insure our office holders for any liability imposed on them as a consequence of an act which was performed by virtue of being an office holder. They also allow us to 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 duty of care. In furtherance of such allowance, we have entered into agreements with each of our directors and executive officers exculpating them, to the fullest extent permitted by law, from liability to us for damages caused to us as a result of a breach of duty of care, and undertaking to indemnify them to the fullest extent permitted by law. See "Item 6. Directors, Senior Management and Employees—C. Board Practices—Exculpation, Insurance and Indemnification of Office Holders."

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

Consolidated financial statements

We have appended our consolidated financial statements at the end of this annual report, together with the report of our independent auditor on those financial statements, beginning on page F-2, as part of this annual report.

Legal Proceedings

From time to time, we may be subject to legal proceedings and claims in the ordinary course of business. We are currently not involved in any pending or contemplated legal proceedings that could reasonably be expected to have a significant effect on our financial position, profitability or cash flows. We may become involved in material legal proceedings in the future. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Dividend Policy

Since our inception, we have not declared or paid any cash or other form of dividends on our ordinary shares. We currently intend to retain any earnings for use in our business and do not currently intend to pay cash dividends on our ordinary shares. Dividends, if any, on our outstanding ordinary shares will be declared by and subject to the discretion of our board of directors. Even if our board of directors decides to distribute dividends, the form, frequency and amount of such dividends will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors our board of directors may deem relevant.

In addition, the distribution of dividends may be limited by Israeli law, which permits the distribution of dividends only out of distributable profits. See "Dividend and Liquidation Rights" in Exhibit 2.1 to this annual report.

B. Significant Changes

No significant changes have occurred since December 31, 2020, except as otherwise disclosed in this annual report.

ITEM 9. THE OFFER AND LISTING

A. Offer and Listing Details

Our ordinary shares have been listed for trading on the TASE since 2007 and were listed for trading on the NYSE commencing with our U.S. initial public offering in November 2013 until December 2016, at which point we transferred the listing to Nasdaq, where they have been listed from December 2016 to the present time. "EVGN" has served as the trading symbol for each such listing.

B. Plan of Distribution

Not applicable.

C. Markets

See "—A. Offer and Listing Details" above.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

For a discussion of the provisions of the company's articles of association with respect to the powers of directors, see "Item 6. Directors, Senior Management and Employees—C. Board Practices." A copy of our articles of association is attached as Exhibit 1.1 to this annual report. The information called for by this Item 10.B is set forth in Exhibit 2.1 to this annual report and is incorporated by reference into this annual report.

C. Material Contracts

The following is a summary of each material contract, other than material contracts entered into in the ordinary course of business, to which we are or have been a party, for the two years immediately preceding the date of this annual report:

Controlled Equity Offering Sales Agreements

On January 14, 2021 and February 19, 2021, we entered into Controlled Equity Offering℠ Sales Agreements, or the January Sales Agreement and February Sales Agreement, respectively, with Cantor Fitzgerald & Co., or the Agent, pursuant to which the Company could offer and sell, from time to time, its ordinary shares, through the Agent in an at-the-market offering, as defined in Rule 415(a)(4) promulgated under the Securities Act, for aggregate offering price of up to $28.0 million and $50.0 million, respectively. In February 2021, we completed the sales of ordinary shares under the January Sales Agreement and subsequently entered into the February Sales Agreement. We are not obligated to make any sales of ordinary shares under the February Sales Agreement and no assurance can be given that we will sell any ordinary shares under such agreement, or, if we do, as to the price or number of such shares that we will sell, or the dates on which any such sales will take place.

Lavie Bio Share Purchase Agreement with Corteva

In August 2019, we entered into a share purchase agreement with Corteva, whereby Corteva invested in our subsidiary Lavie Bio. That investment consisted of Corteva's (i) contribution of its shares in Taxon Biosciences to Lavie Bio and (ii) payment of $10 million for equity of Lavie Bio. In exchange, Lavie Bio issued to Corteva approximately 28% of Lavie Bio's shares. Information on that transaction is set forth in this annual report under "Item 4. Information on the Company— B. Business Overview— Market Segments— Ag-Business Market— Lavie Bio Ltd.— Investment by Corteva" and is incorporated by reference herein.

Indemnification Agreements

We have entered into indemnification agreements with our office holders. Information on the indemnification agreements may be found in this annual report under "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Agreements with Directors and Officers—Indemnification Agreements," and is incorporated herein by reference.

Other Compensation Agreements

- Evogene Ltd. Officers Compensation Policy. See Item 6. "Directors, Senior Management and Employees" for more information about this document.
- Evogene Share Option Plan (2002). See Item 6. "Directors, Senior Management and Employees" for more information about this document.
- Evogene Ltd. Key Employee Share Incentive Plan, 2003. See Item 6. "Directors, Senior Management and Employees" for more information about this document.
- Evogene Ltd. 2013 Share Option Plan. See Item 6. "Directors, Senior Management and Employees" for more information about this document.
- Evogene 2021 Share Incentive Plan. See Item 6. "Directors, Senior Management and Employees" for more information about this document.

D. Exchange Controls

Other than general anti-money laundering regulations, there are currently no Israeli currency control regulations in effect that restrict our import or export of capital to or from the State of Israel, or the availability of cash and cash equivalents for use by our affiliated companies. Under the Bank of Israel Law, 5770-2010, the Governor of the Bank of Israel, with the approval of the monetary policy committee of the Bank of Israel, is authorized to issue an administrative order restricting the transfer of funds to or from Israel. However, such an order is only likely to be issued under emergency circumstances and only for a temporary period, if necessary for the achievement of the goals of the Bank of Israel or the carrying out of its responsibilities under Israeli law. Furthermore, Israel has agreed, pursuant to international agreements to which it is a party (including incident to Israel's having joined the International Monetary Fund) to allow for the free flow of capital to and from within its borders. Certain transactions nevertheless require the filing of reports with the Bank of Israel.

Similarly, there are no currently effective Israeli governmental laws, decrees, regulations or other legislation that restrict the payment of dividends or other distributions with respect to our ordinary shares or the proceeds from the sale of the shares, except for the obligation of Israeli residents to file reports with the Bank of Israel regarding some transactions. However, legislation remains in effect under which currency controls can be imposed by administrative action at any time.

E. Taxation

Israel Income Tax Consequences

This section discusses the material Israeli income tax consequences concerning the ownership and disposition of our ordinary shares by our non-Israeli shareholders. 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 such investors include traders in securities who are subject to special tax regimes not covered in this discussion. Because parts of this discussion are 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. The discussion below is subject to change, including due to amendments under Israeli law or changes to the applicable judicial or administrative interpretations of Israeli law, which change could affect the tax consequences described below.

Taxation of Our Non-Israeli Shareholders

Capital Gains Taxes Applicable to Non-Israeli Resident Shareholders. A non-Israeli resident (whether 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 stock exchange outside of Israel should 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 that such shareholder is not 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. Additionally, such exemption is not applicable to a person whose gains from selling or otherwise disposing of the shares are deemed to be business income.

If not exempt, a non-Israeli resident shareholder would generally be subject to tax on capital gain at the ordinary corporate tax rate (23% in 2021), if generated by a company, or at the rate of 25%, if generated by an individual, or 30%, if generated by an individual who is a "substantial shareholder" (as defined under the Tax Ordinance), at the time of sale or at any time during the preceding 12-month period (or if the shareholder claims a deduction for interest and linkage differences expenses in connection with the purchase and holding of such shares). A "substantial shareholder" is generally a person who alone or together with such person's relative or another person who collaborates with such person on a permanent basis, holds, directly or indirectly, at least 10% of any of the "means of control" of the corporation. "Means of control" generally include, among others, the right to vote, receive profits, nominate a director or an executive officer, receive assets upon liquidation, or order someone who holds any of the aforesaid rights how to act, regardless of the source of such right. 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 (23% in 2021) and a marginal tax rate of up to 47% for an individual in 2021 (excluding excess tax as discussed below)) unless contrary provisions in a relevant tax treaty apply.

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 (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for an exemption). For example, under the United States-Israel Tax Treaty, the disposition of shares by a shareholder who is a United States resident (for purposes of the United States-Israel Tax Treaty) holding the shares as a capital asset and is entitled to claim the benefits afforded to such person by the treaty, is generally exempt from Israeli capital gains tax unless, among other things, (i) the capital gain arising from the disposition can be attributed to a permanent establishment of the shareholder which is maintained in Israel; (ii) the shareholder holds, directly or indirectly, shares representing 10% or more of the voting capital during any part of the 12-month period preceding such sale, exchange or disposition, subject to certain conditions; or (iii) 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 each case, the sale, exchange or disposition of such shares would be subject to Israeli tax, to the extent applicable; however, under the United States-Israel Tax Treaty, the United States resident would be permitted to claim a credit for the Israeli tax against the United States federal income tax imposed with respect to the sale, exchange or disposition, subject to the limitations in United States laws 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, in the form of a merger or otherwise, the Israel Tax Authority may require from shareholders who are not liable for Israeli tax to sign declarations in forms specified by this authority or obtain a specific exemption from the Israel Tax Authority to confirm their status as non-Israeli resident, 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%. With respect to a person who is a "substantial shareholder" (as defined above) at the time of receiving the dividend or on any time during the preceding twelve months, the applicable tax rate is 30%. "Means of control" generally include the right to vote, receive profits, nominate a director or an executive officer, receive assets upon liquidation, or order someone who holds any of the aforesaid rights how to act, regardless of the source of such right. Dividends paid on publicly traded shares, which are registered with and held by a nominee company, to non-Israeli residents are generally subject to Israeli withholding tax at a rate of 25% (whether the recipient is a "substantial shareholder" or not), unless a lower rate is provided under an applicable tax treaty between Israel and the shareholder's country of residence and provided that a certificate from the Israel Tax Authority allowing for a reduced withholding tax rate is obtained in advance.

In this regard, 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 United States resident (for purposes of the United States-Israel Tax Treaty) is 25%. However, generally, the maximum rate of withholding tax on dividends, not generated by an Approved Enterprise or a Beneficiary Enterprise, that are paid to a United States corporation holding at least 10% or more of our outstanding voting capital throughout the tax year in which the dividend is distributed as well as during the previous tax year, is 12.5%, provided that no more than 25% of our gross income for such preceding year consists of certain types of dividends and interest. Notwithstanding the foregoing, dividends distributed from income attributed to an Approved Enterprise, Benefited Enterprise or Preferred Enterprise are not entitled to such reduction under such tax treaty but are subject to withholding tax at the rate of 15% or 20% for such a United States corporate shareholder, provided that the conditions related to the holding of 10% of our voting capital and to our gross income for the previous year (as set forth in the previous sentence) are met. The aforementioned rates under the United States-Israel Tax Treaty would not apply if the dividend income is derived through a permanent establishment of the U.S. resident in Israel. We cannot assure you that we will designate the profits that we may distribute in a way that will reduce shareholders' tax liability. United States residents who are subject to Israeli withholding tax on a dividend may be entitled to a credit or deduction for Untied States federal income tax purposes in the amount of the taxes withheld, subject to detailed rules contained in United States tax legislation.

A non-Israeli resident who receives dividends from which tax was withheld is generally exempt from the obligation to file tax returns in Israel with respect to such income, provided that (i) such income was not derived from a business conducted in Israel by the taxpayer, (ii) the taxpayer has no other taxable sources of income in Israel with respect to which a tax return is required to be filed, and (iii) the taxpayer is not obliged to pay excess tax (as further explained below).

Excess Tax

Individuals who are subject to tax in Israel (whether any such individual is an Israeli resident or non-Israeli resident) are also subject to an additional tax at a rate of 3% on annual taxable income (including, but not limited to, dividends, interest and capital gain) exceeding a certain threshold (NIS 647,640 for 2021), which amount is linked to the annual change in the Israeli consumer price index, including, but not limited to, dividends, interest and capital gain.

United States Federal Income Taxation

The following is a description of the material United States 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 United States federal income tax consequences to holders of our ordinary shares that 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 shares as compensation for the performance of services;
- persons that will hold our shares as part of a "hedging," "integrated" or "conversion" transaction or as a position in a "straddle" for United States federal income tax purposes;
- partnerships (including entities classified as partnerships for United States federal income tax purposes) or other pass-through entities, or holders that will hold our shares through such an entity;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to the ordinary shares being taken into account in an "applicable financial statement" pursuant to Section 451(b) of the Code;
- 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 shares.

Moreover, this description does not address the United States federal estate, gift or alternative minimum tax consequences, or any state, local or foreign tax consequences, of the acquisition, ownership and disposition of our ordinary shares.

This description is based on the Code, existing, proposed and temporary United States 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 United States federal income tax purposes, is:

- a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for United States 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 United States federal income taxation regardless of its source; or
- a trust if such trust has validly elected to be treated as a United States person for United States 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 United States persons have the authority to control all of the substantial decisions of such trust.

A "Non-U.S. Holder" is a beneficial owner of our ordinary shares that is neither a U.S. Holder nor a partnership (or other entity treated as a partnership for United States federal income tax purposes).

If a partnership (or any other entity treated as a partnership for United States federal income tax purposes) holds our 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 is encouraged to consult its tax advisor as to its tax consequences.

You are encouraged to consult your advisor with respect to the United States 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 Israeli 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 United States 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 United States 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 United States 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 United States federal income tax. Subject to the PFIC rules discussed below, 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 we pay a dividend, or were a PFIC for the preceding taxable year. As discussed below, we believe we were classified as a PFIC for the year ending December 31, 2021. Dividends will not be eligible for the dividends received deduction generally allowed to corporate U.S. Holders.

If you are a U.S. Holder, 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, Israeli tax withheld on dividends may be deducted from your taxable income or credited against your United States 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." 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 are encouraged to consult your tax advisor to determine whether and to what extent you will be entitled to this credit.

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 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 United States federal income tax purposes is subject to limitations under the Code. However, as discussed below, we believe we were classified as a PFIC for the year ending December 31, 2021, in which case special rules may apply as explained below. 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.

Passive Foreign Investment Company Considerations

Based on certain estimates of our gross income and gross assets and the nature of our business, we believe that we were classified as a PFIC for the taxable year ending December 31, 2021. As a result, a U.S. Holder who held our ordinary shares at any time during 2020 would be subject to special rules generally intended to reduce or eliminate any benefits from the deferral of U.S. federal income tax that a U.S. Holder could derive from investing in a non-U.S. company that does not distribute all of its earnings on a current basis.

A non-U.S. corporation will be classified as a PFIC for federal income tax purposes in any taxable year in which, after applying certain look-through rules, either:

- at least 75% of its gross income is "passive income"; or
- at least 50% of the average quarterly value of its gross assets (which may be determined in part by the market value of our ordinary shares, which is subject to change) is attributable to assets that produce "passive income" or are held for the production of passive income.

Passive income for this purpose generally includes dividends, interest, royalties, rents, gains from commodities and securities transactions, the excess of gains over losses from the disposition of assets which produce passive income, and includes amounts derived by reason of the temporary investment of funds raised in offerings of our ordinary shares. If a non-U.S. corporation owns at least 25% by value of the stock of another corporation, the non-U.S. corporation is treated for purposes of the PFIC tests as owning its proportionate share of the assets of the other corporation and as receiving directly its proportionate share of the other corporation's income. For publicly traded corporations, the PFIC asset test described above is applied using the fair market value of the non-U.S. corporation's assets. For purposes of a the PFIC asset test, a publicly traded non-U.S. corporation may treat the aggregate fair market value of its assets as being equal to the sum of its Market Capitalization and the total amount of its liabilities. We intend to take the position that the excess of our Market Capitalization plus liabilities over the book value of all of our assets may generally be treated as attributable to non-passive asset. If we are classified as a PFIC in any year with respect to which a U.S. Holder owns our ordinary shares, we will continue to be treated as a PFIC with respect to such U.S. Holder in all succeeding years during which the U.S. Holder owns our ordinary shares, regardless of whether we continue to meet the tests described above.

Based on the book value of our assets and liabilities and our Market Capitalization in 2021, we believe that we met the PFIC asset test described above for 2021 and, as a result, we were classified as a PFIC in 2021. Furthermore, because we currently hold, and expect to continue to hold, a substantial amount of cash and cash equivalents and other passive assets used in our business, and because our Market Capitalization is currently below the level necessary to avoid PFIC status for 2022, there is substantial risk we will be classified as a PFIC for the 2022 taxable year as well. However, because PFIC status is based on our income, assets and activities for the entire taxable year, and our Market Capitalization, it is not possible to determine whether we will be characterized as a PFIC for the 2022 taxable year until after the close of the year. Moreover, we must determine our PFIC status annually after the close of each taxable year based on tests which are factual in nature, and our status in future years will depend on our income, assets, activities and Market Capitalization in those years. Thus, there can be no assurance that we will not be considered a PFIC for the current taxable year or any future taxable year.

If we are a PFIC for any taxable year during which a U.S. Holder owns ordinary shares, we will generally continue to be treated as a PFIC with respect to such U.S. Holder for all succeeding years during which such U.S. Holder owns such ordinary shares, unless we cease to be a PFIC and the U.S. Holder makes a "deemed sale" election with respect to such ordinary shares. If such election is made, the U.S. Holder will be deemed to have sold the ordinary shares it holds at their fair market value and any gain from the deemed sale would be subject to the rules described in the following paragraph. After the deemed sale election, so long as we do not become a PFIC in a subsequent taxable year, the ordinary shares with respect to which such election was made will not be treated as shares in a PFIC and will not be subject to the rules described below with respect to any "excess distribution" the U.S. Holder receives from us or any gain from an actual sale or other disposition of such ordinary shares. U.S. Holders are strongly urged to consult their tax advisors as to the possibility and consequences of making a deemed sale election if we were to become and then cease to be a PFIC, and such election becomes available.

If you are a U.S. Holder that owns our ordinary shares during 2020 or any other taxable year for which we are a PFIC, then unless you make one of the elections described below, a special tax regime will apply to both (a) any "excess distribution" by us to you (generally, your ratable portion of distributions in any year which are greater than 125% of the average annual distribution received by you in the shorter of the three preceding years or your holding period for our ordinary shares) and (b) any gain realized on the sale or other disposition of the ordinary shares. Under this regime, any excess distribution and realized gain will be treated as ordinary income (even if you hold the ordinary shares as capital assets) and will be subject to tax as if (a) the excess distribution or gain had been realized ratably over your holding period, (b) the amount deemed realized in each year had been subject to tax in each year of that holding period at the highest marginal rate for such year (other than income allocated to the current period or any taxable period before we became a PFIC, which would be subject to tax at the U.S. Holder's regular ordinary income rate for the current year and would not be subject to the interest change discussed below), and (c) the interest charge generally applicable to underpayments of tax had been imposed on the taxes deemed to have been payable in those years. The tax liability for amounts allocated to years prior to the year of disposition or excess distribution cannot be offset by any net operating losses for such years.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ordinary shares, then in lieu of being subject to the tax and interest charge rules discussed above, a U.S. Holder may make an election to include gain on the stock of a PFIC as ordinary income under a mark-to-market method, provided that such ordinary shares are "regularly traded" on a "qualified exchange." In general, our ordinary shares will be treated as "regularly traded" for a given calendar year if more than a *de minimis* quantity of our ordinary shares are traded on a qualified exchange on at least 15 days during each calendar quarter of such calendar year. Our ordinary shares are listed, and we expect them to continue to be listed for the foreseeable future, on the New York Stock Exchange, which is a qualifying exchange for this purpose. However, no assurance can be given that our ordinary shares will continue to be regularly traded on a "qualified exchange" for purposes of the mark-to-market election. In addition, because a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a U.S. Holder may continue to be subject to the PFIC rules discussed above with respect to such holder's indirect interest in any investments we hold that are treated as an equity interest in a PFIC for United States federal income tax purposes.

If a U.S. Holder makes an effective mark-to-market election, in each year that we are a PFIC, such U.S. Holder will include in each year that we are a PFIC as ordinary income the excess of the fair market value of such U.S. Holder's ordinary shares at the end of the year over such U.S. Holder's adjusted tax basis in the shares. Such U.S. Holder will be entitled to deduct as an ordinary loss in each such year the excess of such U.S. Holder's adjusted tax basis in the ordinary shares over their fair market value at the end of the year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. If a U.S. Holder makes an effective mark-to-market election, in each year that we are a PFIC, any gain such U.S. Holder recognizes upon the sale or other disposition of such U.S. Holder's ordinary shares will be treated as ordinary income and any loss will be treated as ordinary loss, but only to the extent of the net amount of previously included income as a result of the mark-to-market election.

A U.S. Holder's adjusted tax basis in the ordinary shares will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules discussed above. If a U.S. Holder makes an effective mark-to-market election, it will be effective for the taxable year for which the election is made and all subsequent taxable years unless the ordinary shares are no longer regularly traded on a qualified exchange or the IRS consents to the revocation of the election. U.S. Holders are encouraged to consult their tax advisers about the availability of the mark-to-market election, and whether making the election would be advisable in their particular circumstances.

In certain circumstances, a U.S. equity holder in a PFIC may avoid the adverse tax and interest-charge regime described above by making a "qualified electing fund" election to include in income its share of the corporation's income on a current basis. However, a U.S. Holder may make a qualified electing fund election with respect to the ordinary shares only if we agree to furnish you annually with a PFIC annual information statement as specified in the applicable Treasury regulations.

We do not intend to provide the information necessary for U.S. Holders to make qualified electing fund elections if we are classified as a PFIC. U.S. Holders are encouraged to consult their tax advisors to determine whether any of these elections would be available and if so, what the consequences of the alternative treatments would be in their particular circumstances.

If we are determined to be a PFIC for any year in which a U.S. Holder holds our ordinary shares, the general tax treatment for the U.S. Holder described in this paragraph would apply to indirect distributions and gains deemed to be realized by the U.S. Holders in respect of any of our subsidiaries that also may be determined to be PFICs.

If a U.S. Holder owns ordinary shares during any year in which we are a PFIC and the U.S. Holder recognizes gain on a disposition of our ordinary shares or receives distributions with respect to our ordinary shares, the U.S. Holder generally will be required to file an IRS Form 8621 with respect to the company, generally with the U.S. Holder's federal income tax return for that year. If our company were a PFIC for a given taxable year, then you are encouraged to consult your tax advisor concerning your annual filing requirements.

U.S. Holders are strongly encouraged to consult their tax advisors regarding the consequences of our classification as a PFIC for our 2021 taxable year, our potential classification as a PFIC in 2022 and future taxable years, and the application of the PFIC rules on their investment.

Backup Withholding Tax and Information Reporting Requirements

United States 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 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). 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. Any amounts withheld under the backup withholding rules will be allowed as a credit against the beneficial owner's United States 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 Internal Revenue Service.

Foreign Asset Reporting

Certain U.S. Holders who are individuals are required to report information relating to an interest in our ordinary shares, subject to certain exceptions (including an exception for shares held in accounts maintained by financial institutions). U.S. Holders are encouraged to consult their tax advisors regarding their information reporting obligations, if any, with respect to their ownership and disposition of our ordinary shares.

Medicare Tax

Certain U.S. Holders that are individuals, estates or trusts are subject to a 3.8% tax on all or a portion of their "net investment income," which may include all or a portion of their dividend income and net gains from the disposition of ordinary shares. Each U.S. Holder that is an individual, estate or trust is encouraged to consult its tax advisors regarding the applicability of the Medicare tax to its income and gains in respect of its investment in the ordinary shares.

The above description is not intended to constitute a complete analysis of all tax consequences relating to acquisition, ownership and disposition of our ordinary shares. You are encouraged to consult your tax advisor concerning the tax consequences of your particular situation.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We are currently subject to the informational requirements of the Exchange Act applicable to foreign private issuers and fulfill the obligations of these requirements by filing reports with the SEC. As a foreign private issuer, we are exempt from the rules under the Exchange Act relating 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. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. However, we intend to file with the SEC, within 120 days after the end of each subsequent fiscal year, an annual report on Form 20-F containing financial statements which will be examined and reported on, with an opinion expressed, by an independent public accounting firm. We also intend to furnish to the SEC reports of foreign private issuer on Form 6-K containing unaudited quarterly financial information.

The SEC maintains an Internet website at http://www.sec.gov that contains reports, including this annual report and the documents referred to herein, proxy statements, information statements and other material that are filed through the SEC's Electronic Data Gathering, Analysis and Retrieval, or "EDGAR" system.

We also file annual and special reports and other information with the Israeli Securities Authority through its fair disclosure electronic system called MAGNA. You may review these filings on the website of the MAGNA system operated by the Israeli Securities Authority at www.magna.isa.gov.il or on the website of the TASE at www.tase.co.il.

Our ordinary shares are quoted on the TASE and, since December 2016, on Nasdaq (after being listed on the NYSE from November 2013 until December 2016). Information about us is also available on our website at http://www.evogene.com. Our website and the information contained therein or connected thereto will not be deemed to be incorporated into this annual report and you should not rely on any such information in making your decision whether to purchase our ordinary shares.

I. Subsidiary Information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to a variety of risks, including foreign currency exchange fluctuations, commodity price risk and other risks. We regularly assess the risks to minimize any adverse effects on our business. For sensitivity analysis of our exposure to foreign currency exchange fluctuations and changes in market prices of listed securities, see Note 13d to our consolidated financial statements as of, and for the year ended, December 31, 2021 included elsewhere in this annual report.

Foreign Currency Risk

Most of our revenues are denominated in U.S. dollars. By contrast, we incur expenses primarily denominated in NIS. As a result, any appreciation of the NIS relative to the U.S. dollar adversely impacts our profitability due to the portion of our expenses that are incurred in NIS. As of December 31, 2021, we did not have any open forward currency contracts. In the future we may enter into hedging transactions in order to decrease our foreign currency risk; however, these transactions may not fully protect us from such risk.

The following table presents information about the changes in the exchange rate of the NIS against the U.S. dollar:

Period	Depreciation (Appreciation) of the U.S. dollar against the NIS (%) Based on Average of Daily Exchange Rates Throughout Year Compared to Previous Year
2021	(6.0)
2020	(7.0)
2019	(7.7)
2018	(0.1)
2017	(6.3)

Our exposure related to exchange rate changes on our net asset position denominated in currencies other than U.S. dollars varies with changes in our net asset position. Net asset position refers to financial assets, such as trade receivables and cash and cash deposits, less financial liabilities, such as trade payable and other payables. The impact of any such transaction gains or losses is reflected in financing expenses or income. Our most significant exposure relates to a potential change in the U.S. dollar-NIS exchange rates. Assuming a 10% increase in the U.S. dollar relative to the NIS, and assuming no other change, our financing expenses would have increased by $1.3 million in 2021, increased by $1.0 million in 2020, and increased by $0.8 million in 2019 due to our positive current net asset position denominated in NIS as of December 31, 2021 2020 and 2019. As of December 31, 2021, we did not have any hedge arrangements in place to protect our exposure to foreign currency risk.

Commodity Price Risk

Changes in commodity prices in the agriculture markets may affect our reported operating results and cash flows in view of our activity in the agriculture segment. For example, a decrease in the prices of corn and soy grains may adversely impact the budget for, and size of, research and development expenditures of our existing and potential collaborators and, in turn, our ability to continue or extend existing collaborations or enter into new ones. Further, the royalties we may receive from our collaborators on the sales and transfers of seeds containing the traits we develop could be affected by fluctuations in seed commodity prices. As of December 31, 2021, we did not have any hedge arrangements in place to protect our exposure to commodity price fluctuations.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not applicable.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

The effective date of the registration statement on Form F-1, File No. 333-191315, for our U.S. initial public offering of ordinary shares was November 20, 2013. The offering commenced on November 21, 2013 and was closed on November 26, 2013. Credit Suisse Securities and Deutsche Bank Securities acted as joint book-running managers for the offering, and Oppenheimer & Co. and Piper Jaffray & Co. acted as co-managers. We registered and sold 5,750,000 of our ordinary shares in our U.S. initial public offering. The aggregate offering price of the shares registered was approximately $84.8 million, as was the aggregate price of the shares sold. The total expenses of the offering, including underwriting discounts and commissions, were approximately $8 million. The net proceeds that we received from the offering were approximately $76.8 million.

None of the net proceeds of our U.S. initial public offering was paid directly or indirectly to any director, officer, general partner of ours or to their associates, persons owning ten percent or more of any class of our equity securities, or to any of our affiliates.

The Company has used all the offering proceeds from its U.S. initial public offering that closed on November 26, 2013.

ITEM 15. CONTROLS AND PROCEDURES

(a) Disclosure Controls and Procedures

Our management, including our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2021. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2021, to provide reasonable assurance that the information required to be disclosed in filings and submissions under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms, and that such information related to us and our consolidated subsidiaries is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions about required disclosure.

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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Our management recognizes that there are inherent limitations in the effectiveness of any system of internal control over financial reporting, including the possibility of human error and the circumvention or override of internal control. Accordingly, even effective internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation and may not prevent or detect all misstatements. Further, because of changes in conditions, the effectiveness of internal control over financial reporting may vary over time.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In conducting its assessment of internal control over financial reporting, management used the framework and criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) as of the end of the period covered by this report. Based on that evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2021.

(c) Attestation Report of Registered Public Accounting Firm

Not applicable (we are exempt from this requirement due to our status under the Exchange Act as a non-accelerated filer as of the current time).

(d) Changes in internal control over financial reporting

During the period covered by this annual report, no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act), have occurred 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 of directors has determined that each of Mr. Dan Falk and Mr. Ziv Kop qualifies as an audit committee financial expert, as defined by the rules of the SEC, and has the requisite financial experience required by the Nasdaq Listing Rules. In addition, each of Mr. Falk and Mr. Kop is independent, as such term is defined in Rule 10A-3(b)(1) under the Exchange Act and under the Nasdaq Listing Rules.

ITEM 16B. CODE OF ETHICS

We have adopted a Code of Ethics and Proper Business Conduct applicable to our executive officers, directors and all other employees, which is a "code of ethics" as defined in this Item 16B of Form 20-F promulgated by the SEC. We have also implemented a training program for new and existing employees concerning our Code of Ethics and Proper Business Conduct. A copy of the code is delivered to every employee of Evogene Ltd. and all of its subsidiaries, and is available to investors and others, without charge, on our website at http://www.evogene.com/investor-relations/corporate-governance/ or by contacting our investor relations department. Information contained on, or that can be accessed through, our website does not constitute a part of this Form 20-F and is not incorporated by reference herein. Under Item 16B of Form 20-F, if a waiver or amendment of the Code of Business Conduct and Ethics applies to our principal executive officer, principal financial officer, principal accounting officer, controller or other persons performing similar functions and relates to standards promoting any of the values described in Item 16B(b) of Form 20-F, we will disclose such waiver or amendment on our website within four business days following the date of amendment or waiver in accordance with the requirements of the Nasdaq listing rules and Instruction 4 to such Item 16B. We granted no waivers under our Code of Ethics and Proper Business Conduct in 2021. We also intend to disclose any amendments to, or waivers of, the Code of Ethics and Proper Business Conduct applicable to our directors or executive officers on our website.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Principal Accountant Fees and Services.

We paid or accrued the following fees for professional services rendered by Kost, Forer, Gabbay & Kasierer, a member of Ernst & Young Global and an independent registered public accounting firm, for the years ended December 31, 2020 and 2021:

	2020	2021
Audit Fees	$ 215,000	260,000
Audit-Related Fees	-	-
Tax Fees	16,905	25,000
All Other Fees	-	-
Total	231,905	285,000

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

"Tax fees" include fees for professional services rendered by our auditors for tax compliance and tax consulting in connection with international transfer pricing.

Our audit committee has adopted a pre-approval policy for the engagement of our independent accountant to perform certain audit and non-audit services. Pursuant to this policy, which is designed to assure that such engagements do not impair the independence of our auditors, the audit committee pre-approves annually any specific audit and non-audit services, audit-related services and tax services that may be performed by our independent accountants. Pursuant to that policy, our audit committee pre-approved all fees paid to our auditors for the year ended December 31, 2021.

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

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

Except as otherwise indicated, we are in compliance with corporate governance standards as currently applicable to us under Israeli, U.S., SEC and Nasdaq laws, rules and/or regulations, as applicable. Under the Nasdaq Listing Rules, as a foreign private issuer (as such term is defined in Rule 3b-4 under the Securities Exchange Act of 1934, as amended), we may elect to follow certain corporate governance practices permitted under the Companies Law in lieu of compliance with corresponding corporate governance requirements otherwise imposed by the Nasdaq Listing Rules for U.S. domestic issuers. We currently follow the provisions of the Companies Law, rather than the Nasdaq Listing Rules, solely with respect to the following requirements:

- *Quorum*. As permitted under the Companies Law, pursuant to our articles of association, the quorum required for an ordinary meeting of shareholders consists of at least two shareholders present in person, by proxy or by other voting instrument in accordance with the Companies Law, who hold at least 25% of the voting power of our shares (and in an adjourned meeting, with some exceptions, at least two shareholders), instead of 33 1/3% of the issued share capital, as required under the Nasdaq Listing Rules.

- *Executive sessions of independent directors*. Israeli law does not require executive sessions of independent directors. Although all of our current directors are "independent directors" under the applicable Nasdaq criteria, we do not intend to comply with this requirement if we have directors who are not independent.

- *Shareholder approval*. We seek shareholder approval for all corporate actions requiring such approval under the Companies Law, which include (i) transactions with directors concerning the terms of their service or indemnification, exemption and insurance for their service (or for any other position that they may hold at our company), (ii) transactions concerning the compensation, indemnification, exculpation and insurance of the chief executive officer; (iii) the compensation policy recommended by the compensation committee of our board of directors and approved by our board of directors (and any amendments thereto); (iv) extraordinary transactions with, and the terms of employment or other engagement of, a controlling shareholder (if and when this becomes relevant to our company), (v) amendments to our articles of association, and (vi) certain non-public issuances of securities. In addition, under the Companies Law, a merger requires approval of the shareholders of each of the merging companies. We are not required, however, to seek shareholder approval for any of the following events described in the Nasdaq Listing Rules:

  - certain issuances of shares in excess of 20% of the outstanding shares of the Company;

  - an issuance that will result in a change of control of our company; and

  - adoption of, or material changes to, our equity compensation plans.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable

PART III

ITEM 17. FINANCIAL STATEMENTS

We have provided financial statements pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

The audited consolidated financial statements as required under Item 18 are attached hereto starting on page F-2 of this Annual Report. The audit report of Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, an independent registered public accounting firm, is included herein preceding the audited consolidated financial statements.

ITEM 19. EXHIBITS

ANNUAL REPORT ON FORM 20-F
INDEX OF EXHIBITS

Exhibit No.	Description
1.1	Amended and Restated Articles of Association of the Registrant (incorporated by reference to Exhibit 1.1 to Evogene's Annual Report on Form 20-F for the year ended December 31, 2017, filed with the SEC on March 30, 2018)
2.1	Description of ordinary shares of Evogene Ltd. (incorporated by reference to Exhibit 2.1 to Evogene's Annual Report on Form 20-F for the year ended December 31, 2020, filed with the SEC on April 2, 2021)
4.1	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.9 to Evogene's Registration Statement on Form F-1, as amended (Registration No. 333-191315))
4.2	Evogene Share Option Plan (2002) (incorporated by reference to Exhibit 10.10 to Evogene's Registration Statement on Form F-1, as amended (Registration No. 333-191315))
4.3	Evogene Ltd. Key Employee Share Incentive Plan, 2003 (incorporated by reference to Exhibit 10.11 to Evogene's Registration Statement on Form F-1, as amended (Registration No. 333-191315))
4.4.1	Evogene Ltd. 2013 Share Option Plan (incorporated by reference to Exhibit 10.12 to Evogene's Registration Statement on Form F-1, as amended (Registration No. 333-191315))
4.4.2	2015 U.S. Addendum to Evogene Ltd. 2013 Share Option Plan (incorporated by reference to Exhibit A to the proxy statement for Evogene's special general meeting of shareholders held on March 15, 2016, annexed as Exhibit 99.1 to Evogene's Report of Foreign Private Issuer on Form 6-K, furnished to the SEC on February 4, 2016)
4.5	Evogene Ltd. 2021 Share Incentive Plan (incorporated by reference to Appendix B of Exhibit 99.2 to Evogene's Report of Foreign Private Issuer on Form 6-K, furnished to the SEC on June 23, 2021)
4.6	Evogene Ltd. Officers Compensation Policy†
4.7	Share Purchase Agreement, dated as of August 6, 2019, by and among Evogene Ltd., Lavie Bio Ltd., Lavie Bio Inc., Lavie Tech Inc., Pioneer Hi-Bred International, Inc. and Taxon Biosciences, Inc.*
4.8	Controlled Equity Offering Sales Agreement, dated as of February 19, 2021, by and between Evogene Ltd. and Cantor Fitzgerald & Co. ((incorporated by reference to Exhibit 10.1 to Evogene's Report of Foreign Private Issuer on Form 6-K, furnished to the SEC on February 19, 2021)
8.1	List of subsidiaries of the Registrant†
12.1	Certificate of Chief Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a)†
12.2	Certificate of Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a)†
13.1	Certificate of Chief Executive Officer pursuant to 18 U.S.C. §1350^
13.2	Certificate of Chief Financial Officer pursuant to 18 U.S.C. §1350^
15.1	Consent of Kost Forer Gabbay and Kasierer, a member of Ernst & Young Global, independent registered public accounting firm†
101	The following financial information from Evogene Ltd.'s Annual Report on Form 20-F for the year ended December 31, 2021 formatted in inline XBRL (eXtensible Business Reporting Language): (i) Consolidated Statements of Financial Position at December 31, 2021 and 2020; (ii) Consolidated Statements of Profit or Loss for the years ended December 31, 2021, 2020 and 2019; (iii) Consolidated Statements of Changes in Equity for the years ended December 31, 2021, 2020 and 2019; (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019; and (v) Notes to Consolidated Financial Statements, tagged as blocks of text. †
104	Cover Page Interactive Data File 101

† Filed herewith.
^ Furnished herewith.
* Portions of this exhibit have been omitted in accordance with the rules of the SEC.

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 its behalf.

Evogene Ltd.

Date: March 31, 2022

By: /s/ Ofer Haviv
Name: Ofer Haviv
Title: President and Chief Executive Officer

EVOGENE LTD. AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2021

U.S. DOLLARS IN THOUSANDS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

EVOGENE LTD.

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Evogene Ltd. and its subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of profit or loss, changes in equity and cash flows for each of the three 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 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission 2013 framework and our report dated March 31, 2022 expressed an unqualified opinion thereon.

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.

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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Intangible Assets

Description of the matter

As of December 31, 2021, the Company's intangible assets with finite lives were $15,207 thousand. As described in Notes 2 and 11 to the consolidated financial statements, intangible assets with finite lives are assessed for recoverability whenever events or changes in circumstances indicate that the carrying amount of the assets may not be fully recoverable. The Company evaluates assets for potential impairment by comparing the recoverable amount to the carrying amount of the asset. If the carrying amount of the assets exceeds the recoverable amount, impairment is measured based on the difference between the carrying amount of the assets and the recoverable amount.

Auditing the Company's impairment tests for intangible assets with finite lives was complex and highly judgmental due to the significant estimation in management's assumptions to calculate the recoverable amount. The Company's methodologies for estimating the recoverable value of these assets involve significant assumptions and inputs, including projected financial information, amortization period and discount rates, all of which are sensitive to and affected by economic, industry, and company-specific qualitative factors. These assumptions can significantly affect the cash flows used to determine the recoverable amount of the intangible assets.

How we addressed the matter in our audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company's controls over the Company's finite lives intangible asset review process, including controls over management's review of its significant assumptions described above. We tested controls over the review of methodologies used, significant assumptions and inputs, and completeness and accuracy of the data used in the measurements.

To test the Company's impairment assessment for intangible assets with finite lives, we performed audit procedures that included, among others, assessing the methodologies used by management in deriving the recoverable value, testing the significant assumptions and the underlying data used by the Company in its analyses. We compared the significant assumptions used by management to current industry and economic trends, historical financial results and other relevant factors. We also performed sensitivity analyses of the significant assumptions to evaluate the potential change in the recoverable values of these assets resulting from hypothetical changes in underlying assumptions. We also used an internal valuation specialist to assist in our evaluation of the methodologies used and significant assumptions and inputs used to determine the recoverable value of the intangible assets.

/s/ KOST FORER GABBAY & KASIERER
KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

We have served as the Company's auditor since 2002.

Tel-Aviv, Israel
March 31, 2022

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

EVOGENE LTD.

Opinion on Internal Control over Financial Reporting

We have audited Evogene Ltd. and its subsidiaries ("the Company") internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of the Company as of December 31, 2021 and 2020, the related consolidated statements of profit or loss, changes in equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes, and our report dated March 31, 2022, expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KOST FORER GABBAY & KASIERER
KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

Tel-Aviv, Israel
March 31, 2022

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

U.S. dollars in thousands

	Note	December 31, 2021	December 31, 2020
CURRENT ASSETS:			
Cash and cash equivalents	6	$ 32,325	$ 46,229
Short-term bank deposits		3,000	2,000
Marketable securities	7	18,541	-
Trade receivables		281	222
Other receivables and prepaid expenses	8	2,651	3,372
Inventories		92	-
		56,890	51,823
LONG-TERM ASSETS:			
Long-term deposits		25	9
Right-of-use-assets	9	2,109	1,872
Property, plant and equipment, net	10	2,073	2,072
Intangible assets, net	11	15,207	16,139
		19,414	20,092
		$ 76,304	$ 71,915
CURRENT LIABILITIES:			
Trade payables		$ 1,463	$ 863
Employees and payroll accruals		2,662	2,535
Lease liability		974	777
Liabilities in respect of government grants	12	89	72
Pre-funded warrants		-	4,144
Deferred revenues and other advances	5	175	47
Other payables		1,519	1,238
		6,882	9,676
LONG-TERM LIABILITIES:			
Lease liability		1,695	1,663
Liabilities in respect of government grants	12	4,307	3,694
		6,002	5,357
SHAREHOLDERS' EQUITY:	17		
Ordinary shares of NIS 0.02 par value:			
Authorized – 150,000,000 ordinary shares; Issued and outstanding – 41,170,168 shares on December 31, 2021 and 35,600,088 shares on December 31, 2020		234	200
Share premium and other capital reserves		260,488	225,121
Accumulated deficit		(207,069)	(179,276)
Equity attributable to equity holders of the Company		53,653	46,045
Non-controlling interests		9,767	10,837
Total equity		63,420	56,882
		$ 76,304	$ 71,915

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

March 31, 2022			
Date of approval of the financial statements	Sarit Firon Chairperson of the board	Ofer Haviv Chief Executive Officer	Dorit Kreiner Chief Financial Officer

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS

U.S. dollars in thousands

	Note	Year ended December 31, 2021	2020	2019
Revenues		$ 930	$ 1,040	$ 753
Cost of revenues	19a	767	574	334
Gross profit		163	466	419
Operating expenses:				
Research and development, net	19b	21,125	17,287	15,791
Business development	19c	2,738	2,672	2,029
General and administrative	19d	7,253	5,321	3,765
Total operating expenses		31,116	25,280	21,585
Operating loss		(30,953)	(24,814)	(21,166)
Financing income	19e	1,935	1,591	2,630
Financing expenses	19e	(1,414)	(2,951)	(555)
Financing income (expenses), net		521	(1,360)	2,075
Loss before taxes on income		(30,432)	(26,174)	(19,091)
Taxes on income		13	32	24
Loss		$ (30,445)	$ (26,206)	$ (19,115)
Attributable to:				
Equity holders of the Company		(27,793)	(23,374)	(18,112)
Non-controlling interests		(2,652)	(2,832)	(1,003)
		$ (30,445)	$ (26,206)	$ (19,115)
Basic and diluted loss per share, attributable to equity holders of the Company	20	$ (0.69)	$ (0.83)	$ (0.70)
Weighted average number of shares used in computing basic and diluted loss per share		40,433,303	28,158,779	25,754,297

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

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

U.S. dollars in thousands

	Attributable to equity holders of the Company					
	Share capital	Share premium and other capital reserves	Accumulated deficit	Total	Non-controlling interests	Total equity
Balance as of January 1, 2019	$ 142	$ 187,701	$ (137,790)	$ 50,053	$ 253	$ 50,306
Loss	-	-	(18,112)	(18,112)	(1,003)	(19,115)
Issuance of subsidiary's ordinary shares to non-controlling interests	-	17,406	-	17,406	10,042	27,448
Benefit to non-controlling interests regarding share-based compensation	-	(17)	-	(17)	17	-
Share-based compensation	-	814	-	814	764	1,578
Balance as of December 31, 2019	$ 142	$ 205,904	$ (155,902)	$ 50,144	$ 10,073	$ 60,217
Loss	-	-	(23,374)	(23,374)	(2,832)	(26,206)
Issuance of ordinary shares on September 2, 2020	35	9,766	-	9,801	-	9,801
Issuance of ordinary shares on November 2, 2020	23	8,834	-	8,857	-	8,857
Exercise of subsidiary options	-	(73)	-	(73)	82	9
Forfeiture of non-controlling interests regarding share-based compensation	-	238	-	238	(238)	-
Benefit to non-controlling interests regarding share-based compensation	-	(10)	-	(10)	10	-
Exercise of options	*) -	107	-	107	-	107
Share-based compensation	-	355	-	355	3,742	4,097
Balance as of December 31, 2020	$ 200	$ 225,121	$ (179,276)	$ 46,045	$ 10,837	$ 56,882
Loss	-	-	(27,793)	(27,793)	(2,652)	(30,445)
Issuance of ordinary shares, net	27	29,555	-	29,582	-	29,582
Forfeiture of non-controlling interests regarding share-based compensation	-	536	-	536	(536)	-
Benefit to non-controlling interests regarding share-based compensation	-	(23)	-	(23)	23	-
Exercise of subsidiary options	-	(378)	-	(378)	378	-
Exercise of pre-funded warrants	6	4,359	-	4,365	-	4,365
Exercise of options	1	426	-	427	-	427
RSUs Vested	*)	*)	-	-	-	-
Share-based compensation and RSUs	-	892	-	892	1,717	2,609
Balance as of December 31, 2021	$ 234	$ 260,488	$ (207,069)	$ 53,653	$ 9,767	$ 63,420

*) Represents an amount lower than $1

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

	Year ended December 31,		
	2021	**2020**	**2019**
Cash flows from operating activities:			
Loss	$ (30,445)	$ (26,206)	$ (19,115)
Adjustments to reconcile loss to net cash used in operating activities:			
Adjustments to the profit or loss items:			
Depreciation	1,302	1,792	2,395
Amortization of intangible assets	932	935	374
Share-based compensation	2,609	4,097	1,578
Pre-funded warrants issuance expenses	-	211	-
Net financing expenses (income)	(884)	967	(2,414)
Decrease in accrued bank interest	11	64	-
Loss from derecognition of property, plant and equipment	121	-	12
Taxes on income	13	32	24
	4,104	8,098	1,969
Changes in asset and liability items:			
Decrease (increase) in trade receivables	(59)	(150)	88
Decrease (increase) in other receivables	653	(1,300)	(1,250)
Increase in inventories	(92)	-	-
Increase in long term deposits	(16)	-	(10)
Increase (decrease) in trade payables	625	(29)	(122)
Increase (decrease) in employees and payroll accruals	127	456	(33)
Increase (decrease) in other payables	290	(87)	375
Increase (decrease) in deferred revenues and other advances	128	(339)	(45)
	1,656	(1,449)	(997)
Cash received (paid) during the year for:			
Interest received	297	294	803
Interest paid	(315)	(238)	(302)
Taxes paid	(13)	(13)	(24)
Net cash used in operating activities	$ (24,716)	$ (19,514)	$ (17,666)

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. dollars in thousands

	Year ended December 31,		
	2021	**2020**	**2019**
Cash flows from investing activities:			
Purchase of property, plant and equipment	$ (847)	$ (682)	$ (900)
Proceeds from sale of marketable securities	4,395	2,097	27,084
Purchase of marketable securities	(23,114)	-	(1,637)
Withdrawal from (investment in) bank deposits, net	(1,000)	8,000	12,592
Net cash provided by (used in) investing activities	(20,566)	9,415	37,139
Cash flows from financing activities:			
Proceeds from issuance of ordinary shares, net of issuance expenses	29,582	18,658	-
Proceeds from issuance of pre-funded warrants	-	1,989	-
Proceeds from issuance of subsidiary's ordinary shares to non-controlling interests	-	-	10,000
Proceeds from advances for pre-funded warrants	-	9	-
Proceeds from exercise of options	484	59	-
Repayment of lease liability	(580)	(639)	(597)
Proceeds from government grants	824	320	493
Repayment of government grants	(34)	(22)	(590)
Net cash provided by financing activities	30,276	20,374	9,306
Exchange rate differences - cash and cash equivalent balances	1,102	1,206	159
Increase (decrease) in cash and cash equivalents	(13,904)	11,481	28,938
Cash and cash equivalents beginning of the year	46,229	34,748	5,810
Cash and cash equivalents end of the year	$ 32,325	$ 46,229	$ 34,748
Significant non-cash activities			
Acquisition of property, plant and equipment	$ 32	$ 57	$ 216
Increase (decrease) of right-of-use asset recognized with corresponding lease liability	$ 841	$ (41)	$ 3,437
Exercise of options	$ -	$ 57	$ -
Acquisition of intangible assets	$ -	$ -	$ 17,448
Exercise of pre-funded warrants	$ 4,365	$ -	$ -

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

NOTE 1: – GENERAL

a. Evogene Ltd. together with its subsidiaries (the "Company" or "Evogene") is a leading computational biology company aiming to revolutionize life-science product development across several market segments, including human health, agriculture, and other industries, by utilizing cutting edge computational technologies. To achieve this mission, Evogene established its unique Computational Predictive Biology ("CPB") platform, leveraging big data and artificial intelligence, and incorporating deep multidisciplinary understanding in life sciences. The CPB platform is the basis for three technology engines, each focused on the direction and acceleration of the discovery and development of products based on one of the following core components: Microbes – *MicroBoost AI*, Small molecules – *ChemPass AI*, Genetic elements – *GeneRator AI*. Evogene uses its technological engines to support the development of products for the life science industry through dedicated subsidiaries and with strategic partners. Currently, Evogene's main subsidiaries utilize the technological engines to develop human microbiome-based therapeutics by Biomica Ltd., medical cannabis products by Canonic Ltd., ag-chemicals by AgPlenus Ltd. and ag-biologicals by Lavie Bio Ltd. The Company has a history of losses and incurred operating losses of $30,953 and $24,814 during the years ended December 31, 2021, and 2020, respectively.

Furthermore, the Company intends to continue to finance its operating activities by raising capital, by seeking collaborations with multinational companies in the industry (see Note 17b) as well as from revenues derived from the sale of end-products or commercialization of product candidates.

The Company's management and board of directors are of the opinion that the Company's current financial resources will be sufficient to continue the development of the Company's products in the foreseeable future.

Evogene Ltd. was founded on October 10, 1999, as Agro Leads Ltd., a division of Compugen Ltd. In 2002, the Company was spun-off as an independent corporation under the laws of the State of Israel, and changed its name to Evogene Ltd.

The Company's shares have been listed for trading on the Tel Aviv Stock Exchange ("TASE") since 2007, on the New York Stock Exchange ("NYSE") from November 2013 until December 2016, and on the Nasdaq Stock Market ("NASDAQ") since December 2016.

b. The Company principally derives its revenues from collaboration arrangements and since October 2021, from Canonic Ltd.'s commercialization of its first medical cannabis products in Israel, see Note 5d). As to major customers, see Note 21c.

c. The Company has the following direct and indirect subsidiaries: Casterra Ag Ltd. (formerly Evofuel Ltd.), Evogene Inc., Biomica Ltd., AgPlenus Ltd., AgPlenus Inc., Lavie Bio Ltd., Lavie Bio Inc., Lavie Tech Inc., Taxon Biosciences, Inc. and Canonic Ltd.

Casterra Ag Ltd. was incorporated on December 29, 2011 and is currently focusing on the development of improved castor bean seeds for industrial uses.

Evogene Inc. was incorporated in Delaware, United States on September 22, 2006. From 2015 to 2019, Evogene Inc. was engaged in research and development in the field of insect control and located in the Bio-Research and Development Growth (BRDG) Park, in St. Louis, Missouri, United States.

NOTE 1: – GENERAL (Cont.)

Biomica Ltd. was incorporated on March 2, 2017, with the mission of discovering and developing human microbiome-based therapeutics.

AgPlenus Ltd. was incorporated on June 10, 2018, with the mission to design effective and sustainable crop protection ag-chemicals products by leveraging predictive biology.

On August 27, 2020, AgPlenus Ltd. Incorporated a wholly owned U.S. subsidiary, AgPlenus Inc.

Lavie Bio Ltd. was incorporated on January 21, 2019, with the mission to improve food quality and sustainability through the introduction of microbiome-based ag-biological products. In 2019, Lavie Bio Ltd. Incorporated two wholly owned subsidiaries, Lavie Bio Inc., located in the city Foundry STL Project, in St. Louis, Missouri, United States, and Lavie Tech Inc. Lavie Tech Inc. wholly owns as a subsidiary Taxon Biosciences, Inc. (see item d below).

Canonic Ltd. was incorporated on March 25, 2019, with the mission to develop next-generation medical cannabis products.

d. On August 6, 2019, Corteva Inc. ("Corteva"), through its subsidiary Pioneer Hi-Bred International, Inc., made an investment in the Company's agriculture biologicals subsidiary, Lavie Bio Ltd., which included a cash investment of $10,000 and the contribution of all shares of Corteva's wholly owned subsidiary Taxon Biosciences Inc. in consideration for 27.84% of Lavie Bio Ltd.'s shares. As part of the foregoing transaction, the parties entered into a commercial arrangement, including the grant to Corteva of certain commercialization rights with respect to Lavie Bio Ltd.'s products, mainly in corn and soybean (See Note 11 and Note 17).

e. On September 2, 2020, the Company issued 5,882,353 ordinary shares in a registered direct offering, for gross proceeds of $10,000 and on November 2, 2020, the Company issued 3,920,000 ordinary shares and 883,534 pre-funded warrants in a second registered direct offering, for gross proceeds of $12,000 (See Note 17). On January 4. 2021, 883,534 pre-funded warrants were exercised into 883,534 of the Company's ordinary shares at an exercise price of $0.01 per pre-funded warrant for a total amount of $9 (see Note 22b.).

f. In January 2021, the Company entered into a Controlled Equity Offering Sales Agreement, pursuant to which the Company issued 3,803,594 ordinary shares during January and February 2021, in an at-the-market ("ATM") offering, with a weighted average selling price of $7.36 per share, resulting in gross proceeds of approximately $28,000.

g. On February 19, 2021, the Company entered into a new Controlled Equity Offering Sales Agreement, having an aggregate offering price of up to $50,000, pursuant to which the Company issued 726,832 ordinary shares during April through September 2021, in an ATM offering, with a weighted average selling price of $3.64 per share, resulting in gross proceeds of approximately $2,600.

h. The Company's subsidiaries and divisions are split into three operating segments: (1) Agriculture – Evogene seed traits division, Lavie Bio Ltd. and Ag Plenus Ltd.; (2)

Human health – Biomica Ltd. and Canonic Ltd.; and (3) Industrial – Casterra Ag Ltd. (see also Note 21).

NOTE 1: – GENERAL (Cont.)

i. The Company considered the impact of COVID-19 pandemic on the estimates and assumptions and determined that there were no material adverse impacts on the consolidated financial statements for the period ended December 31, 2021. As events continue to evolve and additional information becomes available, the Company's estimates and assumptions may change in future periods.

j. Definitions

In these Financial Statements –

Subsidiary - A company that is controlled by the Company (as defined in International Financial Reporting Standards ("IFRS") 10- Consolidated Financial Statements) and whose accounts are consolidated with those of the Company.

Related parties - As defined in International Accounting Standard ("IAS") 24- Related Party Disclosures.

NOTE 2: – SIGNIFICANT ACCOUNTING POLICIES

The following accounting policies have been applied consistently in the financial statements for all periods presented, unless otherwise stated.

a. Basis of presentation of the financial statements:

These financial statements have been prepared in accordance with IFRS as issued by the International Accounting Standards Board ("IASB").

The Company's financial statements have been prepared on a cost basis, except for financial assets and liabilities (including derivatives) which are presented at fair value through profit or loss.

The Company has elected to present profit or loss items using the function of expense method.

b. Consolidated financial statements:

The consolidated financial statements comprise the financial statements of companies that are controlled by the Company (subsidiaries). Control is achieved when the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Potential voting rights are considered when assessing whether an entity has control.

The consolidation of the financial statements commences on the date on which control is obtained and ends when such control ceases. The financial statements of the Company and of the subsidiaries are prepared as of the same dates and periods. The consolidated financial statements are prepared using uniform accounting policies by all companies controlled by the Company. Significant intracompany balances and transactions and gains or losses resulting from intracompany transactions are eliminated in full in the consolidated financial statements. Non-controlling interests in subsidiaries represent the equity in subsidiaries not attributable, directly or indirectly, to a parent. Non-controlling interests are presented in equity separately from the equity attributable to the equity holders of the Company. Profit or loss and components of other comprehensive income are attributed to the Company and to non-controlling interests. Losses are attributed to non-controlling interests even if they result in a negative balance of non-controlling interests in the consolidated statement of financial position.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

c. Other comprehensive loss:

The Company has no components of comprehensive loss other than net loss. Thus, comprehensive loss is the same as net loss for the period presented.

d. Functional currency, presentation currency and foreign currency:

1. Functional currency and presentation currency:

The presentation currency of the financial statements is the U.S. dollar.

The Company and its subsidiaries determine the functional currency of each entity, and this currency is used to separately measure each entity's financial position and operating results. The Company's functional currency is the U.S. dollar.

2. Transactions, assets and liabilities in foreign currency:

Transactions denominated in foreign currency are recorded upon initial recognition at the exchange rate at the date of the transaction. After initial recognition, monetary assets and liabilities denominated in foreign currency are translated at each reporting date into the functional currency at the exchange rate at that date. Exchange rate differences, other than those capitalized to qualifying assets or accounted for as hedging transactions in equity, are recognized in profit or loss. Non-monetary assets and liabilities denominated in foreign currency and measured at cost are translated at the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currency and measured at fair value are translated into the functional currency using the exchange rate prevailing at the date when the fair value was determined.

e. Cash equivalents:

Cash equivalents are considered as highly liquid investments, including unrestricted short-term bank deposits with an original maturity of three months or less from the date of investment or with a maturity of more than three months, but which are redeemable on demand without penalty, and which form part of the Company's cash management.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

f. Short-term deposits:

Short-term bank deposits are deposits with an original maturity of more than three months from the date of investment and which do not meet the definition of cash equivalents. The deposits are presented according to their terms of deposit.

g. Inventories:

Inventories are measured at the lower of cost and net realizable value. The cost of inventories comprises costs of purchase and costs incurred in bringing the inventories to their present location and condition. Net realizable value is the estimated selling price in the ordinary course of business. The Company reviews inventory for obsolete, redundant and slow-moving goods and any such inventory is written-down to net realizable value.

Inventories of purchased finished goods and packing materials are initially valued at cost and subsequently at the lower of cost and net realizable value.

h. Government grants:

Government grants received from the Israel Innovation Authority ("IIA," formerly "Office of the Chief Scientist in Israel")) and the Israel-U.S. Binational Industrial Research and Development Foundation ("BIRD") are recognized upon receipt as a liability if future economic benefits are expected from the research project that will result in royalty-bearing sales.

A liability for the loan is first measured at fair value using a discount rate that reflects a market rate of interest. The difference between the amount of the grant received and the fair value of the liability is accounted for as a government grant and recognized as a reduction of research and development expenses. After initial recognition, the liability is measured at amortized cost using the effective interest method. Royalty payments are treated as a reduction of the liability. If no economic benefits are expected from the research activity, the grant receipts are recognized as a reduction of the related research and development expenses. In that event, the royalty obligation is treated as a contingent liability in accordance with IAS 37- Provisions, Contingent Liabilities and Contingent Assets ("IAS 37").

In each reporting date, the Company evaluates whether there is reasonable assurance that the liability recognized, in whole or in part, will not be repaid (since the Company will not be required to pay royalties) based on the best estimate of future sales and using the original effective interest method, and if so, the appropriate amount of the liability is derecognized against a corresponding reduction in research and development expenses.

Amounts paid as royalties are recognized as settlement of the liability.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Non-refundable grants from the IIA and the European Union Horizon 2020 for funding research and development projects are recognized at the time the Company is entitled to such grants on the basis of the related costs incurred and recorded as a deduction from research and development expenses.

i. Leases:

The Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Company recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying asset.

1. Right-of-use assets

The Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received.

Following are the amortization periods of the right-of-use assets by class of underlying asset:

	Years	Mainly
Office space	2-8	6
Laboratory space	2-8	6
Motor vehicles	3	3

If ownership of the leased asset transfers to the Company at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

2. Lease liabilities

At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Company and payments of penalties for terminating the lease, if the lease term reflects the Company exercising the option to terminate.

In calculating the present value of lease payments, the Company uses its incremental borrowing rate (“IBR”) at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in the consumer price index ("CPI") or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

3. Short-term leases and leases of low-value assets

The Company applies the short-term lease recognition exemption to its short-term leases of motor vehicles (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term.

j. Property, plant and equipment:

Property, plant and equipment are measured at cost, including directly attributable costs, less accumulated depreciation, accumulated impairment losses and any related investment grants and excluding day-to-day servicing expenses.

Depreciation is calculated on a straight-line basis over the useful life of the assets at annual rates as follows:

	%	Mainly %
Laboratory equipment	9-30	15
Computers and peripheral equipment	15-33.33	33.33
Office equipment and furniture	6-20	6
Leasehold improvements	see below	

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

The useful life, depreciation method and residual value of an asset are reviewed at least each year-end and any changes are accounted for prospectively as a change in accounting estimate. Depreciation of an asset ceases at the earlier of the date that the asset is classified as held for sale and the date that the asset is derecognized.

k. Intangible assets:

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for intangible assets with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortization period or method, as appropriate, and are treated as changes in accounting estimates.

The amortization expense on intangible assets with finite lives is recognized in the statement of profit or loss in the expense category that is consistent with the function of the intangible assets.

An intangible asset is derecognized upon disposal (i.e., at the date the recipient obtains control) or when no future economic benefits are expected from its use or disposal. Any gain or loss arising upon derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of profit or loss (see Note 11).

A summary of the useful economic lives of the intangible assets purchased by the Company is as follows:

	Years
Pipeline Products	17
Potential Products	19
Microorganisms Collection	20

l. Impairment of non-financial assets:

The Company evaluates the need to record an impairment of non-financial assets whenever events or changes in circumstances indicate that the carrying amount is not recoverable. If the carrying amount of non-financial assets exceeds their recoverable amount, the assets are reduced to their recoverable amount. The recoverable amount is the higher of fair value less costs of sale and value in use. In measuring value in use, the expected future cash flows are discounted using a pre-tax discount rate that reflects the risks specific to the asset. The recoverable amount of an asset that does not generate independent cash flows is determined for the cash-generating unit to which the asset belongs. Impairment losses are recognized in profit or loss.

m. Revenue recognition:

The revenue recognition is in accordance with IFRS 15, “Revenue from Contracts with Customers” (“IFRS 15”).

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

IFRS 15 introduces a five-step model that applies to revenue earned from contracts with customers:

Step 1: Identify the contract with a customer, including reference to contract combination and accounting for contract modifications.

Step 2: Identify the distinct performance obligations in the contract.

Step 3: Determine the transaction price, including reference to variable consideration, significant financing components, non-cash consideration and any consideration payable to the customer.

Step 4: Allocate the transaction price to the distinct performance obligations on a relative stand-alone selling price basis using observable prices, if available, or using estimates and assessments.

Step 5: Recognize revenue when a performance obligation is satisfied, either at a point in time or over time.

Revenue from contracts with customers is recognized when the control over the goods or services is transferred to the customer. The transaction price is the amount of the consideration that is expected to be received based on the contract terms, excluding amounts collected on behalf of third parties (such as taxes).

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations such as licenses, services, royalties and milestone events require an allocation of the transaction price to each performance obligation based on a relative standalone selling price (“SSP”) basis. The Company establishes SSP based on management judgment, considering internal factors such as margin objectives, pricing practices and historical sales.

Revenue from each performance obligation is recognized when the performance obligation related to that revenue is satisfied and only to the extent of the consideration that is not contingent upon completion or satisfaction of future performance obligations in the contract.

Revenues from research and development services as part of the Company's collaboration agreements are recognized over time, during the period the customer simultaneously receives and consumes the benefits provided by the Company's performance. Recognition of the service is throughout the services period and is determined based on the proportion of actual costs incurred for each reporting period to the estimated total costs, subject to the enforceable rights. The Company charges its customers based on payment terms agreed upon in specific agreements. When payments are made before or after the service is performed, the Company recognizes the resulting contract asset or liability.

Revenues from milestone events stipulated in the agreements are recognized upon the occurrence of the event or achievement of the milestone specified in the agreement.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Costs to fulfill a contract:

Costs incurred in fulfilling contracts or anticipated contracts with customers are recognized as an asset when the costs are expected to be recovered. Costs to fulfill a contract comprise direct identifiable costs and indirect costs that can be directly attributed to a contract based on a reasonable allocation method. Costs to fulfill a contract are expensed consistently with the recognition of revenues under the specific contract.

n. Taxes on income:

Current or deferred taxes are recognized in profit or loss, except to the extent that they relate to items which are recognized in other comprehensive income (loss) or equity.

1. Current taxes:

The current tax liability is measured using the tax rates and tax laws that have been enacted or substantively enacted by the reporting date as well as adjustments required in connection with the tax liability in respect of previous years.

2. Deferred taxes:

Deferred taxes are computed in respect of temporary differences between the carrying amounts in the financial statements and the amounts attributed for tax purposes.

Deferred taxes are measured at the tax rate that is expected to apply when the asset is realized, or the liability is settled, based on tax laws that have been enacted or substantively enacted by the reporting date.

Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is not probable that they will be utilized. Temporary differences for which deferred tax assets had not been recognized are reviewed at each reporting date and a respective deferred tax asset is recognized to the extent that their utilization is probable.

o. Financial instruments:

The accounting for financial instruments is in accordance with IFRS 9, “Financial Instruments” (“IFRS 9”).

1. Financial assets:

Financial assets are measured upon initial recognition at fair value plus transaction costs that are directly attributable to the acquisition of the financial assets, except for financial assets measured at fair value through profit or loss in respect of which transaction costs are recorded in profit or loss.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The Company classifies and measures debt instruments in the financial statements based on the following criteria:

- The Company's business model for managing financial assets; and

- The contractual cash flow terms of the financial asset.

Debt instruments are measured at amortized cost when:

The Company's business model is to hold the financial assets in order to collect their contractual cash flows, and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. After initial recognition, the instruments in this category are measured according to their terms at amortized cost using the effective interest rate method, less any provision for impairment.

On the date of initial recognition, the Company may irrevocably designate a debt instrument as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency, such as when a related financial liability is also measured at fair value through profit or loss.

2. Impairment of financial assets:

The Company evaluates at the end of each reporting period the loss allowance for financial debt instruments which are not measured at fair value through profit or loss.

The Company has short-term financial assets such as trade receivables in respect of which the Company applies a simplified approach and measures the loss allowance in an amount equal to the lifetime expected credit losses. An impairment loss on debt instruments measured at amortized cost is recognized in profit or loss with a corresponding loss allowance that is offset from the carrying amount of the financial asset.

3. Financial liabilities:

a) Financial liabilities measured at amortized cost:

Financial liabilities are initially recognized at fair value less transaction costs that are directly attributable to the issue of the financial liability.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

After initial recognition, the accounting treatment of financial liabilities is based on their classification as follows:

After initial recognition, the Company measures all financial liabilities at amortized cost using the effective interest rate method, except for financial liabilities at fair value through profit or loss such as derivatives.

b) Financial liabilities measured at fair value through profit or loss:

At initial recognition, the Company measures financial liabilities that are not measured at amortized cost at fair value. Transaction costs are recognized in profit or loss.

After initial recognition, changes in fair value are recognized in profit or loss.

4. Offsetting financial instruments:

Financial assets and financial liabilities are offset, and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

5. De-recognition of financial instruments:

a. Financial assets:

A financial asset is derecognized when the contractual rights to the cash flows from the financial asset expire or the Company has transferred its contractual rights to receive cash flows from the financial asset or assumes an obligation to pay the cash flows in full without material delay to a third party and has transferred substantially all the risks and rewards of the asset or has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

b. Financial liabilities:

A financial liability is derecognized when it is extinguished, that is when the obligation is discharged or cancelled or expires. A financial liability is extinguished when the debtor (the Company) discharges the liability by paying in cash, other financial assets, goods or services; or is legally released from the liability.

p. Fair value measurement:

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Fair value measurement is based on the assumption that the transaction will take place in the asset's or the liability's principal market, or in the absence of a principal market, in the most advantageous market.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

Fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities measured at fair value or for which fair value is disclosed are categorized into levels within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement:

Level 1	-	Quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2	-	Inputs other than quoted prices included within Level 1 that are observable directly or indirectly.
Level 3	-	Inputs that are not based on observable market data (valuation techniques which use inputs that are not based on observable market data).

q. Provisions:

A provision in accordance with IAS 37 is recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

r. Employee benefit liabilities:

The Company has several employee benefits plans:

1. Short-term employee benefits:

Short-term employee benefits are benefits that are expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related services. These benefits include salaries, paid annual leave, paid sick leave, recreation and social security contributions and are recognized as expenses as the services are rendered. A liability in respect of a cash bonus or a profit-sharing plan is recognized when the Company has a legal or constructive obligation to make such payment as a result of past service rendered by an employee and a reliable estimate of the amount can be made.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

2. Post-employment benefits:

The plans are normally financed by contributions to insurance companies and classified as defined contribution plans or as defined benefit plans.

The Company has defined contribution plans pursuant to section 14 of the Israeli Severance Pay Law (the "Severance Law") under which the Company pays fixed contributions and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient amounts to pay all employee benefits relating to employee service in the current and prior periods.

Contributions to the defined contribution plan in respect of severance or retirement pay are recognized as an expense when contributed concurrently with the performance of the employee's services.

In respect of its severance pay obligation to certain of its employees, the Company makes current deposits in pension funds and insurance companies ("the plan assets"). Plan assets comprise assets held by a long-term employee benefit fund or qualifying insurance policies. Plan assets are not available to the Company's own creditors and cannot be returned directly to the Company.

s. Share-based payment transactions:

The Company's employees and consultants are entitled to remuneration in the form of equity-settled share-based payment transactions.

Equity-settled transactions:

The cost of equity-settled transactions with employees is measured at the fair value of the equity instruments granted at the grant date. The fair value is determined using an acceptable option pricing model.

As for consultants, the cost of the transactions is measured at the fair value of the services received as consideration for equity instruments granted.

The cost of equity-settled transactions is recognized in profit or loss together with a corresponding increase in equity during the period which the performance and/or service conditions are to be satisfied ending on the date on which the relevant employees become entitled to the award ("the vesting period"). The cumulative expense recognized for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Company's best estimate of the number of equity instruments that will ultimately vest. No expense is recognized for awards that do not ultimately vest.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

If the Company modifies the conditions on which equity-instruments were granted, an additional expense is recognized for any modification that increases the total fair value of the share-based payment arrangement or is otherwise beneficial to the employee or other service provider at the modification date.

t. Loss per share:

Loss per share is calculated by dividing the loss attributable to equity holders of the Company by the weighted number of ordinary shares outstanding during the period.

Potential ordinary shares are included in the computation of diluted earnings per share when their conversion decreases earnings per share from continuing operations.

u. Reclassification:

Certain amounts previously reported in the consolidated financial statements have been reclassified to conform to the current year's presentation. Such reclassifications did not affect statements of financial position, statements of loss, statements of changes in equity or statements of cash flows.

NOTE 3: - SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUPMTIONS USED IN THE PREPARATION OF THE FINANCIAL STATEMENTS

In the process of applying the significant accounting policies, the Company has made the following judgments which have the most significant effect on the amounts recognized in the financial statements:

a. Judgments:

- Determining the timing of satisfaction of performance obligations:

In order to determine the timing of recognizing revenues from contracts with customers at a point in time or over time, the Company evaluates the date of transfer of control over the assets or services promised in the contracts. Among others, the Company evaluates whether the customer obtains control of the asset at a specific point in time or consumes the economic benefits associated with the contract simultaneously with the Company's performance. In determining the timing of revenue recognition, the Company also considers the provisions of applicable laws and regulations.

- Discount rate for a lease liability:

When the Company is unable to readily determine the discount rate implicit in the lease for calculating the lease liability, it uses an IBR that represents the rate of interest that a lessee would have to pay to borrow over a similar term and with similar security, the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment. When the Company cannot rely on borrowing transactions, it determines the IBR based on its financing risk, the lease period and other economic variables dictated by the lease contract's existing conditions and restrictions. The Company occasionally hires an external valuation expert for determining the IBR.

NOTE 3: - SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUPMTIONS USED IN THE PREPARATION OF THE FINANCIAL STATEMENTS (Cont.)

b. Estimates and assumptions:

The preparation of the financial statements requires management to make estimates and assumptions that have an effect on the application of the accounting policies and on the reported amounts of assets, liabilities, revenues and expenses. Changes in accounting estimates are reported in the period of the change in estimate.

The key assumptions made in the financial statements concerning uncertainties at the reporting date and the critical estimates computed by the Company that may result in a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

- Government grants:

  Government grants received from the IIA are recognized as liabilities if future economic benefits are expected from the research and development activity that will result in royalty-bearing sales. There is uncertainty regarding the estimated future cash flows used to measure the amount of the liability.

- Legal claims:

  In estimating the likelihood of outcome of legal claims filed against the Company and its investees, the Company relies on the opinion of its legal counsel. These estimates are based on the legal counsel's best professional judgment, taking into account the stage of proceedings and legal precedents in respect of the different issues. Since the outcome of the claims will be determined in courts, the results could differ from these estimates.

- Determining the fair value of share-based payment transactions:

  The fair value of share-based payment transactions is determined upon initial recognition by an acceptable option pricing model. The inputs to the model include share price (as the Company's subsidiaries' shares are not publicly traded, the fair value of the subsidiaries' shares was estimated by valuation reports prepared by third-party valuation specialists) and exercise price and assumptions regarding expected volatility, expected life of share option and expected dividend yield.

NOTE 3: - SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUPMTIONS USED IN THE PREPARATION OF THE FINANCIAL STATEMENTS (Cont.)

- Leases - Estimating the IBR:

  The Company cannot readily determine the interest rate implicit in the lease; therefore, it uses its IBR to measure lease liabilities. The IBR is the rate of interest that the Company would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Company 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease.

  The Company estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the Company's stand-alone credit rating).

- Lease extension and/or termination options:

  In evaluating whether it is reasonably certain that the Company will exercise an option to extend a lease or not exercise an option to terminate a lease, the Company considers all relevant facts and circumstances that create an economic

  incentive for the Company to exercise the option to extend or not exercise the option to terminate such as, but not limited to: significant amounts invested in leasehold improvements, the significance of the underlying asset to the Company's operation and whether it is a specialized asset and the Company's past experience with similar leases.

  After the commencement date, the Company reassesses the term of the lease upon the occurrence of a significant event or a significant change in circumstances that affects whether the Company is reasonably certain to exercise an option to extend or not exercise an option to terminate previously included in the determination of the lease term, such as significant leasehold improvements that had not been anticipated on the lease commencement date, sublease of the underlying asset for a period that exceeds the end of the previously determined lease period, etc.

- Intangible assets - Estimating the fair value:

  The fair value of intangible assets purchased is determined upon initial recognition by either one of three traditional methods in evaluating an asset. These methods include the market approach, the income approach and the cost approach. The pipeline products and potential products were valued by applying the income approach and the microorganisms collection was valued using the cost approach. The useful economic life was determined through years of development until the final year of projected sales. When applying the income approach, the cash flows expected to be generated by intangible assets are discounted to their present value equivalent using a rate of return that reflects the relative risk of the investment, as well as the time value of money. For each intangible asset, a specific discount rate was calculated using the "Modified CAPM Build-Up Method".

NOTE 4: - DISCLOSURE OF NEW STANDARDS IN THE PERIOD PRIOR TO THEIR ADOPTION

a. Amendment to IAS 37, “Provisions, Contingent Liabilities and Contingent Assets”:

In May 2020, the IASB issued an amendment to IAS 37, regarding which costs a company should include when assessing whether a contract is onerous ("the IAS 37 Amendment"). According to the Amendment, costs of fulfilling a contract include both the incremental costs (for example, raw materials and direct labor) and an allocation of other costs that relate directly to fulfilling a contract (for example, depreciation of an item of property, plant and equipment used in fulfilling the contract).

The Amendment is effective for annual periods beginning on or after January 1, 2022 and applies to contracts for which all obligations in respect thereof have not yet been fulfilled as of January 1, 2022. Early application is permitted.

The Company estimates that the application of the Amendment is not expected to have a material impact on the financial statements.

b. Amendment to IAS 8, "Accounting Policies, Changes to Accounting Estimates and Errors":

In February 2021, the IASB issued an amendment to IAS 8, “Accounting Policies, Changes to Accounting Estimates and Errors” (“the IAS 8 Amendment”), in which it introduces a new definition of “accounting estimates”.

Accounting estimates are defined as “monetary amounts in financial statements that are subject to measurement uncertainty”. The IAS 8 Amendment clarifies the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors.

The IAS 8 Amendment is to be applied prospectively for annual reporting periods beginning on or after January 1, 2023 and is applicable to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Early application is permitted.

The Company is currently evaluating the effects of the IAS 8 Amendment on its financial statement.

c. Amendment to IAS 1, "Presentation of Financial Statements":

In January 2020, the IASB issued an amendment to IAS 1, “Presentation of Financial Statements” (“the IAS 1 Amendment”) regarding the criteria for determining the classification of liabilities as current or non-current.

NOTE 4: - DISCLOSURE OF NEW STANDARDS IN THE PERIOD PRIOR TO THEIR ADOPTION (Cont.)

The IAS 1 Amendment includes the following clarifications:

- What is meant by a right to defer settlement;
- That a right to defer must exist at the end of the reporting period;
- That classification is unaffected by the likelihood that an entity will exercise its deferral right; and
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification.

The IAS 1 Amendment is effective for annual periods beginning on or after January 1, 2023 and must be applied retrospectively. Early application is permitted.

The Company is evaluating the possible impact of the IAS 1 Amendment on its current loan agreements.

d. Amendment to IFRS 3, "Business Combinations":

In May 2020, the IASB issued Amendments to IFRS 3, "Business Combinations – Reference to the Conceptual Framework" which are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements with a reference to the Conceptual Framework for Financial Reporting, that was issued in March 2018, without significantly changing its requirements.

The IASB added an exception to the recognition principle of IFRS 3 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of IAS 37, "Provisions, Contingent Liabilities and Contingent Assets" or International Financial Reporting Interpretations Committee 21 (IFRIC), "Levies" if incurred separately.

According to the exception, liabilities and contingent liabilities within the scope of IAS 37 or IFRIC 21 will be recognized on the acquisition date according to the criteria in IAS 37 or IFRIC 21 and not according to the Conceptual Framework.

The Amendments also clarify that contingent assets do not qualify for recognition at the acquisition date.

The Amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively.

U.S. dollars in thousands (except share and per share data)

NOTE 5: - COLLABORATION, RESEARCH AND DISTRIBUTION AGREEMENTS-

Each of the following agreements amounted to 10% or more of the Company's total revenues in 2021 and 2020:

a. In December 2018, the Company entered into a collaboration with TMG Tropical Melhoramento e Genetica S.A. ("TMG") for the development of nematode-resistant soybean varieties using genome editing technology. In the initial phase of the collaboration, the Company identified genomic elements for editing to attribute nematode resistance in soybean and perform such edits on TMG's commercial soybean germplasm. In turn, TMG is to validate the efficacy of the edited soybean varieties in greenhouse assays and field trials in Brazil, for incorporation in its breeding pipeline.

b. In March 2020, AgPlenus Ltd. entered into a multi-year collaboration with Corteva for the discovery and development of novel herbicides. Under the terms of the collaboration agreement, AgPlenus Ltd. and Corteva work together to optimize herbicide product candidates originating from the Company's pipeline. Successful candidates from this collaboration are expected to be further developed by Corteva.

c. In April 2020, Lavie Bio Ltd. entered into a proof-of-concept agreement with customer E (see Note 21c) for the purpose of optimization of a bioinsecticide.

d. In August 2021, Canonic Ltd. entered into an agreement with customer F (see Note 21c) for the distribution in Israel of Canonic Ltd.'s medical cannabis products, through its distribution channels, on a consignment basis to licensed pharmacies, under the Canonic brand. The initial term of the agreement is 36 months.

NOTE 6: - CASH AND CASH EQUIVALENTS

	December 31,	
	2021	2020
Cash for immediate withdrawal in USD	$ 7,793	$ 32,757
Cash for immediate withdrawal in New Israeli Shekels ("NIS")	24,002	13,044
Cash for immediate withdrawal in Euro and other currencies	530	428
	$ 32,325	$ 46,229

NOTE 7: - MARKETABLE SECURITIES

Financial assets measured at fair value through profit and loss:

	December 31,	
	2021	2020
Corporate bonds and government treasury notes	18,541	-
	$ 18,541	$ -

U.S. dollars in thousands (except share and per share data)

NOTE 8: - OTHER RECEIVABLES AND PREPAID EXPENSES

	December 31,	
	2021	2020
Government authorities	$ 275	$ 207
Grant receivables	-	643
Patent cost reimbursement	603	1,078
Accrued bank interests	7	18
Prepaid expenses	1,681	1,308
Restricted cash	77	47
Other	8	71
	$ 2,651	$ 3,372

NOTE 9: - LEASES

The Company has entered into various lease agreements for certain of its offices and car leases with original lease periods expiring between 2022 and 2028. Most of the lease agreements include one or more options to renew. The Company does not assume renewals in determination of the lease term unless the renewals are deemed to be reasonably certain at lease commencement.

Lease payments included in the measurement of the lease liability comprise the following: the fixed non-cancelable lease payments and payments for optional renewal periods where it is reasonably certain the renewal period will be exercised. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

a. Information on leases in which the Company is a lessee:

	Year ended December 31	
	2021	2020
Interest expense on lease liabilities	$ 315	$ 238
Exchange rate differences	(31)	152
CPI expenses on lease liabilities and right-of-use assets	6	(1)
Depreciation expenses on right-of-use assets	606	758
Income due to removal of lease liabilities and right-of-use assets	*)	*)

*) Represents an amount lower than $1

b. Lease extension and cancelation options:

The Company has leases that include both extension and cancelation options. These are used to maximize operational flexibility in terms of managing the assets used in the Company's operations. The Company exercises significant judgements in deciding whether it is reasonably certain that the extension and cancelation options will be exercised.

U.S. dollars in thousands (except share and per share data)

NOTE 9: - LEASES (Cont.)

In leaseholds for periods of 5-7 years, the Company recognizes any extension options exercised as per lease agreements in the lease period. In these leases, the Company usually exercises the lease extension option to avoid critical impairment to its operating activities in the event that an alternative asset is not available immediately upon termination of the noncancelable lease period.

In leases of motor vehicles, the Company does not include in the lease term the exercise of extension options since the Company does not ordinarily exercise options that extend the lease period beyond 3 years.

Moreover, the lease period subject to the termination option is accounted for as part of the lease period when it is reasonably certain that the termination option will not be exercised.

c. Disclosures of right-of-use assets:

	Leasehold	Motor vehicles	Total
Cost:			
Balance as of January 1, 2021	$ 3,025	$ 319	$ 3,344
Additions during the year:			
Additions to right-of-use assets for new leases in the period	412	412	824
Revaluation recognized in CPI	4	43	47
Disposals during the year:			
Disposals of right-of-use assets for leases terminated in the period	-	(30)	(30)
Balance as of December 31, 2021	3,441	744	4,185
Accumulated depreciation:			
Balance as of January 1, 2021	1,224	248	1,472
Additions during the year:			
Depreciation	494	112	606
Disposals during the year:			
Disposals of right-of-use assets	-	(2)	(2)
Balance as of December 31, 2021	1,718	358	2,076
Depreciated cost on December 31, 2021	$ 1,723	$ 386	$ 2,109

U.S. dollars in thousands (except share and per share data)

NOTE 9: - LEASES (Cont.)

	Leasehold	Motor vehicles	Total
Cost:			
Balance as of January 1, 2020	$ 3,041	$ 381	$ 3,422
Additions during the year:			
Additions to right-of-use assets for new leases in the period	-	23	23
Revaluation recognized in CPI	(16)	(7)	(23)
Disposals during the year:			
Disposals of right-of-use assets for leases terminated in the period	-	(78)	(78)
Balance as of December 31, 2020	3,025	319	3,344
Accumulated depreciation:			
Balance as of January 1, 2020	596	155	751
Additions during the year:			
Depreciation	628	130	758
Disposals during the year:			
Disposals of right-of-use assets	-	(37)	(37)
Balance as of December 31, 2020	1,224	248	1,472
Depreciated cost on December 31, 2020	$ 1,801	$ 71	$ 1,872

d. Disclosures of lease liability:

	Leasehold	Motor vehicles	Total
Balance as of January 1, 2021	$ 2,375	$ 65	$ 2,440
Lease payments	(748)	(147)	(895)
Lease deposits	-	(2)	(2)
Interest expense	281	34	315
Exchange rate differences	(38)	7	(31)
Additions to lease liability for new leases in the period	412	412	824
Reduction of lease liability for leases terminated in the period	-	(29)	(29)
Revaluation recognized in CPI	4	43	47
Balance as of December 31, 2021	2,286	383	2,669

U.S. dollars in thousands (except share and per share data)

NOTE 9: - LEASES (Cont.)

	Leasehold	Motor vehicles	Total
Balance as of January 1, 2020	$ 2,760	$ 211	$ 2,971
Lease payments	(740)	(137)	(877)
Lease deposits	-	(5)	(5)
Interest expense	216	22	238
Exchange rate differences	145	7	152
Additions to lease liability for new leases in the period	-	21	21
Reduction of lease liability for leases terminated in the period	-	(40)	(40)
Revaluation recognized in CPI	(6)	(14)	(20)
Balance as of December 31, 2020	2,375	65	2,440

The Company leases facilities for its offices and research and development activities, as well as motor vehicles under leases. Future minimum lease payments under non-cancelable leases for the years ended December 31, are as follows:

	Leasehold	Motor vehicles	Total
2022	782	193	975
2023	788	140	928
2024	755	58	813
2025	115	-	115
2026 and thereafter	138	-	138
Total lease payments	$ 2,578	$ 391	$ 2,969
Less: imputed interest	292	8	300
Present value of lease liabilities	$ 2,286	$ 383	$ 2,669

NOTE 10: - PROPERTY, PLANT AND EQUIPMENT, NET

	Laboratory equipment	Computers and peripheral equipment	Office equipment and furniture	Leasehold improvements	Total
Cost:					
Balance on January 1, 2021	$ 4,150	$ 3,009	$ 264	$ 13,690	$ 21,113
Additions	314	211	-	297	822
Deductions	(208)	(1,612)	(11)	(475)	(2,306)
Balance on December 31, 2021	4,256	1,608	253	13,512	19,629
Accumulated Depreciation:					
Balance on January 1, 2021	3,457	2,830	173	12,581	19,041
Additions	311	129	14	242	696
Deductions	(96)	(1,612)	(11)	(462)	(2,181)
Balance on December 31, 2021	3,672	1,347	176	12,361	17,556
Depreciated cost on December 31, 2021	$ 584	$ 261	$ 77	$ 1,151	$ 2,073

U.S. dollars in thousands (except share and per share data)

NOTE 10: - PROPERTY, PLANT AND EQUIPMENT, NET (Cont.)

	Laboratory equipment	Computers and peripheral equipment	Office equipment and furniture	Leasehold improvements	Total
Cost:					
Balance on January 1, 2020	$ 4,939	$ 4,051	$ 264	$ 13,527	$ 22,781
Additions	299	61	-	163	523
Deductions	(1,088)	(1,103)	-	-	(2,191)
Balance on December 31, 2020	4,150	3,009	264	13,690	21,113
Accumulated Depreciation:					
Balance on January 1, 2020	4,230	3,780	157	12,031	20,198
Additions	315	153	16	550	1,034
Deductions	(1,088)	(1,103)	-	-	(2,191)
Balance on December 31, 2020	3,457	2,830	173	12,581	19,041
Depreciated cost on December 31, 2020	$ 693	$ 179	$ 91	$ 1,109	$ 2,072

NOTE 11: - INTANGIBLE ASSETS, NET

On August 6, 2019, Corteva, through its subsidiary Pioneer Hi-Bred International, Inc., made an investment in the Company's agriculture biologicals subsidiary, Lavie Bio Ltd., which included the contribution of all Corteva's holdings in its wholly owned subsidiary Taxon Biosciences, Inc. along with an amount of $10,000 in consideration for Lavie Bio Ltd.'s shares. This transaction included the following intangible assets: (see also Note 17f).

	Pipeline Products	Potential Products	Microorganisms Collection	Total
Cost:				
Balance on January 1, 2021	$ 7,028	$ 4,920	$ 5,500	$ 17,448
Additions	-	-	-	-
Balance on December 31, 2021	7,028	4,920	5,500	17,448
Accumulated Depreciation:				
Balance on January 1, 2021	$ 567	$ 356	$ 386	$ 1,309
Additions	404	253	275	932
Balance on December 31, 2021	971	609	661	2,241
Amortized cost on December 31, 2021	$ 6,057	$ 4,311	$ 4,839	$ 15,207

U.S. dollars in thousands (except share and per share data)

NOTE 11: - INTANGIBLE ASSETS, NET (Cont.)

	Pipeline Products	Potential Products	Microorganisms Collection	Total
Cost:				
Balance on January 1, 2020	$ 7,028	$ 4,920	$ 5,500	$ 17,448
Additions	-	-	-	-
Balance on December 31, 2020	7,028	4,920	5,500	17,448
Accumulated Depreciation:				
Balance on January 1, 2020	$ 162	$ 102	$ 110	$ 374
Additions	405	254	276	935
Balance on December 31, 2020	567	356	386	1,309
Amortized cost on December 31, 2020	$ 6,461	$ 4,564	$ 5,114	$ 16,139

Amortization expenses of intangible assets are classified in profit or loss in research and development, net.

NOTE 12: - LIABILITIES IN RESPECT OF GOVERNMENT GRANTS

	2021	2020
Balance on January 1,	$ 3,766	$ 3,362
Grants received	824	320
Royalties paid	(34)	(22)
Amounts recorded in profit or loss	(160)	106
Balance on December 31,	$ 4,396	$ 3,766

The Company received research and development grants from the IIA and undertook to pay royalties of 3% of revenues derived from research and development projects that were financed by the IIA, of up to 100% of the grants received. As of December 31, 2021, the Company received grants amounting to $8,646 (including accrued interest), of which $3,502 were repaid to date.

NOTE 13: - FINANCIAL INSTRUMENTS

a. Classification of financial instruments by fair value hierarchy:

	December 31,	
	2021	2020
Financial assets:		
Marketable securities – Level 1	$ 18,541	$ -
	$ 18,541	$ -

During 2021 and 2020, there were no transfers due to the fair value measurement of any financial instrument to or from Levels 1, 2 and 3.

U.S. dollars in thousands (except share and per share data)

NOTE 13: - FINANCIAL INSTRUMENTS (Cont.)

b. Financial risk factors:

The Company's operations are exposed to various financial risks, such as market risk (foreign currency risk, price risk), credit risk and liquidity risk. The Company's comprehensive risk management plan focuses on measures to minimize possible negative effects on the financial performance of the Company.

The Company's Board of Directors has provided guidelines for risk management, and specific policies for various risk exposures, such as foreign currency risk, interest-rate risk, credit risk, and the use of derivative financial instruments, non-derivative financial instruments, and excess-liquidity investments.

1. Market Risk:

a) Foreign currency risk:

The Company operates primarily in Israel and has an exchange rate risk as it incurs fixed expenses in NIS, which differs from its functional currency.

b) Price risk:

The Company has investments in bonds, classified as financial instruments, which are measured at fair value through profit and loss. Accordingly, the Company is exposed to a risk from changes in the fair value of these investments.

2. Credit Risk:

The Company holds cash and cash equivalents, short-term investments and other financial instruments with various financial institutions. Its policy is to spread its investments among various institutions. In accordance with this policy, the Company invests its funds with stable financial institutions.

The Company has no trade receivables balances past due, and accordingly has not recognized any provision for doubtful accounts.

3. Liquidity Risk:

The following table presents the repayment dates of the Company's financial liabilities, by contractual terms, in nominal amounts (including interest payments):

Balance on December 31, 2021:

	Up to 1 year	1 year to 2 years	2 years to 3 years	3 years to 4 years	4 years to 5 years	Over 5 years	Total
Trade payables	$ 1,463	$ -	$ -	$ -	$ -	$ -	$ 1,463
Employees and payroll accruals	2,662	-	-	-	-	-	2,662
Other payables	1,519	-	-	-	-	-	1,519
Leases liability	975	928	814	115	73	64	2,969
Liabilities in respect of government grants	89	233	490	847	1,449	1,359	4,467
	$ 6,708	$ 1,161	$ 1,304	$ 962	$ 1,522	$ 1,423	$ 13,080

U.S. dollars in thousands (except share and per share data)

NOTE 13: - FINANCIAL INSTRUMENTS (Cont.)

Balance on December 31, 2020:

	Up to 1 year	1 year to 2 years	2 years to 3 years	3 years to 4 years	4 years to 5 years	Over 5 years	Total
Trade payables	$ 863	$ -	$ -	$ -	$ -	$ -	$ 863
Employees and payroll accruals	2,535	-	-	-	-	-	2,535
Other payables	1,238	-	-	-	-	-	1,238
Leases liability	777	659	622	622	111	133	2,924
Liabilities in respect of government grants	72	177	291	557	948	2,639	4,684
	$ 5,485	$ 836	$ 913	$ 1,179	$ 1,059	$ 2,772	$ 12,244

c. Fair Value:

The carrying amounts of cash and cash equivalents, short-term investments, other receivables, trade payables and other payables approximate their fair values due to the short-term maturities of such instruments.

The fair value of the liabilities in respect of government grants is measured using a discount rate that reflects the applicable market rate of interest at the date the grants are received, which approximates the fair value at the respective balance sheet date.

The fair value of lease liability is measured using a discount rate that reflects the IBR of interest at the date of the contract.

d. Sensitivity tests relating to changes in market factors:

	December 31,	
	2021	2020
Sensitivity test to changes in the USD/NIS exchange rate:		
Gain (loss) from the change:		
Increase of 5% in exchange rate	$ (639)	$ (485)
Decrease of 5% in exchange rate	$ 639	$ 485
Sensitivity test to changes in the market price of listed securities:		
Gain (loss) from the change:		
Increase of 5% in market price	$ 927	$ -
Decrease of 5% in market price	$ (927)	$ -

Sensitivity tests and principal work assumptions:

The selected changes in the relevant risk variables were determined based on management's estimate as to reasonable possible changes in these risk variables.

U.S. dollars in thousands (except share and per share data)

NOTE 14: - COMMITMENTS AND CONTINGENT LIABILITIES

a. Claims:

As of December 31, 2021, the Company is not involved in any material claims.

b. Government grants:

The Company received research and development grants from the IIA. See Note 12. If no economic benefits are expected from the research activity, the royalty obligation is not recorded as a liability and instead is treated as a contingent liability in accordance with IAS 37. The grants from the IIA impose certain restrictions on the transfer outside of Israel of the underlying know-how and the manufacturing or manufacturing rights of the underlying products and technologies.

c. Canonic:

In December 2020, Canonic entered into a certain service agreement with a licensed medical cannabis cultivator (the "cultivator" and the "agreement"). According to the agreement, the cultivator will provide to Canonic plant growth services in Israel. As of December 31, 2021, Canonic committed to pay the cultivator for its future services an additional amount of approximately $50.

NOTE 15: - SEVERANCE PAY LIABILITY

Labor laws and the Severance Law require the Company to pay compensation to employees upon dismissal or retirement, or to make routine contributions in defined contribution plans pursuant to Section 14 of the Severance Law, as described below. The Company's liability is accounted for as a post-employment benefit. The Company's employee benefit liability is based on a valid labor agreement, the employee's salary, and the applicable terms of employment, which together generate a right to severance compensation.

Post-employment employee benefits are financed by deposits with defined deposit plans, as detailed below.

Contributions in accordance with Section 14 to the Severance Law release the Company from any additional liability to employees for whom said contributions were made. These contributions represent defined contribution plans.

	Year ended December 31,		
	2021	2020	2019
Expenses - defined contribution plan	$ 837	$ 665	$ 703

NOTE 16: - TAXES ON INCOME

a. Tax rates applicable to the Company and its subsidiaries:

1. The Israeli corporate income tax rate was 23% for all years presented.

U.S. dollars in thousands (except share and per share data)

NOTE 16: - TAXES ON INCOME (Cont.)

2. The Company's U.S. subsidiaries, Evogene Inc., Lavie Bio Inc., Lavie Tech Inc., Taxon Biosciences, Inc., and AgPlenus Inc., are subject to U.S. income taxes. During the years 2018 through 2021, the tax rates applicable to those companies were approximately 21% and 6.5% (federal tax and state tax, respectively, where those companies operate).

b. Tax assessments:

Evogene Ltd. and its subsidiary Casterra Ag Ltd. received assessments that are considered final, up to and including the 2016 tax year.

The Company's Israeli subsidiaries, Biomica Ltd., AgPlenus Ltd., Lavie Bio Ltd. and Canonic Ltd. have not received final tax assessments since their incorporation.

c. Carryforward losses for tax purposes and other temporary differences:

As of December 31, 2021, Evogene Ltd. and its Israeli subsidiaries have carryforward operating tax losses amounting to approximately $120,000 and $44,000, respectively, which can be carried forward for an indefinite period.

d. Deferred taxes:

The Company did not recognize deferred tax assets for carry-forward losses and other temporary differences, because their utilization in the foreseeable future is not probable.

e. Theoretical tax:

As the Company has incurred operating losses during the years ended December 31, 2021, 2020 and 2019 for which deferred taxes were not recorded, as mentioned in note 16d, the reconciliation between the tax expense, assuming that all the income and expenses, gains and losses in the statement of income were taxed at the statutory tax rate, and the taxes on income recorded in profit or loss, does not provide significant information and therefore is not presented.

NOTE 17: - SHAREHOLDERS' EQUITY

a. Share capital:

	December 31,			
	2021		2020	
	Authorized	Issued and Outstanding	Authorized	Issued and Outstanding
	Number of shares			
Ordinary shares of NIS 0.02 par value each	150,000,000	41,170,168	150,000,000	35,600,088

U.S. dollars in thousands (except share and per share data)

NOTE 17: - SHAREHOLDERS' EQUITY (Cont.)

b. Changes in share capital:

Share capital issued and outstanding:

	Number of shares	NIS par value
Outstanding on January 1, 2020	25,754,297	515,086
Exercise of options	43,438	869
Issuance of ordinary shares	9,802,353	196,047
Outstanding on December 31, 2020	35,600,088	712,002
Exercise of options and vesting of restricted share units (“RSUs”)	156,120	3,122
Exercise of pre-funded warrants	883,534	17,671
Issuance of ordinary shares	4,530,426	90,609
Outstanding on December 31, 2021	41,170,168	823,404

Issuance of shares and pre-funded warrants:

1. On September 2, 2020, the Company issued 5,882,353 ordinary shares in a registered direct offering. Each ordinary share was sold at $1.70 per share resulting in gross proceeds of $10,000.

2. On November 2, 2020, the Company completed a second registered direct offering with certain institutional investors for the purchase of 3,920,000 ordinary shares at a share price of $2.50 per ordinary share and 883,534 pre-funded warrants with an exercise price of $0.01 per share at price of $2.49 per warrant, resulting in gross proceeds of $12,000. According to the agreement, the holder can choose settlement in cash or by exchanging shares for cash. According to the provisions of IAS 32, "Financial Instruments: Presentation", these pre-funded warrants are accounted for as a liability and measured at fair value according to IFRS 9.

3. On January 4, 2021, the 883,534 pre-funded warrants were exercised into 883,534 of the Company's ordinary shares at an exercise price of $0.01 per pre-funded warrant for a total amount of $9 (see Note 22b).

4. On January 14, 2021, the Company entered a Controlled Equity Offering Sales Agreement. pursuant to which it issued 3,803,594 ordinary shares during January and February 2021, in an at-the-market (“ATM”) offering, with a weighted average selling price of $7.36 per share, resulting in gross proceeds of approximately $28,000.

U.S. dollars in thousands (except share and per share data)

NOTE 17: - SHAREHOLDERS' EQUITY (Cont.)

5. On February 19, 2021, the Company entered a new Controlled Equity Offering Sales Agreement. In accordance with the terms of the sales agreement, from time to time the Company may offer and sell its ordinary shares in an ATM offering having an aggregate offering price of up to $50,000. During April through September 2021, 726,832 ordinary shares were issued through the ATM offering, with a weighted average selling price of $3.64 per share, resulting in gross proceeds of approximately $2,600.

c. Rights attached to shares:

The Company's ordinary shares have voting rights at the general meeting, rights to dividends, rights upon liquidation of the Company and the right to nominate directors in the Company.

d. Rights attached to pre-funded warrants:

Until the pre-funded warrants are exercised into ordinary shares, there are no rights with respect to the ordinary shares underlying such pre-funded warrants. Upon exercise of the pre-funded warrants into ordinary shares, the holder is entitled to exercise the rights attached to shares only as to matters for which the record date occurs after the exercise date.

e. Capital management in the Company:

The Company's objectives in managing capital are as follows:

To maintain its ability to ensure the continuity of the business, and thus to generate a return to equity holders, investors and other parties. The Company manages its capital structure and makes adjustments following changes in economic conditions and the risk-nature of its operations. In order to maintain or to adjust the necessary capital structure, the Company takes various steps, such as raising funds by capital issues.

f. Composition of non-controlling interests in the statement of financial position:

	December 31,	
	2021	2020
Balance on January 1,	$ 10,837	$ 10,073
Forfeiture of non-controlling interests regarding share-based compensation	(536)	(238)
Share-based compensation	1,717	3,742
Exercise of subsidiary options	378	82
Benefit to non-controlling interests regarding Share-based compensation	23	10
Loss attributed to non-controlling interests	(2,652)	(2,832)
Balance on December 31,	$ 9,767	$ 10,837

U.S. dollars in thousands (except share and per share data)

NOTE 17: - SHAREHOLDERS' EQUITY (Cont.)

Issuance of shares by subsidiary:

1. On August 6, 2019, Corteva, through its subsidiary Pioneer Hi-Bred International, Inc., made an investment in the Company's agriculture biologicals subsidiary, Lavie Bio Ltd., which included the contribution of all Corteva's holdings in its wholly owned subsidiary Taxon Biosciences, Inc. along with an amount of $10,000. Upon consummation of the foregoing transactions, Corteva was issued 27.84% of Lavie Bio Ltd.'s equity while Evogene Ltd. held 72.16% of Lavie Bio Ltd.'s equity following such investment. As a result, the Company recorded a share premium and a non-controlling interest in the amounts of $17,406 and $10,042, respectively.

2. On July 24, 2020, 36,520 options were exercised in AgPlenus Ltd. into its ordinary shares. Upon the exercise of options, the non-controlling interest was issued 1.66% of AgPlenus Ltd.'s equity. As a result, the Company recorded an increase in non-controlling interest in the amount $82.

3. On November 16, 2021, 203,826 options were exercised in Lavie Bio Ltd. into ordinary shares. Upon the exercise of options, the non-controlling interest was issued 1.99% of Lavie Bio Ltd.'s equity. As a result, the Company recorded an increase in non-controlling interest in the amount of $378.

NOTE 18: - SHARE- BASED COMPENSATION

a. Expenses recognized in the financial statements:

The expense recognized in the Company's financial statements for services provided by employees and service-providers is as follows:

	Year ended December 31,		
	2021	2020	2019
Share-based compensation – Attributable to equity holders of the Company	$ 892	$ 355	$ 814
Share-based compensation – Attributable to non-controlling interests (see Note 17f)	1,717	3,742	764
	$ 2,609	$ 4,097	$ 1,578

b. The Company maintains four share option and incentive plans: the Evogene Ltd. 2002 Share Option Plan, the Evogene Ltd. 2003 Key Employee Share Incentive Plan, the Evogene Ltd. 2013 Share Option Plan and the Evogene Ltd. 2021 Share Incentive Plan (the "2021 Plan"). All such option and incentive plans provide for the grant of options to purchase the Company's ordinary shares that generally expire 10 years from the grant date.

U.S. dollars in thousands (except share and per share data)

NOTE 18: - SHARE- BASED COMPENSATION (Cont.)

c. Evogene Ltd. share-based payment plan for employees, directors and consultants:

During 2021, 2020 and 2019, the board of directors of the Company approved to grant its employees, directors and consultants 987,750, 1,046,500 and 750,000 options, respectively. The fair value of the options granted in 2021, determined at their grant date using the binomial model, was approximately $957. The fair value of the options granted in 2020 and 2019 was approximately $629 and $390, respectively.

d. Evogene Ltd. share options activity:

The following table summarizes the number of share options, the weighted average exercise price, and the changes that were made in the option plans to employees, consultants and directors of the Company:

	2021		2020		2019	
	Number of options	Weighted average exercise prices ($)	Number of options	Weighted average exercise prices ($)	Number of options	Weighted average exercise prices ($)
Outstanding on January 1,	4,030,702	6.24	4,335,017	7.08	4,389,523	7.46
Granted	987,750	3.69	1,046,500	1.37	750,000	1.67
Exercised	(151,995)	2.81	(43,438)	2.45	-	-
Forfeited	(632,507)	9.06	(1,307,377)	6.98	(804,506)	7.13
Outstanding at December 31,	4,233,950	5.54	4,030,702	6.24	4,335,017	7.08
Exercisable at December 31,	2,558,643	7.31	2,556,360	8.54	2,855,405	9.09

The following table summarizes information about share options outstanding at December 31, 2021:

	Options outstanding		
Range of exercise prices ($)	Number outstanding	Average remaining contractual life	Weighted average exercise price
0.54 - 1.80	872,927	7.79	1.36
1.84 - 3.40	1,132,750	8.93	2.69
3.43 - 4.98	359,373	6.58	3.83
5.73 -8.03	939,400	4.08	6.05
8.49 - 10.77	228,000	2.40	9.41
12.14 - 22.85	701,500	2.10	14.30
Total	4,233,950	5.94	5.54

The weighted average outstanding remaining contractual term of the options as of December 31, 2021 is 5.94 years (as of December 31, 2020, it was 6.31 years).

U.S. dollars in thousands (except share and per share data)

NOTE 18: - SHARE- BASED COMPENSATION (Cont.)

The weighted average fair value of options granted during 2021 was $0.97 (for options granted during 2020, the weighted average fair value was $0.60).

The fair value of Company share options granted to employees, directors and consultants for the years ended December 31, 2021, 2020 and 2019 was estimated using the binomial model with the following assumptions:

	2021	2020	2019
Dividend yield (%)	-	-	-
Expected volatility of the share prices (%)	43-47	34-41	33-34
Risk-free interest rate (%)	0.9-1.9	0.2-0.9	0.97-1.51
Suboptimal factor	1.8-2	1.8-2	1.8-2
Post-vesting forfeiture rate (%)	5-10	5-10	5-10

The expected volatility of the share prices reflects the assumption that the historical volatility of the share prices is reasonably indicative of expected future trends.

e. Evogene Ltd. RSUs activity:

The 2021 Plan also provides for the grant of restricted shares and RSUs. During 2021, the board of directors of the Company approved to grant its employees, directors and consultants 270,900 RSUs. The fair value of the RSUs granted in 2021, determined at their grant date using the binomial model, was approximately $622.

The following table summarizes the number of RSUs, and the changes that were made in the RSU's plan to employees, consultants and directors of the Company during 2021:

	Number of RSUs	Weighted average grant date fair value
Outstanding on January 1, 2021	-	-
Granted	270,900	2.3
Vested	(4,125)	2.42
Forfeited	(19,000)	2.42
Outstanding at December 31, 2021	247,775	2.28

U.S. dollars in thousands (except share and per share data)

NOTE 18: - SHARE- BASED COMPENSATION (Cont.)

f. The Company's subsidiaries maintain share option and incentive plans with similar terms and conditions.

The following table summarizes the number of share options, the weighted average exercise price, and the changes that were made in the option plans to employees, consultants and directors of the Company's subsidiaries:

	2021		2020	
	Number of options	Weighted average exercise prices ($)	Number of options *)	Weighted average exercise prices ($) *)
Outstanding on January 1,	1,798,780	0.88	460,038	0.13
Granted	318,302	1.64	1,433,648	1.08
Exercised	(203,826)	0.03	(36,520)	0.25
Forfeited	(11,264)	0.21	(58,386)	0.20
Outstanding on December 31,	1,901,992	1.39	1,798,780	0.88
Exercisable on December 31,	730,753	1.62	785,236	0.55

*) Number of options and weighted average exercise price are adjusted to represent a 1:10 split in Canonic Ltd.'s ordinary shares on June 8, 2021, effected through issuance of bonus options and a proportional decrease in the exercise price of the options.

g. The fair value of Company's subsidiaries' share options granted to employees, directors and consultants for the years ended December 31, 2021 and 2020 was estimated using the binomial model with the following assumptions:

	2021	2020
Dividend yield (%)	-	-
Expected volatility of the share prices (%)	65-96	46-90
Risk-free interest rate (%)	0.11-1.56	0.07-0.9
Suboptimal factor	1.2-2.5	1.8-2
Post-vesting forfeiture rate (%)	5-10	5-10

NOTE 19: - STATEMENTS OF PROFIT OR LOSS - ADDITIONAL INFORMATION

a. Cost of revenues:

	Year ended December 31,		
	2021	2020	2019
Salaries and benefits	$ 514	$ 508	$ 242
Materials and sub-contractors	253	66	63
Other	-	-	29
	$ 767	$ 574	$ 334

U.S. dollars in thousands (except share and per share data)

NOTE 19: - STATEMENTS OF PROFIT OR LOSS - ADDITIONAL INFORMATION (Cont.)

b. Research and development, net:

	Year ended December 31,		
	2021	2020	2019
Salaries and benefits	$ 10,841	$ 9,198	$ 9,811
Share-based compensation	1,348	2,227	782
Materials and sub-contractors	5,709	3,817	2,674
Plant growth and greenhouse maintenance	802	628	337
Rentals and office maintenance	682	684	428
Depreciation and amortization	2,234	2,709	2,742
Loss from derecognition of property, plant and equipment	121	-	12
Other	46	45	579
Participation in respect of government grants	(658)	(2,021)	(1,574)
	$ 21,125	$ 17,287	$ 15,791

c. Business development:

	Year ended December 31,		
	2021	2020	2019
Salaries and benefits	$ 1,424	$ 1,002	$ 907
Share-based compensation	574	1,115	442
Travel	39	58	168
Legal	87	35	133
Other	614	462	379
	$ 2,738	$ 2,672	$ 2,029

d. General and administrative:

	Year ended December 31,		
	2021	2020	2019
Salaries and benefits	$ 2,866	$ 2,362	$ 1,922
Share-based compensation	687	755	354
Professional fees	3,484	2,023	1,151
Other	216	181	338
	$ 7,253	$ 5,321	$ 3,765

U.S. dollars in thousands (except share and per share data)

NOTE 19: - STATEMENTS OF PROFIT OR LOSS - ADDITIONAL INFORMATION (Cont.)

e. Financing income and expenses

Financing income:

	Year ended December 31,		
	2021	2020	2019
Exchange differences	$ 1,525	$ 1,361	$ 1,432
Interest income	291	230	759
Change in the fair value of marketable securities	119	-	439
	$ 1,935	$ 1,591	$ 2,630

Financing expenses:

	Year ended December 31,		
	2021	2020	2019
Bank expenses and commissions	$ 88	$ 32	$ 52
Exchange differences	460	350	160
Change in the fair value of marketable securities	181	34	-
Pre-funded warrants issuance expenses	-	211	-
Revaluation of pre-funded warrants	212	1,944	-
Lease liability interest	315	237	302
Revaluation of liabilities in respect of government grants	158	143	41
	$ 1,414	$ 2,951	$ 555

NOTE 20: - LOSS PER SHARE

Details of the number of shares and loss used in the computation of loss per share:

	Year ended December 31,					
	2021		2020		2019	
	Weighted number of shares *)	Loss attributable to equity holders of the Company	Weighted number of shares *)	Loss attributable to equity holders of the Company	Weighted number of shares *)	Loss attributable to equity holders of the Company
Number of shares and loss	40,433,303	(27,793)	28,158,779	(23,374)	25,754,297	(18,112)

*) To compute diluted loss per share, potential ordinary shares (detailed below) have not been taken into account due to their anti-dilutive effect:

4,233,950 options to employees under share-based payment plans

U.S. dollars in thousands (except share and per share data)

NOTE 21: - OPERATING SEGMENTS

a. General:

The Company operates across several market segments, including human health, agriculture, and other industrial applications. The agriculture segment consists of the certain parent Company's activities and two of the Company's subsidiaries, Lavie Bio Ltd. and AgPlenus Ltd. The human health segment consists of the Company's subsidiaries, Biomica Ltd. and Canonic Ltd. The industrial applications segment consists of the Company's subsidiary Casterra Ag Ltd. The segments were determined on the basis of information considered by the Chief Operating Decision-Maker ("CODM") for purposes of decision-making on the allocation of resources and evaluation of performance. The following Company's segments are engaged in business activities for which they earn revenues and incur expenses, their results are reviewed by the CODM and discrete financial information is available:

Agriculture segment	-	Develops seed traits, ag-chemical products, and ag-biological products to improve plant performance.
Industrial applications segment	-	Develops improved castor bean seeds to serve as a feedstock source for other industrial uses.
Human health segment	-	Discovers and develops human microbiome-based therapeutics and cannabis activity.
Unallocated	-	Other corporate expenses and general development of enabling technologies discovery and optimization.

Each segment's performance is determined based on operating loss reported in the financial statements. The results of a segment reported to the CODM include items attributed directly to a segment, as well as other items, which are indirectly attributed using reasonable assumptions and exclude share-based compensation charges as they are not considered in the internal operating plans and measurement of the segment's financial performance.

b. The following table presents our revenues and operating loss by segments:

	Agriculture	Industrial application	Human health	Unallocated	Total
For the Year Ended December 31, 2021					
Revenues	$ 628	$ 40	$ 183	$ 79	$ 930
Operating loss	$ (12,248)	$ (169)	$ (10,087)	$ (8,449)	$ (30,953)
Net financing income					$ 521
Loss before taxes on income					$ (30,432)

U.S. dollars in thousands (except share and per share data)

NOTE 21: - OPERATING SEGMENTS (Cont.)

	Agriculture	Industrial application	Human health	Unallocated	Total
For the Year Ended December 31, 2020					
Revenues	$ 862	$ 33	$ 75	$ 70	$ 1,040
Operating loss	$ (8,687)	$ (333)	$ (4,669)	$ (11,125)	$ (24,814)
Net financing expenses					$ (1,360)
Loss before taxes on income					$ (26,174)

	Agriculture	Industrial application	Human health	Unallocated	Total
For the Year Ended December 31, 2019					
Revenues	$ 651	$ 26	$ -	$ 76	$ 753
Operating loss	$ (10,062)	$ (419)	$ (3,219)	$ (7,466)	$ (21,166)
Net financing income					$ 2,075
Loss before taxes on income					$ (19,091)

c. Major customers:

Revenues from major customers each of whom amounts to 10% or more of total revenues. The revenues from major customers detailed below were recorded in the Agriculture segment:

	Year ended December 31,		
	2021	2020	2019
Customer A (subsidiary shareholder)	35%	48%	33%
Customer B	-	-	24%
Customer C	-	-	13%
Customer D	*) -	*)-	13%
Customer E	20%	17%	-
Customer F	17%	-	-

*) Represents an amount lower than 10%.

See also Note 22a.

U.S. dollars in thousands (except share and per share data)

NOTE 21: - OPERATING SEGMENTS (Cont.)

d. Geographical information:

Revenues based on the location of the customers, are as follows:

	Year ended December 31,		
	2021	2020	2019
United States	56%	65%	33%
Israel	38%	22%	35%
Brazil	2%	11%	28%
Other	4%	2%	4%
	100%	100%	100%

The carrying amounts of non-current assets (right-of-use-assets, property, plant and equipment property and intangible assets) in the Company's country of domicile (Israel) and in the United States based on the location of the assets, are as follows:

	December 31,		
	2021	2020	2019
United States	81%	82%	79%
Israel	19%	18%	21%
	100%	100%	100%

NOTE 22: - BALANCES AND TRANSACTIONS WITH EXECUTIVE OFFICERS AND CERTAIN SHAREHOLDERS

a. As reported by the shareholders, and based on publicly available information, the Company believes that as of December 31, 2021, ARK Investment Management LLC holds approximately 6.01% of the Company's ordinary shares and Corteva (through its subsidiary Pioneer Hi-Bred International, Inc.) holds 27.28% of the Company's subsidiary shares)Lavie Bio Ltd.'s(. In addition, Corteva is a major customer (see Note 21c, customer A).

b. Balances:

Balance at December 31, 2021:

	Executive officers	Certain shareholders
Receivables	$ -	$ 603
Other payables	$ 491	$ -

U.S. dollars in thousands (except share and per share data)

NOTE 22: - BALANCES AND TRANSACTIONS WITH EXECUTIVE OFFICERS AND CERTAIN SHAREHOLDERS (Cont.)

Balance at December 31, 2020:

	Executive officers	Certain shareholder
Receivables	$ -	$ 1,078
Pre-funded warrants	$ -	$ 4,144
Other payables	$ 739	$ 49
Other advances (see Note 23a.)	-	$ 9

Balance at December 31, 2019:

	Executive officers	Certain shareholder
Receivables	$ -	$ 539
Other payables	$ 477	$ -

c. Benefits to directors:

	Year ended December 31,		
	2021	2020	2019
Compensation to directors not employed by the Company or on its behalf	$ 279	$ 268	$ 254
Number of directors that received the above compensation by the Company	6	6	6

d. Salary and Benefits to Executive officers:

	Year ended December 31,		
	2021	2020	2019
Salary and related benefits	$ 2,429	$ 2,385	$ 1,960
Share-based compensation	731	1,789	1,070
	$ 3,160	$ 4,174	$ 3,030
Number of people that received salary and benefits	11	11	8

U.S. dollars in thousands (except share and per share data)

NOTE 22: - BALANCES AND TRANSACTIONS WITH EXECUTIVE OFFICERS AND CERTAIN SHAREHOLDERS (Cont.)

e. Transactions:

For the year ended December 31, 2021:

	Executive officers	Certain shareholders
Revenues	$ -	$ 329
Research and development expenses (participation)	541	(1,892)
Business development expenses	1,210	-
General and administrative expenses	1,409	-
Financing expenses	$ -	$ 212

For the year ended December 31, 2020:

	Executive officers	Certain shareholder
Revenues	$ -	$ 500
Cost of revenues	-	17
Research and development expenses (participation)	978	(1,723)
Business development expenses	1,756	-
General and administrative expenses	1,440	-
Financing expenses	$ -	$ 1,944

For the year ended December 31, 2019:

	Executive officers	Certain shareholders
Revenues	$ -	$ 250
Research and development expenses (participation)	669	(1,280)
Business development expenses	1,250	-
General and administrative expenses	$ 1,111	$ -

EXHIBIT 4.6

Appendix A

Evogene Ltd. Officers Compensation Policy

COMPENSATION POLICY

EVOGENE LTD.

Compensation Policy for Executive Officers and Directors

(As Adopted on August 10, 2021)

A. Overview and Objectives

1. **Introduction**

This document sets forth the Compensation Policy for Executive Officers and Directors (this "**Compensation Policy**" or "**Policy**") of Evogene Ltd. ("**Evogene**" or the "**Company**"), in accordance with the requirements of the Companies Law, 5759-1999 (the "**Companies Law**").

Compensation is a key component of Evogene's overall human capital strategy to attract, retain, reward, and motivate highly skilled individuals that will enhance Evogene's value and otherwise assist Evogene 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 Evogene'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, non-employee members of the Evogene's Board (and such committees formed by the Board).

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 that will be approved following the date on which this Policy is adopted and shall serve as Evogene's Compensation Policy for three (3) years, commencing as of its adoption, unless amended earlier.

The Compensation Committee and the Board of Directors of Evogene (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.

In determining the terms of the compensation pursuant to this Policy, the Compensation Committee will take into consideration information prepared and presented by the Company's management, Company's management's recommendations, as well as information that may be provided by third party advisors who may be engaged by the Compensation Committee from time to time.

2. **Objectives**

Evogene's objectives and goals in setting this Policy are to attract, motivate and retain highly experienced leaders who will contribute to Evogene'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 Evogene'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 Evogene's shareholders in order to enhance shareholder value;

2.2. to align a significant portion of the Executive Officers' compensation with Evogene'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;

3.5. change of control terms; and

3.6. 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 Evogene'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 target bonus and equity-based compensation per vesting annum (based on the fair market value at the time of grant calculated on a linear basis) of each Executive Officer shall not exceed 90% of such Executive Officer's total compensation package for such year.

5. **Intra-Company Compensation Ratio**

5.1. In the process of drafting and updating this Policy, Evogene'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 Evogene'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 Evogene were examined and will continue to be examined by Evogene 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 Evogene.

B. <u>Base Salary and Benefits</u>

6. **Base Salary**

6.1. A base salary provides stable compensation to Executive Officers and allows Evogene 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, the past performance of each Executive Officer and other relevant factors.

6.2. Since a competitive base salary is essential to Evogene's ability to attract and retain highly skilled professionals, Evogene 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 Evogene's, as much as possible, while considering, among others, such companies' size and characteristics including their revenues, profitability rate, growth rates, market capitalization, number of employees and operating arena (in Israel and globally), the list of which shall be reviewed and approved by the Compensation Committee from time to time. To that end, Evogene shall utilize as a reference, comparative market data and practices, which will include a compensation survey that analyses and compares the level of the overall compensation package offered to an Executive Officer of the Company with compensation packages in positions with similar scope and responsibilities (to that of the relevant officer) in such companies. Such compensation survey may be conducted internally or through an external independent consultant.

6.3. The Compensation Committee (and the Board, if required by law) may periodically consider and approve base salary adjustments for Executive Officers. The main considerations for approving 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. When approving salary adjustments for the Executive Officers, 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. Any limitation herein based on the annual base salary shall be calculated based on the monthly base salary applicable at the time of consideration of the respective grant or benefit.

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. paid time off / vacation days in accordance with market practice (as relevant in the domicile of the applicable Executive Officer);

7.1.2. sick days in accordance with domicile market practice;

7.1.3. convalescence pay according to applicable law;

7.1.4. monthly remuneration for a study fund, per domicile market practice, and as allowed by applicable law and with reference to Evogene's practice and the practice in peer group companies;

7.1.5. Evogene 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 Evogene's policies and procedures and the practice in peer group companies (including contributions on bonus payments); and

7.1.6. Evogene shall contribute on behalf of the Executive Officer towards work disability insurance, per domicile market practice, and as allowed by applicable law and with reference to Evogene's policies and procedures and to the practice in peer group companies.

7.2. Executive Officers will receive domicile-applicable benefits, based on, and subject to, the principles of this Policy, as customary and as applicable in the relevant jurisdiction in which they are employed, and will not be entitled to any duplicates or such benefits that are not applicable in such domicile or any compensation 'in-lieu' of benefits provided in other domiciles. Such customary benefits shall be determined based on the methods described in Section 6.2 of this Policy (with the necessary changes and adjustments).

7.3. In events of relocation or repatriation of an Executive Officer to another geography, such Executive Officer may receive customary benefits applicable in the relevant jurisdiction in which he or she is employed following the relocation, in lieu of the benefits otherwise applicable to the relocating Executive Officer in the origin country, but may be entitled to additional payments to reflect adjustments in cost of living. Such benefits may include reimbursement for out-of-pocket one-time payments and other ongoing expenses, such as housing allowance, car allowance, home leave visit, etc.

7.4. Evogene may offer additional benefits to its Executive Officers, comparable to customary market practices, such as, but not limited to: cellular and land line phone benefits, company car and travel benefits, medical insurance, participation in daily alimentation expenses, 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 Evogene's policies and procedures, and shall be set on a domicile-basis.

C. Cash Bonuses

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 Evogene's objectives and business goals. Therefore, annual cash bonuses will reflect a pay-for-performance element, with payout eligibility and levels determined based on actual financial and operational results, in addition to other factors the Compensation Committee may establish as a policy parameter.

8.2. An annual cash bonus may be awarded to Executive Officers upon the attainment of pre-set periodical objectives and individual targets as may be approved by the Compensation Committee (and, if required by law, by the Board) for each fiscal year, or in connection with such Executive Officer's engagement, in case of newly hired Executive Officers, taking into account Evogene's short and long-term goals, as well as its compliance and risk management policies. The Compensation Committee (and, if required by law, the Board) may approve applicable minimum thresholds that must be met for entitlement to the annual cash bonus (all or any portion thereof) and the principle formula for calculating any annual cash bonus payout, with respect to each fiscal year. In special circumstances (e.g., regulatory changes, significant changes in Evogene's business environment, a significant organizational change, a significant merger and acquisition event, etc.), the Compensation Committee (and the Board, if required by law) may approve a modification of the objectives and/or their relative weights during the fiscal year, or of the payouts following the conclusion of the 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 (but shall not be obligated to) pay such Executive Officer an annual cash bonus (which may or may not be pro-rated), taking into consideration any contractual commitments or obligations.

8.4. The actual annual bonus paid to the Executive Officers shall be approved by the Compensation Committee (and the Board, if required by law).

9. **Annual Cash Bonuses - The Formula**

9.1. The performance objectives for the annual cash bonus of Evogene's Executive Officers, other than the CEO, shall be determined by the Compensation Committee (and the Board, if required by law), and may be based on 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, among other things, on overall company performance measures, which are based on actual financial and operational results, such as (by way of example and not by way of limitation) sales, revenues, operating income, cash flow or Company's annual operating plan and long-term plan and may further include, divisional or personal objectives which may include operational objectives, such as (by way of example and not by way of limitation) market share, initiation of new markets and operational efficiency, customer focused objectives, project milestone objectives and objectives related to human capital. The Company may also grant annual cash bonuses to Evogene's Executive Officers on a discretionary basis.

9.2. The annual cash bonus of Evogene's CEO will be mainly based on performance measurable objectives. Such performance measurable objectives will be determined by the Compensation Committee (and the board, if required by law) and will be based on company and/or 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 based, among other things, on overall company performance measures, which are based on actual financial and operational results, such as (by way of example and not by way of limitation) revenues, sales, operating income, cash flow or Company's annual operating plan and long-term plan.

9.3. The less significant part of the annual cash bonus granted to Evogene's CEO, and in any event not more than 25% 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.

9.4. The target annual cash bonus that an Executive Officer will be entitled to receive for any given fiscal year, will be up to 50% of such Executive Officer's annual base salary. In case of over achievement of the objectives, the annual cash bonus may be increased, provided that the total annual cash bonus that an Executive Officer will be entitled to receive for any given fiscal year will not exceed 75% of such Executive Officer's annual base salary, or 100% of his or her annual base salary with respect to the CEO.

10. **Other Bonuses**

10.1. Special Bonus. Evogene may grant its Executive Officers a special bonus as an award for special achievements (such as in connection with mergers and acquisitions, offerings, entering a strategic collaboration, or achieving target budget or business plan under exceptional circumstances) or as a retention award, subject to any approval as may be required by the Companies Law (a "**Special Bonus**"). Any such Special Bonus will not exceed 100% of the Executive Officer's annual base salary. Special Bonus can be paid, in whole or in part, in equity in lieu of cash. Executive Officers may be entitled to receive a Special Bonus even where the achievement is completed within three (3) months after the date on which such Executive Officer's service with the Company terminated, provided that the circumstances for such termination are not such that qualify for withdrawal of severance pay in accordance with the Severance Pay Law, 1963.

10.2. Signing Bonus. Evogene may grant a newly recruited Executive Officer a signing bonus, subject to any approval as may be required by the Companies Law (a "**Signing Bonus**"). Any such Signing Bonus will not exceed 50% of the Executive Officer's annual base salary.

10.3. Relocation/ Repatriation Bonus. Evogene may grant its Executive Officers a special bonus in the event of relocation or repatriation of an Executive Officer to another geography (the "**Relocation Bonus**"). Any such Relocation bonus will include customary benefits associated with such relocation and its monetary value will not exceed 100% of the Executive Officer's annual base salary.

11. **Compensation Recovery ("Clawback")**

11.1. In the event of an accounting restatement, Evogene shall be entitled to recover from its Executive Officers bonus compensation or performance-based equity compensation in the amount in which such compensation exceeded what would have been paid based on the financial statements, as restated, provided that a claim is made by Evogene prior to the second anniversary following the filing of such 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 or a separate contractual obligation.

D. Equity Based Compensation

12. **The Objective**

12.1. The equity-based compensation for Evogene's Executive Officers will be designed in a manner consistent with the underlying objectives of the Company 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 Evogene 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 Evogene is intended to be in a form of share options and/or other equity-based awards, such as RSUs or performance stock units, 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 (other than bonuses paid in equity in lieu of cash) shall normally 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 or in a specific compensation plan approved by the Compensation Committee and the Board, grants to Executive Officers other than non-employee directors shall vest based on time, gradually over a period of at least 2 years, or based on performance. The exercise price of options shall be determined in accordance with Evogene's policies as may be adopted from time to time, the main terms of which shall be disclosed as required by law or other applicable accounting requirements.

12.4. All other terms of the equity awards shall be in accordance with Evogene's incentive plans and other related practices and policies. Accordingly, the Board may, following approval by the Compensation Committee, make modifications to such awards consistent with the terms of such incentive plans, 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. Notwithstanding the aforementioned in Section 13.1, the total fair market value of an annual equity-based compensation at the time of grant (not including bonuses paid in equity in lieu of cash) shall not exceed with respect to each Executive Officer 500% of his or her annual base salary.

13.3. The fair market value of the equity-based compensation for the Executive Officers will be determined based on the market price of Evogene's ordinary shares on or around the time of the grant or according to other acceptable valuation practices at the time of grant, in each case, as determined by the Compensation Committee and the Board.

E. Retirement and Termination of Service Arrangements

14. **Advanced Notice Period**

Evogene may provide any Executive Officer, according to his/her seniority in the Company, his/her contribution to the Company's goals and achievements and the circumstances of retirement, a prior notice of termination of up to six (6) months, during which the Executive Officer may be entitled to all of the compensation elements, and to the continuation of vesting of his/her equity-based compensation. Such advance notice may or may not be provided in addition to severance, provided, however, that the Compensation Committee shall take into consideration the Executive Officer's entitlement to advance notice in establishing any entitlement to severance and vice versa.

15. **Adjustment Period**

Evogene may provide an additional adjustment period of up to six (6) months to any Executive Officer according to his/her seniority in the Company, his/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/her equity-based compensation.

16. **Non-Compete Grant**

Upon termination of employment and subject to applicable law, Evogene may grant to its Executive Officers a non-compete grant as an incentive to refrain from competing with Evogene 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 four (4). The Board shall consider the existing entitlements of the Executive Officer in connection with the consideration of any non-compete grant.

17. **Limitation on Retirement and Termination of Service Arrangements**

The total non-statutory payments under Sections 14-16 above for a given Executive Officer shall not exceed the Executive Officer's monthly base salary multiplied by ten (10). The limitation under this Section 18 does not apply to benefits and payments provided under other chapters of this Policy.

18. **Additional Retirement and Termination Benefits**

Evogene 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, including acceleration of unvested equity awards and extension of the exercise period of equity awards.

F. Exculpation, Indemnification and Insurance

19. **Exculpation**

Evogene 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 Evogene, to the fullest extent permitted by applicable law.

20. **Insurance and Indemnification**

20.1. Evogene 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 Evogene, all subject to applicable law and the Company's articles of association.

20.2. Evogene will provide directors' and officers' liability insurance (including for liability pursuant to a future public offering of securities) and/or may enter into a "run off" insurance policy of up to seven (7) years, with the same or any other insurer (collectively, an **"Insurance Policy"**) for its directors and Executive Officers as follows:

20.2.1. The limit of liability of the insurer shall not exceed the greater of $100 million or 50% of the Company's shareholders equity based on the most recent financial statements of the Company at the time of approval by the Compensation Committee (the "**Insurance Limit**"); and

20.2.2. The Insurance Policy, as well as the Insurance Limit and the premium for each extension or renewal (of any and all of the insurance policies described in this Section 20.2) shall be approved by the Compensation Committee (and, if required by law, by the Board) which shall determine that the sums are reasonable considering Evogene'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.

G. Arrangements upon Change of Control

21. The following benefits may be granted to any Executive Officers (in addition to, or in lieu of, the benefits applicable in the case of any retirement or termination of service) upon or in connection with a "Change of Control" (as such term is defined below) or, where applicable, in the event of a Change of Control following which the employment of the Executive Officer is terminated or adversely adjusted in a material way:

21.1. Vesting acceleration of outstanding equity-based awards, comparable to customary market practices;

21.2. Extended exercise period of equity-based compensation following the date of employment termination, comparable to customary market practices; and

21.3. Continued base salary and benefits following the date of employment termination for a period comparable to customary market practices (the "**Additional Adjustment Period**"). For avoidance of doubt, such Additional Adjustment Period may 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 17 of this Policy.

21.4. A cash bonus in an amount comparable to customary market practices.

Unless otherwise defined in the respective incentive plan or employment agreement, a "Change of Control" shall mean (i) a sale of all or substantially all of the assets of the Company; (ii) a sale (including an exchange) of all or substantially all of the shares of the Company; (iii) a merger, consolidation or like transaction of the Company with another corporation in which the holders of the Company's outstanding share capital immediately before consummation of such merger, consolidation or like transaction hold, immediately after consummation of such merger, consolidation or like transaction, either (x) less than a majority of the voting power of the surviving entity or (y) less than a majority of the voting power of an entity that wholly owns, directly or indirectly, the surviving entity; or (iv) such other transaction that is either defined as such in the respective incentive plan or employment agreement or determined as such by the Board.

H. Board of Directors Compensation

22. All Evogene's non-employee Board members may be entitled to an annual cash fee retainer of up to $70,000 (and up to $140,000 for the chairperson of Evogene's Board), and in addition an annual committee membership fee retainer of up to $20,000, or an annual committee chairperson cash fee retainer of up to $30,000 (it is being clarified that the payment for the chairpersons would be in lieu of (and not in addition) to the payments referenced above for committee membership).

23. The compensation of the Company's external directors, if elected, 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.

24. Each non-employee member of Evogene's Board may be granted equity-based compensation. The total fair market value of a "welcome" or an annual equity-based compensation at the time of grant shall not exceed $350,000. Such equity-based awards shall vest in accordance with a vesting schedule that may vary from a period of 6 months to 4 years.

25. All other terms of the equity awards shall be in accordance with Evogene's incentive plans and other related practices and policies. Accordingly, the Board may, following approval by the Compensation Committee, make modifications to such awards consistent with the terms of such incentive plans, subject to any additional approval as may be required by the Companies Law.

26. In addition, members of Evogene**'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 Section H will not apply to directors who serve as Executive Officers.

I. Miscellaneous

28. Nothing in this Policy shall be deemed to grant to any of Evogene**'s** Executive Officers, employees, directors, or any third party any right or privilege in connection with their employment by or service to the Company, nor deemed to require Evogene to provide any compensation or benefits to any person. Such rights and privileges shall be governed by applicable personal employment agreements or other separate compensation arrangements entered into between Evogene and the recipient of such compensation or benefits. 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 any part of it.

29. An Immaterial Change in the Terms of Employment of an Executive Officer other than the CEO may be approved by the CEO, provided that the amended terms of employment are in accordance with this Policy. An "Immaterial Change in the Terms of Employment" means a change in the terms of employment of an Executive Officer with an annual total cost to the Company not exceeding an amount equal to three (3) monthly base salaries of such employee.

30. 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, Evogene 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 Evogene and none of the provisions thereof are intended to provide any rights or remedies to any person other than Evogene.

EXHIBIT 8.1

List of Subsidiaries

Name of Subsidiary	Jurisdiction	Ownership Interest
AgPlenus Ltd.	Israel	98.3% (1)
Biomica Ltd.	Israel	93.2% (2)
Canonic Ltd.	Israel	100%
Casterra Ag Ltd. (formerly known as Evofuel Ltd.).	Israel	100%
Lavie Bio Ltd.	Israel	70.7% (3)

(1) The remaining 1.7% of AgPlenus Ltd.'s outstanding share capital is held by AgPlenus' former Chief Executive Officer and current director as a result of exercise of options.
(2) The remaining 6.8% of Biomica Ltd.'s outstanding share capital is held by Biomica's Chief Technology Officer.
(3) The remaining 29.3% of Lavie Bio Ltd.'s outstanding share capital is held by (i) Pioneer Hi-Bred International, Inc. (also known by the name Corteva), who holds 27.3%, and (ii) Lavie Bio's former Chief Executive Officer, who holds 2.0% as a result of exercise of options.

EXHIBIT 12.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/ 15d-14(a)

I, Ofer Haviv, certify that:

1. I have reviewed this annual report on Form 20-F of Evogene Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the 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 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.

/s/ Ofer Haviv
Ofer Haviv
President and Chief Executive Officer
(principal executive officer)

Date: March 31, 2022

EXHIBIT 12.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/ 15d-14(a)

I, Dorit Kreiner, certify that:

1. I have reviewed this annual report on Form 20-F of Evogene Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the 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 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.

/s/ Dorit Kreiner
Dorit Kreiner
Chief Financial Officer
(principal financial and accounting officer)

Date: March 31, 2022

EXHIBIT 13.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
18 U.S.C. SECTION 1350

In connection with the Annual Report of Evogene Ltd. (the "Company") on Form 20-F for the fiscal year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Ofer Haviv, do certify, pursuant to 18 U.S.C. § 1350, that to my 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 operations of the Company.

/s/ Ofer Haviv
Ofer Haviv
President and Chief Executive Officer
(principal executive officer)

Date: March 31, 2022

EXHIBIT 13.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO
18 U.S.C. SECTION 1350

In connection with the Annual Report of Evogene Ltd. (the "Company") on Form 20-F for the fiscal year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Dorit Kreiner, do certify, pursuant to 18 U.S.C. § 1350, that to my 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 operations of the Company.

/s/ Dorit Kreiner
Dorit Kreiner
Chief Financial Officer
(principal financial and accounting officer)

Date: March 31, 2022

EXHIBIT 15.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-8 No. 333-193788) pertaining to the 2013 Share Option Plan of Evogene Ltd.,
(2) Registration Statement (Form S-8 No. 333-201443) pertaining to the 2013 Share Option Plan of Evogene Ltd.,
(3) Registration Statement (Form S-8 No. 333-203856) pertaining to the 2013 Share Option Plan of Evogene Ltd.,
(4) Registration Statement (Form S-8 No. 333-259215) pertaining to the 2021 Share Option Plan of Evogene Ltd.,
(5) Registration Statement (Form F-3 No. 333-253300) and related Prospectus of Evogene Ltd.,

of our reports dated March 31, 2022, with respect to the consolidated financial statements of Evogene Ltd. and the effectiveness of internal control over financial reporting of Evogene Ltd. included in this Annual Report (Form 20-F) of Evogene Ltd. for the year ended December 31, 2021.

/s/ KOST FORER GABBAY & KASIERER
KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

Tel-Aviv, Israel
March 31, 2022