EDGAR Submission Header Summary	
Submission Form Type	20-F
XBRL	External XBRL Submission
Period of Report	12-31-2019
Filer	Evogene Ltd.
CIK	0001574565
CCC	w6abkid$
EDGAR Accelerated Filer Status	Non-Accelerated Filer
Voluntary Filer	No
Shell Company	Off
Well-known Seasoned Issuer	Off
Emerging Growth Company	Off
Ex Transition Period	Off
Exchanges	NASD
Co-Registrants	
Submission Contact	Yaron Kleiner
Contact Phone Number	972-54-2233-054
Documents	18

Notification Emails	
Emails	edgar@z-k.co.il

Documents	
20-F	zk2024279.htm
Description	20-F
EX-2.1	exhibit_2-1.htm
Description	Exhibit 2.1
EX-4.7	exhibit_4-7.htm
Description	Exhibit 4.7
EX-8.1	exhibit_8-1.htm
Description	Exhibit 8.1
EX-12.1	exhibit_12-1.htm
Description	Exhibit 12.1
EX-12.2	exhibit_12-2.htm
Description	Exhibit 12.2
EX-13.1	exhibit_13-1.htm
Description	Exhibit 13.1
EX-13.2	exhibit_13-2.htm
Description	Exhibit 13.2
EX-15.1	exhibit_15-1.htm
Description	Exhibit 15.1
EX-101.INS	evgn-20191231.xml
Description	XBRL Instance Document
EX-101.SCH	evgn-20191231.xsd
Description	XBRL Taxonomy Extension Schema
EX-101.CAL	evgn-20191231_cal.xml
Description	XBRL Taxonomy Extension Calculation Linkbase
EX-101.DEF	evgn-20191231_def.xml
Description	XBRL Taxonomy Extension Definition Linkbase

EX-101.LAB	evgn-20191231_lab.xml
Description	XBRL Taxonomy Extension Label Linkbase
EX-101.PRE	evgn-20191231_pre.xml
Description	XBRL Taxonomy Extension Presentation Linkbase
GRAPHIC	image0.jpg
GRAPHIC	image00001.jpg
GRAPHIC	image1.jpg

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, 2019

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.B 4173, Ness Ziona, 7414002, Israel

(Address of principal executive offices)

Ofer Haviv
President and Chief Executive Officer
Telephone: +972-8-931-1900
Facsimile: +972-8-946-6724
Email: Ofer.Haviv@evogene.com
13 Gad Feinstein Street, Park Rehovot, Rehovot
P.O.B 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, 2019, the registrant had outstanding 25,754,297 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 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 ☒

FORM 20-F
ANNUAL REPORT FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019

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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., Biomica Ltd., Canonic Ltd., Casterra Ag Ltd. (formerly known as Evofuel Ltd.), Evogene Inc., Lavie Bio Ltd., 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 "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 3.456 = USD 1.00, the exchange rate between the NIS and the U.S. dollar reported by the Bank of Israel as of December 31, 2019.

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. appearing in this annual report are the property of Evogene Ltd. 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 of our continuing 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 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;
- 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 the Coronavirus);
- 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 maintain and recruit 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 effect of the spread and resulting government actions implemented to limit coronavirus.

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.

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. Selected Financial Data

The following tables set forth our selected consolidated financial data. You should read the following selected consolidated financial data in conjunction with "Item 5. Operating and Financial Review and Prospects" and our consolidated financial statements and related notes included in this annual report. Historical results are not necessarily indicative of the results that may be expected in the future. Our financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB.

The selected consolidated statements of profit or loss and other comprehensive income (loss) data for each of the years in the three-year period ended December 31, 2019 and the consolidated statements of financial position data as of December 31, 2018 and December 31, 2019 are derived from our audited consolidated financial statements appearing in this annual report. The consolidated statements of profit or loss and other comprehensive income (loss) data for each of the years ended December 31, 2015 and December 31, 2016 and the consolidated statements of financial position data as of December 31, 2015, 2016 and 2017 are derived from our audited consolidated financial statements that are not included in this annual report.

	2015	2016	2017	2018	2019
Consolidated Statements of Profit or Loss and Other Comprehensive Income (Loss):					
Revenues:					
Research and development payments, including up-front payments	$ 10,956	$ 6,500	$ 3,369	$ 1,747	$ 753
Share purchase related revenues	173	40	12	-	-
Total Revenues	11,129	6,540	3,381	1,747	753
Cost of revenues	8,255	5,639	2,845	1,452	334
Gross profit	2,874	901	536	295	419
Operating expenses:					
Research and development, net	14,449	16,405	16,987	14,686	15,791
Business development	1,964	1,696	1,686	2,084	2,029
General and administrative	4,382	3,889	3,810	3,514	3,765
Total operating expenses	20,795	21,990	22,483	20,284	21,585
Operating loss	(17,921)	(21,089)	(21,947)	(19,989)	(21,166)
Financing income	2,571	2,424	2,125	1,413	2,630
Financing expenses	(1,863)	(891)	(1,005)	(2,206)	(555)
Loss before taxes on income	(17,213)	(19,556)	(20,827)	(20,782)	(19,091)
Taxes on income	-	36	11	30	24
Loss	(17,213)	(19,592)	(20,838)	(20,812)	(19,115)
Other comprehensive income (loss):					
Loss from cash flow hedges	(45)	-	-	-	-
Amounts transferred to the statement of profit or loss for cash flow hedges	267	-	-	-	-
Total comprehensive loss	$ (16,991)	$ (19,592)	$ (20,838)	$ (20,812)	$ (19,115)
Attributable to:					
Equity holders of the Company	-	-	-	(20,758)	(18,112)
Non-controlling interests	-	-	-	(54)	(1,003)
	$ (16,991)	$ (19,592)	$ (20,838)	$ (20,812)	$ (19,115)
Basic and diluted loss per share, attributable to equity holders of the Company	$ (0.68)	$ (0.77)	$ (0.81)	$ (0.81)	$ (0.70)
Weighted average number of ordinary shares used in computing basic and diluted loss per share (1)	25,378,325	25,444,733	25,673,276	25,753,411	25,754,297

	2015	2016	2017	2018	2019
Selected Consolidated Statements of Financial Position Data:					
Cash and cash equivalents	$ 10,221	$ 3,236	$ 3,435	$ 5,810	$ 34,748
Marketable securities	71,807	71,738	59,940	26,065	2,128
Short-term bank deposits	18,603	13,137	8,380	22,592	10,000
Trade receivables	2,675	169	132	160	72
Total current assets	104,376	89,490	72,791	55,488	49,027
Total assets	112,595	95,986	77,602	58,694	71,364
Net assets	103,752	87,289	69,378	50,306	60,217
Deferred revenues and other advances	858	1,105	605	440	395
Total liabilities	8,843	8,697	8,224	8,388	11,147
Working capital (2)	98,737	84,265	68,127	50,057	43,298
Shareholders' equity	103,752	87,289	69,378	50,306	60,217

The issued and outstanding share capital of the company is composed of 25,754,297 ordinary shares as of December 31, 2019.

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(1) Basic and diluted loss per share is computed based on the weighted average number of ordinary shares outstanding during each period, in accordance with International Accounting Standard 33, "Earnings per Share."

(2) Working capital is defined as total current assets less total current liabilities.

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 4.

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 more efficient and to better reflect the individual value of each of our market focused business units. Under the new corporate structure, the Evogene group operates with Evogene as a technology hub and a growing group of divisions and subsidiaries that benefit from the unique capabilities of Evogene's CPB platform. 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 effect: 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 in our castor oil activity, none of our discoveries 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 effect, 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 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 varieties, 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 never commercialize products based on our discoveries, we will not realize revenues from 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 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; and
- we may be unable to protect the intellectual property underlying our discoveries in the necessary jurisdictions.

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 seed traits, ag-chemicals, ag-biologicals, castor varieties, human microbiome-based therapeutics or medical cannabis products involves several phases and a long development period. The timelines for development of product candidates by ourselves 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 their 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".

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 consist 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. At the same time, an increasing number of products are coming off patent and are thus available to generic manufacturers for production. 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 products containing our discoveries. 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 our ag-biological product programs, Lavie Bio funds its early stages of research and development efforts in order to potentially capture more value, while in others it funds the entire development program towards launch of a commercial product. Lavie Bio's efforts to develop 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 meet regulation requirements in case significant changes occur in the future; and
- failure to establish cost-effective go-to-market models for selling our products.

If Lavie Bio's efforts to develop 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;
- inability to obtain sufficient funding to fully execute its ag-chemical business plan; and
- failure to meet regulation 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 successfully complete development of our seed trait product candidates; and
- our failure to meet regulation 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. Biomica's efforts to develop its product candidates and develop marketable products may be unsuccessful for a variety of reasons, including the following:

- failure to complete pre-clinical studies and clinical trials with positive results;
- failure to finance the development and commercialization of its product candidates;
- failure to receive marketing approvals from applicable regulatory authorities;
- failure to obtain and maintain patent and trade secret protection and regulatory exclusivity for its product candidates;
- failure to making arrangements with third-party manufacturers for, or establishing its own, commercial manufacturing capabilities;
- 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 of its products, if approved, to compete effectively with other therapies;
- 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 microbime-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 product. 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 establish the agro-technical knowledge and expertise for cultivating cannabis;
- failure to meet regulation 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 our medical cannabis products;
- failure to secure our cannabis cultivation facilities; 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 currently developing improved, high-yield castor bean seeds for use as a source of non-edible feedstock for the existing 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, we will need to demonstrate on a commercial scale that our 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 a naturally occurring poison called ricin;
- 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 sustainable production of castor seeds.

We are operating in a new industry, with limited understanding of the dynamics involved in producing and selling castor seeds. We have made initial commercial sales of castor seeds; however, we are unable to foresee as to when significant sales will commence. If we are unable to adequately address any of these issues, 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 products through distribution and retail channels. We have little experience in establishing such channels and may be unsuccessful in doing so. In addition, we will be dependent on our distributers in introducing our products to the market. If we or our distributors are unsuccessful in our efforts to penetrate the market, our revenues and financial results will be adversely affected.

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.

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.

Each of us and our subsidiaries depends on our key personnel and, if we are not able to attract and retain qualified scientific and business 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 subjects relevant to our operations. For example, of our staff, 38 employees hold a Ph.D. 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.

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

In recent years we have begun to develop certain discoveries and product candidates independent of our collaborators, with a goal of making such discoveries available to collaborators in later phases, including the final product development stage in certain cases. While we believe this will allow us to negotiate more favorable license or commercialization terms with respect to such discoveries and product candidates, 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. 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 products containing our discoveries and product candidates. Typically, we apply for and maintain the regulatory approvals necessary for our operations, while our collaborators apply for and maintain regulatory approvals necessary for the commercialization of products containing our discoveries. 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.

Although Canonic, our subsidiary that develops medical cannabis products currently has limited operations, our current and potential 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, use, etc.;
- 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; and
- 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.

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

The cost we incur in procuring a directors and officers, or 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. The increases have been tied to perceived heightened levels of risk for D&O insurers. For example, the year 2018 set a 20-year record high for securities class actions filed against issuers of common or preferred stock listed in the United States. 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.

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, or any other pandemic, epidemic or outbreak of an infectious disease in the United States, Israel or elsewhere, may hurt our business in many ways, and, if prolonged, could adversely impact our operating results and financial condition in a significant manner.

The COVID-19 pandemic, and any other pandemic, epidemic or outbreak of an infectious disease that occurs in the United States, Israel or elsewhere, may adversely affect our business and, if prolonged, could adversely impact our operating results and financial condition in a significant manner. In December 2019, a novel strain of coronavirus, COVID-19, was identified in Wuhan, China. This virus continues to spread globally and, as of April 2020, has spread to over 100 countries, including the United States, Israel and Latin America. The spread of COVID-19 from China to other countries has resulted in the World Health Organization declaring the outbreak of COVID-19 as a "pandemic," or a worldwide spread of a new disease, on March 11, 2020. Many countries around the world have imposed quarantines and restrictions on travel and mass gatherings to slow the spread of the virus. Since March 2020, the Government of Israel imposed multiple precautionary measures, such as quarantine restrictions for foreign travelers arriving from any country, avoiding gatherings, and restrictions on work places. Employers (including us) are also required to prepare and increase as much as possible the capacity and arrangement for employees to work remotely. In addition, since March, 2020, the President of the United States issued a proclamation to restrict travel to the United States from certain foreign nationals and governors of many U.S. states have enacted temporary measures seeking to limit the spread of COVID-19, including in the State of Missouri, where our U.S. research and development site is located. We are still assessing and will continue to assess the effect on our business, from the spread of COVID-19 and the actions implemented by the governments of the State of Israel, the United States and elsewhere across the globe.

These actions have disrupted the ordinary course of operations for us, our collaborators and contractors, causing operational delays, labor shortages, travel disruption and shutdowns, thus restricting our, our collaborators' and contractors' ability to ensure the continuous development of our product candidates, which could have an adverse effect on our development programs.

In addition, regulatory bodies may reduce or postpone meetings with us or internally if resources are pushed away from our industries in response to the spread of an infectious disease. Such events may result in a period of business disruption, and in reduced operations, any of which could materially affect our business, financial condition and results of operations.

The COVID-19 outbreak and mitigation measures also have had and may continue to have an adverse impact on global economic conditions which could have an adverse effect on our business and financial condition, including impairing our ability to raise capital if and when needed. 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 genetically modified organisms may negatively affect our public image and reduce 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 $21.1 million, $20.0 million and $21.9 million for the years ended December 31, 2019, 2018, and 2017, 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 revenues or royalties on the product candidates we are currently developing and 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. 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.

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.

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 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;
- 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 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 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 in recent years, 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.

We and our collaborators may disagree over our right to receive payments under our collaboration agreements, potentially resulting in costly litigation and loss of reputation.

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 genes or other intellectual property to our collaborators, who use or will use such intellectual property to develop and commercialize products with our discoveries. 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.

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.

On Israel's domestic front there is currently a level of unprecedented political instability. The Israeli government has been in a transitionary phase since December of 2018, when the Israeli Parliament, or the Knesset, first resolved to dissolve itself and call for new general elections. In 2019, Israel held general elections twice – in April and September – and a third general election was held in March of 2020. The Knesset, for reasons related to this extended political transition, has failed to pass a budget for the year 2020, and certain government ministries, which may be critical to the operation of our business, are without necessary resources and may not receive sufficient funding moving forward. Given the uncertainty with respect to when the current political stalemate will be resolved, our ability to conduct our business effectively may be adversely affected.

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. 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.

Included on our balance sheet are corporate bonds and government treasury notes denominated in New Israeli Shekels and in U.S. dollars having an aggregate value of approximately $2.1 million as of December 31, 2019. 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. As of December 31, 2019, we did not have any hedge arrangements in place to protect our exposure to interest rate fluctuations. See "Item 11. Quantitative and Qualitative Disclosure About Market Risk—Foreign Currency Risk."

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, which 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, 2019, we had received from Israeli National Authority for Technological Innovation, or the IIA, approximately $7.4 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 18 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 $0.91 and as of April 23, 2020 were trading at $1.11 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.

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.

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 director and officer liability 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.

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.

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 passive foreign investment company, PFIC, for U.S. federal income tax purposes in 2019, and there is significant risk we will be a PFIC in 2020 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 2019, we believe that we met the PFIC asset test described above for 2019 and, as a result, we were classified as a PFIC in 2019. 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 2020, there is substantial risk we will be classified as a PFIC for the 2020 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 2020 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 2019 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."

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Our History

We are a leading biotechnology company aiming to revolutionize the development of novel products for life-science based industries, including human health, agriculture, and industrial applications, by utilizing cutting edge computational biology technologies.

Our company was founded on October 10, 1999 as Agro Leads Ltd., a division 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 early 2019, we reorganized certain of our divisions into wholly-owned subsidiaries of the Company, as described elsewhere in this annual report. In addition, in April 2019 we established a new subsidiary, Canonic Ltd., or Canonic, for developing next generation medical cannabis products.

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.B 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 is a part of this annual report.

Principal Capital Expenditures

Our capital expenditures for fiscal years 2019, 2018 and 2017 amounted to $0.9 million, $0.4 million and $0.6 million, respectively. Our capital expenditures during those years consisted of investments in property, plant and equipment. We anticipate our capital expenditures in fiscal year 2020 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.

B. Business Overview

Overview

We are a leading biotechnology company aiming to revolutionize the development of novel products for life-science based industries, including human health, agriculture, and industrial applications, by utilizing cutting edge computational biology technologies. To achieve this mission, we established our unique Computational Predictive Biology, or CPB, platform, leveraging the revolutions in big data and artificial intelligence and incorporating a deep understanding of biology. Our CPB platform aims to disrupt conventional life-science product development methodology, currently challenged by inefficiencies, by computationally designing the most relevant core components for life-science products such as microbes, small molecules and genes.

Business Model

To capture the value of the diverse applicability of our computational platform, our business model consists of two main pathways, both based primarily on the utilization of the CPB Platform: (i) The establishment of market-focused subsidiaries to develop and commercialize product pipelines, meeting unmet needs in selected industries, and (ii) in certain other cases, engaging directly with strategic partners for the development of specific products.

Each of the subsidiaries we established under the first pathway is an independently managed company, fully supported by the capabilities and corporate management of Evogene Ltd. Evogene provides each of the subsidiaries with initial funding as well as a long-term exclusive right to use the CPB platform in order to develop products in a defined field of activity, and, at least initially certain corporate functions. Under this pathway, Evogene expects its income to include: (i) ongoing license and research fees from its subsidiaries and (ii) income based on our equity holdings in its subsidiaries, namely dividends and revenues from sales of equity.

In addition, pursuant to the second pathway of the business model, Evogene intends to collaborate directly with strategic partners for the development of products, as we have done over the past years in our ag-seeds activity. Under this pathway, Evogene expects its income to include: (i) on-going license and research fees from its partners and (ii) success-based payments, including milestone payments and revenue sharing.

Currently, we apply our technology and approach for the development of products based on microbes, small molecules and genes in three general industries:

(i) Agriculture, focusing on the following target markets:
   a. Agriculture biologicals, via our subsidiary Lavie Bio Ltd. or Lavie Bio,
   b. Agro chemicals, via our subsidiary AgPlenus Ltd., or AgPlenus, and
   c. Seed traits, via our Ag-Seeds division;

(ii) Human health, focusing on the following target markets:
   a. Human microbiome-based therapeutics, via our subsidiary Biomica Ltd., or Biomica, and
   b. Medical cannabis products, via our subsidiary Canonic Ltd., or Canonic; and

(iii) Life-science based industrial applications, currently focusing on castor seed varieties and agro-technical capabilities, through our subsidiary Casterra Ag Ltd. (formerly Evofuel Ltd.), or Casterra.

Each subsidiary pursues its individual mission, focusing on the following objectives: (i) advancing its product development and pipeline, (ii) establishing its "go-to-market", and (iii) securing additional financial resources, if and when required.

We continuously evaluate new substantial industries with well-recognized development road-blocks for which we can leverage our capabilities and assets for the development of next-generation products. We 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 prevent others from developing next-generation products; and, most importantly; and (iv) the expectation that our CPB platform and unique approach provide a significant competitive advantage in addressing these roadblocks.

Except for initial seed sales under our Casterra activity, our activities are still in the development stages and no products have been commercialized based on our discoveries. Our revenues consist primarily of research and development payments under our strategic collaborations in the field of seed traits and ag-chemical products. 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 Measures of Our Performance—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 2020, through our subsidiaries, 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 additional value can be created in a relatively short time.

The precautionary measures undertaken by many governmental authorities worldwide, including in Israel and the U.S., in order to limit the spread of the ongoing Coronavirus outbreak, and its negative impact on economies and financial markets worldwide, may affect the implementation of our business plan and objectives by: (i) disruption of ordinary course of operations for us, our collaborators and contractors, causing operational delays, labor shortages, travel disruption and shutdowns, which could have an adverse effect on our development programs, (ii) adversely impacting our ability to maintain or extend our existing collaborations or enter into new collaborations on favorable financial terms, (iii) negatively impacting on our ability to raise additional funds for our operations, if and when needed.

The following are major occurrences and developments in the Company during 2019 and until the date of this annual report, reflecting advancement in all areas of activity:

Evogene

- In February 2019 – we announced that Evogene's Ag-Biologicals activities are being transferred to a new subsidiary – Lavie Bio Ltd., or Lavie Bio.

- In April 2019 – we announced that we will develop next generation medical cannabis products through a new subsidiary, Canonic Ltd.

- In August 2019 – Corteva AgriScience, or Corteva, invested in Lavie Bio. The investment included $10 million in equity funding and the contribution by Corteva to Lavie Bio of its shares in Taxon Biosciences, Inc., or Taxon Biosciences, in exchange for shares in Lavie Bio. Taxon Biosciences is a company focused on microbiome discovery to develop biological crop products.

Lavie Bio

- In July 2019 – Lavie Bio announced positive 2nd-year field results in its bio-stimulant program for wheat.
- In November 2019 – Lavie Bio announced advancement in the product development pipeline for wheat bio-stimulants.

AgPlenus

- In March 2020 – AgPlenus announced entering a collaboration with Corteva for the development of novel herbicides.

Ag-Seeds division

- In July 2019 – we amended our corn disease resistance research collaboration agreement with Bayer (previously with Monsanto) to include genome editing targets.

Biomica

- In April 2019 – Biomica announced initiation of pre-clinical studies in its Immuno-Oncology Program.
- In October 2019 – Biomica announced advancement to pre-clinical studies in its Inflammatory Bowel Disease program.
- In October 2019 – Biomica announced a collaboration with the Weizmann Institute of Science to develop a selective treatment against antibiotic-resistant bacteria.
- In November 2019 – Biomica reported positive preliminary results in animal studies in its Immuno-Oncology program.
- In January 2020 – Biomica announced entering a new agreement with Biose Industrie for scale-up and GMP production of drug candidates BMC121 & BMC127 for its immuno-oncology program to support the preparation towards the anticipated first in man proof of concept clinical trials.

Canonic

- In November 2019 - Canonic announced initiation of cultivation and breeding of cannabis varieties with unique genomic profiles for the development of medical cannabis products.
- In January 2020 - Canonic announced an agreement with Hadassah Medical Center for pre-clinical studies to support the development of Canonic's medical cannabis products.

Casterra (formerly Evofuel)

- In May 2019 – our subsidiary Evofuel Ltd. was rebranded as Casterra Ltd. to better reflect its change in business focus from the alternative fuel industry to the market of castor oil for industrial uses.

Approach, Science & Technology

Approach

The mission of the CPB platform is to revolutionize the product development approach in life science industries by decoding the biological world. This platform is a result of a decade long, multidisciplinary effort to integrate scientific concepts with semi-structured big data and the most advanced computational analytics in order to develop predictions of potential products that later undergo experimental validation.

The CPB platform aims to disrupt conventional life-science product development methodology, currently challenged by inefficiencies, by computationally designing the most relevant core components for life-science products such as microbes, small molecules and genes. The uniqueness of our computational design approach stems from our ability to successfully address multiple product attributes at the beginning of the discovery process, rather than one at a time during the development phase. This is expected to reduce both time and cost, but more importantly, increase the probability of reaching a successful product launch.

These efforts have been enabled by two parallel revolutions: (i) the data revolution – allowing the creation of enormous amounts of biological and chemical data in a cost-effective manner, and (ii) the computational processing revolution – allowing the integration and analysis of data with advanced algorithms such as machine learning and other artificial intelligence.

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, screening and validation systems comprised of multiple tailored bioassays.

This approach enables the CPB platform to first predict the most relevant candidates from our comprehensive databases to begin the candidate selection, validation and product development process, and thereafter to guide the process. The ability to make and evaluate candidate selection and prioritization according to these pre-defined criteria upon the initiation of a program significantly increases the probability of successful product development while decreasing time and cost.

This approach is broadly applicable to various life science industries. We continuously evaluate new substantial markets with well-recognized development roadblocks where we can leverage our capabilities and assets for the development of next generation products.

Science and Know-how

The underlying driver of the CPB platform's unique approach is deep scientific understanding of the life sciences combined with computer sciences and tailored experimental tools. Our multidisciplinary scientific teams play a pivotal role in our unique product development approach.

As of December 31, 2019, our research and development activities involve 86 employees amounting to approximately 67% of our total full-time workforce, of which 49 are employed at Evogene and 37 are employed via our subsidiaries. Our staff possesses multidisciplinary and wide-ranging expertise, with employees specializing in biology, chemistry, plant genetics, agronomics, mathematics, computer science and other related fields. 38 of our employees hold a Ph.D.

Furthermore, we have a Scientific Advisory Board composed of representatives from the Faculty of Agriculture of The Hebrew University in Jerusalem, the Weizmann Institute of Science in Rehovot and other global academic institutions, as well as experienced scientists from the industry.

Computational Technologies

Our computational technologies, utilized for data integration and analysis, are comprised of two main proprietary components: (i) our databases generated via data integration capabilities; and (ii) our computational analysis platforms, utilized to mine these databases within our ongoing activities.

Proprietary Databases

To date, Evogene's databases leverage multiple sources and types of tailored "big data" in order to support the different research and development activities across the company. Specifically, we focus on four different entities: microbial organisms, microbial genes, small molecules and plant genes. Our information databases on these 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 (primarily from academic institutions and research publications), and in part compile increasing amounts of proprietary data, generated either in-house or received from our collaborators.

Our current database framework consists of the following:

- *Plant and microbial gene databases* – These databases are focused on the gene entity, linking available data relevant to a gene in a single assembled database.
    - Our plant gene databases cover over 16 million genes from more than 200 plant species, and account for various data types, including phenotypic data (*i.e.*, data related to a plant's observable characteristics, morphology, development and physiological properties) and genotypic data (*i.e.*, data from the molecular level, derived from DNA, RNA or other sources).
    - Our microbial gene database incorporates more than 250 million microbial genes. In our pursuit to expand our databases to include novel genetic material, we established a pipeline for assembling gene models from samples containing bacterial populations, or metagenomics. Utilizing this approach, we have unveiled millions of genes, some of which have never been observed before, as well as a multitude of bacteria never previously cultured.
- *Microbial strain database (microbial organisms)* – This database comprises data on microbial strains isolated from plant and human sources. It includes several tens of thousands of microbial strains that are key to plant and human life cycles.
- *Chemical database (small molecules)* – This database is structured as molecule-centric, covering broad chemical collections and derived from publicly available sources of synthetic and natural chemistry. This database currently comprises over 400 million chemicals, integrating multiple layers of data describing the chemicals' properties.

Computational Analysis Platforms

We have developed advanced proprietary computational analysis platforms, comprised of novel algorithms and methodologies designed to handle immense amounts of data. Our computational analysis platforms are designed to deliver innovative solutions to key bottlenecks in the product development process. In recent years, we have increasingly focused on artificial intelligence, machine learning driven approaches to provide effective predictions for key questions. As our predictions undergo validation via dedicated validation systems, this allows us to continuously improve our predictions by feeding back these results into our systems.

Currently, we operate and develop the following computational analysis platforms, for the prediction of genetic elements (ATHLETE, GEDAI, BiomeMiner and PointTar), small molecules (PointHit and PointLead) and microbes (MicrobeMiner and PRISM):

Genetic elements:

ATHLETE

The ATHLETE computational analysis platform that is our central computational analysis platform for plant gene identification is comprised of unique algorithmic tools and novel data-mining concepts that allow generation of rapid and reliable lists of genes relevant to a target trait.

GEDAI

GEDAI is our central computational analysis platform for plant gene editing. It is comprised of deep learning-based analysis (artificial intelligence) and a novel approach that allows predicting the desired editing in regulatory elements to be implemented in order to achieve a desired pattern of expression.

BiomeMiner

BiomeMiner is a computational analysis platform for identifying microbial insecticidal toxins, *i.e.* microbial genes that can be specifically toxic to insects that lead to substantial crop damage. This unique computational technology platform consists of a newly developed vast proprietary microbial-based gene centric database, the underlying data assembly pipelines, as well as a dedicated analysis platform, BiomeMiner. The BiomeMiner platform utilizes advanced machine learning methods in order to identify toxins with novel modes of action in order to overcome the rising resistance to current products' modes of action.

PoinTar

PoinTar specializes in the identification of plant targets (proteins) for development of ag-chemicals such as herbicides, and examines data aimed to indicate the potential impact that a target, when inhibited, would have on a weed. Both our gene-centric database and its integrated chemical-centric database are mined by PoinTar to achieve this goal. PoinTar addresses the structural characteristics of a target in order to predict the target's likelihood of binding to a small chemical molecule for use as a herbicide.

Small molecules:

PointHit

PointHit, is a computational analysis platform for identifying chemical molecules that are predicted to be potential inhibiting chemicals. This analysis platform leverages biological rationale, discovering chemical molecules by optimizing among three key considerations: (i) predicted binding to molecular targets, (ii) compliance with product desired attributes such as low cost of production, low toxicity and others, and (iii) mainly for ag-applications – potential for activity, namely probability to be absorbed by the plant and transported within the plant to reach a specific molecular target within it. Overall, relying on "big data" computational approaches, the PointHit platform is capable of prioritizing tens of millions of chemicals to a selected library of candidate hits.

PointLead

PointLead is a computational platform that supports the Hit-to-Lead phase in the development of ag-chemical products, as described under "—Fields of Activity—Agriculture—AgPlenus—Product—Development Programs—Product Development Cycle." The platform includes computational tools addressing various challenges common to the drug and herbicide development processes, such as toxicity, efficacy, metabolic stability, resistance and others. In addition, PointLead includes a computational molecule generator that suggests compounds for synthesis based on an initial hit, thus assisting the chemist to think "outside the box". This tool is combined with machine-learning models for focusing on the most relevant molecules as well as a proprietary tool for innovative analog search within Evogene's database of synthetically feasible small molecules.

Microbes:

MicrobeMiner

MicrobeMiner is a computational platform addressing key challenges in the discovery and development of microbial products. The core of the analysis platform relies on the ability to identify the genetic functions within the microbe responsible for important aspects of product development including, efficacy, stability of effect across conditions and shelf life. This platform leverages the vast digital catalog of microbial functions within our microbial gene database along with our proprietary plant-microbe phenotypic data in our microbial strain database.

PRISM

PRISM (Predictive high-Resolution Integrative Selection of Microbes) is a computational analysis platform that combines a high-resolution profiling of the microbiome, based on accurate strain-level taxonomy and comprehensive functional analyses, and the efficient correlation of the microbiome to host physiological and genomic profiles.

Screening and validation systems

Our screening and validation systems support two key aspects of our unique research and development approach: (i) generating data sets to enable development of tailored computational modules and their prediction performance evaluation; and (ii) screening, validating and characterizing selected product candidates by the division's/subsidiary's scientific teams.

Our experimental technologies include bioassays as well as screening and validation pipelines (set of bioassays organized in a cascade of tests). They relate to diverse scientific fields including plant tissue culture, plant pathology greenhouse and field activities, molecular biology, microbiology, organic chemistry and insect biology.

Market Segments

Agriculture

Ag-Business Market

Background

The global population is projected to reach 10 billion inhabitants by 2050, which is expected to lead to a necessary 50% expansion in food, feed and biofuel production[1]. Moreover, changing diets in BRIC countries (Brazil, Russia, India and China) to more protein and dairy heavy diets, are leading to a rising need for grain for animal feed. On the supply side, 17% of harvest is lost to climate change, while 12 million hectares of agricultural land is lost, annually. This results in the need to increase in food production by increasing yields and cropping intensity as there is limited arable land left to expand planting.[2]

In light of historical and current needs to improve crop productivity, technological inventions have been incorporated into agriculture since the dawn of humanity. The most advanced and recent technological tool available is biotechnology, which aims to enhance crop performance and productivity. During the last decade, the biological world has witnessed a dramatic increase in the availability of data, which is used to drive agricultural product innovation. This increase in the availability of biological and chemical data has primarily been a result of the introduction of new technologies that facilitate the rapid generation of quality data at a significantly lower cost. As a result, the key opportunity, and challenge, for enhancing crop productivity has shifted from the generation of quality data to data integration and the analysis of large volumes of data.

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., a separate company that is 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, which is a promising source for novel ag-biologicals.

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

Investment by Corteva

In August 2019, we announced that Corteva Agriscience had invested in Lavie Bio. The transaction included the exchange of all shares of Corteva’s wholly owned subsidiary Taxon Biosciences along with a US$10 million equity investment by Corteva in Lavie Bio in consideration of approximately 28% of Lavie Bio’s equity. The assets of Taxon Biosciences include, among others, a large microbial collection and product candidate pipeline, which are integrated into Lavie Bio’s pipeline.

Corteva and Lavie 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. In addition, Corteva’s investment in Lavie Bio was accompanied by the provision to Corteva of certain rights to obtain in the future commercial licenses to Lavie Bio’s candidate products, mainly in corn and soy.

[1] Source: FAO 2017, The Future of Food and Agriculture
[2] Source: Piper Jaffray, Industry Note August 27, 2013, Agriculture

Market

The market for ag-biological products was estimated at $7.0 billion in 2019[3] 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 $13.4 billion in 2024[3], 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 others, 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, upon commercialization:

(i) Direct market access – in fragmented markets we expect to complete product development independently and then establish a tailored market access strategy per specific product and territory (such as certain fruits and vegetables), and

(ii) Indirect market access – in markets in which Lavie Bio identifies strategic partners that can drive its go-to-market, it will aim to gain market access through collaborations with such partners, either through co-development or through royalty-bearing commercialization agreements.

To date, Lavie Bio has not commenced commercialization and has not yet generated any revenues. In the longer term, as its product candidates advance through development and to the extent that they are commercialized, Lavie Bio expects revenues from direct sales as well as milestone payments and royalty payments from products developed and commercialized indirectly through partners. Lavie Bio expects its first product launch, of a spring wheat bio-stimulant product, by 2022.

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 technological platform includes end-to-end capabilities for product discovery, optimization and development. This approach harnesses the power of genomics, employing a combination of computational and biological assets including a broadly diverse microbial collection, a proprietary validation platform and formulation and fermentation technologies. The computational aspects of Lavie Bio’s platform are empowered by Evogene’s CPB platform and by the Taxon Biosciences technology platform, acquired in August 2019, as part of the Corteva investment in Lavie Bio.

Product Development Cycle

We estimate 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.

[3] According to industry publications.

The development process for microbial-based ag-biologicals is divided into four steps, or phases, which generally 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 was structured 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". Discovery phase typically lasts 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". This stage typically lasts 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, this stage typically lasts 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. we expect this stage to last approximately 24 months for bio-stimulants and 36-48 months for bio-pesticides due to longer regulation processes.

Product Development Pipeline

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

Program	Ag-biological product	Crop/Target	Development phase (1)
1	Bio-stimulants – Yield & abiotic stress tolerance (2)	Corn	Pre-Development
2	Bio-stimulants – Yield & abiotic stress tolerance	Wheat	Development stage 2
3	Bio-pesticides – Seedling disease resistance	Row crops, seed treatment	Pre-development
4	Bio-pesticides – Mildew and fruit rots resistance	Row and specialty Crop, foliar application	Development stage 1
5	Bio insecticides – Western corn rootworm	Corn, soil and foliar	Pre-development

(1) Please see "—Product Development Cycle" for a description of the product development cycle of ag-biological products.

(2) Part of our bio-stimulants program for yield and abiotic stress tolerance in Corn is conducted in collaboration with Corteva (originally with 'DuPont-Pioneer'), pursuant to a multiyear collaboration initiated in 2017. For more information on such collaboration, see "—Key Collaborations—Corteva."

In respect to its Bio-stimulants for Wheat program, in November 2019, Lavie Bio announced that it had advanced its leading product candidate LAV211 into development stage 2, having exhibited consistent positive results across commercial varieties in target locations, with advanced product formulation for extended shelf life. Overall, the fields treated with LAV211 showed significant yield improvement compared with controls and industry benchmarks with a 'win rate' in over 75% of the locations.

Key Collaboration

Corteva (originally with DuPont-Pioneer)

In July 2017, Evogene entered into a multiyear collaboration with DuPont Pioneer (now Corteva, following the merger of Dow Chemicals and DuPont in September 2017 and the establishment of Corteva as the agriculture division of the merged DowDuPont entity), for the research and development of novel microbial bio-stimulant seed treatments for the improvement of corn productivity globally. Under the agreement, Lavie Bio is entitled to milestone payments for advancement of candidate strains, and royalties from products sales. This collaboration helped in establishing the relationship with Corteva, which matured into Corteva's investment in Lavie Bio.

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. Other innovative and proprietary technologies that we develop (such as computational predictive and design technologies), are typically protected as 'trade secrets'.

Raw Materials

We do not significantly rely upon any sources of raw materials for our operations.

Seasonality

As field trials are highly dependent on crop seasonality and the time windows for conducting such trials are rigid, Lavie Bio's research and development activities are dependent on crop seasonality. Although Lavie Bio currently does not have any commercialized products, our expectation is that in the future, sales cycles of the products Lavie Bio develops will be dependent on crop seasonality.

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 U.S. Environmental Protection Agency, or 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. 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 predictive biology. AgPlenus' activities focus on herbicides, with a strong focus on novel modes-of-action, or MoAs, and on insecticides, focusing on new sites-of-action, or SoAs. AgPlenus is also active in fungicides and crop enhancers.

Market

According to industry publications, the ag-chemicals market was estimated at approximately $57.5 billion in 2018, out of which approximately 42%, 28% and 27% were attributable to herbicides, insecticides and fungicides, respectively, and is expected to grow to over $70 billion by 2022. 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 market, as described above, can be classified into four key groups of companies: (i) leading innovative players – multi-billion dollar companies (such as Bayer, Syngenta and Corteva) that invest substantial resources in the discovery and development of novel molecules for crop protection, (ii) small innovative players – companies with revenues in the range of tens to hundreds of millions of dollars, developing innovative molecules. These are mainly Japanese companies which are mostly focused on the Japanese market. Such players are investing resources in the development of novel crop protection molecules, (iii) small to mid-size biotech companies – companies that undertake new approaches to research and development of novel molecules for crop protection, and (iv) Academic and agricultural research institutions that grant licenses to third parties to use their ag-chemical discoveries.

Business Model

AgPlenus' business model is based on three commercialization avenues: (i) reach high-value, revenue-sharing deals based on its internal product development pipeline, (ii) sales of product candidates that have reached the *'Pre-Development'* stage (described below under —Product Development Cycle); and (iii) in parallel, early stage collaborations providing a tailored product offering per partner and market.

High value revenue sharing deals – based on AgPlenus' internal pipeline of novel MoA herbicides and new SoA insecticides.

Sale of Product candidates that have reached the 'Pre-Development' stage – when product candidates advance to what is referred to in the industry as a '*Lead*' or '*Optimized Lead*', these product candidates gain significant commercialization value.

Early collaborations – AgPlenus aims to enter such collaborations in order to build long-term relationships in the industry and to mitigate the risk associated with building an independent pipeline.

Currently, AgPlenus' revenues are derived from research and development payments under early collaborations. In the longer term we expect that: (i) as AgPlenus' product candidates advance through development in our partner's pipelines, and to the extent that they are commercialized by its collaboration partners, revenues will include milestone payments and royalty payments, or to the extent that they are sold, revenues may include significant one-time payments; and (ii) as its internal pipeline product candidates further advance, AgPlenus will be able to reach higher value revenue-sharing deals.

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 novel herbicides and insecticides with new MoAs or SoAs to address the growing resistance of weeds and insects to existing products. AgPlenus utilizes Evogene's CPB platform's capabilities, namely the expertise in plant and insect genomics, as well as advanced technologies and know-how, to drive chemical discovery with the target of ultimately developing new herbicides and insecticides that display new MoAs or SoAs.

AgPlenus' approach begins with the computational identification of protein ‘targets’, which are proteins that are essential to the function of performance of the relevant weed or insect. Following the identification and validation of such targets, we identify candidate Hits, which are chemical compounds that potentially inhibit these targets. We screen candidate hits to identify those displaying effect on weeds or insects 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. In addition, these capabilities are also used independently of each other to discover new Hits for known targets, optimize an existing Hit-to-Lead and optimize a commercial molecule.

Product Development Cycle

The product development cycle for the development of 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 plant or insect 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 plants or insects of interest. The development 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.
- Lead – A lead is a validated hit that has confirmed activity in advanced validation screens proving commercial level efficacy.

Pre-development stage

- In this stage different types of regulatory experiments are conducted, and the chemistry may be further modified to address specific challenges. This stage ends with an Optimized Lead compound.

Development, Regulation & Registration

- In the final development phases, new chemical products are registered with the proper regulatory authorities and then launched for commercialization. According to publications of key industry players, such development processes are likely to last 5-8 years. We expect that these last stages of development will be conducted by our current and future collaboration partners or by our customers.

Product Development Pipeline

(i) internal product development pipeline

Program	Product	Target Organism / Crop	Stage
1	Non-selective & selective herbicides (novel MoAs)	Key crops	Discovery – Hit-to-Lead process
2	Broad spectrum insecticides (novel SoAs/MoAs)	Lepidoptera, Coleoptera and Hemiptera	Discovery– Identification of Hits

(ii) Product development under collaborations:

Program	Product	Target Organism / Crop	Collaborator	Stage
1	Non-selective & selective herbicides	Key crops	BASF	Undisclosed
2	Non-selective & selective herbicides	Key crops	Corteva	Undisclosed
3	Broad spectrum insecticides	Lepidoptera, Coleoptera and Hemiptera	BASF	Undisclosed
4	Crop enhancers	Key crops	ICL	Undisclosed

Key Collaborations

BASF SE (BASF) – Herbicides

Overview

In December 2015, Evogene entered into a multi-year collaboration with BASF for the discovery and development of novel herbicides. Under the terms of the collaboration agreement, we utilize our biology-driven computational discovery approach to identify potential candidate chemicals for novel herbicides while BASF uses its proprietary advanced plant platform to screen the candidate chemicals in order to experimentally validate their biological effects on weeds. Successful candidates from this collaboration will be further developed by BASF. Following the establishment of AgPlenus, the collaboration was assigned from Evogene to AgPlenus.

License & Consideration

Pursuant to the agreement, BASF obtains a worldwide, royalty-bearing, exclusive license to use and modify chemical compounds that we identify under the collaboration to develop and commercialize weed control products containing such compounds. Under the terms of the agreement, AgPlenus is entitled to milestone payments upon achievement of certain development milestones as well as royalty payments from sales of products developed under the collaboration.

BASF SE (BASF) – Insecticides

Overview

In May 2018, Evogene announced that we entered into a two-year collaboration with BASF for the development of novel insecticides based on new binding areas (SoAs). Following the establishment of AgPlenus, the collaboration was assigned from Evogene to AgPlenus. Under the terms of the agreement, in the initial phase of the collaboration, we utilized our biology-driven computational methods to identify potential novel compounds that act on new proteins binding sites. Compounds we discover enter BASF's proprietary insecticides discovery platform for efficacy screening and testing and to validate the chemistry's ability to modulate the respective target proteins.

License & Consideration

Pursuant to the agreement, BASF obtains a worldwide, royalty-bearing, exclusive license to use and modify chemical compounds that we identify under the collaboration to develop and commercialize weed control products containing such compounds. Under the terms of the agreement, we are entitled to milestone payments upon achievement of certain development milestones. Commercial arrangements concerning further development and commercialization are subject to further agreement between the parties.

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 will 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 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. Under the terms of the agreement, 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 expects to file patent applications with respect to its discoveries, either alone or together with its collaborators, in later stages of maturity of its product candidates. AgPlenus' ongoing operations take into consideration various aspects of such future filings, and our filing policy follows industry standards with respect to the preferred timing for filing.

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

At this stage of development, AgPlenus' business in general, and revenues in particular, are not subject to variations based on seasonality. In more advanced stages of product development its activities are expected to include field trials, which are highly dependent on crop seasonality. Although AgPlenus currently does not have any commercialized products, its expectation is that, in the future, sales cycle of the products it develops will be dependent on crop seasonality.

Ag-Seeds Division

Overview

Initiated in 2004, our seed traits activity is focused on the development of products improving seed traits that have a direct impact on crop productivity through the use of GM (genetically modified) and non-GM approaches. We mainly target key commercial crops such as corn, soy, wheat, rice and cotton.

The activities of this division are divided into three categories: (i) yield & abiotic stress tolerance – 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; and (iii) insect control – increase crop tolerance to pests.

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

Market

According to industry publications, in 2015 the seeds market size was estimated at approximately $37 billion, out of which approximately 53% was attributed to GM seeds[4]. 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.[5] We estimate that the potential value of improving non-existent commercial seed traits such as yield, drought or fertilizer utilization in the major crops of corn and soybean alone could be significant.

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, and Instituto Mato-grossense do Algodão, or IMAmt. Typically, under these collaborations we perform the discovery phase, during which we discover and validate candidate trait-improving genetic elements, and 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."

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 science and genomics to improve commercial seed traits. Evogene's proprietary CPB platform, 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.

[4] According to Industry publications.
[5] According to Industry publications.

Product Development Cycle

Developing and integrating seed traits into commercial seeds may take, based on estimations, between eight and sixteen years. The length of the process 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 divided into five discrete steps, or phases, as follows:

- ***Discovery***: The identification of candidate genetic elements for enhancing specified plant traits. We usually test these elements in model systems to determine whether they will enhance the specified trait. In our experience, the Discovery phase typically lasts approximately 18-24 months. In our collaborations, we typically undertake this phase.

- ***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. During this phase, the genetic elements are also optimized to improve their efficacy. Phase I may be conducted by us or by our collaborators, and in our experience, may last up to six years.

- ***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. By the end of this phase, a specific product candidate is being selected to advance to Phase III. We estimate Phase II to last between two to four years.

- ***Phase III, or "Advanced Development and Regulation"***: 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 Phase III to last between one to two years.

- ***Phase IV, or "Pre-Launch"***: 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 Phase IV to last between one to two years.

As indicated, the estimated timeframes of phase duration and probability of success are mainly 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 segment of yield & abiotic stress tolerance seed traits under development with our collaborators:

Program	Crop	Technology	Collaborator	Development Phase
1	Corn	GM	Bayer	Phase I
2	(1)	Advanced breeding	A consumer goods company (1)	Development with Collaborator

_____

(1) Crop and collaborator name not disclosed.

The following table sets forth our key product development programs in the segment of disease resistance traits, under development with our collaborators:

Program	Crop	Trait	Technology	Collaborator	Development Phase
1	Corn	Fusarium	GM & genome editing	Bayer	Undisclosed
2	Soybean	Asian Soybean Rust	GM	Corteva	Undisclosed
3	Soybean	Nematodes	Genome editing	TMG	Discovery
4	Banana	Black Sigatoka	GM	Rahan Meristem	Phase I

The following table sets forth our key product development programs in the segment of insect control traits, under development with our collaborators or as internal product development programs:

Program	Trait	Crop	Technology	Collaborator and Collaboration Phase	Phase
1	Coleoptera / Lepidoptera	Cotton	GM	IMAmt	Undisclosed
2	Lepidoptera	Corn, Soybean, Cotton	GM	Internal program	Phase I
3	Coleoptera	Corn, Cotton	GM	Internal program	Phase I
4	Hemiptera	Soybean	GM	Internal program	Phase I

Key Collaborations

Bayer (originally with Monsanto)

Background

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), which we refer to as the Monsanto Collaboration Agreement. This agreement was amended in November 2011 and again in October 2013, in both cases extending and expanding the original agreement. As part of the October 2013 amendment and restatement, we further apply our computational technologies in the field of biotic stress in corn.

Yield and abiotic stress tolerance program

Pursuant to the Monsanto Collaboration 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 Monsanto Collaboration Agreement, we applied our computational technologies in the field of biotic stress to identify 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 have 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 is 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 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.

A Multinational Consumer Goods Company

Background

In October 2014, we entered a Collaboration Agreement with a multinational consumer goods company, focusing on improving yield in a certain field crop through non-GM methods. The agreement significantly limits the parties' freedom to disclose information on the nature of, and the parties to, the agreement. In the framework of the collaboration, we identified genes with the potential to improve the desired trait in the target crop when the expression of such genes in the plant is modified. We generated new varieties of the target crop using molecular methods, and further tested the performance of these new varieties. These activities were performed over a period of approximately four years before we delivered these varieties to our partner for further development as part of their product development pipeline.

License & Consideration

We granted the partner an exclusive worldwide license to the genes we identified and the varieties we delivered under the collaboration. The agreement provided for research and development payments, as well as milestone payments by the partner upon achievement of certain development milestones. The agreement does not provide for payment of royalties to us.

Corteva (originally with DuPont-Pioneer)

Background

In 2011, we entered a multi-year research and development collaboration with DuPont-Pionner (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. Pursuant to this collaboration, we identified relevant genes having the potential to improve in-plant resistance to ASR.

License & Consideration

DuPont holds a worldwide, royalty-bearing, exclusive license to develop and commercialize soybean products containing our licensed genes. Our compensation under the 2011 agreement with DuPont is in the form of milestone payments and royalty payments based on the sales of resulting products. According to the agreement, each party funds 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. We hold a contractual option to co-invest in the development costs for greater royalty percentages downstream if a product is successfully commercialized.

Rahan Meristem

Background

In 2007, we entered into a multi-year collaboration with Rahan Meristem, or Rahan, with the target of developing banana varieties expressing tolerance to Black Sigatoka, the most damaging disease threatening commercial banana plantations. The agreement focuses on identifying and developing genes targeting this trait in bananas. Together with Rahan, we have identified candidate genes, while transformation to banana plants and further validation in infected areas is conducted by Rahan.

In 2013, we announced that, in field trials conducted by Rahan, banana crops consisting of Evogene-discovered genes demonstrated a lower infection rate than banana crops which did not contain the selected genes. In September 2017, we announced positive results in 2nd year field trials.

License and Consideration

Pursuant to the agreement, Rahan holds an exclusive license to develop and commercialize banana products containing genes identified under the collaboration. Each of Rahan and us bears its costs in performing its activities under the program, using its own resources. Under the terms of the agreement, we are entitled to royalty payments from sales by Rahan of commercial products containing genes identified under the collaboration.

TMG

Background

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 identify 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.

License and Consideration

Under the collaboration and license 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 received from TMG an up-front payment in consideration for its R&D costs and is entitled to success-based payments upon achievement of pre-defined development milestones.

IMAmt

Background

In July 2018, we entered into a research and testing agreement with IMAmt, a crop research company, owned by Mato Grosso Cotton Grower Association, a leading developer and marketer of cotton seeds, with the objective of discovering and testing toxins against major cotton pests, such as the Boll Weevil and the Fall Armyworm, which threaten the viability of the cotton industry in Brazil. According to the agreement, we selected insecticidal genes predicted to have desired insecticidal activity against Boll Weevil and Fall Armyworm, and IMAmt will validate their activity in lab assays against the target pests.

Consideration

Under the terms of the agreement, we are entitled to R&D funding from IMAmt for the initial discovery phase. Commercial arrangements for development and commercialization of the genes are subject to further agreement between the parties.

Intellectual Property

Our intellectual property rights are important to our business. In certain cases they determine our eligibility to receive royalties for seed traits under the licenses we grant our collaborators. We actively seek to protect the intellectual property and proprietary technology that we believe is important to the development of our business. To date, we have sought and obtained patent protection for hundreds of plant and bacterial genes linked to desired traits.

Government Regulation of Product Candidates

Regulatory approvals are required prior to the commercialization and importation of biotechnologically enhanced seeds in most countries. 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, will require such regulatory approvals prior to the commercialization of such products. Additional regulatory approvals will be required for 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 will apply for all requisite regulatory approvals prior to commercialization of the product candidates we are developing with them.

The regulatory status of products developed via genome editing technologies is currently unclear. In the United States, approvals are required by the USDA prior to field testing of genomic edited seeds. A ‘non-regulated organism’ approval has been issued by the USDA for some products currently under development; however, the regulatory status of all changes this technology allows has yet to be determined.

Government Regulation of our Operations

Our business 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 our active jurisdictions, 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.

As an Israeli company, our activities in the fields of biotechnology and plant genomics are regulated by the Israel 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

We do not significantly rely upon any sources of raw materials for our operations.

Seasonality

Our seed traits business in general, and our revenues in particular, are not subject to variations based on crop seasonality. Our revenues from our seed traits business are generated from our strategic collaborations, based on research and development and milestone payments as the seed traits we discover advance in the product development pipeline of our collaborators, and are therefore not season-dependent.

Human Health

Background

In 2017, we decided to leverage our capabilities in computational biology towards the area of human health with the establishment of Biomica. In 2019, we expanded our activity in this area with the establishment of Canonic.

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 and (ii) GI related disorders (iii) MDRO (Multi Drug resistant organisms) - 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[6]

[6] 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

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 part 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[7]. 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 gastrointestinal inflammatory 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.[8]

MDRO (Multi Drug resistant organisms) -

- *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.[9]

- *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[10].

[7] https://www.grandviewresearch.com/industry-analysis/irritable-bowel-syndrome-ibs-treatment-market

[8] https://www.prnewswire.com/news-releases/the-global-inflammatory-bowel-diseases-ibd-drug-market-is-estimated-at-6-7bn-in-2017-and-7-6bn-in-2023--300688523.html

[9] https://www.globaldata.com/global-clostridium-difficile-infections-market-approach-1-7-billion-2026/

[10] https://www.prnewswire.com/news-releases/global-methicillin-resistant-staphylococcus-aureus-mrsa-drugs-market-to-reach-over-us-39-billion-by-2025-upsurge-in-the-consumption-of-antibiotics-across-the-globe-to-fuel-market-growth-observes-transparency-market-research-676949593.html

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 product 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

Our goal (through Biomica) 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.

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, we combine 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 PRISM platform, a facet of Evogene's CPB platform. 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 us to achieve the following:

- At the taxonomic level our analysis allows strain-level resolution and relies on an extensive proprietary strain database.
- At the functional level, our 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 utilizes Evogene's *PointHit* platform 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 roughly 200 million small-molecules for the discovery of potential therapeutics.

Product Development Pipeline

Biomica expects to continue to promote its discovery stage programs to pre-clinical and Proof-of-Concept studies in 2020.

Immune-Oncology – rationally-designed microbial consortia, BMC121 and BMC127, with potential to enhance immunologic therapeutic responses and facilitate anti-tumor immune activity, were identified using our computational analysis and predictive capabilities. During 2019, Biomica initiated pre-clinical studies wherein anti-tumor activity was tested in mice following treatment with Biomica's rationally designed bacterial consortia BMC121 & BMC127 and achieved positive preliminary results from animal studies.

GI disorders –

For IBD - using our computational predictive biology capabilities Biomica identified BMC321 & BMC322, two rationally-designed microbial consortium with potential anti-inflammatory activity in IBD. During 2019, pre-clinical studies were initiated for the development of a novel microbiome-based drug for IBD that triggers multiple mechanisms for the reduction of intestinal inflammation.

For IBS, 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/bacterial-associated factors affecting symptoms and underlying pathophysiology.

MDRO (Multi Drug Resistant Organisms) -

CDI – Using our 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 initiated 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

We aim to protect the proprietary intellectual property that we believe is important to our Biomica business, including seeking international patent protection for our product candidates and promptly file patent applications for new commercially valuable inventions of our Biomica business. We also rely on trade secrets to protect aspects of our Biomica business that we do not consider appropriate for patent protection. Our success with Biomica will depend on our 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. We, along with our contract manufacturers, will be required to navigate the various preclinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval for our 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 our product candidates. All of our product candidates are based on microbiome therapy, a therapeutic approach that is designed to treat disease by restoring the function of a dysbiotic microbiome. We have not, nor to our 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 a new subsidiary, Canonic Ltd., focusing on the development of precise and stable medical cannabis products for better therapeutic performance.

Market

The global legal cannabis market is forecasted to reach $103.9 billion in 2024[11]. In North America alone, the size of this market increased to greater than $11 billion in 2018 and is estimated to reach $30 billion in 2024[12]. This overall market is rapidly growing due to changes in regulatory acceptance and can be divided into recreational and medical products. For more information on the regulatory environment of cannabis activities and products, please see " Government Regulation of our Operations and Product Candidates" below. The market segment attributed to medical cannabis products is projected to reach $62 billion in 2024[12].

Canonic has identified three main challenges in this market:

- **Cannabinoid specificity –** the lack of clinical data demonstrating the correlation between medical indications and the genomic and cannabinoid profile of the cannabis plant.
- **Cannabinoid yields –** with the increasing legalization of cannabis in more and more countries, the price per gram of cannabis is decreasing. The decreasing selling price of cannabis has made this product increasingly sensitive to the cost of production, making yield of cannabinoid per square foot a significant factor.
- **Genetic stability –** there is high genetic variability in currently available cannabis lines, which directly reflects on product consistency, or lack thereof.

Competition

In view of Canonic's current stage of operations, companies that are in direct competition to Canonic are plant genomics companies aiming to improve the properties of medical cannabis varieties, such as Arcadia Biosciences, Benson Hill and KeyGene. When Canonic reaches commercialization of its products, its competitors will include companies developing and marketing medical cannabis products.

Business Model

Canonic intends to develop its products by conducting in-house the core elements relating to cannabis genetics, such as advanced breeding and seed and seedling production, while outsourcing other production activities, such as cannabis cultivation, extraction, and formulation. With respect to commercialization, Canonic intends to access the markets through distributors.

[11] The global cannabis report, Nov. 2019, Prohibition Partners

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 CPB platform, Canonic utilizes advanced breeding technologies in order to improve the properties of cannabis varieties. Canonic is currently establishing a unique cannabis data base, which is based on its diverse genetic collection, and is identifying specific genomic elements in order to enhance either specific active compounds in the plant or the plant's total active compounds.

In addition, Canonic integrates pre-clinical data collected from trials performed with its genetic collection. These trials are conducted in parallel to the breeding program and support the company product development to achieve unique genomic profile for better therapeutic effects.

Product Development

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

- **Development of varieties –** This stage includes pre-breeding and breeding activities of tailored cannabis varieties (i.e., selective crossing of cannabis lines) to achieve desired properties. In addition, during this stage Canonic also performs pre-clinical trials in order to support and direct its medical product development pipeline.

- **Pre-production and pre-commercialization –** During this stage, Canonic performs several activities that are intended to support future production and commercialization of its product. These activities include the establishment of business agreements with manufacturers and distributers, introduction of cannabis varieties to cultivators and provision of agro-technical support, as well as upscale through seed and seedling multiplication.

- **Production and Commercialization –** This stage will include the production of Canonic's products as well as their commercialization through local distributors.

Product Development Pipeline

Canonic has two product lines under development, which are both at the stage of development of varieties:

- **MetaYield**, for enhancement of total active compounds in the plant, and

- **Precise**, for the enhancement of specific active compounds in the plant, targeting anti-inflammatory and pain management properties.

Intellectual Property

We expect Canonic's intellectual property to be composed of three layers: (i) Evogene's existing patent portfolio 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; (ii) plant variety protection rights for cannabis varieties that will be developed by Canonic; and (iii) intellectual property relating to the therapeutic attributes of active compounds within the cannabis plant, resulting from pre-clinical and clinical trials to be conducted by Canonic.

Raw Materials

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

Seasonality

While outdoor cultivation of cannabis varieties is impacted by seasonality, cultivation under controlled environments is not. Currently, all of Canonic's cultivation activities are performed under controlled environments.

Government Regulation of our Operations and Product Candidates

All cannabis related activities in Israel (including R&D, cultivation, manufacturing and distribution) are regulated by the Israeli Medical Cannabis Agency, or IMCA. Every company with cannabis-related activity in Israel is subject to the IMCA's regulation and is required to obtain the relevant annually IMCA certifications for such 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[12], depending on the specific activity undertaken by Canonic. 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 a GSP certification, a possession license, approval for its R&D work plan and an import permit for cannabis seeds.

Under the guidelines of the IMCA, medical cannabis can be manufactured and marketed in Israel for local use. Export has been approved by the government but regulation for cannabis export has yet to be set. Potential end markets include Europe and North America. In Europe, regulation is on a country by country basis. In North America, Canada has legalized cannabis for both medical and recreational use and in the United States, regulation is carried out on a state by state basis, while under federal law, cannabis is illegal.

Industrial Applications

Casterra Ag Ltd.

Overview

In 2007, we initiated our activities related to castor beans, which were in 2012 organized under Evofuel, a wholly owned subsidiary, which changed its name to Casterra Ag, or Casterra, in 2019. Casterra focuses on the development of an integrated solution – agricultural-technical growth protocols for castor cultivation for the production of castor oil to be used for industrial uses, such as bio-polymers and lubricants. Casterra's integrated agricultural solution includes breeding of advanced high-yielding castor bean varieties that are non-GM and agricultural growth protocols compatible with a mechanical harvesting solution exclusively available to Casterra's customers. Our target market is Brazil, where large scale castor agriculture and industry are well established.

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, to name a few. 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. The market for castor oil and its derivatives is rapidly growing and according to market publications, is expected to reach $2.3 billion by 2024[13]. The growth in this market is expected to be further supported by the conversion of the castor bean plant to a modernized commercial crop.

Competition

Casterra's competition includes a few other relatively small companies that supply castor seeds to growers worldwide. Casterra differentiates itself by providing rain-fed varieties (while its competitors offer irrigation-based varieties) and by providing a unique, mechanical harvesting solution for modernized commercial crop.

Business Model & Products

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: (i) high yielding varieties with plant structure suitable for mechanized harvest; (ii) best practices and recommendations to growers for growing castor efficiently in large scale; and (iii) advanced compatible mechanical harvest solution.

[12] For more info see https://www.health.gov.il/UnitsOffice/HD/cannabis/Pages/default.aspx
[13] Grand View Research, August 2016, http://www.grandviewresearch.com/industry-analysis/castor-oil-derivatives-industry.

Product development

Casterra develops proprietary castor seed varieties and growth protocols adapted to specific target markets. During 2018, Casterra completed semi-commercial field trials of certain castor varieties with partners in multiple target locations. In 2019, Casterra completed semi commercial field trials in multiple locations in South America and decided to focus its commercialization efforts to Brazil.

The castor seeds product development process includes three main steps: (i) research and pre-breeding, which we typically undertake in Israel and which takes between one to two years, resulting in experimental varieties for market location trials; (ii) yield field trials in the target markets, which take between two to three years and yield varieties for pre-commercial field trials; and (iii) semi-commercial field trials, which take approximately two years in the target markets.

Key Collaborations

Fantini s.r.l.

In October 2018, Casterra announced a breakthrough achieved in the mechanical harvesting of castor beans with Fantini s.r.l., 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.r.l Harvester with Casterra's proprietary varieties demonstrated significant improvement in yield loss in field trials.

The harvester is commercialized by Fantini s.r.l to Casterra's global partners.

Intellectual Property

Our policy is to register relevant castor varieties in the destination territories. To date we have registered several of our varieties in several Latin America countries including Brazil.

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, we are required, among other things, to (i) obtain toxins permits, which allow us to conduct experiments using "hazardous materials," as such term is defined in the applicable regulations, and (ii) follow specific rules regarding waste disposal. Violation of these regulations may expose the company 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 our 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

We do not significantly rely upon any sources of raw materials for our operations.

Seasonality

Casterra's castor seed business in general, and our revenues in particular, generated from our collaborations with castor growers, are subject to variations based on crop seasonality. The timing of our seed production field trials, as well as the delivery of castor seeds to our partners and revenue recognition with respect to such seed sales, derive substantially from the seasonality of castor growing in the locations where we produce seeds and in our target markets.

C. Organizational Structure

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	100%
Biomica Ltd.	Israel	90.9% (1)
Canonic Ltd.	Israel	100%
Casterra Ag Ltd. (formerly known as Evofuel Ltd.).	Israel	100%
Lavie Bio Ltd.	Israel	72.2% (2)

(1) Remaining 9.1% of Biomica Ltd.'s outstanding share capital is held by Biomica's Chief Technology Officer.
(2) Remaining 27.8% of Lavie Bio Ltd.'s outstanding share capital is held by Pioneer Hi-Bred International, Inc. (also known by the name Corteva).

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 these offices will expire on December 31, 2021, and we hold an option to renew such lease for an additional 36 months.

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. The first lease covers approximately 13,500 square meters (or 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 months. The second lease covers approximately 10,000 square meters (approximately 108,000 square feet) of land and expires on May 14, 2021, and we hold an option to renew such lease for an additional 60 months.

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 medicinal cannabis. In addition, the Evogene Farm contains warehouses, office facilities and seed banks. During 2018 and 2019, we subleased a portion of the Evogene Farm to an agriculture-tech start-up company.

In 2015, we established a research and development facility in the Bio-Research and Development Growth (BRDG) Park, developed by Wexford Science & Technology, a BioMed Realty Company, at the campus of the Donald Danforth Plant Science Center in St. Louis, Missouri. We signed a six year lease, expiring November 1, 2021 and covering approximately 5,745 square feet lab facility. Starting March 2020, the facility accommodates the activities of Lavie Bio Inc., a wholly owned subsidiary of our subsidiary Lavie Bio. A portion of the leased space, comprising approximately 1,200 square feet of lab and office space, is subleased to a biotech company since December 2017, under a three-year sublease agreement.

Unless otherwise stated, all of our facilities are fully utilized. We have no material tangible fixed assets apart from the leased properties described above.

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, 2019 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 biotechnology company aiming to revolutionize the development of novel products for life-science based industries, including human health, agriculture, and industrial applications, by utilizing cutting edge computational biology technologies. To achieve this mission, we established our unique Computational Predictive Biology, or CPB, platform, leveraging the revolutions in big data and artificial intelligence and incorporating a deep understanding of biology. Our CPB platform aims to disrupt conventional life-science product development methodology, currently challenged by inefficiencies, by computationally designing the most relevant core components for life-science products such as microbes, small molecules and genes.

Currently, we apply our technology and approach for the development of products based on microbes, small molecules and genes in three general industries:

(iv) Agriculture, focusing on the following target markets:
   a. Agriculture biologicals, via our subsidiary Lavie Bio Ltd.,
   b. Agro chemicals, via our subsidiary AgPlenus Ltd., and
   c. Seed traits, via our Ag-Seeds division;

(v) Human health, focusing on the following target markets:
   a. Human microbiome-based therapeutics, via our subsidiary Biomica Ltd., or Biomica, and
   b. Medical cannabis products, via our subsidiary Canonic Ltd.; and

(vi) Life-science based industrial applications, currently focusing on castor seed varieties and agro-technical capabilities, through our subsidiary Casterra Ltd. (formerly Evofuel Ltd.), or Casterra.

Each subsidiary pursues its individual mission, focusing on the following objectives: (i) advancing its product development and pipeline, (ii) establishing its "go-to-market", and (iii) securing additional financial resources, if and when required.

To capture the value of the diverse applicability of our computational platform, our business model consists of two main pathways, both based primarily on the utilization of the CPB Platform: (i) The establishment of market-focused subsidiaries to develop and commercialize product pipelines, meeting unmet needs in selected industries, and (ii) in certain other cases, engaging directly with strategic partners for the development of specific products.

Key Measures of Our Performance

Revenues

Our revenues are principally derived from research and development payments under our collaboration agreements and related arrangements with our collaborators. Most 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.

Share Purchases

We have entered into share purchase agreements with Monsanto (now Bayer) and Bayer, which were signed in contemplation of our collaboration agreements with them. We attribute the proceeds from arrangements under these agreements to the value of our ordinary shares issued to Monsanto and Bayer at the time of the investments as well as to the services we perform under the collaboration agreements. As a result, we recognized in 2018 and 2017 as revenues the excess payment, which is the consideration these investors paid for our ordinary shares over the market value of our ordinary shares traded on the TASE at the time of the investment. We did not record such revenues for the year ended December 31, 2019.

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:	**2019**	**2018**	**2017**
	(U.S. dollars, in thousands)		
Agriculture	$ 651	$ 1,641	$ 3,247
Industry	26	106	134
Human	-	-	-
Unallocated	76	-	-
Total	**$ 753**	**$ 1,747**	**$ 3,381**

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:	**2019**	**2018**	**2017**
United States	33%	57%	76%
Germany	2%	13%	10%
Israel	35%	12%	6%
Brazil	28%	6%	-
Other	2%	12%	8%
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 (including share-based compensation) 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). Cost of revenues also includes operational overhead costs such as: depreciation of our property, plant and equipment; costs related to leasing and operating our office and laboratory facilities and greenhouses; 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 consist of developing and improving 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, mainly with respect to producing genomic data, 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.

In view of the COVID-19 outbreak, which has disrupted our operations starting March 2020, we adjusted our work plans and budget, reducing and delaying certain activities originally planned for the second quarter and second half of 2020. Accordingly, we expect that our research and development expenses during 2020 will decrease from those of 2019.

Business Development Expenses: Business development expenses consist of costs primarily related to maintaining our relationships with our collaborators and establishing new collaborations. These costs include: salaries and related personnel costs (including share-based compensation); expenses incident to business travel; and expenses related to legal and professional services. We expect our business development expenses will remain at the current level during 2020.

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; expenses related to HR activities and employee benefits and welfare; expenses for consulting, insurance, legal, Directors' and officers' insurance, and professional services; 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 2020.

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: 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 $119 million as of December 31, 2019, 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. subsidiary, Evogene Inc., is subject to U.S. income taxes. In 2019, the weighted tax rate applicable to Evogene Inc. was approximately 27.25% (federal tax and state tax where the company operates).

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 (now through our subsidiary AgPlenus) and ag-biologicals activity (now through our subsidiary Lavie Bio).
- *Human Health:* our human health segment focuses 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	Industry	Human	Unallocated	Total
			(in thousands)		
Year ended December 31, 2019					
Revenues	$ 651	$ 26	$ –	$ 76	$ 753
Operating loss	(10,062)	(419)	(3,219)	(7,466)	(21,166)
Year ended December 31, 2018					
Revenues	$ 1,641	$ 106	$ –	$ 0	$ 1,747
Operating loss	(7,674)	(456)	(1,608)	(10,251)	(19,989)
Year ended December 31, 2017					
Revenues	3,247	134	–	3,381	3,381
Operating loss	(8,347)	(344)	(502)	(12,754)	(21,947)

A. Operating Results

Comparison of Period-to-Period Results of Operations

The following table sets forth our overall results of operations (on an unsegmented basis) for the years ended December 31, 2017, 2018 and 2019. The below discussion of our results of operations omits a comparison of our results for the years ended December 31, 2017 and 2018. 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, 2018, which we filed with the SEC on April 29, 2019.

	2017	2018	2019
	(U.S. dollars, in thousands)		
Consolidated Statements of Comprehensive loss:			
Total Revenues	$ 3,381	$ 1,747	$ 753
Cost of revenues	2,845	1,452	334
Gross profit	536	295	419
Operating Expenses:			
Research and development, net	16,987	14,686	15,791
Business development	1,686	2,084	2,029
General and administrative	3,810	3,514	3,765
Total operating expenses	22,483	20,284	21,585
Operating loss	(21,947)	(19,989)	(21,166)
Financing income	2,125	1,413	2,630
Financing expenses	(1,005)	(2,206)	(555)
Loss before taxes on income	(20,827)	(20,782)	(19,091)
Taxes on income	11	30	24
Loss	$ (20,838)	$ (20,812)	$ (19,115)

Year Ended December 31, 2019 Compared to Year Ended December 31, 2018

Revenues

Our total revenues decreased by $0.9 million, or 56.9%, to $0.8 million for the year ended December 31, 2019 from $1.7 million for the year ended December 31, 2018. This decline was mainly due the completion of our gene discovery and optimization activities under our collaboration agreement with Monsanto (from which we had recognized revenues).

Cost of Revenues

Cost of revenues decreased by $1.1 million, or 77.0%, to $0.3 million for the year ended December 31, 2019 from $1.4 million for the year ended December 31, 2018. The decrease primarily related to the decrease in revenues from R&D cost reimbursement, due to the completion of our gene discovery and optimization activities under our collaboration agreement with Monsanto.

Gross Profit

Gross profit increased by $0.1 million, or 42.0%, to $0.4 million for the year ended December 31, 2019 from $0.3 million for the year ended December 31, 2018, 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 $1.1 million, or 7.5%, to $15.8 million for the year ended December 31, 2019 from $14.7 million for the year ended December 31, 2018. This increase in R&D expenses during 2019 was attributable to (a) payments made to third parties for (i) pre-clinical studies conducted for Biomica, (ii) field trials conducted in target locations for Lavie Bio and (iii) the acquisition of a genomic-unique seed collection for Canonic, as well as (b) amortization of intangible assets.

Business Development Expenses. Business development expenses decreased by $0.1 million, or 2.6%, to $2.0 million for the year ended December 31, 2019 from $2.1 million for the year ended December 31, 2018, constituting a non-material decrease.

General and Administrative Expenses. General and administrative expenses increased by $0.3 million, or 7.1%, to $3.8 million for the year ended December 31, 2019 from $3.5 million for the year ended December 31, 2018, constituting an insignificant increase.

Financing Income and Expenses

Financing Income. Financing income increased by $1.2 million, or 86.1%, to $2.6 million for the year ended December 31, 2019 from $1.4 million for the year ended December 31, 2018. This increase was mainly due to exchange rate differences between the U.S. dollar and the New Israeli Shekel during the two years.

Financing Expenses. Financing expenses decreased by $1.6 million, or 74.8%, to $0.6 million for the year ended December 31, 2019 from $2.2 million for the year ended December 31, 2018. This decrease was mainly due to profit from marketable securities in 2019 as compared to loss from marketable securities in 2018.

Taxes on Income

For the year ended December 31, 2019, we recorded insignificant amounts for taxes on income in Israel due to advances on excess expenses and an insignificant amount of taxes with respect to Evogene Inc. We did not record or pay taxes on income for the year ended December 31, 2018 in Israel due to our loss for the year. We recorded an insignificant amount of taxes with respect to Evogene Inc.

Loss

The amount of our overall loss decreased by 8.2% to $19.1 million for the year ended December 31, 2019, from $20.8 million for the year ended December 31, 2018. That decrease reflected the cumulative effect of all of the above-described line items from our consolidated statements of comprehensive loss.

Application of Critical Accounting Policies and Estimates

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 collaboration 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 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 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 $1.6 million, $1.7 million and $2.2 million in 2019, 2018 and 2017, 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, BIRD and Canada-Israel Industrial Research and Development Foundation, or CIIRDF, are recognized as a liability if future economic benefits are expected from the projects that will result in royalty-bearing sales.

A liability for the 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, it 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 Inc. 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 granted 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".

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 2018 and 2019, 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.

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, 2019, we had cash, marketable securities and short term bank deposits of $46.9 million, of which $10 million were contributed in the transaction with Corteva, and working capital of $43.3 million, which is calculated by subtracting our current liabilities from our current assets. As of December 31, 2019, we had $3.3 million of outstanding long-term indebtedness related to government grants.

We expect that our working capital and capital investment needs will be funded for the foreseeable future mainly by our cash and cash equivalents, marketable securities and bank deposits we hold as well as from payments from our collaborators. Currently, our principal uses of cash are to fund our operations. 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 and cash equivalents, marketable securities and short-term bank deposits as of December 31, 2019 will be sufficient to meet our projected cash requirements for at least 12 months.

To the extent that existing cash, and cash equivalents, marketable securities and short-term bank deposits 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. The negative impact of the ongoing Coronavirus outbreak on economies and financial markets worldwide may adversely impact on our ability to raise additional funds for our operations, if and when needed.

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, 2017, 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, 2018, which we filed with the SEC on April 29, 2019:

	2017	2018	2019
	(U.S. dollars, in thousands)		
Net cash used in operating activities	$ (15,929)	$ (15,161)	$ (17,666)
Net cash provided by investing activities	15,245	17,353	37,139
Net cash provided by financing activities	814	297	9,306
Exchange rate differences - cash and cash equivalents	69	(114)	159
Net increase (decrease) in cash and cash equivalents	$ 199	$ 2,375	$ 28,938

Cash Used in Operating Activities

Cash used in operating activities for the year ended December 31, 2019 was $17.7 million and primarily reflects our overall loss of $19.1 million, as reduced, in part, by the elimination of certain non-cash items that were taken into account in calculating, and that increased, our overall loss, including $2.4 million of depreciation expenses, $1.6 million of share-based compensation expenses, increase in other payables of $0.4, and $0.4 million of expense due to the amortization of intangible assets; which reduction was partially offset by the elimination non-cash items that were taken into account in calculating, and that reduced, that loss amount, including the increase in other receivables of $1.3 million and net financing income of $2.4 million.

Cash used in operating activities for the year ended December 31, 2018 was $15.1 million and primarily reflects our overall loss of $20.8 million, as reduced, in part, by the elimination of certain non-cash items that were taken into account in calculating, and that increased, our overall loss, including $1.7 million of share-based compensation expenses, $2.0 million of depreciation expenses and $0.7 million of net financing expenses, as well as by $1.4 million interest received; which reduction was partially offset by the elimination of non-cash items that were taken into account in calculating, and that reduced, that loss amount, including a decrease of $0.2 million in deferred revenues and other advances.

Cash Provided by Investing Activities

Cash provided by investing activities was $37.1 million for the year ended December 31, 2019. That primarily reflects $25.4 million of net cash proceeds from the sale of marketable securities and $12.6 million of cash withdrawn from bank deposits, partially offset by $0.9 million of cash used for the purchase of property, plant and equipment.

Cash provided by investing activities was $17.4 million for the year ended December 31, 2018. That primarily reflects $31.9 million of net cash proceeds from the sale of marketable securities, partially offset by $14.2 million of cash invested in bank deposits and $0.4 million of cash used for the purchase of property, plant and equipment.

Cash Provided by Financing Activities

Cash provided by financing activities was $9.3 million for the year ended December 31, 2019. That was primarily attributable to $10 million of cash provided by the issuance and sale of ordinary shares of subsidiaries to third parties, offset, in part, by the use of $0.1 million for net repayments in respect of government grants and $0.6 million for the repayment of an operating lease liability.

Cash provided by financing activities was $0.3 million for the year ended December 31, 2018, which was primarily attributable to net proceeds from government grants.

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 2019, we received grants totaling $7.4 million (including accrued interest) from the IIA, and repaid $3.4 million, in respect of refundable projects. We also received an additional $1.85 million from the IIA in respect of a non-refundable project. We have received grants totaling approximately $1 million (linked to the U.S. Consumer Price Index) from BIRD and have repaid $0.6 million, whereas the remaining $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 $0.8 million from the EU, which are not required to be repaid. As of December 31, 2019, we had four active research grants under which we have received funding: three from the IIA and one from the EU.

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 $2.1 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 $1.8 million was granted to Evogene.

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; 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.

Under these two BIRD programs, 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 66 months from the original grant date, in the case of our program with DuPont, or 60 months, in the case of our program with MBI, we and our partner to the development program 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.

As alluded to in this section above and as described in Note 12 to our financial statements that appear in Item 18 of this annual report, the grant received for the joint development program with DuPont-Pioneer (now Corteva) has been repaid in full, whereas our liability for grants received for our joint research and development program with MBI has been cancelled.

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 will receive a total 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 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, 2019, 86 of our employees, representing approximately 67% 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

In recent years we experienced an increase in the cost we incur for procuring a directors and officers, or 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 increases 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.

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. Off-Balance Sheet Arrangements

We do not currently engage in off-balance sheet financing arrangements. In addition, we do not have any interest in entities referred to as variable interest entities, which includes special purpose entities and other structured finance entities.

F. Contractual Obligations

Our significant contractual obligations and commitments as of December 31, 2019 are summarized in the following table:

	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
	(in thousands, unaudited)				
Trade payables	$ 1,001	$ -	$ -	$ -	$ 1,001
Employees and payroll accruals	2,071	-	- -	- -	2,071
Other payables(1)	1,339	-	-	-	1,339
Liabilities in respect of government grants (undiscounted)(2)	37	303	985	2,474	3,799
Non-cancellable operating leases (undiscounted) (3)	895	1,350	1,165	229	3,639
Total	$ 5,343	$ 1,653	$ 2,150	$ 2,703	$ 11,849

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(1) Consists of accrued expenses to be paid to suppliers and subcontractors, mainly for work related to our research and development activities.

(2) Consists of the projected repayments of government grants that partly fund our research and development activities.

(3) Consists of non-cancellable operating leases of our offices, laboratory facilities, greenhouses and motor vehicles.

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	53	President and Chief Executive Officer
Mr. Ido Dor	44	Chief Executive Officer of Lavie Bio Ltd.
Dr. Eyal Emmanuel	46	Chief Scientific Officer
Dr. Elran Haber	39	Chief Executive Officer of Biomica Ltd.
Dr. Arnon Heyman	43	Chief Executive Officer of Canonic Ltd.
Mr. Mark Kapel	43	Executive Vice President Technology
Mr. Eran Kosover	43	Chief Executive Officer of AgPlenus Ltd.
Ms. Dorit Kreiner	48	Chief Financial Officer
Directors		
Mr. Martin S. Gerstel(3)(4)	78	Chairman of the Board
Ms. Sarit Firon(1)(2)(4)	53	Director
Mr. Ziv Kop(1)(2)(3)(4)	49	Director
Dr. Adrian Percy(4)	54	Director
Mr. Leon Y. Recanati(3)(4)	71	Director
Dr. Oded Shoseyov(1)(2)(4)	53	Director

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(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 Chairman 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.

Mr. Ido Dor has served as Chief Executive Officer of Lavie Bio, a subsidiary of Evogene, from February 2019. In January 2018, Mr. Dor was appointed Executive Vice President & General Manager Ag-Biologicals, responsible for the overall management of the division. Previously, from November 2015 until his appointment as Executive Vice President & General Manager ag-biologicals, Mr. Dor served as Executive Vice President & General Manager Crop Enhancement, responsible for the overall management of the Crop Enhancement division. Mr. Dor joined Evogene in 2011 as a Director of Business Development and led the business activity of the Ag-Chemicals division. Prior to joining Evogene, Mr. Dor headed the Small & Mid-Size Enterprise business unit at the Israeli branch of SAP, the world leading organizational software company. Prior to his role at SAP in Israel, Mr. Dor led a business unit at Niram Gitan Group, a leading Israeli management-consulting firm. Mr. Dor holds an M.B.A. and a BSc in Industrial Engineering - both from Tel Aviv University.

Dr. Eyal Emmanuel has served as Chief Scientific Officer of Evogene since January 2019 and previously served as Evogene's VP of Corporate Strategy from September 2018 until January 2019. In parallel Dr. Emmanuel is serving as the CEO of EcoBreed, an Israeli startup company and as the Chief Technology Officer of Agrinnovation – the Hebrew University's internal fund for agriculture. From September 2017 to September 2018, Dr. Emmanuel served as the VP Ideation and technology evaluation of Yissum Ltd., the technology transfer office of the Hebrew University. From 2014 to January 2017, Dr. Emmanuel served as the Chief Science Officer & Head of R&D Crop Protection of Evogene. From May 2006 to September 2017, Dr. Emmanuel served in various managerial R&D positions, leading several of the Company's key research programs. Prior to joining Evogene, Dr. Emmanuel served as a researcher at LSRI, Israel's premier life sciences research center. Dr. Emmanuel holds a Ph.D. and an MSc from the Weizmann Institute's Department of Plant Science as well as a BSc from the Hebrew University of Jerusalem, Faculty of Agriculture. Dr. Emmanuel also holds an MBA from the College of Management - Academic Studies (COMAS), majoring in Bio-Medical Management.

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 (NASDAQ, TASE: "TRPX") 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 Chairman 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. since April 2019 and as Vice President & General Manager of Ag-Seeds since January 2018, previously serving as director of project management crop protection. Dr. Heyman's team was in charge of all collaboration and internal project in the fields of disease control, insect control and chemistry. Prior to Evogene, Dr. Heyman served as CTO of BondX Technologies Ltd. from 2009 to 2014. Dr. Heyman holds a PhD. in Biotechnology from The Hebrew University of Jerusalem (2008) and a MBA from the College of Management (2015).

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, an MBA specializing in Management of Technology from Tel Aviv University's Faculty of Management – Recanati Graduate School of Business Administration.

Mr. Eran Kosover has served as Chief Executive Officer of AgPlenus Ltd., a subsidiary of Evogene, since November 2018. In January 2018, Mr. Kosover was appointed Executive Vice President & General Manager Ag-Chemicals, responsible for the overall management of the division. Previously, Mr. Kosover served as the Executive Vice President & General Manager Crop Protection from November 2015 to January 2018, responsible for the overall management of the Crop Protection division. Prior to that, Mr. Kosover served as Evogene's VP Project Management from April 2014 to November 2015, and was responsible for managing all company collaborations and internal projects. From January 2009 to May 2011 Mr. Kosover served as a Business Development Manager. Prior to joining the company, Mr. Kosover was in charge of sales, business development and operations in Atera Networks, an Israeli Hi-tech start-up in the field of SMB IT. Prior to Atera, Mr. Kosover worked as a Project Manager in various strategic consulting projects for Teva Pharmaceuticals (mainly Teva EU division). Mr. Kosover holds an M.A. in Economics and a B.A. in Economics and Management, both from Tel Aviv University.

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 between 2014 and 2018 and Therapix Biosciences between 2011 and 2014 (TASE: THXBY). Ms. Kreiner also previously filled the position of Director of Finance of Evogene between 2004 and 2011. Ms. Kreiner holds a BA in accounting and economics from Tel Aviv University, a Bachelors of Law from the College of Management and an MBA in Finance and Marketing from Tel Aviv University.

Directors

Mr. Martin S. Gerstel has served as our Chairman of the Board of Directors since December 2004 and as a director since February 2004. In addition, Mr. Gerstel has served as the Chairman of Compugen Ltd., a predictive drug discovery and development company, from 1997 to 2017; Chairman of Keddem Bioscience Ltd., a drug discovery company, from 2004 to 2016, and co-founder and co-chairman of Itamar Medical Ltd., a medical device company, from 1997 to 2017, where he now serves as a director. In addition, Mr. Gerstel has been a board member of Yeda Ltd., the technology transfer company of the Weizmann Institute of Science, since 1994 and was a board member of Yissum Ltd., the technology transfer company of The Hebrew University, from 2003 to 2015. He is a member of the board of governors and the executive committee of the Weizmann Institute of Science and the board of governors of The Hebrew University of Jerusalem. Prior to relocating to Israel, Mr. Gerstel was co-chairman and chief executive officer of ALZA Corporation, a U.S. pharmaceutical company specializing in advanced drug delivery, which he helped to found in 1968. Mr. Gerstel holds a BSc from Yale University and an MBA from Stanford University.

Ms. Sarit Firon has served as a director of our company since she was appointed by the Board in August 2016. Ms. Firon is the Managing Partner of Cerca Partners, a Venture Capital, co-investment fund. Previously, Ms. Firon was the Chief Executive Officer of Extreme Reality (XTR3D), a company that provides real time software-based, 3D motion capture technology, using a single standard webcam. Prior to her role at Extreme Reality (XTR3D), Ms. Firon held roles as Chief Financial Officer at each of Kenshoo, MediaMind (NSDQ: MDMD, acquired by DG corp.), OLIVE SOFTWARE, P-CUBE (acquired by Cisco) and RADCOM, LTD. (NSDQ: RDCM). Ms. Firon serves as the Chairperson of myThings, a global leader in customized programmatic ad solutions, which runs personalized retargeting campaigns on desktop, mobile and Facebook, since July 2015. Ms. Firon also holds other board positions at DTORAMA and Protected Media. Ms. Firon holds a Bachelor's degree in accounting and economics, and a Diploma in Accounting Advanced Studies, both from Tel Aviv University.

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 VC. From February 2014 to June 2016, Mr. Kop served as chief operating officer and Active 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. and an MBA from Tel Aviv University Law School and Business School and is a graduate of INSEAD's Young Managers Program.

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 Biotalys. He is a member of the science and technology boards of Terramera, Biotalys and Rothamsted Research. Dr. Percy currently serves as the CTO of UPL Ltd., is a venture partner with Finistere Ventures and frequently acts as an advisor to companies through his own consultancy company, Nomad Technology Consulting. Previously, Dr. Percy 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 crop protection development activities for Bayer in North America and regulatory affairs activities across the entire division of Crop Science. Dr. Percy has held positions in the research and development departments of Rhone Poulenc, Aventis CropScience and Bayer in France, Germany and the United States. Dr. Percy earned a bachelor's degree in pharmacology at the University of Liverpool, as well as a master's degree in toxicology and a doctorate in biochemistry at the University of Birmingham.

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

Dr. Oded Shoseyov has served as a director of our company since November 2018. Dr. Shoseyov is the scientific founder of 14 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., and Karme Yosef Winery. Dr. Shoseyov is a faculty member of The Hebrew University of Jerusalem, where he conducts research in plant molecular biology protein engineering and nano-biotechnology. His group focus is on Bio-Inspired Nanocomposite materials. He has authored or co-authored more than 200 scientific publications and is the inventor or co-inventor of 64 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 BSc from the Hebrew University (1981), MSc from the Hebrew University (1982), and a Ph.D. from the Hebrew University (1987).

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, 2019 to all persons who served as directors and/or executive officers during that year, was approximately $3.2 million. That amount includes approximately $0.3 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.

During 2019, we granted to our executive officers and directors an aggregate amount of 230,000 options, of which 2,500 were granted with an exercise price of NIS 5.61, 2,500 were granted with an exercise price of NIS 5.63, 150,000 were granted with an exercise price of NIS 5.74, 7,500 were granted with an exercise price of NIS 6.19 and 67,500 were granted with an exercise price of NIS 8.53. Those options generally expire within ten years from the date of grant. In addition, during 2019, a few of our officers, who serve as CEOs in our subsidiaries, were granted options to purchase equity of our subsidiaries, which are not detailed above.

The following table presents information regarding compensation accrued in our financial statements for the year ended December 31, 2019 for our five most highly compensated executive officers.

	(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	366	76	96	538
Eran Kosover				
CEO AgPlenus	208	-	370	578
Ido Dor				
CEO Lavie Bio	209	48	404	661
Mark Kapel				
EVP Technology	199	35	51	285
Dorit Kreiner				
Chief Financial Officer	201	31	45	277

(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 2020 relating to the officers' service in our company in 2019, as approved by our compensation and nominating committee and board of directors, and, with respect to our Chief Executive Officer, 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, 2019 in respect of option grants. Some of our executive officers 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 (which include directors and senior executive officers), or a compensation policy. 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 compensation policy was last updated in September 2019, at a special 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 Chief Executive Officer 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 Chief Executive Officer, the shareholder approval must include 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"). 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 shareholder 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 is consistent with the compensation policy and that links financial and qualitative target-based goals and metrics related to the specific objectives within the responsibility of the relevant executive officer. The goals and objectives of our executive officers are determined by the compensation and nominating committee and our board of directors. For each fiscal year, our board of directors determines the maximum target bonus for each of our executive officers, including our Chief Executive Officer. In the case of our executive officers other than the Chief Executive Officer, assuming that the bonus terms conform to the compensation policy, such terms only require approval by the compensation and nominating committee followed by the board of directors. For our Chief Executive Officer, 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 the additional condition that either: (i) the majority voted in favor includes a majority of the shares held by shareholders who are neither controlling shareholders of our Company nor have a conflict of interest (referred to as a "personal interest" under the Companies Law) in such matter, or (ii) the shares held by the foregoing non-conflicted, non-controlling shareholders that are voted against the terms of compensation do not constitute more than two percent of the outstanding voting rights in our company.

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 Chief Executive Officer, 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 to 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 $17,950 for directors not classified as experts and approximately $24,000 for directors classified as experts; and
- Per-meeting fees in an amount of approximately $950 for directors not classified as experts and approximately $1,250 for directors classified as experts; 60% of such amounts for participation in meetings via phone 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 to Chairman of the Board

Under our compensation policy, a chairman of the board who is determined by the Board to be an "active chairman" in light of increased involvement in our activities and increased time investment in the performance of the duties accompanying the chairman's position compared to the other directors, may be entitled to increased compensation relative to our other directors. If so determined, an active chairman of our board will be entitled to (i) an annual fee of up to three times the average annual fee of the other directors and (ii) a per-meeting fee of up to two times the average per-meeting fee of the other directors.

Our Board has determined that Mr. Martin Gerstel, our chairman of the board, is an active chairman, and our shareholders have approved setting Mr. Gerstel's fees as active chairman at approximately $6,200 per month. Mr. Gerstel has waived his right to receive the per-meeting fees that are payable to our other directors for so long as he serves as the Company's active chairman of the board.

Equity Compensation to Directors

In accordance with our compensation policy, each new non-employee director who is appointed to the board of directors is granted options to purchase 10,000 ordinary shares of the Company. These options vest over a period of four years, with one-sixteenth of the options vesting at the end of each successive three-month period following the director's appointment, subject to continued service through each vesting date. In accordance with our compensation policy, the chairman of the board was granted options to purchase twice the number of ordinary shares, on similar terms.

In addition, each non-employee director is granted annually, upon the anniversary of such director's original election to the board, options to purchase 2,500 ordinary shares of the Company. These options vest over a period of one year commencing three years following such anniversary of the director's appointment to the board, with one-fourth of the options vesting at the end of each successive three-month period during such year, subject to continued service through each vesting date. The chairman of the board is granted options to purchase twice the number of ordinary shares, on similar terms. All of our currently serving directors were granted options accordingly.

All option grants to directors are subject to the terms of our 2013 Share Option Plan and are granted at an exercise price equal to the higher of (i) the closing price of our ordinary shares on the TASE on the date of option allocation and (ii) the average closing price of our ordinary shares on the TASE during the 30 trading days prior to 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 April 20, 2020, 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 three share option and incentive plans: our Evogene Share Option Plan (2002), our Evogene Ltd. Key Employee Share Incentive Plan, 2003, and our Evogene Ltd. 2013 Share Option Plan, or the 2013 Plan. All such option and incentive plans provide for the grant of options to purchase our ordinary shares. The plans are administered by our board.

As of April 20, 2020, options to purchase 4,124,899 ordinary shares were outstanding under our option and incentive plans, having a weighted average exercise price of NIS 24.74 per share, of which, options to purchase 2,908,628 ordinary shares were exercisable. An additional 1,653,827 ordinary shares remained available for future grant under our option and incentive plans (all of which are available under our 2013 Plan) as of that date.

Among other types of option awards, our share option and incentive plans provide for granting options in compliance with Section 102 of the Israeli Income Tax Ordinance, 1961, 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 or options 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 (or were) to be 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 options or shares.

The 2013 Plan also permits us to grant options to U.S. residents. Under an addendum to the 2013 Plan, or the U.S. Addendum, that our shareholders approved at a special general meeting of our shareholders in March 2016 following adoption by our board in March 2015, the board may grant options to purchase ordinary shares to U.S. residents, in accordance with the applicable provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code.

Options granted under our plans are subject to vesting schedules and generally expire 10 years from the grant date. The plans address the treatment of vested and unvested options upon the termination of employment of the option 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 the date hereof (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%	5.6%
Biomica	24.5%	*17.2 %*
Casterra	*8 %*	*3.9 %*
Canonic	*9.1 %*	–
Lavie Bio	*10 %*	*7.8 %*

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 $0.8 million in 2019, as detailed in Note 16.e. 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.

Chairman of the Board

Our articles of association provide that the chairman of the board is appointed by the members of the board of directors and serves as chairman of the board throughout his term as a director, unless resolved otherwise by the board of directors. Under the Companies Law, the general manager or a relative of the general manager may not serve as the chairman of the board of directors, and the chairman or a relative of the chairman 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 chairman of the board of directors; the chairman of the board may not be vested with authorities that are granted to those subordinated to the general manager; and the chairman 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 chairman 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 Ms. Sarit Firon, Mr. Ziv Kop and Dr. Oded Shoseyov. Ms. Firon 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 Ms. Sarit Firon 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 at http://www.evogene.com/wp-content/uploads/2017/07/evogene-audit-committee-charter.pdf.

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 Ms. Sarit Firon, Mr. Ziv Kop and Dr. Oded Shoseyov. Dr. Shoseyov 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 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 approving 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 at http://www.evogene.com/wp-content/uploads/2017/07/9b-evogene-comp-nominating-committee-charter.pdf. 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 Mr. Martin Gerstel, Mr. Ziv Kop and Mr. Leon Recanati serve as members. Mr. Gerstel 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 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. Each person listed in the table under "Item 6. Directors, Senior Management and Employees— A. Directors and Senior Management" is an office holder 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:

(i) 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;

(ii) 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

(iii) 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; (ii) 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, 2017, 2018 and 2019 was 165, 150, and 143, respectively. As April 20, 2020, the total number of employees in Evogene and its subsidiaries was 122. This net decrease over the course of the last three years mainly relates to adjustment of the workforce to our activities, and hiring new employees relevant to certain activities while reducing workforce in other areas of activity.

As of the date hereof, all of our employees are based in Israel, except for five U.S.-based employees who are based at our U.S. research and development site in St. Louis, Missouri and are employed by Lavie Bio Inc., a U.S. subsidiary of Lavie Bio. In addition, during 2019, we had, on average, approximately 17 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, excluding hourly employees:

	As of December 31, 2019		
	Israel (Evogene Ltd.)	U.S. (Lavie Bio Inc.)	Total
Executive Management	4	-	4
Lavie Bio Ltd.	15	-	15
AgPlenus Ltd.	16	-	16
Ag-Seeds division	5	-	5
Casterra Ag Ltd.	2	-	2
Biomica Ltd.	7	-	7
Canonic Ltd.	4	-	4
Technology Platform	57	4	61
General and administrative	25	-	25
Total	139	4	143

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.

Our staff possesses multidisciplinary and wide-ranging expertise, with employees specializing in biology, chemistry, plant genetics, agronomics, mathematics, computer science and other related fields. Additionally, 38 of our employees hold a Ph.D.

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."

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 April 20, 2020 (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 April 20, 2020, 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 25,754,297 ordinary shares outstanding as of April 20, 2020. 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.B 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."

	Shares Beneficially Held	
Name of Beneficial Owner	**Number**	**Percentage of Class**
Principal Shareholders		
Entities affiliated with Waddell & Reed Financial, Inc. (1)	2,757,203	10.7%
Entities affiliated with The Phoenix Holdings Ltd. (2)	1,952,389	7.6%
Entities affiliated with Senvest Management, LLC (3)	2,179,092	8.5%
Monsanto Company (4)	1,636,364	6.4%
Entities affiliated with UBS Group AG (5)	1,369,829	5.3%
Executive Officers and Directors		
Ofer Haviv	739,682(6)	2.8%
Ido Dor	239,875(7)	*
Dr. Eyal Emmanuel	39,378(8)	*
Dr. Elran Haber	0(9)	*
Dr. Arnon Heyman	76,433(10)	*
Mark Kapel	101,136(11)	*
Eran Kosover	222,500(12)	*
Dorit Kreiner	36,185(13)	*
Martin S. Gerstel	671,506(14)	2.6%
Sarit Firon	9,375(15)	*
Ziv Kop	15,625(16)	*
Dr. Adrian Percy	3,125(17)	*
Leon Y. Recanati	1,006,360(18)	3.9%
Dr. Oded Shoseyov	3,750(19)	*
All directors and executive officers as a group (14 persons)	3,164,930	11.6%

* Less than 1%.

(1) This information is based upon a Schedule 13G/A filed jointly with the SEC on February 14, 2020 by (i) Waddell & Reed Financial, Inc., or WDR; and (ii) Ivy Investment Management Company, or IICO, an investment advisory subsidiary of WDR, each of which reported sole voting and dispositive power with regard to all 2,757,203 shares. According to this Schedule 13G/A, the investment advisory contracts grant IICO investment power over securities owned by their advisory clients and the investment sub-advisory contracts grant IICO investment power over securities owned by their sub-advisory clients and, in most cases, voting power. Any investment restriction of a sub-advisory contract does not restrict investment discretion or power in a material manner. Therefore, IICO may be deemed the beneficial owner of the securities under Rule 13d-3 of the Exchange Act. These ordinary shares are held by WDR and IICO. The principal address for these entities is 6300 Lamar Avenue, Overland Park, KS 66202.

(2) This information is based upon a Schedule 13G/A filed jointly with the SEC on February 18, 2020 by (i) Itzhak Sharon (Tshuva); (ii) Delek Group Ltd. and (iii) The Phoenix Holdings Ltd. According to this Schedule 13G/A, 1,952,389 ordinary shares are held by various direct or indirect, majority or wholly-owned subsidiaries of The Phoenix Holdings Ltd. (referred to as the Subsidiaries), and only The Phoenix Holdings Ltd. may be deemed to possess shared voting and dispositive power with regard to such ordinary shares. The Subsidiaries manage their own funds and/or the funds of others, including for holders of exchange-traded notes or various insurance policies, members of pension or provident funds, unit holders of mutual funds, and portfolio management clients. Each of the Subsidiaries operates under independent management and makes its own independent voting and investment decisions. According to the Schedule 13G/A, the Phoenix Holdings Ltd. is no longer controlled by the Delek Group Ltd. or by Itzhak Sharon (Tshuva). The principal address of the Phoenix Holding Ltd. is 53 Derech Hashalom, Givataim, 53454, Israel.

(3) This information is based upon a Schedule 13G/A filed jointly with the SEC on February 7, 2020 by (i) Senvest Management LLC. and (ii) Richard Mashaal. According to this Schedule 13G/A, all 2,179,092 reported ordinary shares are held in the accounts of Senvest Master Fund, LP and Senvest Technology Partners Master Fund, LP (collectively, the "Investment Vehicles"). Senvest Management, LLC may be deemed to beneficially own the securities held by the Investment Vehicles by virtue of Senvest Management, LLC's position as investment manager of each of the Investment Vehicles. Mr. Mashaal may be deemed to beneficially own the securities held by the Investment Vehicles by virtue of Mr. Mashaal's status as the managing member of Senvest Management, LLC. The principal address of Senvest Management, LLC is 540 Madison Avenue, 32nd Floor New York, New York 10022. The address of Mr. Richard Mashaal is c/o Senvest Management, LLC 540 Madison Avenue, 32nd Floor New York, New York 10022.

(4) This information is based upon a Schedule 13G/A filed by Monsanto Company with the SEC on February 12, 2016. Monsanto Company is a Delaware corporation and is listed on the NYSE and possesses sole voting and dispositive power over these ordinary shares. The principal address for Monsanto Company is 800 North Lindbergh Boulevard, St. Louis, Missouri 63167, USA.

(5) This information is based upon a Schedule 13G/A filed with the SEC on February 11, 2020 by UBS Group AG, or UBS. UBS is a Swiss corporation and a bank, as defined under Section 3 (a)(6) of the Exchange Act, and shares voting and dispositive investment power over these ordinary shares with its wholly-owned subsidiaries, UBS Europe SE., UBS Securities LLC and UBS AG London Branch. The principal address of UBS is Bahnhofstrasse 45, PO Box CH-8021 Zurich, Switzerland.

(6) Consists of 739,682 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 200,000 on June 19, 2020, 215,000 on July 17, 2023, 170,000 on March 22, 2025, and 154,682 on August 8, 2027. The weighted average exercise price of these options is NIS 34.77.

(7) Ido Dor serves 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 239,875 ordinary shares of Evogene issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 21,875 on September 21, 2021, 7,500 on July 15, 2023, 25,000 on November 9, 2024, 23,000 ordinary on March 22, 2025, 80,000 on November 17, 2025, and 82,500 on August 8, 2027. The weighted average exercise price of these options is NIS 29.42.

(8) Consists of 39,378 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 19,689 on November 13, 2028, and 19,689 on December 23, 2028. The weighted average exercise price of these options is NIS 10.16.

(9) Elran Haber serves as the CEO of our subsidiary company Biomica, and as such, he holds options to purchase shares of Biomica rather than our company itself. 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".

(10) Arnon Hayman serves as the CEO of our subsidiary company Canonic Ltd. Dr. Hayman holds options to purchase 76,433 ordinary shares of Evogene issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, 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, 34,375 on August 8, 2027, and 14,058 on February 26, 2028. The weighted average exercise price of these options is NIS 22.98.

(11) Consists of 101,136 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 10,000 on June 19, 2020, 13,500 on July 15, 2023, 12,000 on March 22, 2025, 15,950 on August 8, 2027, 33,750 on February 26, 2028, 9,375 on February 5, 2029 and 6,561 on July 30, 2029. The weighted average exercise price of these options is NIS 21.95.

(12) Eran Kosover serves as the CEO of our subsidiary company AgPlenus Ltd., and as such, he holds options to purchase shares of AgPlenus Ltd. In addition, Mr. Kosover also holds options to purchase 222,500 ordinary shares of Evogene issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 25,000 on May 7, 2024, 25,000 on November 11, 2024, 10,000 on March 22, 2025, 80,000 on November 17, 2025, and 82,500 on August 8, 2027. The weighted average exercise price of these options is NIS 32.41.

(13) Includes of 34,685 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 13,124 on February 4, 2029, and 21,561 on July 30, 2029. The weighted average exercise price of these options is NIS 6.80. Also includes 1,500 ordinary shares held by a trustee in favor of Ms. Kreiner.

(14) 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. Also includes 35,000 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 5,000 on June 11, 2020, 5,000 on September 17, 2021, 5,000 on November 10, 2022, 5,000 on September 14, 2023, 5,000 on August 16, 2024, 5,000 on July 2, 2025, and 5,000 on May 18, 2026. The weighted average exercise price of these options is NIS 38.03.

(15) Consists of 9,375 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, which expire on August 10, 2026. The weighted average exercise price of these options is NIS 26.89.

(16) Consists of 15,625 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, 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, and 625 on January 12, 2027. The weighted average exercise price of these options is NIS 57.76.

(17) Consists of 3,125 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, which expire on December 23, 2028. The weighted average exercise price of these options is USD $2.56.

(18) Includes 988,860 ordinary shares held by Mr. Recanati. Also includes 17,500 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, of which options to purchase the following number of shares expire on the following dates, respectively: 2,500 on June 11, 2020, 2,500 on September 17, 2021, 2,500 on June 11, 2022, 2,500 on September 15, 2023, 2,500 on August 17, 2024, 2,500 on July 2, 2025, and 2,500 on May 18, 2026. The weighted average exercise price of these options is NIS 38.03.

(19) Consists of 3,750 ordinary shares issuable upon exercise of options that are currently exercisable or exercisable within 60 days of April 20, 2020, which expire on November 13, 2028. The weighted average exercise price of these options is NIS 10.67.

Changes in Percentage Ownership by Major Shareholders

Over the course of 2019, there were increases in the percentage ownership of some of our major shareholders, 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) WDR (from 10.9% to 10.7%).

Over the course of 2018, there were increases in the percentage ownership of some of our major shareholders, including (i) entities affiliated with The Phoenix Holdings Ltd. (from 6.7% to 6.8%); and (ii) entities affiliated with UBS (from 5.2% to 5.3%), while there were decreases in the percentage ownership of (x) entities affiliated with Migdal (from 7.6% to 7.4%), (y) entities affiliated with our former significant shareholder, Harel Insurance, Investments & Financial Services Ltd., or Harel (from 5.2% to 4.5%), and (z) entities affiliated with our former significant shareholder, Morgan Stanley (from 5.4% to 3.9%).

Over the course of 2017, there were increases in the percentage ownership of some of our major shareholders, including (i) entities affiliated with The Phoenix Holdings Ltd. (from 5.1% to 6.7%); and (ii) entities affiliated with Harel (from 5.1% to 5.2%), while there were decreases in the percentage ownership of (x) entities affiliated with Psagot Investment House Ltd. (from 6.1% to 4.7%) and (y) entities affiliated with WDR (from 11.9% to 10.9%).

Record Holders

As of March April 20, 2020, all of our 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. In particular, we are aware, based on public filings, that the Phoenix Holdings Ltd. and UBS, which hold 7.6% and 5.3%, respectively, of our ordinary shares, have addresses outside of the United States.

B. Related Party Transactions

Except as described below or elsewhere in this annual report, since January 1, 2019, 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 Form 20-F promulgated by the SEC.

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.

Options

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, 2019, except as otherwise disclosed in this annual report.

ITEM 9. THE OFFER AND LISTING

A. 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. 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

Collaboration and License Agreements

We have entered into collaboration and license agreements with Bayer (formerly Monsanto). Information on the collaboration and license agreements may be found in this annual report under "Item 4. Information on the Company" and is incorporated herein by reference.

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. A description of that transaction is set forth in this annual report under "Item 4. Information on the Company," which description 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.

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.

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" at the time of receiving the dividend or on any time during the preceding twelve months, the applicable tax rate is 30%. 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 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. 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 649,560 for 2019), which amount is linked to the annual change in the Israeli consumer price index.

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 (as defined below);
- 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, 2019. 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, 2019, 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, 2019. As a result, a U.S. Holder who held our ordinary shares at any time during 2018 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 2019, we believe that we met the PFIC asset test described above for 2019 and, as a result, we were classified as a PFIC in 2019. 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 2020, there is substantial risk we will be classified as a PFIC for the 2020 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 2020 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 2018 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 2019 taxable year, our potential classification as a PFIC in 2020 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, changes in interest rates, inflation, 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, 2019 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, 2019, 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 NIS against the U.S. dollar (%) Based on Average of Daily Exchange Rates Throughout Year Compared to Previous Year
2019	(7.7)
2018	(0.1)
2017	(6.3)
2016	(1.1)
2015	8.6

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% decrease in the U.S. dollar relative to the NIS, and assuming no other change, our financing expenses would have increased by $0.8 million in 2019, increased by $2.1 million in 2018 and decreased by $0.3 million in 2017 due to our positive current net asset position denominated in NIS as of December 31, 2019 and negative current net asset position denominated in NIS as of December 31, 2018 and 2017. As of December 31, 2019, 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, 2019, we did not have any hedge arrangements in place to protect our exposure to commodity price fluctuations.

Interest rate risk

We have a considerable investment in marketable securities that consist of corporate bonds and government treasury notes denominated in NIS and in U.S. dollars. These investments expose us to the risk of interest rate fluctuations. An increase in Israeli or U.S. interest rates could cause the fair value of these investments to decrease. As of December 31, 2019, the fair value of these investments was $2.1 million. The potential loss in fair value from a hypothetical 0.5% increase in the interest rate would be approximately $0.03 million. As of December 31, 2019, we did not have any hedge arrangements in place to protect our exposure to interest rate 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.

A portion of the net proceeds from our U.S. initial public offering has been used to develop our operations in the agriculture, human health and industrial applications segments, and to fund our working capital and capital expenditures. The balance is held in cash, short term deposit and marketable securities.

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.

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, 2019. 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, 2019, 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, 2019. 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, 2019.

(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 Ms. Sarit Firon 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 Ms. Firon 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 2019. 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, 2018 and 2019:

	2018	2019
Audit Fees	$ 155,000	$ 130,000
Audit-Related Fees	-	5,000
Tax Fees	23,000	14,000
All Other Fees	-	-
Total	$ 178,000	$ 149,000

"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.

"Audit-related fees" and "All Other Fees" are for other tax filings and IFRS-US GAAP translations for internal use.

"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, 2019.

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, 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.

PART III

ITEM 17. FINANCIAL STATEMENTS

Not applicable.

ITEM 18. FINANCIAL STATEMENTS

See pages F-2 through F-42 of this annual report.

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
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	Second Amended and Restated Collaboration Agreement, dated October 27, 2013, by and between Monsanto Company and Evogene Ltd. (incorporated by reference to Exhibit 10.1 to Evogene's Registration Statement on Form F-1, as amended (Registration No. 333-191315)) †
4.6	Evogene Ltd. Officers Compensation Policy (incorporated by reference to Appendix A to Evogene's proxy statement for its special general meeting of shareholders held on September 26, 2019, annexed as Exhibit 99.2 to Evogene's Report of Foreign Private Issuer on Form 6-K, furnished to the SEC on August 22, 2019)
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.*
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) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002
12.2	Certificate of Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002
13.1	Certificate of Chief Executive Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002
13.2	Certificate of Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002
15.1	Consent of Kost Forer Gabbay and Kasierer, a member of Ernst & Young Global

† Confidential treatment has been granted for portions of this document. The omitted portions of this document have been filed with the SEC.

* 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: April 27, 2020

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, 2019

U.S. DOLLARS IN THOUSANDS

INDEX

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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 subsidiaries (the "Company") as of December 31, 2019 and 2018, and 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

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

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

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

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

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

Tel-Aviv, Israel
April 27, 2020

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

U.S. dollars in thousands (except share and per share data)

	Note	December 31, 2019	December 31, 2018
CURRENT ASSETS:			
Cash and cash equivalents	6	$ 34,748	$ 5,810
Marketable securities	7	2,128	26,065
Short-term bank deposits		10,000	22,592
Trade receivables		72	160
Other receivables and prepaid expenses	8	2,079	861
		49,027	55,488
LONG-TERM ASSETS:			
Long-term deposits		9	19
Operating lease right-of-use-assets	9	2,671	-
Property, plant and equipment, net	10	2,583	3,187
Intangible assets, net	11	17,074	-
		22,337	3,206
		$ 71,364	$ 58,694
CURRENT LIABILITIES:			
Trade payables		$ 1,001	$ 1,015
Employees and payroll accruals		2,071	2,081
Operating lease liability		895	-
Liabilities in respect of government grants	12	37	988
Deferred revenues and other advances	5	386	412
Other payables		1,339	935
		5,729	5,431
LONG-TERM LIABILITIES:			
Operating lease liability		2,076	-
Liabilities in respect of government grants	12	3,325	2,898
Deferred revenues and other advances	5	9	28
Severance pay liability, net	14	8	31
		5,418	2,957
SHAREHOLDERS' EQUITY:	16		
Ordinary shares of NIS 0.02 par value: Authorized − 150,000,000 ordinary shares; Issued and outstanding – 25,754,297 shares at December 31, 2019 and 2018, respectively		142	142
Share premium and other capital reserves		205,904	187,701
Accumulated deficit		(155,902)	(137,790)
Equity attributable to equity holders of the Company		50,144	50,053
Non-controlling interests		10,073	253
Total equity		60,217	50,306
		$ 71,364	$ 58,694

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

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS

U.S. dollars in thousands (except share and per share data)

	Note	Year ended December 31, 2019	2018	2017
Revenues		$ 753	$ 1,747	$ 3,381
Cost of revenues	18a	334	1,452	2,845
Gross profit		419	295	536
Operating expenses:				
Research and development, net	18b	15,791	14,686	16,987
Business development	18c	2,029	2,084	1,686
General and administrative	18d	3,765	3,514	3,810
Total operating expenses		21,585	20,284	22,483
Operating loss		(21,166)	(19,989)	(21,947)
Financing income	18e	2,630	1,413	2,125
Financing expenses	18e	(555)	(2,206)	(1,005)
Financing income (expenses), net		2,075	(793)	1,120
Loss before taxes on income		(19,091)	(20,782)	(20,827)
Taxes on income		24	30	11
Loss		$ (19,115)	$ (20,812)	$ (20,838)
Attributable to:				
Equity holders of the Company		(18,112)	(20,758)	(20,838)
Non-controlling interests		(1,003)	(54)	-
		$ (19,115)	$ (20,812)	$ (20,838)
Basic and diluted loss per share, attributable to equity holders of the Company	19	$ (0.70)	$ (0.81)	$ (0.81)
Weighted average number of shares used in computing basic and diluted loss per share		25,754,297	25,753,411	25,673,276

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, 2017	$ 141	$ 183,342	$ (96,194)	$ 87,289	$ -	$ 87,289
Loss	-	-	(20,838)	(20,838)	-	(20,838)
Exercise of options	1	682	-	683	-	683
Share-based compensation	-	2,244	-	2,244	-	2,244
Balance as of December 31, 2017	$ 142	$ 186,268	$ (117,032)	$ 69,378	$ -	$ 69,378
Loss	-	-	(20,758)	(20,758)	(54)	(20,812)
Exercise of options	*)-	9	-	9	-	9
Share-based compensation	-	1,424	-	1,424	307	1,731
Balance as of December 31, 2018	$ 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

*) 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,		
	2019	**2018**	**2017**
Cash flows from operating activities:			
Loss	$ (19,115)	$ (20,812)	$ (20,838)
Adjustments to reconcile loss to net cash used in operating activities:			
Adjustments to the profit or loss items:			
Depreciation	2,395	2,020	2,145
Amortization of intangible assets	374	-	-
Share-based compensation	1,578	1,731	2,244
Net financing expenses (income)	(2,414)	694	(1,454)
Loss from deduction of property, plant and equipment	12	-	-
Taxes on income	24	30	11
	1,969	4,475	2,946
Changes in asset and liability items:			
Decrease (increase) in trade receivables	88	(28)	37
Decrease (increase) in other receivables	(1,250)	95	221
Increase in long term deposits	(10)	-	(6)
Decrease in trade payables	(122)	(114)	(86)
Decrease in severance pay liability, net	(23)	-	-
Decrease in employees and payroll accruals	(10)	(132)	(7)
Increase in other payables	375	183	145
Decrease in deferred revenues and other advances	(45)	(165)	(500)
	(997)	(161)	(196)
Cash received (paid) during the year for:			
Interest received	803	1,360	2,173
Interest paid	(302)	-	-
Taxes paid	(24)	(23)	(14)
Net cash used in operating activities	$ (17,666)	$ (15,161)	$ (15,929)

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,		
	2019	**2018**	**2017**
Cash flows from investing activities:			
Purchase of property, plant and equipment	$ (900)	$ (374)	$ (590)
Proceeds from sale of marketable securities	27,084	63,639	22,737
Purchase of marketable securities	(1,637)	(31,700)	(11,659)
Proceeds from (investment in) bank deposits, net	12,592	(14,212)	4,757
Net cash provided by investing activities	37,139	17,353	15,245
Cash flows from financing activities:			
Proceeds from exercise of options	-	9	683
Repayment of operating lease liability	(597)	-	-
Issuance of subsidiary's ordinary shares to non-controlling interests	10,000	-	-
Proceeds from government grants	493	354	339
Repayment of government grants	(590)	(66)	(208)
Net cash provided by financing activities	9,306	297	814
Exchange rate differences on cash and cash equivalent balances	159	(114)	69
Increase in cash and cash equivalents	28,938	2,375	199
Cash and cash equivalents at the beginning of the year	5,810	3,435	3,236
Cash and cash equivalents at the end of the year	$ 34,748	$ 5,810	$ 3,435
Significant non-cash activities			
Acquisition of property, plant and equipment	$ 216	$ 80	$ 39
Increase of operating lease right-of-use-assets	$ 3,437	-	-
Acquisition of intangible assets	$ 17,448	-	-

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 biotechnology company aiming to revolutionize the development of novel products for life-science based industries, including human health, agriculture, and industrial applications, by utilizing cutting edge computational biology technologies. To achieve this mission, it established the Computational Predictive Biology ("CPB") platform, leveraging the revolutions in Big Data and Artificial Intelligence and incorporating a deep understanding of biology. The CPB platform aims to disrupt conventional life-science product development methodology, currently challenged by inefficiencies, by computationally designing the most relevant core components for life-science products such as microbes, small molecules and genes. This platform is utilized by the Company to discover and develop innovative products in the following areas: ag-chemicals, ag-biologicals, seed traits, medical cannabis, human microbiome-based therapeutics and integrated castor oil ag-solutions.

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 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, see Note 5. As to major customers, see Note 20c.

c. The Company has the following subsidiaries: Casterra Ag Ltd. (formerly Evofuel Ltd.), Evogene Inc., Biomica Ltd., AgPlenus Ltd., Lavie Bio Ltd., Canonic Ltd., Lavie Bio Inc., Lavie Tech Inc. and Taxon Biosciences, Inc.

Casterra Ag Ltd. was incorporated on January 1, 2012 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. Since 2015, Evogene Inc. has been 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.

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.

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-biologicals products. Lavie Bio Ltd. has incorporated two wholly owned subsidiaries, Lavie Bio Inc. and Lavie Bio Tech. Lavie Bio Tech 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") invested 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. for 27.84% of Lavie Bio Ltd.'s shares. As part of the foregoing transaction, the parties entered into a commercial arrangement, including with respect to the commercialization by Corteva of Lavie Bio Ltd.'s products, mainly in corn and soybean (See Note 11 and Note 16).

NOTE 1: – GENERAL (Cont.)

e. The Company's subsidiaries and divisions are split into three operating segments: (1) Agriculture - Evogene seed traits division, Lavie Bio, Ag Planus; (2) Human - Biomica, Canonic; and (3) Industry - Casterra (see also Note 20).

f. Definitions

In these Financial Statements –

Subsidiary - 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 in 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.)

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.

c. 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.

d. 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.

e. 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.

f. 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.

NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

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.

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.

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.

g. Leases:

As described below regarding the initial application of IFRS 16, "Leases" ("IFRS 16"), the Company elected to adopt the provisions of IFRS 16 using the modified retrospective method (without restatement of comparative data).

The accounting policy for leases applied effective from January 1, 2019, is as follows:

The Company assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

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 assets.

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.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Following are the amortization periods of the right-of-use assets by class of underlying asset:

	Years	Mainly
Leasehold	2-8	6
Motor vehicles	1-3	1

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 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.

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.

U.S. dollars in thousands (except share and per share data)

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

h. 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.

i. 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.

j. Revenue recognition:

Effective of January 1, 2018, the Company adopted IFRS 15, "Revenue from Contracts with Customers" ("IFRS 15"). The Company elected to adopt the provisions of IFRS 15 using the modified retrospective method with the application of certain practical expedients and without restatement of comparative data.

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.

IFRS 15 has been applied for the first time in the financial statements as of December 31, 2018 and the initial application of IFRS 15 did not affect the Company's financial statements.

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.

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.

k. 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.

l. 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.

Intangible assets with finite live 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 an intangible asset 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.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

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	17-20
Potential Products	17-20
Microorganisms Collection	17-20

m. Financial instruments:

Effective of January 1, 2018, the Company adopted IFRS 9, "Financial Instruments" ("IFRS 9"), which replaced IAS 39- Financial Instruments: Recognition and Measurement. The Company elected to adopt the provisions of IFRS 9 retrospectively without restatement of comparative data.

1. Financial assets:

Financial assets are classified, at initial recognition, and subsequently measured at amortized cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset’s contractual cash flow characteristics and the Company’s business model for managing them. The Company initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

2. Financial liabilities:

Financial liabilities within the scope of IFRS 9 are initially measured at fair value.

After initial recognition, the accounting treatment of financial liabilities is based on their classification as follows:

Financial liabilities measured at amortized cost:

Loans and other contingent liabilities are measured at amortized cost using the effective interest method taking into account directly attributable transaction costs.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

3. 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.

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.

4. Classification of financial instruments by fair value hierarchy:

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 as a whole:

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).

5. 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.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

6. 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.

n. 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.

o. Employee benefit liabilities:

The Company has several employee benefit 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.

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.

NOTE 2: - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The Company has defined contribution plans pursuant to section 14 to the Severance Pay 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 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.

p. 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 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.

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.

q. 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.

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 incremental borrowing rate 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 incremental borrowing rate 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 incremental borrowing rate.

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.

NOTE 3: - SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUPMTIONS USED IN THE PREPARATION OF THE FINANCIAL STATEMENTS (Cont.)

- Government grants:

  Government grants received from the IIA and BIRD are recognized as a liability 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 rely on the opinion of their 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 and exercise price and assumptions regarding expected volatility, expected life of share option and expected dividend yield.

- Leases - Estimating the incremental borrowing rate:

  The Company cannot readily determine the interest rate implicit in the lease; therefore, it uses its incremental borrowing rate (“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).

- 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 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 useful economic life 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 the "Modified CAPM Build-Up Method".

NOTE 4: - DISCLOSURE OF NEW STANDARDS IN THE PERIOD PRIOR TO THEIR ADOPTION

IFRS 3, "Business Combinations":

In October 2018, the IASB issued an amendment to the definition of a "business" in IFRS 3, "Business Combinations" (the "Amendment"). The Amendment is intended to assist entities in determining whether a transaction should be accounted for as a business combination or as an acquisition of an asset.

The Amendment consists of the following:

1. Clarification that to meet the definition of a business, an integrated set of activities and assets must include, as a minimum, an input and a substantive process that together significantly contribute to the ability to create output.

2. Removal of the reference to the assessment whether market participants are capable of acquiring the business and continuing to operate it and produce outputs by integrating the business with their own inputs and processes.

3. Introduction of additional guidance and examples to assist entities in assessing whether the acquired processes are substantive.

4. Narrowing the definitions of "outputs" and "business" by focusing on goods and services provided to customers.

5. Introducing an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business.

The Amendment is to be applied prospectively to all business combinations and asset acquisitions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020, with earlier application permitted.

NOTE 5: - COLLABORATION AND RESEARCH AGREEMENTS-

Below is information regarding collaboration agreements each of which amounts to 10% or more of our total revenues in 2019:

a. In November 2016, the Company entered into a research agreement with ADAMA Ltd., for research of samples sent by ADAMA Ltd. to the Company.

In July 2017, the Company entered into a research agreement with Pioneer Hi-Bred International, Inc. ("Pioneer") for the validation and further development activities relating to certain microbial strains. In January 2019, the Company provided Pioneer with collaboration strain for performance of a second year of field trials. As a result of the research agreement the Company recorded a revenue of $250 in 2019.

U.S. dollars in thousands (except share and per share data)

NOTE 5: - COLLABORATION AND RESEARCH AGREEMENTS- (Cont.)

b. In May 2018, the Company entered into a research agreement with Instituto Matogrossense do Algodao ("IMA"), for evaluating the insecticidal activity of certain proprietary material obtained from bacteria. The Company transferred two batches of certain proteins for testing in insect bioassay.

c. In December 2018, the Company entered into a collaboration with TMG Tropical Melhoramento e Genetica S.A., for the development of soybean cyst nematode, and potentially other nematode resistance using genome editing technology. In the initial phase of the collaboration, the Company calibrated its proprietary genome editing protocols for the TMG soybean lines on which to perform genome edits using its CPB platform. In the next phase, the Company will design genome edits with respect to various combinations. In the final phase, the Company will deliver edited lines to TMG.

NOTE 6: - CASH AND CASH EQUIVALENTS

	December 31,	
	2019	2018
Cash for immediate withdrawal in USD	$ 24,823	$ 2,069
Cash for immediate withdrawal in NIS	9,459	3,415
Cash for immediate withdrawal in Euro and other currencies	466	326
	$ 34,748	$ 5,810

NOTE 7: - MARKETABLE SECURITIES

	December 31,	
	2019	2018
Financial assets measured at fair value through profit or loss:		
Participation certificates in trust funds	$ 1,042	$ 21,208
Corporate bonds and government treasury notes	1,086	4,857
	$ 2,128	$ 26,065

U.S. dollars in thousands (except share and per share data)

NOTE 8: - OTHER RECEIVABLES AND PREPAID EXPENSES

	December 31,	
	2019	2018
Government authorities	$ 241	$ 122
Grant receivables	276	190
Patent cost reimbursement	539	89
Accrued bank interests	82	114
Prepaid expenses	886	275
Restricted cash	47	47
Other	8	24
	$ 2,079	$ 861

NOTE 9: - LEASES

The Company has entered into various operating lease agreements for certain of its offices and car leases with original lease periods expiring between 2021 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 operating 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, 2019
Interest expense on lease liabilities	$ 302
CPI expenses on lease liabilities and right-of-use assets	1
Depreciation expenses on right-of-use assets	767
Income due to removal of lease liabilities and right-of-use assets	(2)
Total expenses	$ 1,068

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.

U.S. dollars in thousands (except share and per share data)

NOTE 9: - LEASES (Cont.)

The Company exercises critical judgements in deciding whether it is reasonably certain that the extension and cancelation options will be exercised.

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 any extension options in the lease liability since the Company is not in the habit of exercising the options and does not lease vehicles for a period that exceeds 3 years (excluding any extension option).

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, 2019	$ 3,023	$ 267	$ 3,290
Additions during the year:			
Additions to right-of-use assets for new leases in the period	-	168	168
Revaluation recognized in CPI	18	1	19
Disposals during the year:			
Disposals of right-of-use assets for leases terminated in the period	-	(55)	(55)
Balance as of December 31, 2019	3,041	381	3,422
Accumulated depreciation:			
Balance as of January 1, 2019	-	-	-
Additions during the year:			
Depreciation	596	171	767
Disposals during the year:			
Disposals of right-of-use assets	-	(16)	(16)
Balance as of December 31, 2019	596	155	751
Depreciated cost at December 31, 2019	$ 2,445	$ 226	$ 2,671

U.S. dollars in thousands (except share and per share data)

NOTE 10: - PROPERTY, PLANT AND EQUIPMENT, NET

Balance at December 31, 2019:

	Laboratory equipment	Computers and peripheral equipment	Office equipment and furniture	Leasehold improvements	Total
Cost:					
Balance at January 1, 2019	$ 4,852	$ 3,895	$ 225	$ 12,838	$ 21,810
Additions	87	156	39	689	971
Balance at December 31, 2019	4,939	4,051	264	13,527	22,781
Accumulated Depreciation:					
Balance at January 1, 2019	3,834	3,593	144	11,052	18,623
Additions	396	187	12	979	1,575
Balance at December 31, 2019	4,230	3,780	156	12,031	20,198
Depreciated cost at December 31, 2019	$ 709	$ 271	$ 108	$ 1,496	$ 2,583

Balance at December 31, 2018:

	Laboratory equipment	Computers and peripheral equipment	Office equipment and furniture	Leasehold improvements	Total
Cost:					
Balance at January 1, 2018	$ 4,756	$ 3,749	$ 224	$ 12,666	$ 21,395
Additions	96	146	1	172	415
Balance at December 31, 2018	4,852	3,895	225	12,838	21,810
Accumulated Depreciation:					
Balance at January 1, 2018	3,514	3,275	129	9,685	16,603
Additions	320	318	15	1,367	2,020
Balance at December 31, 2018	3,834	3,593	144	11,052	18,623
Depreciated cost at December 31, 2018	$ 1,018	$ 302	$ 81	$ 1,786	$ 3,187

U.S. dollars in thousands (except share and per share data)

NOTE 11: - INTANGIBLE ASSETS

On August 6, 2019, Corteva. invested 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. for Lavie Bio Ltd.'s shares and along with an amount of $10 million. This transaction includes the following intangible assets: (see also Note 16f).

	Pipeline Products	Potential Products	Microorganisms Collection	Total
Cost:				
Balance at January 1, 2019	$ -	$ -	$ -	$ -
Additions (Acquisition on August 6, 2019)	7,028	4,920	5,500	17,448
Balance at December 31, 2019	7,028	4,920	5,500	17,448
Accumulated Depreciation:				
Balance at January 1, 2019	$ -	$ -	$ -	$ -
Additions	162	102	110	374
Balance at December 31, 2019	162	102	110	374
Depreciated cost at December 31, 2019	$ 6,866	$ 4,818	$ 5,390	$ 17,074

Amortization expenses of intangible assets are classified in profit or loss in research and development, net.

NOTE 12: - LIABILITIES IN RESPECT OF GOVERNMENT GRANTS

	2019	2018
Balance at January 1,	$ 3,886	$ 3,542
Grants received	493	354
Royalties paid	(44)	(66)
BIRD repayment	(546)	-
Amounts recorded in profit or loss	(427)	56
Balance at December 31,	$ 3,362	$ 3,886

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, 2019, the Company received grants amounting to $7,047 (including accrued interest), of which $3,449 were repaid to date.

The Company received research and development grants from BIRD amounting to $936 and undertook to pay royalties of 5% of revenues derived from research and development projects that were financed by BIRD or upon conclusion of product development. On April 1, 2019, the Company repaid $546 out of its current liabilities in respect of government grants. On July 22, 2019, the Company has decided to withdraw from the project on which it has notified BIRD and therefore a liability in the amount of $410 was cancelled.

U.S. dollars in thousands (except share and per share data)

NOTE 13: - FINANCIAL INSTRUMENTS

a. Classification of financial instruments by fair value hierarchy:

	December 31,	
	2019	2018
Financial assets:		
Marketable securities – Level 1	$ 1,042	$ 21,208
Marketable securities – Level 2	1,086	4,857
	$ 2,128	$ 26,065

During 2019 and 2018, there were no transfers due to the fair value measurement of any financial instrument to or from Levels 1, 2 and 3.

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 New Israel Shekels, 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.

U.S. dollars in thousands (except share and per share data)

NOTE 13: - FINANCIAL INSTRUMENTS (Cont.)

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 at December 31, 2019:

	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	$ 1,001	$ -	$ -	$ -	$ -	$ -	$ 1,001
Employees and payroll accruals	2,071						2,071
Other payables	1,339	-	-	-	-	-	1,339
Operating leases liability	895	734	616	583	582	229	3,639
Liabilities in respect of government grants	37	107	196	333	652	2,474	3,799
	$ 5,343	$ 841	$ 812	$ 916	$ 1,234	$ 2,703	$ 11,849

Balance at December 31, 2018:

	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	$ 1,015	$ -	$ -	$ -	$ -	$ -	$ 1,015
Employees and payroll accruals	2,081						2,081
Other payables	935	-	-	-	-	-	935
Liabilities in respect of government grants	1,003	79	232	456	263	2,634	4,667
	$ 5,034	$ 79	$ 232	$ 456	$ 263	$ 2,634	$ 8,698

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 measurement is categorized into Level 3.

The fair value of the operating leases liability is measured using a discount rate that reflects the incremental borrowing rate of interest at the date of the contract. The fair value measurement is categorized into Level 3.

U.S. dollars in thousands (except share and per share data)

NOTE 13: - FINANCIAL INSTRUMENTS (Cont.)

d. Sensitivity tests relating to changes in market factors:

	December 31,	
	2019	2018
Sensitivity test to changes in the USD/NIS exchange rate:		
Gain (loss) from the change:		
Increase of 5% in exchange rate	$ (381)	$ (1,059)
Decrease of 5% in exchange rate	$ 381	$ 1,059
Sensitivity test to changes in the market price of listed securities:		
Gain (loss) from the change:		
Increase of 5% in market price	$ 106	$ 1,303
Decrease of 5% in market price	$ (106)	$ (1,303)

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.

e. Hedging activities and derivatives:

Cash flow hedges:

As of December 31, 2018, and 2019, there were no hedging contracts held by the Company.

NOTE 14: - SEVERANCE PAY LIABILITY

Labor laws and the Severance Pay Law in Israel (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,		
	2019	2018	2017
Expenses - defined contribution plan	$ 703	$ 712	$ 759

NOTE 15: - TAXES ON INCOME

a. Tax rates applicable to the Company:

1. In December 2016, the Israeli Parliament approved the Economic Efficiency Law (Legislative Amendments for Applying the Economic Policy for the 2017 and 2018 Budget Years), 2017 which reduces the corporate income tax rate to 24% (instead of 25%) effective from January 1, 2017 and to 23% effective from January 1, 2018.

   The Israeli corporate income tax rate was 23% in 2019, 23% in 2018 and 24% in 2017.

2. Evogene Inc, a company incorporated in the U.S., is subject to U.S. income taxes. In 2019, the weighted tax rate applicable to Evogene Inc. was approximately 27.25% (Federal tax and state tax where the company operates).

3. We are subject to taxation in the United States, as well as a number of foreign jurisdictions. On December 22, 2017, the U.S. President signed into law federal tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act provides for significant and wide-ranging changes to the U.S. Internal Revenue Code. As the Company tax expenses comprise 0.1% of the Loss for 2018, the impact of these reforms is immaterial.

b. Tax assessments:

The Company received assessments that are considered final, up to and including the 2015 tax year.

c. Carryforward losses for tax purposes and other temporary differences:

As of December 31, 2019, Evogene Ltd. and its Israeli subsidiaries have carryforward operating tax losses amounting to approximately $101 million and $18 million 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:

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.

U.S. dollars in thousands (except share and per share data)

NOTE 16: - SHAREHOLDERS' EQUITY

a. Share capital:

	December 31,			
	2019		2018	
	Authorized	Issued and Outstanding	Authorized	Issued and Outstanding
	Number of shares			
Ordinary shares of NIS 0.02 par value each	150,000,000	25,754,297	150,000,000	25,754,297

b. Changes in share capital:

Share capital issued and outstanding:

	Number of shares	NIS par value
Outstanding at January 1, 2018	25,750,547	515,011
Exercise of options	3,750	75
Outstanding at December 31, 2018	25,754,297	515,086
Exercise of options	-	-
Outstanding at December 31, 2019	25,754,297	515,086

c. Rights attached to shares:

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. 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.

U.S. dollars in thousands (except share and per share data)

NOTE 16: - SHAREHOLDERS' EQUITY (Cont.)

e. Composition of non-controlling interests in the statement of financial position:

	December 31,	
	2019	2018
Balance at January 1,	$ 253	$ -
Shares issuance to non-controlling interests	10,042	160
Share-based compensation	764	147
Benefit to non-controlling interests regarding Share-based compensation	17	-
Loss attributed to non-controlling interests	(1,003)	(54)
Balance at December 31,	$ 10,073	$ 253

f. Issuance of shares by subsidiary:

On August 6, 2019, Corteva Inc. invested 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 million . Upon consummation of the foregoing transactions, Corteva was issued 27.84% of Lavie Bio Ltd.'s equity while Evogene Ltd. holds 72.16% of Lavie Bio Ltd.'s equity. As a result, Lavie Bio Ltd. recorded a share premium and a non-controlling interest in the amounts of $17,406 and $10,042 respectively.

NOTE 17: - 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,		
	2019	2018	2017
Share-based compensation – Attributable to equity holders of the Company	$ 814	$ 1,424	$ 2,244
Share-based compensation – Attributable to non-controlling interests (see Note 16e.)	764	307	-
	$ 1,578	$ 1,731	$ 2,244

Evogene Ltd. maintains three share option and incentive plans: the Evogene Share Option Plan (2002), the Evogene Ltd. Key Employee Share Incentive Plan, 2003, and the Evogene Ltd. 2013 Share Option 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 17: - SHARE- BASED COMPENSATION (Cont.)

b. Evogene Ltd. share-based payment plan for employees, directors and consultants:

During 2019, 2018 and 2017, the board of directors of Evogene Ltd. approved to grant its employees, directors and consultants 750,000, 555,000 and 1,537,250 options, respectively. The fair value of the options determined at their grant date using the binomial model was approximately $314, $536 and $2,182, respectively.

c. 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 Evogene Ltd.:

	2019		2018		2017	
	Number of options	Weighted average exercise prices ($)	Number of options	Weighted average exercise prices ($)	Number of options	Weighted average exercise prices ($)
Outstanding at January 1,	4,389,523	7.46	5,106,300	8.47	4,439,884	9.50
Grants	750,000	1.67	555,000	3.16	1,537,250	5.08
Exercised	-	-	(3,750)	2.64	(269,738)	2.18
Forfeited	(804,506)	7.13	(1,268,027)	9.66	(601,096)	10.22
Outstanding at December 31,	4,335,017	7.08	4,389,523	7.46	5,106,300	8.47
Exercisable at December 31,	2,855,405	9.09	2,843,582	8.95	3,146,823	10.73

The following table summarizes information about share options outstanding at December 31, 2019:

	Options outstanding		
Range of exercise prices ($)	Number outstanding	Average remaining contractual life	Weighted average exercise price
1.41 – 3.05	827,343	9.47	1.81
3.08 – 5.66	1,436,636	7.70	4.72
5.67 – 8.04	216,000	6.07	7.60
8.10 – 10.69	748,538	1.89	8.70
10.92 – 20.55	1,106,500	4.28	12.86
Total	4,335,017	6.08	7.08

d. The weighted average outstanding remaining contractual term of the options as of December 31, 2019 is 6.08 years (as of December 31, 2018, it was 5.81 years).

U.S. dollars in thousands (except share and per share data)

NOTE 17: - SHARE- BASED COMPENSATION (Cont.)

e. The weighted average fair value of options granted during 2019 was $0.52 (for options granted during 2018, the fair value was $0.95).

f. The fair value of Evogene Ltd. share options granted to employees, directors and consultants for the years ended December 31, 2019, 2018 and 2017 was estimated using the binomial model with the following assumptions:

	2019	2018	2017
Dividend yield (%)	-	-	-
Expected volatility of the share prices (%)	33-34	35-42	42-43
Risk-free interest rate (%)	0.97-1.51	1.90-2.93	1.89-2.42
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.

g. 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:

	2019		2018	
	Number of options	Weighted average exercise prices ($)	Number of options	Weighted average exercise prices ($)
Outstanding at January 1,	205,543	0.05	-	-
Grants	255,370	0.2	206,043	0.05
Exercised	-	-	-	-
Forfeited	(875)	0.19	(500)	0.19
Outstanding at December 31,	460,038	0.13	205,543	0.05
Exercisable at December 31,	135,194	0.11	37,553	0.03

h. The fair value of Company's subsidiaries share options granted to employees, directors and consultants for the years ended December 31, 2019 and 2018 was estimated using the binomial model with the following assumptions:

	2019	2018
Dividend yield (%)	-	-
Expected volatility of the share prices (%)	48-72	50-56
Risk-free interest rate (%)	0.11-2.03	1.96-2.34
Suboptimal factor	1.8-2	1.8-2
Post-vesting forfeiture rate (%)	5-10	8-10

U.S. dollars in thousands (except share and per share data)

NOTE 18: - STATEMENTS OF PROFIT OR LOSS - ADDITIONAL INFORMATION

a. Cost of revenues:

	Year ended December 31,		
	2019	2018	2017
Salaries and benefits	$ 242	$ 873	$ 1,668
Share-based compensation	-	68	53
Materials and sub-contractors	63	216	572
Depreciation	-	161	309
Rentals and maintenance	-	130	233
Other	29	4	10
	$ 334	$ 1,452	$ 2,845

b. Research and development, net:

	Year ended December 31,		
	2019	2018	2017
Salaries and benefits	$ 9,811	$ 9,599	$ 10,205
Share-based compensation	782	960	1,200
Materials and sub-contractors	2,686	* 1,368	1,636
Plant growth and greenhouse maintenance	337	342	405
Rentals and office maintenance	428	1,114	1,430
Depreciation	2,742	1,859	1,836
Other	579	*709	437
Participation in respect of government grants	(1,574)	(1,265)	(162)
	$ 15,791	$ 14,686	$ 16,987

*Reclassification

c. Business development:

	Year ended December 31,		
	2019	2018	2017
Salaries and benefits	$ 907	$ 1,301	$ 1,038
Share-based compensation	442	381	363
Travel	168	163	109
Legal	133	67	37
Other	379	172	139
	$ 2,029	$ 2,084	$ 1,686

d. General and administrative:

	Year ended December 31,		
	2019	2018	2017
Salaries and benefits	$ 1,922	$ 1,755	$ 1,737
Share-based compensation	354	322	628
Professional fees	1,151	1,075	1,065
Other	338	362	380
	$ 3,765	$ 3,514	$ 3,810

U.S. dollars in thousands (except share and per share data)

NOTE 18: - STATEMENTS OF COMPREHENSIVE LOSS - ADDITIONAL INFORMATION (Cont.)

e. Financing income and expenses

Financing income:

	Year ended December 31,		
	2019	2018	2017
Exchange differences	$ 1,432	$ -	$ -
Interest income	759	1,413	2,125
Change in the fair value of marketable securities	439	-	-
	$ 2,630	$ 1,413	$ 2,125

Financing expenses:

	Year ended December 31,		
	2019	2018	2017
Bank expenses and commissions	$ 52	$ 141	$ 129
Exchange differences	160	660	82
Change in the fair value of marketable securities	-	1,285	720
Hedging instruments	-	-	7
Operating lease liability interest	302	-	-
Revaluation of liabilities in respect of government grants	41	120	67
	$ 555	$ 2,206	$ 1,005

NOTE 19: - LOSS PER SHARE

Details of the number of shares and loss used in the computation of loss per share:

	Year ended December 31,					
	2019		2018		2017	
	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	25,754,297	(18,112)	25,753,411	(20,758)	25,673,276	(20,838)

*) To compute diluted loss per share, potential ordinary shares have not been taken into account due to their anti-dilutive effect.

U.S. dollars in thousands (except share and per share data)

NOTE 20: - OPERATING SEGMENTS

a. General:

Commencing 2017, the Company operates in three segments, Agriculture, Industry and Human. The Agriculture segment which constitutes of the parent Company and two of the Company's subsidiaries, Lavie Bio Ltd. and AgPlenus Ltd. was named Evogene until 2018. The Industry segment which constitutes of the Company's subsidiary Casterra AG Ltd., was named Evofuel until 2018. The Human segment which constitutes of the Company's subsidiaries, Biomica Ltd. and Canonic Ltd., was named Biomica in 2018. The change of segment composition and their names in 2019, is a result of the establishment of new subsidiaries incorporated at the end of 2018 and beginning of 2019 (see Note 1c.) and a redefinition of the segments by the Chief Operating Decision-Maker ("CODM")based on their target markets. All the above changes were reflected through retroactive revision of prior period segment information. The segments were determined on the basis of information considered by the 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.
Industry segment	-	Develops improved castor bean seeds to serve as a feedstock source for biofuel and other industrial uses.
Human segment	-	Discovery and development of human microbiome-based therapeutics.
Unallocated	-	Other corporate expenses and general development of enabling technologies for optimization.

Segments 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.

b. The following table presents our revenues and operating loss by segments:

	Agriculture	Industry	Human	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 expenses					$ 2,075
Loss before taxes on income					$ (19,091)

U.S. dollars in thousands (except share and per share data)

NOTE 20: - OPERATING SEGMENTS (Cont.)

	Agriculture	Industry	Human	Unallocated	Total
For the Year Ended December 31, 2018					
Revenues	$ 1,641	$ 106	$ -	$ -	$ 1,747
Operating loss	$ (7,674)	$ (456)	$ (1,608)	$ (10,251)	$ (19,989)
Net financing expenses					$ (793)
Loss before taxes on income					$ (20,782)

	Agriculture	Industry	Human	Unallocated	Total
For the Year Ended December 31, 2017					
Revenues	$ 3,247	$ 134	$ -	$ -	$ 3,381
Operating loss	$ (8,347)	$ (210)	$ (637)	$ (12,753)	$ (21,947)
Net financing income					$ 1,120
Loss before taxes on income					$ (20,827)

c. Major customers:

Revenues from major customers each of whom amounts to 10% or more, of total revenues:

	Year ended December 31,		
	2019	2018	2017
Customer A (shareholder)	-	38%	66%
Customer B	-	19%	10%
Customer C	*)-	13%	*)-
Customer D (subsidiary shareholder)	33%	-	-
Customer E	24%	-	-
Customer F	13%	*)-	-
Customer G	13%	-	-

*) Represents an amount lower than 10%.

See also Note 21a.

U.S. dollars in thousands (except share and per share data)

NOTE 20: - OPERATING SEGMENTS (Cont.)

d. Geographical information:

Revenues based on the location of the customers, are as follows:

	Year ended December 31,		
	2019	2018	2017
United States	33%	57%	76%
Germany	2%	13%	10%
Israel	35%	12%	6%
Brazil	28%	6%	-
Other	2%	12%	8%
	100%	100%	100%

The carrying amounts of non-current 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,		
	2019	2018	2017
United States	88%	14%	12%
Israel	12%	86%	88%
	100%	100%	100%

NOTE 21: - BALANCES AND TRANSACTIONS WITH KEY OFFICERS AND CERTAIN SHAREHOLDERS

a. 2019 shareholders information refers to Monsanto Company and Pioneer (see Note 20c., customer A and E) which, to the best of the Company's knowledge, Monsanto Company holds approximately 6.4% of the Company's ordinary shares and Pioneer holds 27.84% of the Company's subsidiary shares. Both shareholders are major customers.

b. Balances:

Balance at December 31, 2019:

	Key officers	Certain shareholder
Receivables	$ -	$ 539
Other payables	$ 477	$ -

Balance at December 31, 2018:

	Key officers	Certain shareholder
Receivables	$ -	$ 89
Other payables	$ 439	$ -

U.S. dollars in thousands (except share and per share data)

NOTE 21: - BALANCES AND TRANSACTIONS WITH KEY OFFICERS AND CERTAIN SHAREHOLDERS (Cont.)

Balance at December 31, 2017:

	Key officers	Certain shareholder
Receivables	$ -	$ 337
Other payables	$ 468	$ -

c. Benefits to directors:

	Year ended December 31,		
	2019	2018	2017
Compensation to directors not employed by the Company or on its behalf	$ 254	$ 261	$ 329
Number of directors that received the above compensation by the Company	6	7	6

d. Salary and Benefits to key officers:

	Year ended December 31,		
	2019	2018	2017
Salary and related benefits	$ 1,960	$ 1,976	$ 1,673
Share-based compensation	1,070	669	959
	$ 3,030	$ 2,645	$ 2,632
Number of people that received salary and benefits	8	10	7

e. Transactions:

For the year ended December 31, 2019

	Key officers	Certain shareholder
Revenues	$ -	$ (250)
Cost of revenues	-	-
Research and development expenses	669	(1,280)
Business development expenses	1,250	-
General and administrative expenses	1,111	-
	$ 3,030	$ (1,530)

U.S. dollars in thousands (except share and per share data)

NOTE 21: - BALANCES AND TRANSACTIONS WITH KEY OFFICERS AND CERTAIN SHAREHOLDERS (Cont.)

For the year ended December 31, 2018

	Key officers	Certain shareholder
Revenues	$ -	$ 664
Cost of revenues	-	(1,077)
Research and development expenses	1,056	-
Business development expenses	945	-
General and administrative expenses	644	-
	$ 2,645	$ (1,741)

For the year ended December 31, 2017

	Key officers	Certain shareholders
Revenues	$ -	$ (2,247)
Cost of revenues	141	(948)
Research and development expenses	1,061	-
Business development expenses	547	-
General and administrative expenses	883	-
	$ 2,632	$ (3,195)

NOTE 22: - SUBSEQUENT EVENTS

The ongoing Coronavirus outbreak that is spreading throughout the world has led the Chinese authorities, as well as other authorities around the globe, to take various precautionary measures in order to limit the spread of the Coronavirus. These actions could have an adverse effect on the financial markets and the economy, including on the availability and pricing of materials, manufacturing and delivery efforts and other aspects of the global economy. Therefore, the Coronavirus could adversely impact the Company by causing operating and project development delays and disruptions, labor shortages, travel disruption and shutdowns. It may further divert the attention and efforts of the financial community to coping with the virus and disrupt the marketplace in which the Company operates, this could have a negative impact on the Company's and its subsidiaries' ability to raise additional funds if and when needed.

The occurrence of the outbreak may also result in uncertainties in relation to the assumptions and estimations associated with the measurement of various assets and liabilities in the financial statements that the Company may not have previously recognized or disclosed and may require certain adjustments within the next financial year which financial effect cannot be reasonably estimated at this stage.

EXHIBIT 2.1

Description of Ordinary Shares of Evogene Ltd.

The authorized share capital of Evogene Ltd. (hereinafter, "we", "us", "our" or similar expressions) consists of NIS 3,000,000 divided into 150,000,000 ordinary shares, par value NIS 0.02 per share, or ordinary shares. As of April 22, 2020, 25,754,297 ordinary shares were issued and outstanding.

Registration Number and Purposes of the Company

Our registration number with the Israeli Registrar of Companies is 51-283872-3. Our purpose as set forth in our articles of association, or articles, is to engage in any lawful business.

Voting Rights

Holders of our ordinary shares have one vote for each ordinary share held on all matters submitted to a vote of shareholders at a shareholder meeting. Shareholders may vote at shareholder meetings either in person, by proxy or by written ballot. Israeli law does not allow public companies to adopt shareholder resolutions by means of written consent in lieu of a shareholder meeting. Shareholder voting rights may be affected by the grant of any special voting rights to the holders of a class of shares with preferential rights that may be authorized in the future. Except as otherwise disclosed herein, an amendment to our articles of association to change the rights of our shareholders requires the prior approval of a simple majority of our shares represented and voting at a general meeting and, to the extent applicable, of the holders of a class of shares whose rights are being affected.

Share Ownership Restrictions

The ownership or voting of ordinary shares by non-residents of Israel is not restricted in any way by our articles of association or the laws of the State of Israel, except that citizens of countries that are in a state of war with Israel may not be recognized as owners of ordinary shares.

Transfer of Shares

Fully paid ordinary shares are issued in registered form and may be freely transferred under our articles of association unless the transfer is restricted or prohibited by another instrument, Israeli law or the rules of a stock exchange on which the shares are traded.

Election of Directors

Our ordinary shares do not have cumulative voting rights for the election of directors. Rather, under our articles of association, our directors, other than external directors (to the extent required to be elected), are elected at each annual general meeting of the shareholders, upon expiration of the term of office, by the holders of a simple majority of our ordinary shares present in person or by proxy at such meeting (excluding abstentions). As a result, the holders of our ordinary shares that represent more than 50% of the voting power represented at a shareholder meeting and voting thereon (excluding abstentions) have the power to elect any or all of our directors. Vacancies on our board of directors, resulting from a resignation or other termination of service by a then serving director, or an additional authorized seat on our board of directors, may be filled by a vote of a simple majority of the directors then in office.

Dividend and Liquidation Rights

Under Israeli law, we may declare and pay a dividend only if, upon the reasonable determination of our board of directors, the distribution will not prevent us from being able to meet the terms of our existing and contingent obligations as they become due. Under the Israeli Companies Law, 5759-1999, or the Companies Law, the distribution amount is further limited to the greater of retained earnings or earnings generated over the two most recent years according to our then last reviewed or audited financial statements, provided that the date of the financial statements is not more than six months prior to the date of distribution. In the event that we do not have retained earnings and earnings legally available for distribution, as defined in the Companies Law, we may seek the approval of the court in order to distribute a dividend. The court may approve our request if it is convinced that there is no reasonable concern that the payment of a dividend will prevent us from satisfying our existing and foreseeable obligations as they become due.

In the event of our liquidation, after satisfaction of liabilities to creditors, our assets will be distributed to the holders of ordinary shares on a pro-rata basis. Dividend and liquidation rights may be affected by the grant of preferential dividend or distribution rights to the holders of a class of shares with preferential rights that may be authorized in the future.

Shareholder Meetings

Under the Companies Law, we are required to convene an annual general meeting of our shareholders once every calendar year, not more than 15 months following the preceding annual general meeting. Our board of directors may convene a special general meeting of our shareholders and is required to do so at the request of two directors or one quarter of the members of our board of directors, or at the request of one or more holders of 5% or more of our share capital and 1% of our voting power, or the holder or holders of 5% or more of our voting power. All shareholder meetings require prior notice of at least 21 days and, in certain cases, 35 days. The chairperson of our board of directors or another one of our directors authorized by our board of directors presides over our general meetings. If either of such persons is not present within 15 minutes from the appointed time for the commencement of the meeting, the directors present at such meeting shall appoint one of our directors as the chairperson for such meeting, and if they fail to do so, then the shareholders present shall appoint one of our directors to act as chairperson, and if no director is present, then one of the shareholders present at such meeting shall act as chairperson. Subject to the provisions of the Companies Law and the regulations promulgated thereunder, only shareholders of record on a date decided upon by the board of directors, which may be between four and 40 days prior to the date of the meeting (depending on the type of meeting and whether written proxies are being used) are entitled to participate and vote at a general meeting of shareholders.

Quorum

Under our articles, the quorum required for a meeting of shareholders consists of at least two shareholders present in person, by proxy or by written ballot, who hold or represent between them at least 25% of our voting power. A meeting adjourned for lack of a quorum generally is adjourned to the same day in the following week at the same time and place (without requirement of additional notification to the shareholders), or to a later time, if indicated in the notice to the meeting or to such other time and place as determined by the board of directors in a notice to our shareholders. At the reconvened meeting, if a quorum is not present within half an hour from the appointed time for the commencement of the meeting, the meeting will take place so long as at least one shareholder is present (regardless of the voting power held or represented by any such shareholder(s)), unless the meeting was called pursuant to a request by our shareholders, in which case the quorum required is the number of shareholders required to call the meeting as described under "—Shareholder Meetings" above.

Resolutions

Under the Companies Law, unless otherwise provided in the articles of association or applicable law, all resolutions of the shareholders require a simple majority of the voting rights represented at the meeting, in person, by proxy or by written ballot, and voting on the resolution (excluding abstentions).

Access to Corporate Records

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

Modification of Class Rights

The rights attached to any class of share (to the extent that we may have separate classes of shares in the future), such as voting, liquidation and dividend rights, may be amended by adoption of a resolution by the holders of a majority of our shares represented at the meeting and the holders of a majority of the shares of that class present at a separate class meeting, or otherwise in accordance with the rights attached to such class of shares, as set forth in our articles.

Acquisitions under Israeli Law

Full Tender Offer

A person wishing to acquire shares of a public Israeli company and who could as a result hold over 90% of the target company's voting rights or the target company's issued and outstanding share capital (or of a class thereof), is required by the Companies Law to make a tender offer to all of the company's shareholders for the purchase of all of the issued and outstanding shares of the company (or of the applicable class). If (a) the shareholders who did not accept the offer hold less than 5% of the issued and outstanding share capital of the company (or the applicable class) and the shareholders who accept the offer constitute a majority of the offerees that do not have a personal interest in the acceptance of the tender offer or (b) the shareholders who did not accept the tender offer hold less than 2% of the issued and outstanding share capital of the company (or of the applicable class), all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. A shareholder who had its shares so transferred may petition the court within six months from the date of acceptance of the full tender offer, regardless of whether such shareholder agreed to the offer, to determine whether the tender offer was for less than fair value and whether the fair value should be paid as determined by the court. However, an offeror may provide in the offer documents that a shareholder who accepted the offer will not be entitled to appraisal rights as described in the preceding sentence, as long as the offeror and the company disclosed the information required by law in connection with the tender offer. If (a) the shareholders who did not accept the tender offer hold 5% or more of the issued and outstanding share capital of the company (or of the applicable class) or the shareholders who accept the offer constitute less than a majority of the offerees that do not have a personal interest in the acceptance of the tender offer, or (b) the shareholders who did not accept the tender offer hold 2% or more of the issued and outstanding share capital of the company (or of the applicable class), the acquirer may not acquire shares of the company that will increase its holdings to more than 90% of the company's issued and outstanding share capital (or of the applicable class) from shareholders who accepted the tender offer.

Special Tender Offer

The Companies Law provides that an acquisition of shares of an Israeli public company must be made by means of a special tender offer if as a result of the acquisition the purchaser would become a holder of 25% or more of the voting rights in the company. This rule does not apply if there is already another holder of 25% or more of the voting rights in the company. Similarly, the Companies Law provides that an acquisition of shares in a public company must be made by means of a tender offer if as a result of the acquisition the purchaser would become a holder of more than 45% of the voting rights in the company, if there is no other shareholder of the company who holds more than 45% of the voting rights in the company. These requirements do not apply if the acquisition (i) occurs in the context of a private placement by the company that received shareholder approval, (ii) was from a shareholder holding 25% or more of the voting rights in the company and resulted in the acquirer becoming a holder of 25% or more of the voting rights in the company, or (iii) was from a holder of more than 45% of the voting rights in the company and resulted in the acquirer becoming a holder of more than 45% of the voting rights in the company. A special tender offer may be consummated only if (i) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror and (ii) the number of shares tendered in the offer exceeds the number of shares whose holders objected to the offer (excluding controlling shareholders, holders of 25% or more of the voting rights in the company and any person having a personal interest in the acceptance of the tender offer).

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

If a special tender offer is accepted, then shareholders who did not respond to or that had objected to the offer may accept the offer within four days of the last day set for the acceptance of the offer. In the event that a special tender offer is accepted, then the purchaser or any person or entity controlling it or under common control with the purchaser or such controlling person or entity may not make a subsequent tender offer for the purchase of shares of the target company and may not enter into a merger with the target company for a period of one year from the date of the offer, unless the purchaser or such person or entity undertook to effect such an offer or merger in the initial special tender offer.

Merger

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

For purposes of the shareholder vote, unless a court rules otherwise, if one of the merging companies (or any person who holds 25% or more of the outstanding shares or the right to appoint 25% or more of the directors of one of the merging companies) holds shares in the other merging company, the merger will not be deemed approved if a majority of the shares voted at the shareholders meeting by shareholders other than the other party to the merger, or by any person who holds 25% or more of the outstanding shares or the right to appoint 25% or more of the directors of the other party, vote against the merger. In addition, if the non-surviving entity of the merger has more than one class of shares, the merger must be approved by each class of shareholders. If the transaction would have been approved but for the separate approval of each class or the exclusion of the votes of certain shareholders as provided above, a court may still approve the merger upon the request of holders of at least 25% of the voting rights of a company, if the court holds that the merger is fair and reasonable, taking into account the value of the parties to the merger and the consideration offered to the shareholders. If a merger is with a company's controlling shareholder or if the controlling shareholder has a personal interest in the merger, then the merger is instead subject to the same special majority approval that governs all extraordinary transactions with controlling shareholders, i.e.:

- at least a majority of the voting rights in the company held by 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-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.

Under the Companies Law, each merging company must inform its secured creditors of the proposed merger plans. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of any of the parties to the merger, and may further give instructions to secure the rights of creditors.

In addition, a merger may not be completed unless at least 50 days have passed from the date that a proposal for approval of the merger is filed with the Israeli Registrar of Companies and 30 days have passed from the date that shareholder approval of both merging companies is obtained.

Antitakeover Measures under Israeli Law

Besides the requirements described above with respect to tender offers and mergers, Israeli law and our articles of association enable the implementation of additional measures that may delay or prevent a takeover attempt and thereby preclude our shareholders from realizing a potential premium over the market value of our ordinary shares that they hold. Our articles of association allow our company to increase its registered share capital and provide that the increased capital will be divided into shares having ordinary, preferred or deferred rights or any other special rights, or may be subject to terms and restrictions in respect of dividend, repayment of capital, voting or other terms, in each case provided that the general meeting of our shareholders approves via a simple majority of shares present (in person or by proxy) and voting. Israeli law also permits the issuance of preferred stock. However, the Tel Aviv Stock Exchange, or TASE, rules and regulations prohibit a listed company from having more than one class of shares listed, and the TASE's current position is that a listed company may not issue or list preferred shares. Therefore, assuming that the TASE's current position does not change, as long as our ordinary shares are listed on the TASE, we will be prohibited from issuing preferred stock.

To date, the legality of a poison pill as an additional antitakeover measure has not been examined in Israel.

EXHIBIT 4.7

[***] Certain identified information in this Share Purchase Agreement has been excluded because it is both (i) not material, and (ii) would be competitively harmful if publicly disclosed.

SHARE PURCHASE AGREEMENT

THIS SHARE PURCHASE AGREEMENT is made as of August 6, 2019, by and among Evogene Ltd., an Israeli company (the "Parent"), Lavie Bio Ltd., an Israeli company and a wholly owned subsidiary of Parent (the "Company"), Lavie Bio Inc., a Delaware corporation and a wholly owned subsidiary of the Company (the "Company Subsidiary"), Lavie Tech Inc., a Delaware corporation and a wholly owned subsidiary of the Company Subsidiary (the "Acquirer"), Pioneer Hi-Bred International, Inc., an Iowa corporation ("Corteva", the "Investor" or the "Seller") and Taxon Biosciences, Inc., a Delaware corporation and a wholly owned subsidiary of Corteva (the "Purchased Company").

WHEREAS, prior to the date hereof, (i) the Parent had sold, conveyed, transferred, assigned and delivered to the Company, and the Company purchased and accepted from the Parent, all of the Parent's right, title and interest in and to certain assets of the Parent in the area of ag-biologicals, as set forth in Schedule A (the "Transferred Assets"), free and clear of any and all Encumbrances (as defined below), (ii) the Transferred Employees and Transferred Contractors (as such terms defined below) have been transferred to and become engaged by the Company (the "Assignment") and (iii) the Parent has provided the Company with an aggregate investment of [***] ($[***]) (the "Parent Purchase Price") as additional premium on account of the Ordinary Shares, par value NIS 0.01 of the Company (the "Ordinary Shares") held by the Parent (the "Parent Shares").

WHEREAS, Corteva, the Parent and the Company wish to enter into a business arrangement, which provides for, among other things, the following matters: (i) the purchase by the Acquirer of all of the issued and outstanding shares of the Purchased Company, in consideration for [***] Ordinary Shares of the Company, as set forth in this Agreement, (ii) the capital raise by the Company by means of the issuance of Ordinary Shares to the Investor, at a purchase price of US$[***] per Ordinary Share (the "PPS"), reflecting a pre-money valuation of the Company on a Fully-Diluted Basis (as defined below) of US$[***], for an aggregate investment by the Investor of Ten Million Dollars ($10,000,000), (iii) the entering by the Company into a service agreement with the Parent in the form of Schedule B, which shall provide for, *inter alia*, the provision by the Parent of certain corporate and operational services to the Company (the "Parent Service Agreement"), (iv) the entering by the Company into an access and license agreement with the Parent in the form of Schedule C (the "Access and License Agreement"), pursuant to which, *inter alia*, the Company shall be entitled to the exclusive use of the Parent's Computational Predictive Biology platform (CPB) for the use in the Field (as defined in the Access and License Agreement) and (v) the entering by the Company into a service agreement with Corteva in the form of Schedule D, which shall provide for, *inter alia*, the provision by Corteva of certain operational services to the Company (the "Corteva Service Agreement"); all pursuant to the terms and subject to the conditions more fully set forth in this Agreement.

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. PURCHASE AND SALE OF SHARES OF THE COMPANY AND THE PURCHASED COMPANY.

1.1 Sale and Issuance by the Company of the Investment Shares. Subject to the satisfaction of the closing conditions set forth in Sections 5, 6 and 7 hereof, as applicable, at the Closing, the Company shall issue and sell to the Investor, and the Investor shall purchase from the Company, for an aggregate purchase price of US$10,000,000 (the "Purchase Price"), an aggregate of [***] Ordinary Shares (the "Investment Shares") at the PPS.

1.2 Sale and Issuance of the Transferred Shares of the Company. Subject to the satisfaction of the closing conditions set forth in Sections 5, 6 and 7 hereof, as applicable, the Company shall issue to the Company Subsidiary, and the Company Subsidiary shall purchase from the Company, in consideration for 100 shares of Common Stock of the Company Subsidiary, of US$0.01 par value, an aggregate amount of [***] Ordinary Shares (the "Transferred Shares" and together with the Investment Shares, the "Purchased Shares").

1.3 Purchase and Sale of the Transferred Shares. Immediately following the sale and issuance of the Transferred Shares by the Company to the Company Subsidiary, the Company Subsidiary shall sell to the Acquirer, and the Acquirer shall purchase from the Company Subsidiary, in consideration for 100 shares of Common Stock of the Acquirer of US$0.01 par value, the Transferred Shares.

1.4 Purchase and Sale of Shares of the Purchased Company. Subject to the satisfaction of the closing conditions set forth in Sections 5, 6 and 7 hereof, as applicable, at the Closing, immediately following the transfer of the Transferred Shares from the Company Subsidiary to the Acquirer, the Seller shall sell to the Acquirer, and the Acquirer shall purchase from the Seller, all of the Purchased Company's issued and outstanding shares and any and all other equity securities (including options, warrants, or rights convertible, exchangeable for, redeemable in or otherwise carrying the right to acquire or subscribe for shares) (the "Purchased Company Shares"), in exchange for the Transferred Shares.

The capitalization table of the Company, reflecting the issued and outstanding share capital of the Company on a Fully-Diluted Basis, immediately prior to Closing and immediately following the Closing, assuming the investment of the Purchase Price, the Parent Purchase Price, issuance and transfer of the Transferred Shares in exchange for the Purchased Company Shares, and reflecting the issued and outstanding share capital of the Company on a Fully-Diluted Basis, immediately following the Deferred Closing (as defined below), assuming the issuance of the maximum number of Additional Shares (as defined below), is attached hereto as Schedule E (the "Capitalization Table").

In this Agreement, "Fully-Diluted Basis" shall mean all issued and outstanding shares of the Company, including but not limited to (i) all Ordinary Shares; and (ii) all securities convertible or exercisable into shares and all other rights to acquire shares or other securities exercisable for shares (being deemed so converted).

1.5 Closing. The consummation (the "Closing") of each of the transactions contemplated hereby including the purchase and sale of the Purchased Shares and the Purchased Company Shares and the execution of the Parent Service Agreement, the Access and License Agreement and the Corteva Service Agreement (collectively, the "Contemplated Transactions") shall take place remotely via the exchange of documents and signatures, on or at such time and place as the Company and Investor mutually agree upon (such designated time and place, the "Closing Date"). The Closing shall be subject to satisfaction (or waiver, where permitted hereunder) of the conditions of Section 5, 6 and 7 below, which conditions shall be deemed to have been satisfied simultaneously and no Contemplated Transaction shall be deemed to have been completed or any document delivered until all such transactions have been completed and all such required documents delivered.

1.6 Restated Articles. The Company shall adopt on or before the Closing the Amended and Restated Articles of Association in the form attached hereto as Schedule F (the "Restated Articles"). The Purchased Shares and the Parent Shares shall have and confer upon the holders thereof the rights, preferences, privileges and restrictions set forth in the Restated Articles, as may be amended from time to time in accordance with their terms.

1.7 Pre-Closing and Closing Deliverables.

(a) At the Closing, the Company shall deliver to the Company Subsidiary a duly executed share certificate representing the Transferred Shares in the name of the Company Subsidiary, in the form attached hereto as Schedule 1.7(a).

(b) At the Closing, and immediately following the issuance of the Transferred Shares to the Company Subsidiary, the Company Subsidiary shall deliver to the Acquirer a duly executed share transfer deed with respect to the transfer to the Acquirer of the Transferred Shares, in the form attached hereto as Schedule 1.7(b).

(c) At the Closing, the Company shall deliver to the Parent:

(i) Director indemnification agreements with each of the director(s) appointed by the Parent, duly approved by the Board of Directors of the Company and shareholders of the Company and executed by the Company, in the form attached hereto as Schedule 1.7(c)(i);

(ii) The Parent Service Agreement, duly executed by the Company; and

(iii) The Access and License Agreement, duly executed by the Company.

(d) At the Closing, the Company shall deliver to the Investor:

(i) True and correct copies of written resolutions, or minutes of a meeting, of the Board, approving and adopting in all respects the execution, delivery and performance by the Company of this Agreement and the Contemplated Transactions, including, among others, (i) authorizing the issuance and sale of the Purchased Shares against payment of the purchase price therefor; and (ii) the approval of the execution, delivery and performance by the Company of all agreements contemplated herein to which the Company is a party and any agreements, instruments or documents ancillary thereto;

(ii) True and correct copies of written resolutions, or minutes of meeting, of the Company's shareholders approving and adopting in all respects the execution, delivery and performance by the Company of this Agreement and the Contemplated Transactions, including, among others, (i) the adoption of the Restated Articles as an amendment and restatement of the existing Articles of Association of the Company as in effect prior to the Closing; and (ii) the approval of the execution, delivery and performance by the Company of all agreements contemplated herein to which the Company is a party and any agreements, instruments or documents ancillary thereto;

(iii) A copy of the Restated Articles;

(iv) Duly executed share certificates representing the Investment Shares issued to the Investor at the Closing, in the form attached hereto as Schedule 1.7(d)(iv);

(v) A copy of the register of shareholders of the Company (the "Shareholders Register"), certified by an executive officer of the Company and prepared in accordance with Section 130 of the Companies Law, 5759–1999, as amended (the "Companies Law"), in which the Purchased Shares issued at the Closing are registered in the name of the Investor, in the form attached hereto as Schedule 1.7(d)(v);

(vi) The Corteva Service Agreement, duly executed by Company;

(vii) Director indemnification agreements with the director appointed by the Investor, duly approved by the Board and shareholders of the Company and duly executed by the Company, in the form attached hereto as Schedule 1.7(d)(vii); and

(viii) A certificate duly executed by an executive officer of the Company as of the Closing stating that the conditions specified in Sections 5, 6 and 7 applicable to the Company have been satisfied, in the form attached hereto as Schedule 1.7(d)(viii).

(e) At the Closing, the Acquirer shall deliver to the Seller duly executed share transfer deeds with respect to the transfer of the Transferred Shares to the Seller in the form attached hereto as Schedule (e).

(f) At the Closing, Corteva shall deliver:

(i) To the Acquirer, duly executed share transfer deeds with respect to the transfer of the Purchased Company Shares to the Acquirer in the form attached hereto as Schedule 1.7(f)(i);

(ii) To the Company, a certificate in the form attached hereto as Schedule 1.7(f)(ii), duly executed by a duly authorized representative of Investor as of the Closing stating that the following conditions have been satisfied: (i) the execution, delivery and performance by the Purchased Company of all agreements contemplated herein to which the Purchased Company is party and any agreements, instruments or documents ancillary thereto have been duly authorized by the Purchased Company's board of directors and stockholders, as applicable, and (ii) the conditions specified in Section 5, 6 and 7 applicable to Investor;

(iii) To the Company, a duly executed share resignation letters in the form attached hereto as Schedule 1.7(f)(i), executed by each individual listed in Section 4.6 of the Purchased Company Disclosure Schedule;

(iv) To the Company, the director indemnification agreement, duly executed by the director appointed by Investor; and

(v) To the Company, the Corteva Service Agreement, duly executed by Investor.

(g) At the Closing, the Parent shall deliver to the Company:

(i) The Parent Service Agreement, duly executed by the Parent;

(ii) The Access and License Agreement, duly executed by the Parent;

(iii) The indemnification agreement, duly executed by each of the directors appointed by the Parent; and

(iv) a certificate duly executed by an executive officer of the Parent as of the Closing stating that the conditions specified in Sections 5, 6 and 7 applicable to the Parent have been satisfied, in the form attached hereto as Schedule 1.7(g)(iv).

1.8 Purchase Price and Parent Purchase Price. At the Closing, the Investor shall transfer to the Company the Purchase Price by wire transfer of immediately available funds according to the Company's wire instructions (details of which will be provided by the Company in writing at least three (3) Business Days prior to the Closing).

1.9 Deferred Closing. During a period of twelve (12) months following the Closing Date, the Company may sell and issue, on the same terms and conditions as those contained in this Agreement, at one or more closings (each a "Deferred Closing"), up to [***] Ordinary Shares (subject to appropriate adjustments in the event of any dividend, shares split, combination or similar recapitalization affecting such shares, the "Additional Shares"), in consideration per share equal to the PPS, to one or more investors (the "Additional Investor(s)") approved by the Board and approved in advance by Corteva. As a condition to the issuance of such Additional Shares, the Additional Investors shall become parties to this Agreement by executing and delivering a counterpart signature page or a joinder to this Agreement in a form provided by the Company. Thereafter, for all purposes under the Transaction Documents, each Additional Investor shall be deemed to be an "Investor", the "Additional Shares" shall be deemed to be "Purchased Shares" and the additional purchase price for the Additional Shares shall be deemed to be part of the "Purchase Price". At each Deferred Closing, against payment by each Additional Investor, severally and not jointly, of its respective purchase price with respect to each Additional Share purchased by it, the Company shall deliver to each such Additional Investor a share certificate representing such Additional Shares, register the Additional Shares in the Company's Shareholders Register and file all required notices with the Israeli Registrar of Companies.

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY, THE COMPANY SUBSIDIARY AND THE ACQUIRER.

Each of the Company, the Company Subsidiary and the Acquirer, severally and jointly with each other (and Parent solely with respect to the representations in Sections 2.10, 2.12, 2.13 and 2.15, in each case with respect to the Transferred Assets) hereby represents and warrants to the Investor and the Parent (only with respect to the representations set forth in Sections 2.1 (Organization), 2.2 (Capitalization), 2.3 (Authorization) and 2.4 (Valid Issuance of Shares)), that, except as set forth on the Disclosure Schedule delivered to the Investor and the Parent on the date hereof (the "Disclosure Schedule"), which exceptions shall be deemed to be part of the representations and warranties made hereunder, the following representations are true, correct and complete as of the date hereof and as of the Closing (as if made on the Closing Date); except, in each case, as to such representations and warranties that address matters as of a particular date, which are true, correct and complete only as of such date. The Disclosure Schedule shall be arranged in sections and subsections corresponding to the numbered and lettered sections and subsections contained in this Section 2, and the information set forth in any section or subsection of the Disclosure Schedule shall apply to and qualify (a) the representation and warranty set forth in this Agreement to which it corresponds, and (b) whether or not an explicit reference or cross-reference is made, each other representation and warranty set forth in this Agreement for which it is readily apparent on its face to a reasonable person who has no knowledge of the disclosed subject matter that such information is relevant to such other section. For all purposes of this Article 2, knowledge of the Company shall also include knowledge of the Parent.

"Knowledge" or "knowledge" of the Company or the Purchased Company, as applicable, with respect to any fact or matter, means the actual knowledge of the Company's or the Purchased Company's officers and directors of such fact or matter and such knowledge that such person would be reasonably expected to obtain after reasonable inquiry with those employees and other persons with responsibility to report to such officer or director.

"Material Adverse Effect" means a material and adverse effect on the assets, properties, conditions (financial or otherwise), operating results or business of the Company, the Company Subsidiary, the Acquirer, the Transferred Assets or the Purchased Company (as applicable) and any subsidiaries of the Company and the Purchased Company (as applicable), individually or in the aggregate.

2.1 Organization. Each of the Company, the Company Subsidiary and the Acquirer is a company duly organized and validly existing under the laws of the State of its incorporation and in good standing (to the extent the jurisdiction of its incorporation recognizes the concept of good standing), and to the extent it is incorporated under the laws of the State of Israel, is not a "breaching company" (within the meaning of Section 362.A of the Israeli Companies Law), and has all requisite corporate power and authority to carry on its business as currently conducted.

2.2 Capitalization.

(a) The authorized share capital of the Company is or will be on or immediately prior to the Closing (but following the adoption of the Restated Articles), as set forth in the Restated Articles, and such number of shares of each class as set forth in the Capitalization Table are or shall be (as of the Closing) issued and outstanding.

(b) As of the date hereof, all of the issued and outstanding shares of the Company are owned of record and beneficially by the Parent.

(c) The issued and outstanding shares of the Company were duly and validly authorized and issued, fully paid and non-assessable, and offered and issued in compliance with the provisions of the Company's Articles of Association as in effect at the time of each such issuance and in compliance with all applicable corporate and securities laws. None of the issued and outstanding shares of the Company was offered or sold in such a manner as to make the offer, issuance or sale of such shares not exempted from registration requirements under applicable securities law.

(d) Except as set forth in Section 2.2(d) of the Disclosure Schedule and for the preemptive rights and bring-along provisions set forth in the Restated Articles, there are no outstanding share capital, options, warrants, rights (including conversion, preemptive rights, rights of first refusal or similar rights) or agreements for the purchase from the Company of any of its share capital, or any securities convertible into or exchangeable for shares of the Company (whether now or hereinafter authorized or issued) or that could require the Company or a shareholder of the Company to issue, sell, transfer or otherwise cause to be outstanding any of the Company's share capital or securities convertible or exercisable into shares thereof.

(e) As of the Closing, the Acquirer will have good and valid title to all of the Transferred Shares, free and clear of all Encumbrances and, at the Closing, shall deliver to the Seller good and valid title to such Transferred Shares, free and clear of all Encumbrances. "Encumbrance" means, with respect to any asset, any mortgage, easement, encroachment, equitable interest, right of way, deed of trust, lien (statutory or other), pledge, charge, security interest, title retention device, conditional sale or other security arrangement, collateral assignment, claim, community property interest, adverse claim of title, ownership or right to use, right of first refusal or other similar encumbrance in respect of such asset (including any restriction on (i) the voting of any security or the transfer of any security or other asset, (ii) the receipt of any income derived from any asset, (iii) the use of any asset and (iv) the possession, exercise or transfer of any other attribute of ownership of any asset); *provided, however*, that restrictions on transfer of equity interests under applicable laws shall not constitute an "Encumbrance."

(f) The Company has not granted or agreed to grant registration rights and is not under any contractual obligation to register any of its currently outstanding securities, securities that may hereafter be issued upon conversion thereof, or shares or other securities it may hereafter issue or grant.

(g) The Company has not declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its share capital.

2.3 Authorization. All corporate action on the part of the Company, the Company Subsidiary and the Acquirer, their directors and shareholders, necessary for the authorization, execution, delivery and performance of this Agreement and the other agreements, instruments or documents entered into in connection with this Agreement (collectively, the "Transaction Documents") and for the performance of all obligations of the Company, the Company Subsidiary and the Acquirer, under the Transaction Documents in accordance with their terms has been taken or will be taken prior to the Closing. The Transaction Documents, when executed and delivered by the Company, the Company Subsidiary and the Acquirer, and assuming the due authorization, execution and delivery by the other parties hereto and thereto, constitute valid and binding obligations of the Company, the Company Subsidiary and the Acquirer, enforceable against the Company, the Company Subsidiary and the Acquirer, in accordance with their respective terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

2.4 Valid Issuance of Shares. The Purchased Shares and the Parent Shares to be issued to the Investor and the Parent hereunder, when issued, sold and delivered in accordance with the terms of this Agreement for the consideration expressed herein, shall be duly and validly issued, fully paid and non-assessable, issued in compliance with all applicable laws, and free and clear of Encumbrances, other than restrictions on transfer under this Agreement, the Company's Articles of Association (or, upon Closing, the Restated Articles) and under applicable securities laws and other Encumbrance created by or imposed on the Investor or the Parent as to itself. The offer, sale and issuance of the Purchased Shares and the Parent Shares to be issued pursuant to this Agreement constitute transactions exempted from the registration requirements of Section 15 of the Securities Act and the Israeli Securities Law, 1968, as amended. The rights, privileges and preferences of the Purchased Shares and the Parent Shares are as stated in the Restated Articles, as may be amended from time to time in accordance with its terms.

2.5 No Conflict; Consents. The execution, delivery and performance of the Transaction Documents and the consummation of the Contemplated Transactions do not and will not (a) result in any conflict with, or a breach or violation, with or without the passage of time and giving of notice, of any of the terms, conditions or provisions of, or give rise to rights to others (including rights of termination, cancellation or acceleration) under: (i) the Company, the Company Subsidiary or the Acquirer's Articles of Association or Charter Documents (as defined below); (ii) any judgment, injunction, order, writ, decree or ruling of any court or governmental authority, domestic or foreign, to which the Company, the Company Subsidiary or the Acquirer, is subject; (iii) any material contract or agreement, lease, license or commitment to which the Company, the Company Subsidiary or the Acquirer is a party or by which it is bound; or (iv) any applicable law; (b) result in the creation of any Encumbrance upon any asset of the Company, the Company Subsidiary or the Acquirer or the suspension, revocation, forfeiture, or nonrenewal of any permit or license applicable to the Company, the Company Subsidiary and the Acquirer; or (c) require the consent, approval or authorization of, registration, qualification or filing with, or notice to any Person or any federal, state, local or foreign governmental authority or regulatory authority or agency, in each case which has not heretofore been obtained or made or will be obtained or made prior to Closing, except the filing of the Restated Articles and the other required notices with the Israeli Registrar of Companies, each of which shall be made as soon as practicable following the Closing, and, if applicable, the Deferred Closing, respectively. "Person" means any natural person, company, corporation, limited liability company, general partnership, limited partnership, limited liability partnership, trust, estate, proprietorship, joint venture, business organization or governmental entity. The execution, delivery and performance of the Transaction Documents and the consummation of the Contemplated Transactions do not and will not result in any conflict with, or a breach or violation, with or without the passage of time and giving of notice, of any of the terms, conditions or provisions of, or give rise to rights to others (including rights of termination, cancellation or acceleration) in any material respect under any contract or agreement, lease, license or commitment to which the Parent is a party or by which it or any of the Transferred Assets is bound.

2.6 Compliance with Laws and Other Instruments. Each of the Company, the Company Subsidiary and the Acquirer is, and has been, in compliance with all applicable laws. Neither of the Company, the Company Subsidiary or the Acquirer has received any written notice of or been charged with the violation of any law and, to each of the Company's, the Company Subsidiary's and the Acquirer's knowledge, there is no threatened action or proceeding against the Company, the Company Subsidiary or the Acquirer under any of such laws. Neither of the Company, the Company Subsidiary or the Acquirer is in violation of or default under (i) the Company, the Company Subsidiary or the Acquirer's Articles of Association or Charter Documents or (ii) any order, writ, injunction, decree or judgment of any court or any governmental department, commission or agency, domestic or foreign, to which it is subject or by which it is bound. The Company, the Company Subsidiary and the Acquirer have obtained all franchises, permits, licenses, consents and any similar authorizations that are material to the Business (as defined below), under applicable law, and are in compliance with such franchises, permits, licenses, consents and similar authorizations. None of the Transferred Assets is subject to any restriction or limitation or requires a license or registration under applicable laws relating to marketing, export or import controls. Without limiting the generality of the foregoing, the Company, the Company Subsidiary and the Acquirer, have not and are not using or developing, or otherwise engaged in, encryption technology or other technology whose development, commercialization or export is restricted.

2.7 Directors; Officers. The directors and officers of the Company, the Company Subsidiary and the Acquirer are listed on Section 2.7 of the Disclosure Schedule. Neither the Company, the Company Subsidiary nor the Acquirer has any agreement, obligation or commitment with respect to the election of any individual to its Board or to the right to nominate an observer to the Board. There are no agreements, commitments or understandings of the Company, the Company Subsidiary or the Acquirer, whether written or oral, with respect to any compensation to be provided to any of their directors or officers, except as has been fully disclosed in writing to the Investor and listed on Section 2.7 of the Disclosure Schedule.

2.8 Subsidiaries. Other than as listed on Section 2.8 of the Disclosure Schedule (the "Subsidiary", or (if applicable) the "Subsidiaries") neither the Company, the Company Subsidiary or the Acquirer, owns or controls, directly or indirectly, any interest or any other right in any other corporation, association, or other business entity. Neither the Company, the Company Subsidiary nor the Acquirer, is a participant in any joint venture, partnership, or similar arrangement. Each Subsidiary is a corporation duly organized and validly existing under the laws of the state of its incorporation and has all requisite corporate power and authority to own and operate its properties and assets, and to carry on its business as conducted. Each Subsidiary is duly qualified to transact business and, if applicable, is in good standing, in each jurisdiction in which the failure to so qualify would have a Material Adverse Effect. There are no outstanding options, warrants, rights (including conversion or preemptive rights) or agreements for the purchase or acquisition from the Company, the Company Subsidiary or the Acquirer or any Subsidiary of any shares or securities of any Subsidiary, or that could require a Subsidiary or a shareholder thereof to issue, sell, transfer or otherwise cause to be outstanding any share capital or rights convertible or exercisable into share of any Subsidiary.

2.9 Corporate Books. The Articles of Association and Charter Documents of the Company, the Company Subsidiary and the Acquirer, as in effect immediately prior to the Closing are in the form provided to Investor. The Company, the Company Subsidiary and the Acquirer, has provided to the Investor accurate and complete copies of the minutes of all meetings, or written consents in lieu thereof, of directors (and any committee thereof) and shareholders since its incorporation, reflecting, in all material respects, resolutions passed, enacted, consented to or adopted thereby. The corporate records of the Company, the Company Subsidiary and the Acquirer, have been maintained, in all material respects, in accordance with all applicable statutory requirements and are complete and accurate.

2.10 Title to Transferred Assets.

(a) The Company has marketable and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all of the Transferred Assets, free and clear of any Encumbrances, except as set forth in Section 2.10(a) of the Disclosure Schedule, and except for Permitted Encumbrances. "Permitted Encumbrances" means: (i) statutory liens for taxes that are not yet due and payable or liens for taxes being contested in good faith by any appropriate proceedings for which adequate reserves have been established, (ii) statutory liens to secure obligations to landlords, lessors or renters under leases or rental agreements, (iii) deposits or pledges made in connection with, or to secure payment of, workers' compensation, unemployment insurance or similar programs mandated by applicable law, (iv) statutory liens in favor of carriers, warehousemen, mechanics and materialmen, to secure claims for labor, materials or supplies and other like liens, and (v) liens in favor of customs and revenue authorities arising as a matter of applicable law to secure payments of customs duties in connection with the importation of goods.

(b) The Transferred Assets, together with the Transferred Employees, Transferred Contractors and such other assets that shall be licensed to the Company pursuant to the Access and License Agreement, collectively, comprise all of the material assets, rights and services used by the Company in the operation of the ag-biological business as currently conducted, or as contemplated to be conducted within the twelve (12) months following the date hereof as set forth in the business plan attached as Section 2.10(b) to the Disclosure Schedule (the "Business Plan" and the "Business"). All tangible assets included in the Transferred Assets are in reasonably sufficient operating condition and in a state of reasonable maintenance and repair for the continued conduct of the Business, except only for reasonable wear and tear.

(c) Except as set forth in Section 2.10(c) of the Disclosure Schedule, the Transferred Assets (i) together with the Transferred Employees, Transferred Contractors and such other assets that shall be licensed to the Company pursuant to the terms of the Access and License Agreement, comprise in the aggregate all of the assets necessary for the operation of the Business and (ii) are in good operating condition as necessary to conduct the Business, except for reasonable wear and tear.

2.11 Labor Matters

(a) Employee List. Section 2.11(a) of the Disclosure Schedule contains a list of all employees of the Parent that have transferred and are employed by the Company ("Transferred Employees"), and correctly reflects as of the Agreement Date: (i) their name and dates of hire; (ii) their position, full-time or part-time status, including each Transferred Employee's classification as either exempt or non-exempt from the overtime requirements under any applicable law; (iii) their monthly base salary or hourly wage rate, as applicable; (iv) any other compensation payable to them including housing allowances, compensation payable pursuant to bonus (for the current fiscal year and the most recently completed fiscal year), deferred compensation or commission arrangements, overtime payment, vacation entitlement and accrued vacation or paid time-off balance, travel pay or car maintenance or car entitlement, sick leave entitlement and accrual, recuperation pay entitlement and accrual, entitlement to pension arrangement and/or any other provident fund (including manager's insurance and education fund), their respective contribution rates and the salary basis for such contributions, whether such employee, is subject to Section 14 Arrangement under the Israeli Severance Pay Law - 1963 ("Section 14 Arrangement") (and, to the extent such employee is subject to the Section 14 Arrangement, an indication of whether such arrangement has been applied to such person from the commencement date of their employment and on the basis of their entire salary) and notice period entitlement; (v) for each non-U.S. employee, the city/country of employment, citizenship, date of hire, manager's name and work location and any material special circumstances (including pregnancy, leave of absence period, disability or military service) and (vi) any promises or commitments made to any of the Transferred Employees, whether in writing or not, with respect to any future changes or additions to their compensation or benefits. Other than their salary, the Company Employees are not entitled to any payment or benefit that may be reclassified as part of their determining salary for all intent and purposes, including for the social contributions.

(b) Section 2.11(b) of the Disclosure Schedule contains a list of all consultants, advisory board member and independent contractor, including services providers, manpower companies and their employees, freelancers and sub-contractors of the Parent that have transferred and been engaged by the Company ("Transferred Contractor") and, for each, as of the Agreement Date, such individual's compensation and benefits, the initial date of such individual's engagement, the term of the engagement, prior notice entitlement and whether such engagement has been terminated by written notice by either party thereto. All current and former Transferred Contractors were rightly classified as contactors and all such Person's agreements do not create employer-employee relations between such persons and the Company. The Company does not have nor has it ever had any liability with respect to any misclassification of any Transferred Contractor as an independent contractor. Except as set forth in Section 2.11(b) of the Disclosure Schedule, none of the Transferred Contractors engages any personnel through manpower agencies. To the knowledge of the Company, no Transferred Contractor has a basis for a claim or any other allegation that such Person was not rightly classified as an independent contractor.

(c) Except as set forth in Section 2.11(c) to the Disclosure Schedule, each Transferred Employee is currently devoting one hundred percent (100%) of his or her business time to the conduct of the Business of the Company, and the Company is not aware of any Transferred Employee or Transferred Contractor planning to work less than full-time at the Company in the near future.

(d) Other than as set forth in Section 2.11(d) to the Disclosure Schedule, each Transferred Employee agreement is terminable by the Company at will without liability, upon up to 30 days prior notice. No Transferred Employee has been dismissed or has given written notice of termination of his/her employment in the last 12 months period preceding the date of this Agreement, nor to the Company's best knowledge, do any Transferred Employee or Transferred Contractor have at present any intention to terminate his or her employment agreement.

(e) The Company has complied, in all material respects, with all applicable employment laws, policies, procedures and agreements relating to employment, and terms and conditions of employment of the Transferred Employees. The Company has paid in full to all of the Transferred Employees and Transferred Contractors all wages, salaries, commissions, bonuses, benefits and other compensation due and payable to such employees or consultants on or prior to the date of this Agreement. The Company has complied in all material respects with the applicable laws relating to the proper withholding and remittance to the proper tax and other authorities of all sums required to be withheld from employees or persons deemed to be employees under applicable laws with respect to the Transferred Employees or Transferred Contractors. All Transferred Contractors are correctly classified as such and not as employees for any purpose. All Transferred Employees are subject to Section 14 Arrangement under the Israeli Severance Pay Law, 1963 from the commencement date of their employment and on the basis of their entire salary. The Company's liability for any obligations to pay any amount of severance payment, pension, accrued vacation, and other social benefits and contributions, under applicable law or contract, or any other payment of substantially the same nature, is fully funded by deposit of funds in severance funds, pension funds, managers insurance policies or provident funds (and if not required to be so funded).

(f) Except as set forth in Section 2.11(f) of the Disclosure Schedule, all options to purchase shares of Ordinary Shares (or exercisable for cash) outstanding under the Company's option plan granted by the Company to Transferred Employees or Transferred Contractors in Israel were granted under employee option plans approved by the Israeli Tax authorities under Section 102 of the Israeli Income Tax Ordinance. The Company has complied in all material respects with all requirements of such Section 102 and the regulations promulgated thereunder in all respects.

(g) To the Company's knowledge, no Transferred Employee or Transferred Contractor, is in violation of any term of any employment or engagement contract, assignment agreement, non competition agreement, restrictive covenant or any other contract or agreement, or is subject to any judgment, decree or order of any court or administrative agency, that would interfere with such employee's or consultant's ability to promote the interest of the Company or to comply with its obligations to the Company (including the obligation to assign intellectual property rights) or that would conflict with the Company's business, and the continued employment or engagement of such employee or consultant by the Company will not result in any such violation. The Company has not received any written notice alleging that any such violation has occurred.

(h) The Company is not a party to, bound by or subject to, and no Transferred Employees benefits from, any collective bargaining agreement, collective labor agreement, extension orders (*tzavei harchava*) (other than extension orders that apply to all employees in Israel generally), or other contract or arrangement with a labor union, trade union or other organization or body, to provide benefits or working conditions beyond the minimum benefits and working conditions required by applicable law. No labor union has requested or has sought to represent any of the Transferred Employees, nor is the Company aware of any labor organization activity involving the Transferred Employees. There is no strike or other labor dispute involving the Company and the Transferred Employees pending or, to the Company's knowledge, threatened.

(i) No Conflict. Except as set forth in Section 2.11(i) of the Disclosure Schedule, neither the execution, delivery or performance of this Agreement, nor the consummation of the Contemplated Transactions, will or may (either alone or upon the occurrence of any additional or subsequent events): (i) constitute an event under any Company employee plan, Company employee agreement, trust or loan that will or may result (either alone or in connection with any other circumstance or event) in any payment (whether of severance pay or otherwise), acceleration, forgiveness of indebtedness, vesting, distribution, increase in benefits or obligation to fund benefits with respect to any of the Transferred Employees; (ii) create or otherwise result in any liability or obligation with respect to any Company employee plan; or (iii) result in any obligation to pay any directors, officers, employees, consultants, independent contractors, former directors, officers, employees, consultants or independent contractors of any Company severance pay or termination, retention or other benefits.

(j) Labor Relations. The Company has good labor relations with the Transferred Employees, and, except as set forth in Section 2.11(j) of the Disclosure Schedule, there are no facts indicating that the consummation of the Contemplated Transactions will have a material adverse effect on the labor relations of the Company. Except as set forth in 2.11(j) of the Disclosure Schedule, there are no pending or, to the Company's knowledge, threatened or reasonably anticipated claims or Legal Proceedings (as defined below) against the Company under any workers' compensation policy or long-term disability policy.

(k) Labor-Related Claims. Except as set forth in Section 2.11(k) of the Disclosure Schedule, there is no Legal Proceeding, claim, labor dispute or grievance pending or, to the Company's knowledge, threatened or reasonably anticipated relating to any employment contract, compensation, wages and hours, leave of absence, plant closing notification, employment statute or regulation, privacy right, labor dispute, workers' compensation policy, long-term disability policy, safety, retaliation, immigration or discrimination matter involving any Transferred Employee or Transferred Contractor, including charges of unfair labor practices or harassment complaints.

2.12 Intellectual Property.

(a) As used herein, the following terms have the meanings indicated below:

(i) "Company Intellectual Property" means any and all Company Owned Intellectual Property and any and all Third-Party Intellectual Property that is licensed to the Company.

(ii) "Company Intellectual Property Agreements" means any contract governing any Company Intellectual Property to which the Company is a party or is bound by, except for contracts for Third-Party Intellectual Property that is generally, commercially available software and licensed for an annual fee under $1,000.

(iii) "Company Owned Intellectual Property" means any and all Intellectual Property that is owned (or co-owned) by or purported to be owned (or co-owned) by the Company.

(iv) "Company Privacy Policies" means, collectively, any and all (i) of the Company data privacy and security policies, whether applicable internally, or published on Company Websites or otherwise made available by the Company to any Person as obligations towards such Person, (ii) obligations and commitments and contracts with third parties relating to the Processing of data of such third parties.

(v) "Company Products" means all products or services currently produced, marketed, licensed, sold, distributed or performed by or on behalf of the Company and all products or services currently under development by the Company (including as contemplated in the Business Plan).

(vi) "Company Registered Intellectual Property" means the Israeli, United States, international and foreign: (A) patents and patent applications (including provisional applications); (B) registered trademarks, applications to register trademarks, intent-to-use applications, or other registrations or applications related to trademarks; (C) registered Internet domain names; and (D) registered copyrights and applications for copyright registration, in each case registered or filed in the name of, or owned by the Company.

(vii) "Company Source Code" means, collectively, any software source code or database specifications or designs, or any material proprietary information or algorithm contained in or relating to any software source code or database specifications or designs, of any Company Owned Intellectual Property or Company Products.

(viii) "Company Trade Secrets" means all Trade Secrets owned (or co-owned) by or purported to be owned (or co-owned) by the Company.

(ix) "Company Websites" means all websites owned, operated or hosted by the Company or through which the Company conducts the business (including those websites operated using the domain names listed in Section 2.12(a)(ix) of the Disclosure Schedule), and the underlying platforms for such websites.

(x) "Governmental Grant" means any grant, loan, incentive, subsidy, award, participation, exemption, status, cost sharing arrangement, reimbursement arrangement or other benefit (including tax benefits), relief or privilege provided or made available by or on behalf of or under the authority of any governmental entity.

(xi) "Intellectual Property" means (A) Intellectual Property Rights; and (B) Proprietary Information and Technology.

(xii) "Intellectual Property Rights" means any and all of the following and all rights (including database rights) in, arising out of, or associated therewith, throughout the world: patents, utility models, and applications therefor and all reissues, divisions, re-examinations, renewals, extensions, provisionals, continuations and continuations-in-part thereof and equivalent or similar rights in inventions and discoveries anywhere in the world, including invention disclosures, common law and statutory rights associated with trade secrets, confidential and proprietary information and know-how, industrial designs and any registrations and applications therefor, trade names, logos, trade dress, trademarks and service marks, trademark and service mark registrations, trademark and service mark applications and any and all goodwill associated with and symbolized by the foregoing items, Internet domain name applications and registrations, Internet and World Wide Web URLs or addresses, data, copyrights, copyright registrations and applications therefor and all other rights corresponding thereto, moral and economic rights of authors and inventors, however denominated and any similar or equivalent rights to any of the foregoing, and all tangible embodiments of the foregoing.

(xiii) "Open Source Materials" means software or other material that is distributed as "free software", "open source software" or under similar licensing or distribution terms (including but not limited to the GNU General Public License (GPL), GNU Lesser General Public License (LGPL), Mozilla Public License (MPL), BSD licenses, the Artistic License, the Netscape Public License, the Sun Community Source License (SCSL) the Sun Industry Standards License (SISL) and the Apache License).

(xiv) "Privacy Laws" means (i) each applicable law applicable to the protection or Processing or both of Personal Data, and includes rules relating to the US-EU/Switzerland Safe Harbor, Payment Card Industry Data Security Standards, and direct marketing, emails, text messages or telemarketing; (ii) guidance issued by a governmental entity that pertains to one of the laws, rules, or standards outlined in part (i) of this definition; and (iii) industry self-regulatory principles applicable to the protection or Processing of Company Personal Data, direct marketing, emails, text messages or telemarketing.

(xv) "Process" or "Processing" means, with respect to data, the use, collection, processing, storage, recording, organization, adaption, alteration, transfer, retrieval, disclosure, dissemination or combination of such data.

(xvi) "Proprietary Information and Technology" means any and all of the following: works of authorship, computer programs, source code and executable code, whether embodied in software, firmware or otherwise, assemblers, applets, compilers, user interfaces, application programming interfaces, protocols, architectures, documentation, annotations, comments, designs, files, records, schematics, test methodologies, test vectors, emulation and simulation tools and reports, hardware development tools, models, tooling, prototypes, breadboards and other devices, data, data structures, databases, data compilations and collections, inventions (whether or not patentable), invention disclosures, discoveries, improvements, technology, proprietary and confidential ideas and information, know-how and information maintained as trade secrets, tools, concepts, techniques, methods, processes, formulae, patterns, algorithms and specifications, customer lists and supplier lists and any and all instantiations or embodiments of the foregoing or any Intellectual Property Rights in any form and embodied in any media.

(xvii) "Third-Party Intellectual Property" means any and all Intellectual Property owned by a third party.

(xviii) "Trade Secrets" means all inventions (whether or not patentable) and improvements thereto, know-how, research and development information, business plans, specifications, designs, processes, process libraries, technical data, customer data, financial information, pricing and cost information, bills of material, or other confidential information exclusively owned by a Person, including any formula, pattern, compilation, program, device, method, technique, or process, that (i) provides an actual or potential independent economic value from not being generally known to and not being readily ascertainable by, other Persons, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

(xix) "Company Personal Data" means any data or information relating to a natural Person in any media or format where the Person can be identified directly or indirectly either from such data or information or from the combination of such data or information with other data or information that is in the possession of the Company, including a natural Person's (including a customer's or an employee's) name, street address, telephone number, e-mail address, photograph, factors specific to his/her physical, physiological, mental, economic, cultural or social identity, social security number, driver's license number, passport number or customer, account number, geo-location data, voice recording, video recording, Internet Protocol address, device identifier, or other persistent identifier, "information" as defined by the Israeli Privacy Protection Law, 1981 (whether or not such "information" constitutes "sensitive information" as defined thereunder), or any other piece of information that allows the identification of a natural Person or is otherwise considered personally identifiable information or personal data under any Privacy Laws.

(b) The Company Intellectual Property, together with any Intellectual Property licensed to the Company pursuant to the Access and License Agreement, collectively constitutes all of the Intellectual Property necessary for the Company's conduct of, or that are used in or held for use for the conduct of, the Business, without: (i) the need for the Company to acquire or license any other intangible asset, intangible property or Intellectual Property Right, and (ii) the breach or violation of any contract. The Company has not transferred ownership of, or agreed to transfer ownership of, or, except as set forth in Section 2.12(b) of the Disclosure Schedule, granted any exclusive licenses to, or agreed to grant any exclusive licenses to any Company Owned Intellectual Property to any third party. No third party nor Parent has any ownership right, title, interest, claim in or lien on any of the Company Owned Intellectual Property (excluding for the avoidance of doubt non-exclusive licenses granted by the Company to its distributors, users and customers).

(c) Section 2.12(c) of the Disclosure Schedule lists all Company Registered Intellectual Property, and the jurisdictions in which it has been issued or registered or in which any application for such issuance and registration has been filed, or in which any other filing or recordation has been made as well as a complete and correct list of all material unregistered trademarks, trade names, and service marks used by the Company; and all actions that are required to be taken by the Company vis-à-vis the applicable authorities with which such Company Registered Intellectual Property was registered or filed within 120 days of the date hereof with respect to such Company Registered Intellectual Property in order to avoid prejudice to, impairment or abandonment of such Company Registered Intellectual Property (including without limitation all office actions, provisional conversions, annuity or maintenance fees or re-issuances). Each item of Company Registered Intellectual Property that has been issued by a governmental authority is valid and is not subject to a currently pending application, and all registration, maintenance and renewal fees currently due in connection with such Company Registered Intellectual Property or any pending applications therefor have been paid and all documents, recordations and certificates in connection with such Company Registered Intellectual Property that were required to be filed have been filed with the relevant patent, copyright, trademark or other authorities in which such Company Registered Intellectual Property has been filed, for the purposes of prosecuting, maintaining and perfecting such Company Registered Intellectual Property and recording the Company's ownership interests therein. All such applications have been pursued in a diligent and commercially reasonable manner. For the avoidance of doubt, no assurance is provided that any patent applications will be allowed registration as patents or that once issued will not be held to be invalid, and any failure to be so allowed, or so held, shall not be considered a breach of a representation or warranty herein.

(d) Governmental Grants.

(i) Section 2.12(d)(i) of the Disclosure Schedule identifies each Governmental Grant that has been or is provided to the Company or for which the Company has applied. Except as set forth on Section 2.12(d)(i) of the Disclosure Schedule, the Company has never received any Governmental Grant. The Company has provided to the Investor accurate and complete copies of: (i) all applications and related documents and correspondence submitted by the Company to any governmental entity in connection with Governmental Grants and (ii) all certificates of approval and letters of approval (and supplements thereto) granted to the Company by any governmental entity in connection with Governmental Grants. In each such application submitted by or on behalf of the Company, all information required by such application has been disclosed accurately and completely in all material respects, the Company has not made any material misstatements of fact and any non-material disclosures that are not accurate or complete would not cause the loss of the Company obtained by such application. There are no undertakings of the Company given in connection with any Governmental Grant. The Company is in compliance with the terms, conditions, requirements and criteria of all Governmental Grants, including all reporting requirements as per applicable law, except for any noncompliance with such Governmental Grants that would not cause the Company to lose a material benefit or incur any material liability and has duly fulfilled all conditions, undertakings and other obligations relating thereto. Except as set forth in Section 2.12(d)(i) of the Disclosure Schedule, no governmental entity: (i) has awarded any participation or provided any support to the Company; or (ii) is or may become entitled to receive any royalties or other payments from the Company.

(ii) Section 2.12(d)(ii) of the Disclosure Schedule sets forth, with respect to each Governmental Grant referred to in 2.12(d)(i) of the Disclosure Schedule: (i) a complete and accurate report of the total amount of the benefits received by the Company under each Governmental Grant, the total amount of the benefits available for future use by the Company under each Governmental Grant and the aggregate amounts of all grants; (ii) the time period in which the Company received, or will be entitled to receive, benefits under such Governmental Grant; and (iii) any Governmental Grant consisting of a Tax incentive (other than incentives generally available by operation of law without application or action by any governmental entity). No event has occurred, and no circumstance or condition exists, that would reasonably be expected to give rise to: (A) the annulment, revocation, withdrawal, suspension, cancellation, recapture or modification of any Governmental Grant; (B) the imposition of any limitation on any Governmental Grant or any benefit available in connection with any Governmental Grant; or (C) a requirement that the Company return or refund any benefits provided under any Governmental Grant. The Company has obtained all authorizations and approvals necessary for the consummation of the purchase of the Transferred Assets pursuant to the terms of this Agreement in order to ensure that the purchase of the Transferred Assets: (1) will not adversely affect the ability of the Company to obtain the benefit of any Governmental Grant for the remaining duration thereof or require any recapture of any previously claimed incentive; and (2) will not result in (x) the failure of the Company to comply with any of the terms, conditions, requirements and criteria of any Governmental Grant, applicable laws, regulations, ordinances or guidelines or (y) any claim by any governmental entity or other Person that the Company is required to return or refund, or that any governmental entity is entitled to recapture, any benefit provided under any Company. Except as set forth in Section 2.12(d)(ii) of the Disclosure Schedule, no consent of any governmental entity or other Person is required to be obtained prior to the consummation of the purchase of the Transferred Assets pursuant to the terms of this Agreement in order to preserve the entitlement of the Company to any Governmental Grant or to avoid any increase in royalty rates incurred by the Company under any such Governmental Grant or other change in the terms and conditions applicable to the Company under any such Governmental Grant. There is no intention to change the terms of any Governmental Grant, except as may result from generally applicable changes to the relevant laws and regulations thereunder. No Governmental Grant imposes any restriction on the Company's use of any Intellectual Property developed with funds received under such Governmental Grant or gives the grantor of such Governmental Grant any rights in any such developed Intellectual Property.

(iii) Except as set forth in Section 2.12(d)(iii) of the Disclosure Schedule, no items of Company Owned Intellectual Property were developed or derived from, in whole or in part, funding or resources provided by, or are subject to restriction, constraint, control, supervision, or limitations imposed by any Governmental Entity or regulatory authority.

(e) Company Products. Section 2.12(e) of the Disclosure Schedule lists all Company Products that have been made available for use or purchase by the Company, including any product or service currently under development and scheduled for commercial release within 90 days of the date hereof, for each such Company Product (and each version thereof) identifying its release date.

(f) Private Grants. At no time during the conception of or reduction to practice of any of the Company Owned Intellectual Property was the Company or any developer, inventor or other contributor to such Company Owned Intellectual Property operating under any grants from any private source, performing research sponsored by any private source or subject to any employment agreement or invention assignment or nondisclosure agreement or other obligation with any third party that could or would reasonably be expected to adversely affect, restrict or in any manner encumber the Company's rights in such Company Owned Intellectual Property. No facilities of a university, college, other educational institution or research center was used in the development of the Company Owned Intellectual Property.

(g) Assignment. All rights in, to and under all Intellectual Property assigned as part of the Assignment have been duly and validly assigned to the Company, and the Company has no reason to believe that any such Person is unwilling to provide the Company with such cooperation as may reasonably be required to complete and prosecute all appropriate Israeli and foreign patent and copyright filings related thereto.

(h) Invention Assignment and Confidentiality Agreement. The Company has secured, or Parent has secured with respect to any of the Transferred Assets, from all (i) employees and Company contractors who independently or jointly contributed to or participated in the conception, reduction to practice, creation or development of any Intellectual Property for the Company and (ii) named inventors of patents and patent applications owned or purported to be owned by the Company (any Person described in clauses (i) or (ii), an "Author"), unencumbered and unrestricted exclusive ownership of, all of the Authors' Intellectual Property in such contribution. No Author has affirmatively retained any rights, licenses, claims or interest whatsoever with respect to any Intellectual Property developed by the Author for the Company or the Parent with respect to the Transferred Assets. Without limiting the foregoing, the Company has obtained written and enforceable proprietary information and invention disclosure and Intellectual Property assignments from all current and former Authors and, in the case of patents and patent applications, such assignments have been recorded with the relevant authorities in the applicable jurisdiction or jurisdictions. The Company has provided to the Investor copies of all such forms currently and historically used by the Company, and each proprietary information and invention disclosure and Intellectual Property assignment executed by each Author is substantially similar to the forms the Company has made available to the Investor.

(i) No Violation. To the Company's knowledge, no current or former employee or contractor of the Company: (i) is in violation of any term or covenant of any contract relating to invention disclosure, invention assignment, non-disclosure, data privacy, non-competition or any other contract with any other party by virtue of such employee's or contractor's being employed by, or performing services for, the Company or using trade secrets or proprietary information of others without permission; or (ii) has developed any technology, software or other copyrightable, patentable or otherwise proprietary work for the Company or Parent with respect to the Transferred Assets that is subject to any agreement under which such employee or contractor has assigned or otherwise granted to any third party any rights (including Intellectual Property Rights) in or to such technology, software or other copyrightable, patentable or otherwise proprietary work. To the Company's knowledge, neither the execution nor delivery of this Agreement will conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract of the type described in clause (i) of the immediately foregoing sentence.

(j) Confidential Information. The Company has taken commercially reasonable steps to protect and preserve the confidentiality of all confidential or non-public information of the Company (including Company Trade Secrets) as well as confidential or non-public information provided by any third party (including Company Trade Secrets, Company Personal Data) to the Company under a written obligation of confidentiality ("Company Confidential Information"). All current and former employees and contractors of the Company and any third party having access to Company Confidential Information have executed and delivered to the Company a written legally binding agreement regarding the protection of such Company Confidential Information. The Company has implemented and maintains reasonable security, disaster recovery and business continuity plans consistent with industry practices of companies offering similar services and having similar resources as the Company. To the knowledge of the Company, the Company has not experienced any breach of security or otherwise unauthorized access by third parties to the Company Confidential Information, including Company Personal Data in the Company's possession, custody or control. There has not been any failure with respect to any of the computer systems, including software, used by the Company in the conduct of the business. To the knowledge of the Company, there has been no Company or third-party breach of confidentiality. Nothing in this Section 2.12(j) is intended to limit the scope of Section 2.12(p) of this Agreement.

(k) Non-Infringement. To the knowledge of the Company, there is no unauthorized use, unauthorized disclosure, infringement, violation or misappropriation of any Company Owned Intellectual Property (including any applicable Transferred Assets) by any third party. In the three (3) years prior to the date of this Agreement, there has not been any Legal Proceeding for infringement, violation or misappropriation of any Company Owned Intellectual Property (including any applicable Transferred Assets. The Company (including as a successor to any of the Transferred Assets) does not have any liability for infringement, violation or misappropriation of any Intellectual Property Rights of any third party. To the Company's knowledge, the operation of the Business, including the design, development, manufacturing, reproduction, marketing, licensing, sale, offer for sale, importation, distribution, provision and/or use of any Company Product, Company Owned Intellectual Property as previously conducted and as currently conducted by the Company, has not and does not infringe (directly or indirectly, including via contribution or inducement), misappropriate or violate any Intellectual Property Rights of any third party. The Company (nor Parent with respect to any of the applicable Transferred Assets) has not been sued in any Legal Proceeding or received any written communications (including any third party reports by users) alleging that the Company (or Parent with respect to any applicable Transferred Assets) has infringed, misappropriated, or violated or, by conducting the Business, would infringe, misappropriate, or violate any Intellectual Property of any other Person or entity. No Company Owned Intellectual Property or Company Product is subject to any Legal Proceeding, judgment, writ, decree, stipulation, determination, decision, award, rule, preliminary or permanent injunction, temporary restraining order or other order of any governmental Entity or arbitrator ("Order"), settlement agreement or right that restricts in any manner the use, transfer, or licensing thereof or that may adversely affect the validity, use or enforceability of any such Company Owned Intellectual Property.

(l) Licenses; Agreements. Except as set forth in Section 2.12(l) of the Disclosure Schedule, the Company has not granted any options, licenses or agreements of any kind relating to any Company Owned Intellectual Property outside of normal nonexclusive end use terms of service entered into by users of the Company Products in the ordinary course (copies of which have been provided to the Investor), and the Company is not bound by or a party to any option, license or agreement of any kind with respect to any of the Company Owned Intellectual Property. Except as set forth in Section 2.12(l) of the Disclosure Schedule, the Company is not obligated to pay any royalties, fees or other payments to any Person (other than salaries payable to employees and contractors, not contingent on or related to use of their work product and commissions on sales payable to employees) or third parties with respect to the marketing, sale, distribution, manufacture, license or use of any Company Products or Company Intellectual Property or any other Intellectual Property Rights.

(m) Other Intellectual Property Agreements. With respect to the Company Intellectual Property Agreements:

(i) Each such agreement is valid and subsisting and has, where required of the Company, been duly recorded or registered;

(ii) Except as set forth in Section 2.12(m)(ii) of the Disclosure Schedule, the Company is not (and will not be as a result of the execution and delivery or effectiveness of this Agreement or the performance of the Company's obligations under this Agreement), in breach of any Company Intellectual Property Agreement and the consummation of the Contemplated Transactions will not result in the modification, cancellation, termination, suspension of, or acceleration of any payments, rights, obligations, or remedies with respect to any Company Intellectual Property Agreements, or give any non- Company party to any Company Intellectual Property Agreement the right to do any of the foregoing;

(iii) To the knowledge of the Company, no counterparty to any Company Intellectual Property Agreement is in breach thereof;

(iv) At and immediately following the Closing, the Company will be permitted to continue to exercise all of its rights under the Company Intellectual Property Agreements to the same extent the Company would have been able to had the transactions under this Agreement not occurred and without the payment of any additional amounts or consideration other than ongoing fees, royalties or payments that the Company would otherwise be required to pay;

(v) There are no disputes or private or governmental action, inquiry, claim, proceeding, suit, hearing, litigation, audit or investigation, in each case whether civil, criminal, administrative, judicial or investigative, or any appeal therefrom, in each case by or before any governmental entity or arbitrator ("Legal Proceeding") pending or, to the knowledge of the Company, threatened, regarding any Company Intellectual Property Agreements, or performance under any such agreements including with respect to any payments to be made or received by the Company thereunder;

(vi) No Company Intellectual Property Agreement requires the Company to include any Third-Party Intellectual Property in any Company Product or obtain any Person's approval of any Company Product at any stage of development, licensing, distribution or sale of that Company Product;

(vii) None of the Company Intellectual Property Agreements grants any third party exclusive rights to or under any Company Intellectual Property;

(viii) None of the Company Intellectual Property Agreements grants any third party the right to sublicense any Company Intellectual Property;

(ix) The Company has obtained valid, written, perpetual, non-terminable (other than for cause) licenses (sufficient for the conduct of the Business) to all Third-Party Intellectual Property that is incorporated into, integrated or bundled by the Company with any of the Company Products; and

(x) No third party that has licensed Intellectual Property Rights to the Company has ownership or license rights to improvements or derivative works made by the Company in the Third-Party Intellectual Property that has been licensed to the Company.

(xi) Non-contravention. None of the execution and performance of this Agreement, the consummation of the transactions under this Agreement and the assignment to the Company by operation of law at the Closing of any contracts to which the Company is a party or by which any of its assets is bound (to the extent such contracts provide for such assignment by operation of law at the Closing), will result in: (i) the Company or any of its affiliates (other than the Company as to Company Intellectual Property after Closing) granting to any third party any right to or with respect to any Intellectual Property Rights or data owned by, or licensed to the Company or any of its affiliates, (ii) the Company or any of its affiliates (other than the Company after the Closing), being bound by or subject to, any exclusivity obligations, non-compete or other restriction on the operation or scope of their respective businesses, (iii) the Company being obligated to pay any royalties or other material amounts to any third party in excess of those payable by any of them, respectively, in the absence of this Agreement or the transactions under the Agreement or (iv) any termination of, or other material adverse impact to, any Company Intellectual Property.

(n) Company Source Code. Except as set forth in Section 2.12(n) of the Disclosure Schedule, the Company has not disclosed, delivered or licensed to any Person or agreed or obligated itself to disclose, deliver or license to any Person, or permitted the disclosure or delivery to any escrow agent or other Person of, any Company Source Code, other than disclosures to employees and Company contractors involved in the development of Company Products. No event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time, or both) will, or would reasonably be expected to, result in the disclosure, delivery or license by the Company of any Company Source Code, other than disclosures to employees and Company contractors involved in the development of Company Products. Without limiting the foregoing, neither the execution nor performance of this Agreement nor the consummation of any of the Contemplated Transactions will result in a release from escrow or other delivery to a third party of any Company Source Code.

(o) Open Source Software. Section 2.12(o) of the Disclosure Schedules identifies all Open Source Materials used in any Company Products or that are otherwise distributed by the Company, describes the manner in which such Open Source Materials were used (such description shall include whether (and, if so, how) the Open Source Materials were modified and/or distributed by the Company) and identifies the licenses under which such Open Source Materials were used. Except as set forth on Section 2.12(o) of the Disclosure Schedules, the Company is in compliance with the terms and conditions of all licenses for the Open Source Materials. The Company has not (i) incorporated Open Source Materials into, or combined Open Source Materials with, the Company Owned Intellectual Property or Company Products; (ii) distributed Open Source Materials in conjunction with any Company Owned Intellectual Property or Company Products; or (iii) used Open Source Materials in such a way that, with respect to clauses (i), (ii), or (iii), creates, or purports to create, obligations for the Company with respect to any Company Owned Intellectual Property or grant, or purports to grant to any third party any rights or immunities under any Company Owned Intellectual Property (including using any Open Source Materials) that require, as a condition for the use, modification and/or distribution of such Open Source Materials, that other software incorporated into, derived from or distributed with such Open Source Materials be (A) disclosed or distributed in source code form, (B) licensed for the purpose of making derivative works or (C) redistributable at no charge).

(p) Privacy.

(i) The Company is in compliance in all material respects with the Company Privacy Policies and applicable Privacy Laws. Copies of all current and prior Company Privacy Policies have been made available to the Investor and such copies are true and accurate.

(ii) The Company has established, and maintains, technical, physical and organizational measures, and security systems and technologies which they reasonably believe to be adequate to protect the Company data against accidental or unlawful Processing.

(iii) To the Company’s knowledge, no breach, security incident, or violation of any data security policy in relation to the Company's data has occurred, or, to the Company's knowledge, is threatened, and there has been no unauthorized or illegal Processing of any Company data. To the Company's knowledge, no circumstance has arisen in which: (i) Privacy Laws would require the Company to notify a governmental entity of a data security breach or security incident, or (ii) applicable guidance or codes of practice promulgated under Privacy Laws would recommend the Company to notify a governmental entity of a data security breach.

(iv) The Company has not received or experienced, or has any knowledge of, any circumstance (including any circumstance arising as the result of an audit or inspection carried out by any governmental entity) that would reasonably be expected to give rise to, any Legal Proceeding, notice, communication, court order, warrant, complaint, demand, regulatory opinion, audit result, or allegation, from a governmental entity or any other Person (including a data subject): (A) alleging or confirming non-compliance with a relevant requirement of Privacy Laws or Company Privacy Policies, (B) requiring or requesting the Company to amend, rectify, cease Processing, de-combine, permanently anonymize, block, or delete Company data, (C) permitting or mandating relevant governmental entities to investigate, requisition information from, or enter the premises of, the Company or (D) claiming compensation from the Company in connection with the above. The Company has not been involved in any Legal Proceedings involving a breach or alleged breach of Privacy Laws or Company Privacy Policies.

(v) The Company does not knowingly Process, or has ever obtained actual knowledge that it is Processing, the Personal Data of any natural Person under the age of 13.

(vi) The Company has never directly stated or indirectly implied that Company Products enhance the security of data (including Personal Data) accessed, provided or sent by end users.

(q) Company Websites. To the Knowledge of the Company, no domain names have been registered by any Person that are similar to any trademarks, service marks, domain names or business or trading names used, created or owned by the Company. The contents of any Company Website and all transactions and activities conducted over the Internet comply in all material respects with all applicable laws and Company Privacy Policies.

(r) Information Technology.

(i) Status. Section 2.12(r) of the Disclosure Schedules lists the material server and hosting infrastructure and systems used by the Company in their operations (collectively, the "Company ICT Infrastructure") and any security and disaster recovery arrangements relating thereto. The arrangements relating to the Company ICT Infrastructure (including its operation and maintenance and any amendments or modifications thereto) will not be adversely affected by the transactions under the Agreement, and the Company ICT Infrastructure will continue to be available for use by the Company immediately following the consummation of the transactions under this Agreement on substantially the same terms and conditions as prevailed immediately before the Closing, without further action or payment by the Company. The Company is the legal and beneficial owners of the Company ICT Infrastructure and the Company ICT Infrastructure is used exclusively by the Company. The Company ICT Infrastructure that is currently used in the business constitutes all the information and communications technology and other systems infrastructure reasonably necessary to carry on the business as currently conducted.

(ii) No Faults. Other than as set forth on Section 2.12(r)(ii) of the Disclosure Schedule, the Company has not experienced, any disruption in or to the operation of the business as a result of: (A) any substandard performance or defect in any part of the Company ICT Infrastructure whether caused by any viruses, bugs, worms, software bombs or otherwise, lack of capacity or otherwise or (B) a breach of security in relation to any part of the Company ICT Infrastructure.

(iii) Company ICT Agreements. All contracts relating to the Company ICT Infrastructure are valid and binding and no contract (including any Contract for Third-Party Intellectual Property) that relates to the Company ICT Infrastructure has been the subject of any breach by the Company. To the Company's knowledge, any other Person, and the Company (A) have not waived any breach thereof by any other Person, (B) have not received any written notice of termination of any such contract and (C) do not know of any circumstances that would give rise to a breach, suspension, variation, revocation or termination of any such contract without the consent of the Company (other than termination on notice in accordance with the terms of such contract).

(s) Source Code Access. No contract for Third-Party Intellectual Property licensed to the Company includes a written source code escrow agreement that entitles the Company to access such source code in the event of certain specified circumstances (including the insolvency of the supplier).

2.13 Material Contracts.

(a) Section 2.13 of the Disclosure Schedule set forth a complete and accurate list of each of the following Contracts to which the Company is a party or otherwise bound and that are in effect on the date hereof, including contracts that have been transferred as part of the Assignment (any Contract of the nature described below, whether or not set forth on the Disclosure Schedule, is herein referred to as a "Company Material Contract"). "Contract" means any written or oral legally binding contract, agreement, instrument, commitment or undertaking of any nature (including leases, subleases, licenses, mortgages, notes, guarantees, sublicenses, subcontracts, letters of intent and purchase orders), including all amendments, supplements, exhibits and schedules thereto.

(i) any Contract providing for payments by or to the Parent (through the date of transfer of the Transferred Assets by Parent to the Company) or the Company (following the date of such transfer) (or under which the Parent (through the date of transfer of the Transferred Assets by Parent to the Company) or the Company (following the date of such transfer) has made or received such payments) in any of the years ended December 31, 2016, 2017 or 2018 in an aggregate amount of $10,000 or more;

(ii) (A) any dealer, distributor, joint marketing, strategic alliance, affiliate agreement or similar Contract, or any Contract providing for the grant of rights to reproduce, license, market or sell its products or services to any other Person or relating to the advertising or promotion of the Business or pursuant to which any third parties advertise on any websites operated by the Company or any of its subsidiaries or (B) any sales representative, original equipment manufacturer, manufacturing, value added, remarketer, independent software vendor, or other Contract for use or distribution of Company Products or Company Intellectual/ Property;

(iii) any Contract terminable by the counterparty thereto upon assignment or change in control of the Company or requiring notification to counterparties in the event of assignment or change in control of the Company;

(iv) (A) any joint venture Contract, (B) any Contract that involves a sharing of revenues, profits, cash flows, expenses or losses with other Persons and (C) any Contract that involves the payment of royalties to any other Person;

(v) any Contract (A) with any of its officers, directors, employees or stockholders or any Person known by the Company to be a member of their immediate families, other than employee offer letters which are terminable at will without liability or obligation to the Company, employee invention assignment and confidentiality agreements on the Company's standard form and option grant and exercise agreements on the Company's standard form or (B) with any Person with whom the Company or any subsidiary does not deal at arm's length;

(vi) any Contract (A) pursuant to which any other party is granted exclusive rights or "most favored party" rights of any type or scope with respect to any of the Company Products or Company Intellectual Property, (B) containing any non-competition covenants or other restrictions relating to the Company Products or Company Owned Intellectual Property or (C) that limits the freedom of the Company to (I) engage or participate, or compete with any other Person, in any line of business, market or geographic area with respect to the Company Products or the Company Owned Intellectual Property, or to make use of any Company Owned Intellectual Property or personal data including any grants by the Company of exclusive rights or licenses or (II) sell, distribute or manufacture any products or services or to purchase or otherwise obtain any software, components, parts or services;

(vii) any standstill or similar agreement containing provisions prohibiting a third party from purchasing equity interests of the Company or assets of the Company or otherwise seeking to influence or exercise control over the Company;

(viii) other than "shrink wrap" and similar generally available commercial end-user licenses to software that have an individual acquisition cost of $1,000 or less, all licenses, sublicenses and other Contracts to which the Company is a party and pursuant to which the Company acquired or is authorized to use any Third-Party Intellectual Property used in the development, marketing or licensing of the Company Products;

(ix) any license, sublicense, or other Contract to which the Company is a party and pursuant to which any Person is authorized to use any Company Owned Intellectual Property or Personal Information (other than customer agreements on the Company's standard form agreement, a copy of which has been provided to the Investors);

(x) any license, sublicense, or other Contract pursuant to which the Company or the Parent (with respect to any applicable Transferred Asset) has agreed to any restriction on the right of the Company to use or enforce any Company Owned Intellectual Property or pursuant to which the Company agrees to encumber, transfer or sell rights in or with respect to any Company Owned Intellectual Property or Personal Information;

(xi) any Contracts relating to the membership of, or participation by, the Company in, or the affiliation of the Company with, any industry standards group or association;

(xii) any Contract providing for the development of any Intellectual Property, independently or jointly, either by or for Company (other than employee invention assignment agreements and consulting agreements with Authors on the Company standard form of agreement, copies of which have been provided to the Investors);

(xiii) any confidentiality, secrecy or non-disclosure Contract other than any such Contract entered into by the Company in the ordinary course of business;

(xiv) any Contract to license or authorize any third party to manufacture or reproduce any of the Company Products, Company Intellectual Property or Personal Information;

(xv) any Contract pursuant to which any exclusive licenses or rights, or any covenants not to sue or non-assertion provisions, in or to the Company Intellectual Property are granted by the Company or the Parent (with respect to the applicable Transferred Assets);

(xvi) any Contract containing any indemnification, warranty, support, maintenance or service obligation on the part of the Company;

(xvii) any settlement or litigation "standstill" agreement;

(xviii) any Contract pursuant to which rights of any third party are triggered or become exercisable, or under which any other consequence, result or effect arises, in connection with or as a result of the execution of this Agreement or the consummation of the transaction under the Agreement, either alone or in combination with any other event;

(xix) any Company Product warranty (other than customer agreements and end user agreements, copies of which have been provided to the Investors);

(xx) any Contract or plan (including any share option, merger and/or share bonus plan) relating to the sale, issuance, grant, exercise, award, purchase, repurchase or redemption of any shares of Company share capital or any other securities of the Company or any options, warrants, convertible notes or other rights to purchase or otherwise acquire any such shares, other securities or options, warrants or other rights therefor;

(xxi) (A) any Contract granting any change of control, retention, severance, bonus or termination pay benefits (in cash, equity or otherwise); or (B) any contractor, consulting or sales Contract with a firm or other organization;

(xxii) any Contract or filing related to any item required to be disclosed in Section 2.13(a) of the Company Disclosure Schedule;

(xxiii) any Contract with any labor union or any collective bargaining agreement or similar contract with its employees;

(xxiv) any trust indenture, mortgage, promissory note, loan or credit agreement or other Contract for the borrowing of money, any currency exchange, commodities or other hedging arrangement or any leasing transaction of the type required to be capitalized in accordance with GAAP;

(xxv) any Contract of guarantee, surety, support, indemnification (other than pursuant to its standard customer agreements), assumption or endorsement of, or any similar commitment with respect to, the liabilities or indebtedness of any other Person;

(xxvi) any Contract for capital expenditures in excess of $10,000 in the aggregate;

(xxvii) any Contract pursuant to which the Company is a lessor or lessee of any real property or any machinery, equipment, motor vehicles, office furniture, fixtures or other personal property;

(xxviii) any Contract pursuant to which the Company has acquired a business or entity, or assets of a business or entity, whether by way of merger, consolidation, purchase of stock, purchase of assets, license or otherwise, or any Contract pursuant to which it has any material ownership interest in any other Person; and

(xxix) any Contract with any governmental entity, any agreement which requires consents, licenses, permits, grants, and other authorizations of a governmental entity, or any Contract with a government prime contractor, or higher-tier government subcontractor, including any indefinite delivery/indefinite quantity contract, firm-fixed-price contract, schedule contract, blanket purchase agreement, or task or delivery order (each, a "Government Contract").

(b) All Company Material Contracts are in written form. Each of the Company and the Parent (with respect to any applicable Transferred Asset) has performed all of the obligations required to be performed by it and is entitled to all benefits under, and is not alleged to be in default in respect of, any Company Material Contract. Each of the Company Material Contracts is in full force and effect, subject only to the effect, if any, of applicable bankruptcy and other similar applicable laws affecting the rights of creditors generally and rules of law governing specific performance, injunctive relief and other equitable remedies. There exists no default or event of default or event, occurrence, condition or act, with respect to the Company or the Parent (with respect to any applicable Transferred Asset) or to the knowledge of the Company, with respect to any other contracting party, that, with the giving of notice, the lapse of time or the happening of any other event or condition, would reasonably be expected to (i) become a default or event of default under any Company Material Contract or (ii) give any third party (A) the right to declare a default or exercise any remedy under any Company Material Contract, (B) the right to a rebate, chargeback, refund, credit, penalty or change in delivery schedule under any Company Material Contract, (C) the right to accelerate the maturity or performance of any obligation of the Company under any Company Material Contract, or (D) the right to cancel, terminate or modify any Company Material Contract. Neither the Company nor the Parent (with respect to any applicable Transferred Asset) has received any written notice or other written communication regarding any actual or possible violation or breach of, default under, or intention to cancel or modify any Company Material Contract. Neither does the Company nor the Parent (with respect to any applicable Transferred Asset) have any liability for renegotiation of Government Contracts. True, correct and complete copies of all Company Material Contracts have been provided to the Investor.

2.14 Brokers and Finders. The Company has no contract, arrangement or understanding with any broker, finder or similar agent with respect to the transactions contemplated by this Agreement. No commission or compensation in the nature of a finders' fee shall be payable by the Company or any of its officers, employees or representatives, in their capacities as such, in connection with the transactions contemplated by this Agreement.

2.15 Tax Matters. All taxes, duties and assessments payable or incurred by the Company (or the Parent with respect to the Transferred Assets) prior to the Closing Date that are reasonably expected to result in an Encumbrance upon any of the Transferred Assets have been or will timely be paid by Company other than those being contested in good faith by the Company. There is no Encumbrance for Taxes upon any of the Transferred Assets nor, to the knowledge of the Company, is any taxing authority in the process of imposing any Encumbrance for Taxes on any of the Transferred Assets.

2.16 Litigation.

(a) There is no Legal Proceeding to which the Company or any of its respective assets or any of its respective directors or officers (in their capacities as such or relating to their employment, services or relationship with the Company) is party pending before any governmental entity, or, to the knowledge of the Company, threatened against the Company or any of its respective assets or any of its respective directors, officers or employees (in their capacities as such or relating to their employment, services or relationship the Company). There is no Order served against the Company or any of their respective assets, and to the knowledge of the Company, there is no investigation or other Legal Proceeding pending or, to the Company's knowledge, threatened against the Company or any of its respective assets or directors, officers or employees (in their capacities as such or relating to their employment, services or relationship with the Company). The Company does not have any Legal Proceeding pending against any other person. No governmental entity has at any time challenged or questioned the legal right the Company to conduct its respective operations as presently conducted.

(b) There is no Order served against any of the Company's or any of its directors, officers or employees (in their capacities as such or relating to their employment, services or relationship with the Company). To the knowledge of the Company, there is not any basis for any Legal Proceeding by or against the Company. To the knowledge of the Company, there is no basis for any Person to assert a claim against the Company or any of its respective assets or any of its directors, officers or employees or any other person who has a contractor right or right pursuant to applicable law to indemnification from the Company (in their capacities as such or relating to their employment, services or relationship with the Company) based upon: (a) the Company entering into this Agreement, any of the Contemplated Transactions, including a claim that such director, officer or employee breached a fiduciary duty in connection therewith, (b) any confidentiality or similar agreement entered into by the Company regarding its assets or (c) any claim that the Company has agreed to sell or dispose of any of its assets, whether by way of merger, consolidation, sale of assets or otherwise.

2.17 Insurance. The Company maintains the policies of insurance and bonds set forth in Section 2.17 of the Disclosure Schedules, including all legally required workers' compensation insurance and errors and omissions, casualty, fire and general liability insurance. Section 2.17 of the Disclosure Schedules sets forth the name of the insurer under each such policy and bond, the type of policy or bond, the coverage amount and any applicable deductible as of the date hereof as well as all material claims made under such policies and bonds since inception. The Company has provided to the Investors true, correct and complete copies of all such policies of insurance and bonds issued at the request or for the benefit of the Company. There is no claim pending under any of such policies or bonds as to which coverage has been questioned, denied or disputed by the underwriters of such policies or bonds. All premiums due and payable under all such policies and bonds have been timely paid and the Company is otherwise in compliance with the terms of such policies and bonds. All such policies and bonds remain in full force and effect, and the Company has no knowledge of any threatened termination of, or premium increase with respect to, any of such policies.

2.18 Anti-Bribery Matters. Within the five (5) years prior to the date hereof, neither the Company nor any of the Company's directors, officers, employees or, to the best of the Company's knowledge, its agents have, directly or indirectly, whether on behalf of the Company or on behalf of Parent, made, offered, promised or authorized any payment or gift of any money or anything of value to or for the benefit of any "foreign official" (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended, (the "FCPA")), which term includes but is not limited to a person acting in an official capacity for any government department, agency or instrumentality, including state-owned or controlled companies, and public international organizations, foreign political party or official thereof or candidate for foreign political office for the purpose of (i) influencing any official act or decision of such official, party or candidate, (ii) inducing such official, party or candidate to use his, her or its influence to affect any act or decision of a foreign governmental authority, or (iii) securing any improper advantage, in the case of (i), (ii) and (iii) above in order to assist the Company or any of its affiliates in obtaining or retaining business for or with, or directing business to, any person. Within the five (5) years prior to the date hereof, neither the Company nor any of its directors, officers, employees or, to the best of the Company's knowledge, its agents have made or authorized, directly or indirectly, on behalf of the Company or on behalf of the Parent, any bribe, rebate, payoff, influence payment, kickback or other unlawful payment of funds or received or retained any funds in violation of any law, rule or regulation, including but not limited to the FCPA, the UK Bribery Act 2010 and the Canadian Corruption of Foreign Public Officials Act.

2.19 Prohibited Transactions. Within the five (5) years prior to the date hereof, neither the Company nor any of the Company's directors, officers, employees or, to the best of the Company's knowledge, its agents have, directly or indirectly, whether on behalf of the Company or on behalf of Parent, engaged in any dealings or any transactions with any person or entity described or designated on the list of Specially Designated Nationals and Blocked Persons maintained by the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC") or is otherwise a person or entity officially sanctioned by the United States pursuant to the OFAC sanctions laws.

3. REPRESENTATIONS AND WARRANTIES OF THE INVESTOR AND THE PARENT.

Each of the Investor and the Parent, severally and not jointly and each with respect to itself, hereby represents and warrants that the following representations are true, correct and complete as of the date hereof and as of the Closing (as if made on the Closing Date); except, in each case, as to such representations and warranties that address matters as of a particular date, which are given only as of such date:

3.1 Authorization; Organization. Each of the Investor and the Parent is duly organized, validly existing and, if applicable, in good standing under the laws of the jurisdiction in which it has been incorporated and has full power and authority to enter into the Transaction Documents. The Transaction Documents to which the Investor and the Parent is a party, when executed and delivered by the Investor and the Parent, and assuming the due authorization, execution and delivery by the other parties hereto and thereto, constitute valid and binding obligations of the Investor and the Parent, enforceable against the Investor and the Parent in accordance with their respective terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

3.2 No Conflict; Consents. The execution, delivery and performance by the Investor and the Parent of the Transaction Documents to which it is a party and the consummation of the transactions contemplated by such Transaction Documents do not and will not (a) result in any conflict with, or a breach or violation, with or without the passage of time and giving of notice, of any of the terms, conditions or provisions of, or give rise to rights to others (including rights of termination, cancellation or acceleration) under: (i) the governing documents of the Investor or the Parent; (ii) any judgment, injunction, order, writ, decree or ruling of any court or governmental authority, domestic or foreign, to which the Investor or the Parent is subject; (iii) any material contract or agreement, lease, license or commitment to which the Investor or the Parent is a party or by which it is bound; (iv) any applicable law; or (b) require the consent, approval or authorization of, registration, qualification or filing with, or notice to any person or any federal, state, local or foreign governmental authority or regulatory authority or agency, on the part of the Investor or the Parent, which has not heretofore been obtained or made or will be obtained or made prior to Closing.

3.3 Purchase Entirely for Own Account. Each of the Purchased Shares and the Parent Shares will be acquired for investment for the Investor or the Parent's own account (as applicable), not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and each of the Investor and the Parent has no present intention of selling, granting any participation in, or otherwise distributing the same. Each of the Investor and the Parent does not presently have any contract, undertaking, agreement or arrangement to sell, transfer or grant participation rights to any person with respect to any of the Purchased Shares or the Parent Shares (as applicable). Neither the Investor nor the Parent has been formed for the specific purpose of acquiring the Purchased Shares or the Parent Shares as applicable.

3.4 Disclosure of Information. Each of the Investor and the Parent has had an opportunity to discuss the Company's business, operations, properties, prospects, technology, plans, management, financial affairs and the terms and conditions of the offering of the Purchased Shares and the Parent Shares with the Company's management and has had an opportunity to review the Company's facilities. The foregoing, however, does not limit, modify or qualify the representations and warranties of the Company in Section 2 of this Agreement or the right of the Investor or the Parent to rely thereon. Each of the Investor and the Parent acknowledges that any projections provided (if any) by the Company are uncertain in nature, and that some or all of the assumptions underlying such projections may not materialize or will vary significantly from actual results.

3.5 Investment Experience; Accredited Investor; Non-U.S. Person. Each of the Investor and the Parent is an investor in securities of companies in the development stage and acknowledges that it can bear the economic risk of its investment, and has such knowledge and experience in financial or business matters that it is capable of evaluating and understanding the merits and risks of the investment in the Purchased Shares and the Parent Shares as applicable. Each of the Investor and the Parent is either (i) an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act, or (ii) a Non U.S. Person as defined under Regulation S promulgated under the Securities Act. To the extent that the Investor or the Parent is a non U.S. Person, such Investor or Parent (x) is not acquiring Purchased Shares or the Parent Shares, as applicable, for the account or benefit of any U.S. Person, (y) is not, at the time of execution of this Agreement, and will not be, at the time of the Closing, in the United States and (z) is not a "distributor" (as defined in Regulation S promulgated under the Securities Act).

3.6 Restricted Securities. The Purchased Shares and the Parent Shares have not been and will not be registered under the Securities Act or any state securities laws and, therefore, cannot be resold unless they are registered under the Securities Act and applicable state securities laws or unless an exemption from such registration requirements is available. Each of Investor and the Parent is aware that the Company is under no obligation to effect any such registration or to file for or comply with any exemption from registration. The sale and issuance of the Purchased Shares and the Parent Shares have not been registered under the Securities Act by reason of a specific exemption from registration which depends upon, among other things, the accuracy of the Investor and the Parent's representations as expressed herein.

3.7 Legends. The Purchased Shares and the Parent Shares, and (if applicable) any securities issued in respect of or exchange for the foregoing may be notated with the following or a similar legend as well as other legends as may be required by applicable securities laws: "THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO TRANSFER OF SUCH SHARES MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933."

4. REPRESENTATIONS AND WARRANTIES OF THE SELLER AND THE PURCHASED COMPANY.

Each of the Seller and the Purchased Company, severally and jointly, hereby represents and warrants to the Company that, except as set forth in the Disclosure Schedule delivered to the Company on the date hereof (the "Purchased Company Disclosure Schedule"), which exceptions shall be deemed to be part of the representations and warranties made hereunder, the following representations are true, correct and complete as of the date hereof and as of the Closing (as if made on the Closing Date); except, in each case, as to such representations and warranties that address matters as of a particular date, which are true, correct and complete only as of such date. The Purchased Company Disclosure Schedule shall be arranged in sections and subsections corresponding to the numbered and lettered sections and subsections contained in this Section 4, and the information set forth in any section or subsection of the Purchased Company Disclosure Schedule shall apply to and qualify (a) the representation and warranty set forth in this Agreement to which it corresponds, and (b) whether or not an explicit reference or cross-reference is made, each other representation and warranty set forth in this Agreement for which it is readily apparent on its face to a reasonable person who has no knowledge of the disclosed subject matter that such information is relevant to such other section. For all purposes of this section 4, knowledge of the Purchased Company shall also include knowledge of the Seller.

For purposes of the representations and warranties in this Section 4, the term "Purchased Company" shall be deemed to include or reference (as applicable) any subsidiaries of the Purchased Company.

4.1 Organization. The Purchased Company is a company duly organized and validly existing and in good standing (to the extent the jurisdiction of its incorporation recognizes the concept of good standing) under the laws of Delaware and has all requisite corporate power and authority to carry on its business as currently conducted.

4.2 Title to Purchased Company Shares. The Seller owns of record and beneficially all of the Purchased Company Shares and has good and valid title to all of such Purchased Company Shares, free and clear of all Encumbrances and, at Closing, shall deliver to the Acquirer good and valid title to such Purchased Company Shares, free and clear of all Encumbrances. The Seller does not own and does not have the right to acquire, directly or indirectly, any other securities of the Purchased Company. The Seller is not a party to any option, warrant, purchase right, or other contract or commitment that could require the Seller to sell, transfer, or otherwise dispose of any securities of the Purchased Company (other than this Agreement and the Charter Documents of the Purchased Company). The Seller is not a party to any voting trust, proxy, or other agreement or understanding with respect to the voting of any share capital of the Purchased Company, except as set forth in Section 4.2 of the Purchased Company Disclosure Schedule.

4.3 Capitalization.

(a) The authorized share capital of the Purchased Company consists of 1,000 shares of common stock, par value $0.01 per share, all of which are issued and outstanding.

(b) All of the issued and outstanding shares of the Purchased Company are owned of record and beneficially by the Seller.

(c) The issued and outstanding shares of the Purchased Company were duly and validly authorized and issued, fully paid and non-assessable, and offered and issued in compliance with the provisions of Purchased Company's certificate of incorporation and bylaws, or equivalent governing documents, including all amendments thereto (the "Charter Documents") as in effect at the time of each such issuance and in compliance with all applicable corporate and securities laws. None of the issued and outstanding shares of the Purchased Company was offered or sold in such a manner as to make the offer, issuance or sale of such shares not exempted from registration requirements under applicable securities law.

(d) Except for the preemptive rights and bring-along provisions under applicable law or in the Charter Documents, there are no outstanding share capital, options, warrants, rights (including conversion, preemptive rights, rights of first refusal or similar rights) or agreements for the purchase from the Purchased Company any of its share capital, or any securities convertible into or exchangeable for shares of the Purchased Company (whether now or hereinafter authorized or issued) or that could require the Purchased Company or a shareholder of the Purchased Company to issue, sell, transfer or otherwise cause to be outstanding any of the Purchased Company's capital stock or securities convertible or exercisable into such capital stock.

(e) No option, security or other equity award convertible or exercisable into shares of the Purchased Company contains a provision for acceleration of vesting (or lapse of a repurchase right) or other changes in the vesting provisions or other terms of such option, security or other equity award upon the occurrence of any event or combination of events. No share, option, security or other equity award convertible or exercisable into shares of the Purchased Company is subject to repurchase or redemption (contingent or otherwise) by the Purchased Company, its subsidiaries or its shareholders, and neither the Purchased Company nor any subsidiary or shareholder have repurchased or redeemed any of Purchased Company's shares, options, security or other equity awards.

(f) The Purchased Company has not granted or agreed to grant registration rights and is not under any contractual obligation to register under the Securities Act, any of its currently outstanding securities, securities that may hereafter be issued upon conversion thereof, or shares or other securities it may hereafter issue or grant.

(g) The Purchased Company has not declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its share capital.

4.4 Authorization. All corporate action on the part of the Purchased Company, its directors and shareholders, necessary for the authorization, execution, delivery and performance of the Transaction Documents and for the performance of all obligations of the Purchased Company under the Transaction Documents in accordance with their terms has been taken or will be taken prior to the Closing. The Transaction Documents, when executed and delivered by the Purchased Company, and assuming the due authorization, execution and delivery by the other parties hereto and thereto, constitute valid and binding obligations of the Purchased Company, enforceable against the Purchased Company in accordance with their respective terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

4.5 No Conflict; Consents. The execution, delivery and performance by the Purchased Company and the Seller of the Transaction Documents and the consummation thereby of the Contemplated Transactions do not and will not (a) result in any conflict with, or a breach or violation, with or without the passage of time and giving of notice, of any of the terms, conditions or provisions of, or give rise to rights to others (including rights of termination, cancellation or acceleration) under: (i) the Purchased Company's Charter Documents; (ii) any judgment, injunction, order, writ, decree or ruling of any court or governmental authority, domestic or foreign, to which the Purchased Company or Seller is subject; (iii) any contract or agreement, lease, license or commitment to which the Purchased Company or the Seller is a party or by which it is bound in any material respect; or (iv) any applicable law; (b) result in the creation of any Encumbrance upon any asset of the Purchased Company or the suspension, revocation, forfeiture, or nonrenewal of any permit or license applicable to the Purchased Company; or (c) require the consent, approval or authorization of, registration, qualification or filing with, or notice to any person or any federal, state, local or foreign governmental authority or regulatory authority or agency, on the part of the Purchased Company or the Seller, which has not heretofore been obtained or made or will be obtained or made prior to Closing.

4.6 Directors; Officers. The directors, observers and officers of the Purchased Company are listed on Section 4.6 of the Purchased Company Disclosure Schedule. The Purchased Company has no agreement, obligation or commitment with respect to the election of any individual to its Board or to the right to nominate an observer to the Board, and there is no such agreement among the Purchased Company's shareholders, except as stated in the Purchased Company's Articles of Association. All agreements, commitments and understandings of the Purchased Company, whether written or oral, with respect to any compensation to be provided to any of the Purchased Company's directors, observers or officers have been fully disclosed in writing to the Purchased Company prior to the Closing and listed on Section 4.6 of the Purchased Company Disclosure Schedule.

4.7 Subsidiaries. The Purchased Company does not own or control, directly or indirectly, any interest or any other right in any other corporation, association, or other business entity. The Purchased Company is not a participant in any joint venture, partnership, or similar arrangement. There are no outstanding options, warrants, rights (including conversion or preemptive rights) or agreements for the purchase or acquisition from the Purchased Company, or that could require the Purchased Company or a shareholder thereof to issue, sell, transfer or otherwise cause to be outstanding any share capital or rights convertible or exercisable into shares of any Purchased Company.

4.8 Interested Party Transactions. None of the key employees and directors of the Purchased Company and, to the knowledge of the Purchased Company, none of the other employees of (a) the Purchased Company and (b) any Purchased Company shareholders, and none of the immediate family members of any of the foregoing, (i) has any direct or indirect ownership, participation, royalty or other interest in, or is an officer, director, employee of or consultant or contractor for any firm, partnership, entity or corporation that competes with, or does business with, or has any contractual arrangement with, the Purchased Company (except with respect to any interest in less than 5% of the stock of any corporation whose stock is publicly traded), (ii) is a party to, or to the knowledge of the Purchased Company, otherwise directly or indirectly interested in, any contract to which the Purchased Company is a party or by which the Purchased Company or any of its assets is bound, except for normal compensation for services as an officer, director or employee thereof and for contracts relating to the grant of Purchased Company options or issuance of Purchased Company shares to such Persons or (iii) to the knowledge of the Purchased Company, has any interest in any property, real or personal, tangible or intangible (including any Intellectual Property) that is used in, or that relates to, the business, except for the rights of Purchased Company shareholders under applicable law.

4.9 Title to Purchased Company Transferred Assets; No Undisclosed Liabilities.

(a) The Purchased Company has marketable and valid title to all of the assets set forth in Exhibit A ("Purchased Company Transferred Assets"), free and clear of any Encumbrances, except for Permitted Encumbrances or any Encumbrance created by or imposed on the Acquirer or the Company as to itself.

(b) The Purchased Company Transferred Assets are in good operating condition as necessary to conduct the Purchased Company Business in all material respects.

(c) The Purchased Company does not have any liabilities or obligations, contingent or otherwise related to the Purchased Company Transferred Assets, other than: (i) as reflected on Section 4.9(c) of the Purchased Company Disclosure Schedule (none of which is material either individually or in the aggregate to the operation of the business of the Purchased Company as currently conducted (the "Purchased Company Business")); or (ii) arising under this Agreement or otherwise in connection with the Contemplated Transactions.

4.10 Intellectual Property.

(a) Except as set forth in Section 4.10(a) of the Purchased Company Disclosure Schedule, the Purchased Company has not transferred ownership of, or agreed to transfer ownership of, or is bound by or a party to any options, licenses or agreements of any kind with respect to the Intellectual Property of any other person in connection with the Purchased Company Transferred Assets, or, granted any exclusive licenses to, or agreed to grant any exclusive licenses to any Purchased Company Intellectual Property to any third party, and has all legal rights to all of the Purchased Company Intellectual Property free and clear of all Encumbrances. No third party (including, with respect to past and present employees and consultants) has any ownership right, title, interest, claim in or lien on any of the Purchased Company Intellectual Property. The Purchased Company is not obligated or under any liability whatsoever (contingent or otherwise) to make any payments by way of royalties, fees or otherwise to any owner or licensee of, or other claimant to, any patent, trademark, service mark, trade name, copyright or other intangible asset, with respect to the use thereof or in connection with the Purchased Company Intellectual Property. Except as set forth on Section 4.10(a) of the Purchased Company Disclosure Schedule, for the four (4) years prior to the date of this Agreement, the Purchased Company has obtained and possessed and it currently possesses valid licenses to use all of the material software programs present on the computers and other software-enabled electronic devices that it owns or leases to the extent relating to the Purchased Company Intellectual Property or that it has otherwise provided to its employees for their use in connection with the Purchased Company Intellectual Property. To the Purchased Company's knowledge, no Purchased Company Transferred Asset violates any license or infringes any intellectual property rights of any other person. Except as set forth on Section 4.10(a) of the Purchased Company Disclosure Schedule, to the Purchased Company's Knowledge, no third party intellectual property violates any license or infringes any intellectual property rights of the Purchased Company.

(b) To the Purchased Company's knowledge, no current or former employee or contractor of the Purchased Company: (i) is in violation of any term or covenant of any contract relating to invention disclosure, invention assignment, non-disclosure, data privacy, non-competition or any other contract with any other party by virtue of such employee's or contractor's being employed by, or performing services for, the Purchased Company or using trade secrets or proprietary information of others without permission; or (ii) has developed any technology, software or other copyrightable, patentable or otherwise proprietary work for the Purchased Company with respect to the Purchased Company Intellectual Property that is subject to any agreement under which such employee or contractor has assigned or otherwise granted to any third party any rights (including Intellectual Property Rights) in or to such technology, software or other copyrightable, patentable or otherwise proprietary work. Neither the execution nor delivery of this Agreement will conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract of the type described in clause (i) of the immediately foregoing sentence.

(c) In the four (4) years prior to the date of this Agreement, there has not been any Legal Proceeding for infringement, violation or misappropriation of any Purchased Company Intellectual Property. The Purchased Company has not been sued in any Legal Proceeding or received any written communications (including any third party reports by users) alleging that the Purchased Company has infringed, misappropriated, or violated or, by conducting the Purchased Company Business, would infringe, misappropriate, or violate any Intellectual Property of any other Person or entity. No Purchased Company Intellectual Property is subject to any Legal Proceeding or Order, settlement agreement or right that restricts in any manner the use, transfer, or licensing thereof or that may adversely affect the validity, use or enforceability of any such Purchased Company Intellectual Property. Except as set forth on Section 4.10(c) of the Purchased Company Disclosure Schedule, to the Purchased Company's knowledge, in the four (4) years prior to the date of this Agreement, no person has violated or is violating the Purchased Company Intellectual Property.

(d) Section 4.10(d) of the Purchased Company Disclosure Schedule lists all Purchased Company Registered Intellectual Property, and the jurisdictions in which it has been issued or registered or in which any application for such issuance and registration has been filed, or in which any other filing or recordation has been made. Each item of Purchased Company Intellectual Property that has been issued by a governmental entity is valid and is not subject to a currently pending application, and all registration, maintenance and renewal fees currently due in connection with such Purchased Company Intellectual Property or any pending applications therefor have been paid and all documents, recordations and certificates in connection with such Purchased Company Intellectual Property that were required to be filed have been filed with the relevant patent, copyright, trademark or other authorities in which such Purchased Company Intellectual Property has been filed, for the purposes of prosecuting, maintaining and perfecting such Purchased Company Intellectual Property and recording the Purchased Company's ownership interests therein. For the avoidance of doubt, no assurance is provided that any patent applications will be allowed registration as patents or that once issued will not be held to be invalid, and any failure to be so allowed, or so held, shall not be considered a breach of a representation or warranty herein.

(e) Non-contravention. None of the execution and performance of this Agreement or the consummation of the transactions under this Agreement, will result in: (i) the Purchased Company or any of its affiliates (other than the Purchased Company as to Purchased Company Intellectual Property after Closing) granting to any third party any right to or with respect to any Intellectual Property Rights or data owned by, or licensed to the Purchased Company or any of its affiliates, (ii) the Purchased Company or any of its affiliates (other than the Purchased Company after the Closing), being bound by or subject to, any exclusivity obligations, non-compete or other restriction on the operation or scope of their respective businesses, (iii) the Purchased Company being obligated to pay any royalties or other material amounts to any third party in excess of those payable by any of them, respectively, in the absence of this Agreement or the transactions under the Agreement or (iv) any termination of, or other material adverse impact to, any Purchased Company Intellectual Property.

(f) Open Source Software. Except as set forth on Section 4.10(f) of the Purchased Company Disclosure Schedule, the Purchased Company is in compliance with the terms and conditions of all licenses for the Open Source Materials. Except as set forth on Section 4.10(f) of the Purchased Company Disclosure Schedule, for the four (4) years prior to the date of this Agreement, the Purchased Company has not (i) incorporated Open Source Materials into, or combined Open Source Materials with, the Purchased Company Intellectual Property or Purchased Company products; (ii) distributed Open Source Materials in conjunction with any Purchased Company Intellectual Property or Purchased Company products; or (iii) used Open Source Materials in such a way that, with respect to clauses (i), (ii), or (iii), creates, or purports to create, obligations for the Purchased Company with respect to any Purchased Company Intellectual Property or grant, or purports to grant to any third party any rights or immunities under any Purchased Company Intellectual Property (including using any Open Source Materials) that require, as a condition for the use, modification and/or distribution of such Open Source Materials, that other software incorporated into, derived from or distributed with such Open Source Materials be (A) disclosed or distributed in source code form, (B) licensed for the purpose of making derivative works or (C) redistributable at no charge).

(g) The representations and warranties set forth in this Section 4.10 constitute the sole representations and warranties of the Purchased Company and Seller with respect to any matters, liabilities and obligations relating to Purchased Company Intellectual Property.

(h) As used herein, the following terms have the meanings indicated below:

(i) "Purchased Company Registered Intellectual Property" means the Israeli, United States, international and foreign: (A) patents and patent applications (including provisional applications); (B) registered trademarks, applications to register trademarks, intent-to-use applications, or other registrations or applications related to trademarks; (C) registered Internet domain names; and (D) registered copyrights and applications for copyright registration, in each case registered or filed in the name of, or owned by the Purchased Company related to the Purchased Company Transferred Assets.

(ii) "Purchased Company Intellectual Property" means all patents, patent applications, trademarks, trademark applications, service marks, service mark applications, trade names, copyrights, trade secrets, know-how, inventions, designs, works of authorship, computer programs and technical data, domain names, mask works, information and proprietary rights and processes, similar or other intellectual property rights, tangible embodiments of any of the foregoing, licenses and rights in, to and under any of the foregoing, in each case that are part of the Purchased Company Transferred Assets, and excluding, for clarity, any Intellectual Property set forth on Section 4.10(e) of the Purchased Company Disclosure Schedule.

4.11 Litigation.

(a) There is no Legal Proceeding to which the Purchased Company, the Seller or any of their respective assets or any of its respective directors or officers (in their capacity as such or relating to their employment, services or relationship with the Purchased Company) is party pending before any governmental entity, or, to the knowledge of the Purchased Company, threatened against the Purchased Company or any of its respective assets or any of its respective directors, officers or employees (in their capacity as such or relating to their employment, services or relationship with the Purchased Company) in connection with the Purchased Company Transferred Assets. There is no Order served against the Purchased Company, the Seller or any of their respective assets, and there is no investigation or other Legal Proceeding pending or, to the Purchased Company's knowledge, threatened against the Purchased Company or any of its assets or directors, officers or employees (in their capacities as such or relating to their employment, services or relationship with the Purchased Company) in connection with the Purchased Company Transferred Assets. Neither the Purchased Company nor the Seller have any Legal Proceeding pending against any other person in connection with the Purchased Company Transferred Assets. In the four (4) years prior to the date of this Agreement, no governmental entity has at any time challenged or questioned the legal right of the Purchased Company to conduct the Purchased Company Business

(b) There is no Order served against any of the Purchased Company's directors, officers or employees (in their capacities as such or relating to their employment, services or relationship with the Purchased Company) in connection with the Purchased Company Transferred Assets. To the knowledge of the Purchased Company, there is no basis for any Legal Proceeding by or against the Purchased Company in connection with the Purchased Company Transferred Assets. Except as set forth in Section 4.11(b) of the Purchased Company Disclosure Schedule, to the knowledge of the Purchased Company, there is no basis for any Person to assert a claim against the Purchased Company or any of its respective assets or any of its directors, officers or employees or any other Person who has a contractor right or right pursuant to applicable law to indemnification from the Purchased Company (in their capacities as such or relating to their employment, services or relationship with the Purchased Company) in connection with the transfer of the Purchased Company Transferred Assets.

4.12 Compliance with Laws and Other Instruments. Each of the Purchased Company and the Seller is, and has been, in compliance in all material respects with all applicable laws in connection with the Purchased Company Transferred Assets. Neither the Purchased Company nor the Seller has received any written notice of or been charged with the violation of any such law and, to each of the Purchased Company's and the Seller's knowledge, there is no threatened action or proceeding against the Purchased Company or the Seller under any of such laws in connection with the Purchased Company Transferred Assets. Neither the Purchased Company nor the Seller is in violation of or default under (in each case, in connection with the Purchased Company Transferred Assets) (i) the Purchased Company's or the Seller's Articles of Association or Charter Documents or (ii) any order, writ, injunction, decree or judgment of any court or any governmental department, commission or agency, domestic or foreign, to which it is subject or by which it is bound. The Purchased Company and the Seller have obtained all franchises, permits, licenses, consents and any similar authorizations that are material to the Purchased Company Business, under applicable law, and are in compliance with such franchises, permits, licenses, consents and similar authorizations. None of the Purchased Company Transferred Assets is subject to any restriction or limitation or requires a license or registration under applicable laws relating to marketing, export or import controls. Without limiting the generality of the foregoing, the Purchased Company or the Seller, have not and are not using or developing, or otherwise engaged in, encryption technology or other technology whose development, commercialization or export is restricted in connection with the Purchased Company Transferred Assets.

4.13 Tax Matters. All taxes, duties and assessments payable or incurred by the Purchased Company or the Seller prior to the Closing Date that are reasonably expected to result in an Encumbrance upon any of the Purchased Company Transferred Assets have been or will timely be paid by Purchased Company or the Seller other than those being contested in good faith by the Purchased Company or the Seller. There is no Encumbrance for taxes upon any of the Purchased Transferred Assets nor, to the knowledge of the Purchased Company or the Seller, is any taxing authority in the process of imposing any Encumbrance for taxes on any of the Purchased Company Transferred Assets. The representations and warranties set forth in this Section 4.13 constitute the sole representations and warranties of the Purchased Company and the Seller with respect to any matters, liabilities and obligations relating to taxes related to Purchased Company Transferred Assets.

4.14 Anti-Bribery Matters. During the five (5) years prior to the date hereof, neither the Purchased Company nor any of the Purchased Company's directors, officers, employees or, to the best of the Purchased Company's knowledge, its agents have, directly or indirectly, whether on behalf of the Purchased Company or on behalf of Seller, made, offered, promised or authorized any payment or gift of any money or anything of value to or for the benefit of any "foreign official" with respect to the Purchased Company Transferred Assets, which term includes but is not limited to a person acting in an official capacity for any government department, agency or instrumentality, including state-owned or controlled companies, and public international organizations, foreign political party or official thereof or candidate for foreign political office for the purpose of (i) influencing any official act or decision of such official, party or candidate, (ii) inducing such official, party or candidate to use his, her or its influence to affect any act or decision of a foreign governmental authority, or (iii) securing any improper advantage; in each of (i), (ii) and (iii) above in order to assist the Purchased Company in obtaining or retaining business for or with, or directing business to, any person. During the five (5) years prior to the date hereof, neither the Purchased Company nor any of its directors, officers, employees or, to the best of the Purchased Company's knowledge, its agents have made or authorized, directly or indirectly, on behalf of the Purchased Company or on behalf of the Seller, any bribe, rebate, payoff, influence payment, kickback or other unlawful payment of funds or received or retained any funds in violation of any law, rule or regulation, including but not limited to the FCPA, the UK Bribery Act 2010 and the Canadian Corruption of Foreign Public Officials Act in connection with the Purchased Company Transferred Assets.

4.15 Prohibited Transactions. During the five (5) years prior to the date hereof, neither the Purchased Company nor any of the Purchased Company's directors, officers, employees or, to the best of the Purchased Company's knowledge, its agents have, directly or indirectly, whether on behalf of the Purchased Company or on behalf of Seller, engaged in any dealings or any transactions with any person or entity described or designated on the list of Specially Designated Nationals and Blocked Persons maintained by the OFAC or is otherwise a person or entity officially sanctioned by the United States pursuant to the OFAC sanctions laws in connection with the Purchased Company Transferred Assets.

4.16 Brokers and Finders; Transaction Fees.

(a) The Purchased Company has no contract, arrangement or understanding with any broker, finder or similar agent with respect to the transactions contemplated by this Agreement. No commission or compensation in the nature of a finders' fee shall be payable by the Purchased Company or any of its officers, employees or representatives, in their capacities as such, in connection with the transactions contemplated by this Agreement.

(b) Set forth in Section 4.16(b) to the Purchased Company Disclosure Schedules is the Purchased Company's good faith estimate, as of the date hereof, of all Transaction Expenses (including Transaction Expenses reasonably anticipated to be incurred following the date hereof and until and including the Closing Date). "Transaction Expenses" means all third-party fees, costs, expenses, payments, and expenditures incurred by the Purchased Company prior to the Closing in connection with the purchase of the Purchased Company Shares, this Agreement and the transactions under such Agreement (alone or in combination with any other event), whether or not billed or accrued prior to the Closing.

5. CONDITIONS OF INVESTOR'S OBLIGATIONS AT CLOSING AND DEFERRED CLOSING.

The obligations of the Investor to purchase the Purchased Shares at the Closing and the obligations of the Additional Investors to purchase the Additional Shares at the Deferred Closing, as applicable, are subject to the fulfillment on or before the Closing or such Deferred Closing, as applicable, of each of the following conditions, unless otherwise waived in writing by the Investor or the Additional Investors or any of them, as applicable:

5.1 Representations and Warranties. The representations and warranties of the Company, the Company Subsidiary, and the Acquirer contained in Section 2 have been true in all material respects on and as if made as of the Closing.

5.2 Performance. Each of the Company, the Company Subsidiary, the Acquirer and the Parent shall have performed and complied, in all material respects, with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing or the Deferred Closing, as applicable.

5.3 Delivery of Documents. All of the documents to be delivered by the Company, the Company Subsidiary, the Acquirer and/or the Parent pursuant to Section 1.7, shall have been in a form as attached to this Agreement, or, if not attached, in a form and substance reasonably satisfactory to the Investors and shall have been delivered to the Investors.

5.4 Absence of Adverse Changes. There shall not have occurred and continued through the Closing any event, change, effect, condition or circumstance that, when taken individually or together with any other events, changes, effects, conditions or circumstances, is or is reasonably likely to be materially adverse to the business, assets, properties, operations, results of operations or financial condition of the Company, the Company Subsidiary, or the Acquirer.

5.5 Restated Articles. The Restated Articles shall have been duly adopted.

6. CONDITIONS OF SELLER'S OBLIGATIONS AT CLOSING.

The obligation of Seller to consummate the sale of the Purchased Company Shares to the Acquirer at the Closing is subject to the fulfillment on or before the Closing of each of the following conditions, unless otherwise waived in writing by the Seller:

6.1 Representations and Warranties. The representations and warranties of the Company, the Company Subsidiary, and the Acquirer contained in Section 2 have been true in all material respects on and as if made as of the Closing.

6.2 Performance. Each of the Company, the Company Subsidiary, the Acquirer and the Parent shall have performed and complied, in all material respects, with all of its agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

6.3 Delivery of Documents. All of the documents to be delivered by the Company, the Company Subsidiary, the Acquirer and/or the Parent pursuant to Section 1.7, shall have been in a form as attached to this Agreement, or, if not attached, in a form and substance reasonably satisfactory to the Seller and shall have been delivered to the Seller.

6.4 Absence of Adverse Changes. There shall not have occurred and continued through the Closing any event, change, effect, condition or circumstance that, when taken individually or together with any other events, changes, effects, conditions or circumstances, is or is reasonably likely to be materially adverse to the business, assets, properties, operations, results of operations or financial condition of the Company, the Company Subsidiary, or the Acquirer.

6.5 Consents: All consents of third parties (including governmental entities) required to be obtained in connection with the Contemplated Transactions shall have been obtained and shall be in full force and effect.

7. CONDITIONS OF THE COMPANY'S OBLIGATIONS AT CLOSING AND DEFERRED CLOSING.

7.1 The obligations of the Company to the Investor and the Parent at the Closing or to the Additional Investors at any Deferred Closing, as applicable, under this Agreement are subject to the fulfillment on or before the Closing or, in respect of the Additional Investors, at any Deferred Closing, as applicable, of each of the following conditions, unless otherwise waived in writing by the Company:

(a) Representations and Warranties. The representations and warranties of the Parent and the Investor and the Additional Investors, as applicable, contained in Section 3 shall have been true in all respects on and as if made as of the Closing or, with respect to the Additional Investors, on and as of the Deferred Closing, as applicable.

(b) Performance. Each of the Parent and the Investor and the Additional Investors, as applicable, shall have performed and complied, in all material respects, with all of their agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by them on or before the Closing or, with respect to the Additional Investors, on and as of the Deferred Closing, as applicable.

(c) Payment of Purchase Price. Each of the Parent and the Investor and Additional Investor, as applicable, shall have delivered to the Company its respective portion of the Purchase Price for the Purchased Shares issued to the Parent, the Investor or such Additional Investor, as applicable, at the Closing or at such Deferred Closing, as applicable.

(d) Delivery of Documents. All of the documents to be delivered by the Parent, the Investor and the Additional Investors, as applicable, pursuant to Section 1.7, shall have been in a form as attached to this Agreement, or, if not attached, in a form and substance reasonably satisfactory to the Company and shall have been delivered to the Company.

7.2 The obligation of the Company, the Company Subsidiary and the Acquirer to the Seller with respect to the purchase at the Closing of the Purchased Company Shares is subject to the fulfillment on or before the Closing of each of the following conditions, unless otherwise waived in writing by the Company:

(a) Representations and Warranties. The representations and warranties of the Seller and the Purchased Company contained in Section 4 shall have been true in all respects on and as if made as of the Closing.

(b) Performance. Each of the Seller and the Purchased Company, as applicable, shall have performed and complied, in all material respects, with all of its agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing, including without limitation, the obligations under Section 8.9.

(c) Delivery of Documents. All of the documents to be delivered by the Seller and the Purchased Company pursuant to Section 1.7, shall have been in a form as attached to this Agreement, or, if not attached, in a form and substance reasonably satisfactory to the Company and shall have been delivered to the Company.

(d) Absence of Adverse Changes. There shall not have occurred and continued through the Closing any event, change, effect, condition or circumstance that, when taken individually or together with any other events, changes, effects, conditions or circumstances, is or is reasonably likely to be materially adverse to the business, assets, properties, operations, results of operations or financial condition of the Purchased Company.

(e) Consents: All consents of third parties (including governmental entities) required to be obtained in connection with the Contemplated Transactions shall have been obtained and shall be in full force and effect.

8. AFFIRMATIVE COVENANTS.

8.1 Use of Proceeds. The Company will use the Purchase Price for general working capital purposes substantially in accordance with the Budget, attached hereto as Schedule 8.1, as may be amended from time to time by the Board.

8.2 Filing with the Israeli Registrar of Companies. As soon as possible following the Closing, and in any event no later than 14 days following the Closing, the Company shall file all notices required to be filed with the Israeli Registrar of Companies, including, to the extent required, a translation of the Restated Articles into Hebrew certified by an officer of the Company as required by the Companies Law and any regulations promulgated thereunder.

8.3 Conduct of the Business of the Company between Signing and Closing. Except as otherwise expressly provided by this Agreement or with the prior written consent of the Parent and Investor (which consent shall not be unreasonably withheld or delayed), following the date hereof and through the earlier of the Closing or termination of this Agreement in accordance with the terms of Section 10, the Company and any of its affiliates (including the Company Subsidiary and the Acquirer) shall (i) conduct its business in the ordinary course of business, consistent with prior practice (including, without limitation, granting or issuing any shares, options or other securities of the Company to any person, other than in the ordinary course of business); (ii) comply with all legal requirements applicable to the operation of its business and pay applicable taxes as due; (iii) maintain its books, accounts and records in the ordinary course of business; and (iv) not take any other action that would or would be reasonably expected to result in a breach of any of the representations, warranties or covenants made by the Company in this Agreement or that would adversely affect its ability to consummate the transactions contemplated by this Agreement.

8.4 Conduct of the Business of the Purchased Company between Signing and Closing. Except as otherwise expressly provided by this Agreement or with the prior written consent of the Company (which consent shall not be unreasonably withheld or delayed), following the date hereof and through the earlier of the Closing or termination of this Agreement in accordance with the terms of Section 10 , the Purchased Company shall, and the Seller shall cause the Purchased Company to, (i) conduct its business in the ordinary course of business, consistent with prior practice (including, without limitation, granting or issuing any shares, options or other securities of the Purchased Company to any person, other than in the ordinary course of business); (ii) comply with all legal requirements applicable to the operation of its business and pay applicable taxes as due; (iii) maintain its books, accounts and records in the ordinary course of business; and (iv) not take any other action that would or would be reasonably expected to result in a breach of any of the representations, warranties or covenants made by the Purchased Company in this Agreement or that would adversely affect its ability to consummate the transactions contemplated by this Agreement.

8.5 Third Party Consents. As promptly as practicable after the execution of this Agreement, the parties hereto shall mutually use all commercially reasonable efforts to obtain all consents and make all filings required to be obtained or filed in connection with the transactions contemplated hereby. Notwithstanding anything herein to the contrary, for the purpose of obtaining such consents or making such filings, no party shall be required to take or agree to undertake any action (i) that would require the divestiture or holding separate of any material assets or voting securities of such party or any of its respective affiliates, (ii) to consummate the transactions contemplated hereby on terms substantially different than those as set out herein, or (iii) that would materially limit such party's freedom of action with respect to any of its assets or businesses following the Closing.

8.6 Confidentiality. The parties acknowledge that Parent and Investor have previously executed a Non-Disclosure Agreement towards dated August 1, 2018 (the "Confidentiality Undertaking"), the provisions of which shall apply to all information furnished by the parties hereto through the Closing or the earlier termination of this Agreement in accordance with its terms. In addition, the parties agree that this Agreement, the exhibits and schedules hereto and the information obtained pursuant hereto or thereto or in connection with the negotiation and execution of this Agreement and the other Transaction Documents or the Contemplated Transactions shall be governed by the terms of the Confidentiality Undertaking and shall be deemed to be "Confidential Information" thereunder. Notwithstanding the foregoing, nothing herein or in the Confidentiality Undertaking shall be interpreted or construed to limit, or interfere in any way with, the right of any party hereto to use or disclose any Confidential Information in any action or dispute with any other party hereto in connection with this Agreement.

8.7 Public Announcements. Each party hereto shall not, and shall cause its respective affiliates and Representatives not to, directly or indirectly, disclose to any person or issue any press release, news release, or other public statement relating to, interview, advertise, publish or write any publication, in any media, relating to the terms of this Agreement or the transactions contemplated hereby (including, if applicable, the termination of this Agreement and the reasons therefor), without the prior written approval of the other parties hereto, except if and as required by applicable law, the preparation of such party's financial statements or the rules and regulations of any applicable stock exchange (in which case such required filings or disclosures shall be coordinated reasonably in advance by the parties hereto to the extent otherwise permitted under applicable law or such rules and regulations).

8.8 Reasonable Efforts. Each of the parties hereto agrees to use its commercially reasonable efforts, and to cooperate with each other party hereto, to take, or cause to be taken, all actions, and to do, or cause to be done, all things necessary, appropriate or desirable to consummate and make effective, in the most expeditious manner practicable, the Closing, any Deferred Closing and the Contemplated Transactions.

8.9 Assignment of Patents. Following the Closing, the Investor shall cooperate with the Company and the Purchased Company and shall take, or cause to be taken, all actions, and shall do, or cause to be done, all things reasonably necessary, appropriate or desirable to consummate and make effective, in the most expeditious manner practicable, the assignment of the patents identified as owned by the Investor as listed in Schedule 6(1)(ii) to Exhibit A from the Investor to the Purchased Company.

8.10 Delivery of 2018 Financial Statements. The Investor shall deliver to the Company, (i) a balance sheet and income statement of the Purchased Company as of and for the period ended December 31, 2018, within thirty (30) Business Days following the Closing; provided that such balance sheet and income statement is a legal entity report and unaudited in all respects and (ii) tax returns of the Purchased Company for the years 2017 and 2018 (redacted to remove any information not relating to the Purchased Company) with the 2017 return being delivered within 10 Business Days and the 2018 tax return being delivered within 10 Business Days after the date that the Investor files its own tax returns". Company understands and agrees that unaudited balance sheet and income statement information was prepared solely for the limited informational purposes of this Agreement and that the operation of the Purchased Company was not conducted on a stand-alone basis as a separate entity during the periods indicated in such balance sheet and income statement and therefore the reporting is on a legal entity basis and not presented as a separate carved-out business.

9. INDEMNIFICATION.

9.1 Effectiveness; Survival.

(a) The Investor, the Parent and the Additional Investors (as applicable) have the right to fully rely upon all representations, warranties and covenants of the Company, the Company Subsidiary and the Acquirer contained in or made pursuant to Section 2 of the Agreement and in the schedules attached hereto (except that the Parent may only rely on the representations set forth in Sections 2.1 (Organization), 2.2 (Capitalization), 2.3 (Authorization) and 2.4 (Valid Issuance of Shares)). The Company has the right to fully rely upon all representations, warranties and covenants of the Seller and the Purchased Company contained in or made pursuant to Section 4 of the Agreement and in the schedules attached hereto (each of the Company (with respect to representation and warranties of the Company, Company Subsidiary and the Acquirer) and the Seller (with respect to representations and warranties of the Seller and the Purchased Company) is referred to herein, severally and not jointly, as an "Indemnitor"). Unless otherwise set forth in this Agreement, the representations and warranties of the Company, the Company Subsidiary, the Acquirer, the Seller and the Purchased Company, as applicable, contained in or made pursuant to this Agreement shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of any Investor, any Additional Investor, the Parent or the Company.

(b) The representations and warranties of the Company, the Company Subsidiary, the Acquirer, the Purchased Company and the Seller, as applicable, contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Closing or any Deferred Closing, as applicable, until the earlier of:

(i) immediately prior to the consummation of a Deemed Liquidation or an IPO (as such terms are defined in the Restated Articles), or

(ii) (1) in the case of Sections 2.12 and 4.10 (*Intellectual Property*) and 2.15 and 4.13 (*Tax Matters*), until the third anniversary of the Closing Date; (2) in the case of Sections 2.1 and 4.1 (*Organization*), 2.2 and 4.3 (*Capitalization*), 2.3 and 4.4 (*Authorization*), 2.4 (*Valid Issuance of Shares*), 4.2 (*Title to Purchase Company Shares*), 2.5 and 4.5 (*No Conflict; Consents*), 2.10 (Title to Transferred Assets) and 4.9 (Title To Purchased Company Transferred Assets; No Liabilities) (the representations and warranties referred to in this clause (2), collectively, the "Fundamental Representations"), until the expiration of the applicable statute of limitation period; and (3) other than as set forth in clause (1) and (2) above, the second anniversary of the Closing Date; in each case, with respect to any theretofore un-asserted claims as set forth in clause (c) below;

provided, however, that no limitation shall apply to any breach of any representation or warranty which constitutes fraud or willful misrepresentation by the Company, the Company Subsidiary, the Acquirer, the Seller or the Purchased Company (collectively, "Fraud"). The applicable survival period shall be referred to, as applicable, as the "Claims Period".

(c) Except for Fraud, the Company and the Seller shall not have any liability with respect to any breach of representation and warranty, unless a claim is made hereunder prior to the expiration of the Claims Period for such representation and warranty, in which case such representation and warranty shall survive as to that claim until the claim has been finally resolved.

(d) It is the intention of the parties hereto that the Claims Periods supersede any statute of limitations applicable to the representations and warranties, and this Section 9.1 constitutes a separate written legally binding agreement among the parties hereto in accordance with the provisions of Section 19 of the Israeli Limitation Law, 1958.

9.2 Indemnification.

(a) Indemnifiable Losses. Seller shall indemnify the Company (including its shareholders, directors and officers) (each, a "Company Indemnitee") against, and hold each Company Indemnitee harmless from, all claims, actions, suits, settlements, damages, expenses (including reasonable legal costs and expenses), losses or costs (collectively, "Losses") sustained or incurred by such Company Indemnitees resulting from, or arising out of, a breach or misrepresentations of any of the Seller or the Purchased Company's representations, warranties or covenants made in this Agreement, subject to the limitations set forth in this Section 9; and the Company shall indemnify each of the Parent (only with respect the representations set forth in Sections 2.1 (Organization), 2.2 (Capitalization), 2.3 (Authorization) and 2.4 (Valid Issuance of Shares)) and the Investor (including their shareholders, directors and officers) (each, an "Investor Indemnitee", and, together with the Company Indemnitees, each an "Indemnitee")) against, and hold each Investor Indemnity harmless from, all Losses sustained or incurred resulting from, or arising out of, a breach or misrepresentation of any of the Company, the Company Subsidiary or the Acquirer's representations, warranties or covenants made in this Agreement (except that with respect to the Parent, such indemnification obligation shall relate only to the representations set forth in Sections 2.1 (Organization), 2.2 (Capitalization), 2.3 (Authorization) and 2.4 (Valid Issuance of Shares)), subject to the limitations set forth in this Section 9. In addition, subject to the limitations set forth in Section 9(b)(ii), the Seller shall indemnify each Company Indemnitee against all Losses incurred by it and resulting from or arising out of the operation of the Purchased Company Business due to any event that shall have occurred prior or in connection with the Closing that is not related to the Purchased Company Transferred Assets (the "Pre Closing Indemnification Obligation").

(b) Limitations. The right for indemnification hereunder is subject to the following conditions and limitations, notwithstanding anything to the contrary in this Agreement, but not to any other limitation or condition contained herein; *provided, however*, that no such limitation shall apply to Fraud or with respect to Pre Closing Indemnification Obligation (other than as set forth in Section 9.2(b)(ii):

(i) Other than in respect of the Fundamental Representations, no Indemnitor shall be liable for any Loss, unless and until the aggregate Losses exceed US$50,000, in which case indemnification shall be made from the first dollar amount;

(ii) The aggregate indemnification liability of (A) the Company with respect to the Investor Indemnitee shall be limited to US$[***]; (B) the Seller (other than with respect to Pre Closing Indemnification Obligations) with respect to the Company Indemnitee shall be limited to US$[***]; and (C) Seller with respect to the Company Indemnitee with respect to the Pre Closing Indemnification Obligations shall be limited to US $[***]; each such Investor Indemnitee shall be entitled to receive a pro rata share of such indemnifiable Loss, based on the respective portion of such Investor's Indemnity out of the aggregate amount invested by all Investor Indemnitees in the Company as of the Closing and/or the Deferred Closing, as applicable. The Company may satisfy its indemnification obligations hereunder either by payment of cash and/or by issuance of Ordinary Shares in such number that when multiplied by the PPS (subject to appropriate adjustments in the event of any dividend, shares split, combination or similar recapitalization affecting such shares) will be equal to the indemnifiable Loss, in each case in the Company's discretion.

(c) Claims Notice; Third Party Claims. In the event that an Indemnitee wishes to assert a claim for indemnification hereunder it shall give the applicable Indemnitor a prompt written notice thereof (a "Claims Notice"), which shall describe in reasonable detail the facts and circumstances (to the extent then reasonably available) upon which the asserted claim for indemnification is based and thereafter keep such Indemnitor informed, in all material respects, with respect thereto. In the event that such Claims Notice results from a third party claim against such Indemnitee, then such Indemnitee shall, promptly upon becoming aware of the commencement of proceedings by such third party, provide the Indemnitor with the Claims Notice and the Indemnitor shall have the right to assume the defense thereof (at Indemnitor's expense) with counsel mutually satisfactory to the parties; *provided, however*, that the Indemnitees shall have the right to retain their own counsel, at the reasonable expense of the Indemnitor, and within the indemnification limitations herein, if representation of all parties by the counsel retained by the Indemnitor would be inappropriate due to actual or potential differing interests between the parties in such proceeding. Failure of the Indemnitees to give the Indemnitor prompt notice or to keep it informed, as provided herein, shall not relieve the Indemnitor of any of its obligations hereunder, except to the extent that the Indemnitor is actually and materially prejudiced by such failure. The Indemnitor shall not be liable nor shall it be required to indemnify or hold harmless the Indemnitee in connection with any settlement effected without its consent in writing, which shall not be unreasonably withheld or delayed.

(d) Sole Remedy. The indemnification provided by the applicable Indemnitors hereunder and the enforcement of such indemnification shall be the exclusive remedy available to the Indemnitees under this Agreement, other than for Fraud; *provided* that this provision does not limit the right to seek specific performance, a restraining order or injunctive relief with respect to any provision of this Agreement.

10. TERMINATION

10.1 This Agreement may be terminated and the Contemplated Transactions may be abandoned prior to the Closing:

(a) by mutual written agreement of the Parent, the Company and Investor; or

(b) by either the Company, the Parent or Investor, if the Closing has not been consummated on or before the date that is ninety (90) days hereafter (the "End Date"), except that the End Date may be extended by either the Company, the Parent or Investor for an additional thirty (30) days in the event that in the reasonable judgment of such party the Closing may occur prior to the End Date (as so extended); *provided that* the right to terminate this Agreement pursuant to this Section 10.1(b) shall not be available to any party whose (or whose affiliate's) breach of or failure to comply with any provision of this Agreement or any of the other Transaction Documents has caused any of the conditions to Closing not to have occurred; or

(c) by either the Company, the Parent or Investor, if a governmental authority shall have issued any order, injunction or other decree or taken any other action, in each case, which has become final and non-appealable and which restrains, enjoins or otherwise prohibits the transactions contemplated hereby, or there shall be any statute, rule, regulation or order enacted, promulgated or issued by any governmental authority which is applicable to the transactions contemplated hereby and makes the consummation thereof illegal.

The party desiring to terminate this Agreement pursuant to this Section 10 (other than pursuant to 10.1) shall give written notice of such termination to the other parties, setting forth a brief description of the basis on which such party is terminating this Agreement.

10.2 Effect of Termination. If this Agreement is terminated pursuant to Section 10, this Agreement shall become void and of no effect and there shall be no liability or obligation on the part of any party or any of its or their affiliates to any other person by virtue of, arising out of or otherwise in connection with this Agreement or any other Transaction Document; *provided that*: (a) neither party hereto shall be relieved of any obligation or liability arising from any prior breach by such party of any provision of this Agreement or any other Transaction Document; and (b) the parties shall, in all events, remain bound by and continue to be subject to the provisions set forth in Section 8.6 (*Confidentiality)*,8.7 *(Public Disclosure*) and 11 (*Miscellaneous*).

11. MISCELLANEOUS.

11.1 Entire Agreement. This Agreement (including the exhibits and schedules hereto), the Restated Articles and the other Transaction Documents constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and supersede all prior agreements and understandings, both written and oral, among any of the parties hereto, with respect to the subject matter hereof (with no concession being made as to the existence of any such prior agreements or understandings).

11.2 Amendment; Waiver. Except as explicitly set forth herein, any term of this Agreement may be amended only with the written consent of the Company, the Parent and Investor, provided that any amendment amending an Investor's respective portion of the Purchase Price to be invested at the Closing, or any amendment that has a disproportionate and adverse effect on specific Investor(s) (as compared to other Investors), shall require also such specific Investor's prior written consent. The observance of any term hereof may be waived (either prospectively or retroactively and either generally or in a particular instance) only by the prior written consent of the party against which enforcement of such waiver shall be sought. Any amendment or waiver effected in accordance with this Section 11.2 shall be binding upon the parties hereto and each transferee of the Purchased Shares, each future holder of all such securities, and the Company.

11.3 Assignment; Successors and Assigns. None of the rights, privileges or obligations set forth in, arising under, or created by this Agreement may be assigned or transferred by any party, without the prior written consent of the Company, the Parent and Investor; except that no such consent shall be required after the Closing in case of an assignment of this Agreement along with the transfer of Purchased Shares from an Investor to such Investor's Permitted Transferee (as is defined in the Restated Articles) and the assumption in writing by such Permitted Transferee of the representations, warranties, covenants and obligations arising under this Agreement, as an Investor hereunder. In such case, the Investor and the Permitted Transferee shall deliver to the Company a written notice, in a form reasonably acceptable to the Company, notifying and representing to the Company the foregoing. The Company shall be permitted to assign this Agreement or any and all of its rights, privileges or obligations set forth in, arising under, or created by this Agreement to its successors and assigns (including to a purchaser, successor or assignor of all or substantially all of its assets) after the Closing, subject to the assumption by such successors and assigns of this Agreement or any and all of its rights, privileges or obligations hereunder. Subject to the foregoing, the terms and conditions of this Agreement shall inure to the benefit of, and be binding upon, the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

11.4 Governing Law; Jurisdiction. This Agreement shall be governed by and construed in accordance with to the laws of the State of Delaware, disregarding its conflict of laws rules. Any dispute arising under or in relation to this Agreement shall be resolved exclusively in the competent court located of the State of Delaware and each of the parties hereby irrevocably submits to the exclusive jurisdiction of such court. Each of the parties hereto (i) consents to submit itself to the exclusive jurisdiction of the abovementioned courts in the event any dispute arises out of this Agreement or the transactions contemplated by this Agreement, (ii) agrees that it shall not attempt to deny or defeat such jurisdiction by motion or other request for leave from the abovementioned court, (iii) agrees that it shall not bring any action relating to this Agreement or the transactions contemplated by this Agreement in any court other than the abovementioned court, and (iv) irrevocably consents to service of process in the manner provided by Section 11.4 or as otherwise provided by applicable law.

11.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt, or (i) when delivered, if sent by personal delivery to the party to be notified, (ii) when sent, if sent by electronic mail or facsimile (with electronic conformation of delivery) on a business day and during normal business hours of the recipient, and otherwise on the first business day in the place of recipient, (iii) five (5) business days after having been sent, if sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one (1) business day after deposit with an internationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written confirmation of receipt. All communications shall be sent to the respective parties at their address or contact details as set forth below, or to such address or contact details as subsequently modified by written notice given in accordance with this Section 11.5, or, in the case of the Investors, as used for purposes of sending shareholders' notices by the Company.

If to the Company, the Company Subsidiary or the Acquirer:

13 Gad Feinstein St., Park Rehovot, P.O.B 2100, Rehovot 76120, Israel
Attention: Ofer Haviv
Telephone: [***]
E-mail: [***]

with a mandatory copy to (which shall not constitute a notice):

Meitar Liquornik Geva Leshem Tal
Abba Hillel Silver St.16, Ramat Gan, Israel
Attention: Mike Rimon
Telephone: [***]
Facsimile: [***]
E-mail: [***]

If to the Parent:

13 Gad Feinstein St., Park Rehovot, P.O.B 2100, Rehovot 76120, Israel
Attention: Ido Dor
Telephone: [***]
E-mail: [***]

with a mandatory copy to (which shall not constitute a notice):

Meitar Liquornik Geva Leshem Tal
Abba Hillel Silver St.16, Ramat Gan, Israel
Attention: Mike Rimon
Telephone: [***]
Facsimile: [***]
E-mail: [***]

If to Investor:

Pioneer Hi-Bred International, Inc.
7100 NW 62nd Ave, PO Box 1000
Johnston, IA 50131
Attention: Alan McCunn, M&A
Email: [***]

with a mandatory copy to (which shall not constitute a notice):

Corteva Agriscience
974 Centre Road
Building 735
Wilmington, Delaware 19805
Attention: Ryan Murphy, M&A Legal
Email: [***]

11.6 Delays or Omissions. Except as expressly provided herein, no delay or omission to exercise any right, power or remedy accruing to any party to this Agreement upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default therefore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party to this Agreement, shall be cumulative and not alternative.

11.7 Interpretation. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation". Unless the context requires otherwise, the words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Agreement in its entirety, and not to any particular provision hereof, and all references herein to Sections shall be construed to refer to Sections to this Agreement. Reference to "governmental authorities" (or similar terms) shall include any: (a) nation, principality, state, commonwealth, territory, county, municipality, district or other jurisdiction of any nature, (b) federal, state, local, municipal, foreign or other government, (c) governmental, quasi-governmental or regulatory body of any nature, including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, organization, unit, or body, or (d) court, public or private arbitrator or other public tribunal. Reference to a "person" shall mean any individual, corporation, partnership, limited liability company, firm, joint venture, association, joint-stock company, trust, estate, unincorporated organization, governmental authority or other entity, including, any party to this Agreement. Any reference to a "day" or a number of days (without explicit reference to "business days") shall be interpreted as a reference to a calendar day or number of calendar days, and if any action is to be taken or given on or by a particular calendar day, and such calendar day is not a business day, then such action may be deferred until the first business day thereafter (where "business day" shall mean any day on which banking institutions in Tel-Aviv-Jaffa, Israel are generally open to the public for conducting business and are not required by law to close). For the purposes of this Agreement, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same person, or such person and its affiliates (including persons the Company has reason to believe are affiliated with each other) shall be aggregated for the purpose of meeting the individual minimum dollar amounts indicated herein.

11.8 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be enforceable in accordance with its terms and interpreted so as to give effect, to the fullest extent consistent with and permitted by applicable law, to the meaning and intention of the excluded provision.

11.9 Expenses. Whether or not the transactions contemplated hereby are consummated, all costs and expenses incurred in connection with this Agreement and the other Transaction Documents, including all third-party legal, accounting, financial advisory, consulting or other fees and expenses incurred in connection with the transactions contemplated hereby, shall be paid by the respective party incurring such fees and expenses.

11.10 Counterparts. This Agreement and any Transaction Document may be executed in one or more counterparts, all of which together shall constitute one and the same instrument, binding and enforceable against the parties so executing the same; it being understood that all parties need not sign the same counterpart. Counterparts may also be delivered by facsimile or email transmission (in pdf format or the like, or signed with docusign, e-sign or any similar form of signature by electronic means) and any counterpart so delivered shall be sufficient to bind the parties to this Agreement or any other Transaction Document, as an original.

11.11 No Commitment for Additional Financing. The Company acknowledges and agrees that no Investor has made any representation, undertaking, commitment or agreement to provide or assist the Company in obtaining any financing, investment or other assistance, other than the purchase of the Purchased Shares and the as set forth herein and subject to the conditions set forth herein. In addition, the Company acknowledges and agrees that (i) no statements, whether written or oral, made by any Investor or its representatives on or after the date of this Agreement shall create an obligation, commitment or agreement to provide or assist the Company in obtaining any financing or investment, (ii) the Company shall not rely on any such statement by any Investor or its representatives, and (iii) an obligation, commitment or agreement to provide or assist the Company in obtaining any financing or investment may only be created by a written agreement, signed by such Investor and the Company, setting forth the terms and conditions of such financing or investment and stating that the parties intend for such writing to be a binding obligation or agreement. Each Investor shall have the right, in its sole and absolute discretion, to refuse or decline to participate in any other financing of or investment in the Company, and shall have no obligation to assist or cooperate with the Company in obtaining any financing, investment or other assistance.

- Signature Pages Follow -

IN WITNESS WHEREOF, the parties have executed this SHARE PURCHASE AGREEMENT as of the date first written above.

PARENT:

/s/ Ofer Haviv
EVOGENE LTD.

Name: Ofer Haviv
Title: CEO

IN WITNESS WHEREOF, the parties have executed this SHARE PURCHASE AGREEMENT as of the date first written above.

PURCHASED COMPANY:

/s/ Neal Gutterson
TAXON BIOSCEINSES, INC.

Name: Neal Gutterson
Title: Authorized Representative

IN WITNESS WHEREOF, the parties have executed this SHARE PURCHASE AGREEMENT as of the date first written above.

COMPANY:

/s/ Ido Dor
LAVIE BIO LTD.

Name: Ido Dor
Title: CEO

COMPANY SUBSIDIARY:

/s/ Ido Dor
LAVIE BIO INC.

Name: Ido Dor
Title: Director

ACQUIRER:

/s/ Ido Dor
LAVIE TECH INC.

Name: Ido Dor
Title: Director

IN WITNESS WHEREOF, the parties have executed this SHARE PURCHASE AGREEMENT as of the date first written above.

INVESTOR:

/s/ Neal Gutterson
PIONEER HI-BRED INTERNATIONAL, INC.

Name: Neal Gutterson
Title: Authorized Representative

EXHIBIT 8.1

List of Subsidiaries

Name of Subsidiary	Jurisdiction	Ownership Interest
AgPlenus Ltd.	Israel	100%
Biomica Ltd.	Israel	90.9% (1)
Canonic Ltd.	Israel	100%
Casterra Ag Ltd.	Israel	100%
Evogene Inc.	Delaware	100%
Lavie Bio Ltd.	Israel	72.2% (2)

(1) Remaining 9.1% of Biomica Ltd.’s outstanding share capital is held by Biomica Ltd.'s Chief Technology Officer.

(2) Remaining 27.8% of Lavie Bio Ltd.’s outstanding share capital is held by Pioneer Hi-Bred International, Inc. (also known by the name Corteva).

EXHIBIT 12.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
EXCHANGE ACT RULE 13A-14(A)/ 15D-14(A)
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

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: April 27, 2020

EXHIBIT 12.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO
EXCHANGE ACT RULE 13A-14(A)/ 15D-14(A)
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

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: April 27, 2020

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, 2019 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: April 27, 2020

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, 2019 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: April 27, 2020

EXHIBIT 15.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-193788, 333-201443 and 333-203856) of Evogene Ltd., of our report dated April 27, 2020, with respect to the consolidated financial statements of Evogene Ltd. included in this Annual Report (Form 20-F) for the year ended December 31, 2019, filed with the Securities and Exchange Commission.

/s/ Kost, Forer, Gabbay & Kasierer
KOST, FORER, GABBAY & KASIERER
A Member of Ernst & Young Global

Tel Aviv, Israel
April 27, 2020