As filed with the Securities and Exchange Commission on September 23, 2019

Registration No. 333-230981

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

AMENDMENT NO. 5
TO
FORM F-1
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TODOS MEDICAL LTD.
(Exact name of Registrant as specified in its charter)

Israel	**2835**	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code)	(I.R.S. Employer Identification No.)

1 Hamada Street
Rehovot, Israel
+972-8-633-3964
(*Address and telephone number of Registrant's principal executive offices*)

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Newark, Delaware 19711
302-738-6680
(*Name, address, including zip code, and telephone number, including area code, of agent for service*)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box: ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

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 7(a)(2)(B) of the Securities Act. ☐

Calculation of Registration Fee

Title of Each Class of Securities to be Registered[1]	Proposed Maximum Aggregate Offering Price[2]	Amount of Registration Fee[3]
Units consisting of:		
(i) Ordinary Shares, par value NIS 0.01	$ 4,800,000	$ 581.76
(ii) Warrants to purchase Ordinary Shares, par value NIS 0.01[4]	--	
Ordinary shares, par value NIS 0.01, issuable upon exercise of Warrants included in the Units	$ 12,000,000	$ 1,454.40
Ordinary Shares, par value NIS 0.01, issuable upon exercise of Representative's Warrants	$ 480,000	$ 58.18
TOTAL	$ 17,280,000	$ 2,094.34

(1) In the event of a stock split, stock dividend or similar transaction involving our ordinary shares, the number of shares registered shall automatically be increased to cover the additional ordinary shares issuable pursuant to Rule 416 under the Securities Act of 1933, as amended.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the ordinary shares that the underwriters have the option to purchase

(3) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

(4) In accordance with Rule 457(i) under the Securities Act, no separate registration fee is required with respect to the warrants registered hereby.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission becomes effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Preliminary Prospectus *Subject to Completion. Dated September 23, 2019*

TODOS MEDICAL LTD.
24,000,000 Units
Consisting of Ordinary Shares and Warrants to Purchase Ordinary Shares
at $ Per Unit

This prospectus relates to our public offering of 24,000,000 units, with each unit consisting of (i) one new ordinary share of Todos Medical Ltd., and two warrants, each to purchase one ordinary share of Todos, which will be exercisable upon issuance and will expire five (5) years from issuance, at an offering price of $ per unit. Each warrant will have an exercise price equal to 125% of the offering price for each unit. The units will not be issued or certificated. The ordinary shares and warrants comprising the units are immediately separable and will be issued separately. Our ordinary shares are currently quoted on the U.S. OTCQB marketplace of OTC Link, or OTCQB, under the symbol "TOMDF". On September 18, 2019, the closing price of our ordinary shares, as reported on the OTCQB, was $0.27 per share. We are in the process of applying to list our ordinary shares and the warrants on The Nasdaq Capital Market under the symbols "TOMD" and "TOMDW", respectively. No assurance can be given that our application will be approved.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Start-ups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our ordinary shares involves a high degree of risk. See "*Risk Factors*" on page 7 to read about factors you should consider before buying our ordinary shares.

	Per Share	Total
Public offering price	$	$
Underwriting discount(1)	$	$
Proceeds to Todos Medical Ltd., before expenses	$	$

(1) Does not include additional compensation payable to the underwriters. We have also agreed to issue to the underwriter warrants to purchase a number of ordinary shares equal to 8% of the number of ordinary shares sold in this offering with an exercise price equal to 125% of the public offering price. In addition, we have agreed to reimburse the underwriters for certain expenses. The registration statement of which this prospectus forms a part also covers the ordinary shares issuable upon exercise of the underwriters' warrant. See "*Underwriting*" beginning on page 93 for additional information regarding underwriting compensation.

The underwriters have the option to purchase up to an additional 3,600,000 units, 3,600,000 ordinary shares and/or 7,200,000 warrants from us at the public offering price less the underwriting discount.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the units against payment in New York, NY on or about September __, 2019.

Dawson James Securities **ViewTrade Securities**

Prospectus September__, 2019

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Neither we nor the underwriters have authorized anyone to provide you with information that is different from that contained in this prospectus, any amendment or supplement to this prospectus, or in any free writing prospectus we may authorize to be delivered or made available to you. Neither we nor the underwriters take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell ordinary shares and seeking offers to purchase ordinary shares only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front of this prospectus, regardless of the time of delivery of this prospectus or any sale of ordinary shares. Our business, financial condition, results of operations and prospects may have changed since the date on the front cover of this prospectus.

Neither we nor any of the underwriters have taken any action to permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

Unless the context otherwise requires, references in this prospectus to the "Company," "Todos Medical," "Todos," "we," "us," "our" and other similar designations refer to Todos Medical Ltd. The terms "shekel," "Israeli shekel" and "NIS" refer to New Israeli Shekels, the lawful currency of the State of Israel, and the terms "dollar," "U.S. dollar" or "$" refer to United States dollars, the lawful currency of the United States of America. All references to "shares" in this prospectus refer to the pre-reverse split ordinary shares of Todos Medical Ltd., par value NIS 0.01 per share.

MARKET, INDUSTRY AND OTHER DATA

This prospectus contains estimates, projections and other information concerning our industry, our business, and the markets for our products. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data, and similar sources.

In addition, assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "*Risk Factors*." These and other factors could cause our future performance to differ materially from our assumptions and estimates. See "*Cautionary Statement Regarding Forward-Looking Statements*."

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before deciding to invest in our ordinary shares, you should read this entire prospectus carefully, including the sections of this prospectus entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus.

Overview of the Company

We are a clinical-stage cancer in-vitro diagnostic, or IVD, company engaged in the development of a series of blood tests for the detection of a variety of cancers based on our Todos Biochemical Infrared Analysis method, or TBIA, a proprietary technology for detection of solid tumors using peripheral blood analysis. The method incorporates biochemistry, physics and signal processing. The TBIA detection method is based on the cancer's influence on the immune system which triggers biochemical changes in peripheral blood mononuclear cells, or PBMC, and plasma. Our core technology, TBIA, is based on research conducted and technology invented by the research teams at Ben Gurion University, or BGU, and Soroka Medical Center of Israel, or Soroka, whose intellectual property has been licensed to us in consideration of our contractual obligation to pay certain licensing fees. In addition, we are engaged in the development of blood tests for the early detection of neurodegenerative disorders, such as Alzheimer's disease. We are pursuing this activity through our subsidiary, Breakthrough Diagnostics, Inc., which holds an exclusive license to the LymPro Test®, an immune-based neurodiagnostic blood test developed at the University of Leipzig.

Products

Our products serve as a preliminary cancer detection tool and cannot be regarded as providing a final diagnosis. Our products consist of a blood test that causes what we believe to be minor risk and pain to the patient that is analyzed by our proprietary technology to detect the presence of various cancers. Our test analysis results will be provided to the healthcare provider who may decide to refer the patient for additional detections such as colonoscopy for further determination of cancer presence. Our cancer detection kit includes a glass slide upon which the PBMC and the plasma are placed. Some tests might also include a salt solution that is needed for the blood separation process. There is a different test for each cancer type.

We have developed two cancer detection kits for breast cancer screening and diagnosis and are developing a colon cancer screening product.

TM-B1 is a test designed specifically for breast cancer screening. It is indicated for women who meet the following criteria: female subjects aged 25 years and older, without a diagnosis of inflammatory or autoimmune disease. TM-B1 is to be used as a diagnostic method to indicate whether a malignancy is present or not. TM-B1 assay results should be used in conjunction with other common diagnostic tests as part of breast cancer screening.

TM-B2 is a test designed specifically for breast cancer screening and indicated for women who meet the following criteria: Female subjects, aged 25 years and older, without a diagnosis of inflammatory or autoimmune disease, who were diagnosed as presenting with a Breast Imaging-Reporting and Data System, or BI-RADS, score of three or four (or equivalent). TM-B2 is to be used to further assess if a malignancy is present or not. TM-B2 test results should be used in conjunction with other common diagnostic tests as part of breast cancer screening and should not be used as stand-alone assay.

The TM-C1 is a test designed specifically for colon cancer screening and is intended for the qualitative detection, and for the semi-quantitative detection, of biochemical characteristics of the infrared readings of peripheral blood mononuclear cells and plasma, which may be indicative of polyps and colorectal cancer. The TM-C1 test may integrate with an overall screening program for colorectal cancer.

Recent Developments

Reverse Split

At our annual general meeting of shareholders held on April 29, 2019, our shareholders voted to approve a reverse share split of the Company's ordinary shares within a range of 10:1 to 150:1, to be effective at the ratio and on a date to be determined by the Board of Directors of the Company (the "Reverse Split"). Although our shareholders approved the Reverse Split, all per share amounts and calculations in this prospectus and the accompanying consolidated financial statements do not reflect the effects of the Reverse Split, as the Board of Directors has not determined the final ratio or the effective date of the Reverse Split.

Amarantus Transaction

Background

Amarantus Bioscience Holdings, Inc., ("Amarantus") had entered into an amended and restated license agreement with the University of Leipzig (the "License Agreement"), pursuant to which Amarantus obtained an exclusive license to develop and commercialize the LymPro Test®, an immune-based neurodiagnostic blood test for the detection of Alzheimer's disease (the "License")

On February 27, 2019, the Company entered into a joint venture agreement with Amarantus, pursuant to which the Company issued Ordinary Shares representing 19.99% of the Company to Amarantus, in exchange for Amarantus transferring to the Company 19.99% of the outstanding equity securities of Breakthrough Diagnostics, Inc. ("Breakthrough"), a wholly owned subsidiary of Amarantus, and for Amarantus assigning the License Agreement to Breakthrough. In addition, as part of the transaction, the Company provided Amarantus with an interest-free loan in the amount of $45,000 to be used to pay certain financial obligations of Amarantus owed to the University of Leipzig prior to the assignment of the License to Breakthrough, in connection with the license agreement and a related sponsored research agreement. The maturity date of the loan is May 1, 2019. In addition, the Company provided Breakthrough with an interest-free loan in the amount of $135,000 to be used to pay certain financial obligations of Breakthrough owed to the University of Leipzig after the assignment of the License to Breakthrough, in connection with the license agreement and the related sponsored research agreement. The maturity date of this loan is September 30, 2019. To date, the Company has loaned Amarantus and Breakthrough a total of $502,000 to cover fees owed by Amarantus and Breakthrough to the University of Leipzig in connection with the license agreement and the sponsored research agreement.

As part of the joint venture with Amarantus, the Company was granted an option to acquire the remaining 80.01% of Breakthrough held by Amarantus in exchange for the issuance to Amarantus of Ordinary Shares of the Company representing an additional thirty percent (30%) of the Company, such that upon consummation of the transaction the Company will own 100% of Breakthrough and Amarantus will own 49.99% of the Company.

Exercise of the Option

On April 14, 2019, we notified Amarantus of our decision to exercise our option. The consummation of the change of control transaction with Amarantus, whereby we will issue to Amarantus an additional thirty percent (30%) of the Company in exchange for obtaining Amarantus's 80.01% ownership stake in our jointly-owned subsidiary Breakthrough, such that we will own 100% of Breakthrough and Amarantus will own 49.99% of the Company, is subject to shareholder approval. At the annual meeting of shareholders of the Company held on April 29, 2019, the Company's shareholders voted on a resolution approving the Company's exercise of this option. We expect the formal closing of the exercise of the option to take place this week.

The LymPro Test is a diagnostic blood test that determines the ability of peripheral blood lymphocytes (PBLs) and monocytes to withstand an exogenous mitogenic stimulation that induces them to enter the cell cycle. Scientists believe that certain diseases, most notably Alzheimer's disease, may be the result of compromised cellular machinery that leads to aberrant cell cycle re-entry by neurons which then leads to apoptosis. LymPro Test uses peripheral blood lymphocytes as a surrogate for neuronal cell function, suggesting a common relationship between PBLs and neurons in the brain. The LymPro Test focuses on measuring immune markers that are directly linked to the cell proliferation processes and expands our understanding of how the body's immune system responds to disease. The Company believes that the LymPro Test may use the body's immune system response to diagnose early and monitor the progression of Alzheimer's disease, which has the potential to be an invaluable tool for pharmaceutical companies' development of novel treatments for Alzheimer's.

Convertible Bridge Loan Transaction

We recently raised $1,473,750 from the sale of convertible notes, which have an outstanding principal balance of $1,637,500. On February 27, 2019, we entered into the first of several convertible bridge loan agreements, and have issued notes and warrants relating thereto, to obtain aggregate loans in the principal amount of $1,637,500 from several private lenders, to finance the Company's activities through the consummation of a proposed public offering and our planned uplisting to the NASDAQ Capital Market. The loans, which have an original issue discount of ten percent (10%), bear interest at a flat rate of ten percent (10%) and have a maturity date six months after receipt of the loan funds. The loans are convertible into ordinary shares of the Company after the maturity date at a conversion price equal to 70% of the average closing bid price of the Company's Ordinary Shares in the five days prior to the conversion. In the event the Company defaults under the loan agreement, the conversion price will be reduced to 60% of the average closing bid price of the Company's Ordinary Shares in the 15 days prior to the conversion. In addition, each lender received a warrant to purchase an amount of ordinary shares equal to 25% of the amount loaned by such lender, with the warrant exercise price to be equal to the offering price in the proposed public offering, or, in the event its loan is converted into shares, the warrant exercise price will be equal to the applicable closing bid price of the Company's shares at the time of the conversion of the loan. The warrants may be exercised only during the period beginning on the date that is six months after the date that the warrant exercise price and the number of warrant shares are determined, and ending on the date that is three years thereafter.

On March 10, 2019, we entered into an amendment to the bridge loan agreement that we had entered into on February 27, 2019. The amendment provides for a 10% penalty if we repay the loan prior to the maturity date. In addition, we agreed to grant each lender a warrant to purchase an additional amount of ordinary shares equal to 25% of the amount loaned by such lender, under the same terms as the original warrant, but with a warrant exercise price equal to 150% of the closing bid price of our shares on the day prior to the closing of the bridge loan transaction.

We are in default of some of the convertible loan agreements since the maturity date has passed and we have not repaid the loans that have become due.

Distribution Agreements

On December 20, 2018, we entered into a Marketing and Reseller Agreement with Care G.B. Plus Ltd. ("Care") for the resale of our breast cancer screening products in Israel. We appointed Care as our exclusive distributor in Israel, and Care undertook to establish at least one laboratory in Israel to support the assay protocol and to run a fifty (50) patient pilot trial to evaluate the performance of the laboratory and Care's support team. Care is fifty-percent owned by Assaf Gold, who was the beneficial owner of 5.49% of our issued and outstanding shares at the time the Care agreement was signed by the Company.

On March 28, 2019, we entered into a Distribution Agreement with Orot Plus Ltd. for the distribution of our breast cancer screening products in Romania and Austria. We appointed Orot as our exclusive distributor in Romania and Austria, and Orot undertook to utilize local laboratories or establish its own laboratories in the territory to support the assay protocol and to run a fifty (50) patient survey to evaluate the performance of our products.

Corporate Background

We were incorporated in the State of Israel in April 2010, and are subject to the Companies Law. Since March 7, 2017, our Ordinary Shares have been quoted on the OTCQB under the symbol TOMDF. In January 2016, we incorporated our fully held subsidiary, Todos (Singapore) Pte. Ltd. In March 2016, Todos (Singapore) Pte. Ltd. changed its name to Todos Medical Singapore Pte. Ltd., or Todos Singapore. Todos Singapore has not yet commenced its business operations.

Our principal executive office is located at 1 HaMada Street, Rehovot, Israel and our telephone number in Israel is +972-8-633-3964. Our web address is www.todosmedical.com. The information contained on our website or available through our website is not incorporated by reference into and should not be considered a part of this prospectus, and the reference to our website in this prospectus is an inactive textual reference only. Any website references (URL's) in this Registration Statement are inactive textual references only and are not active hyperlinks. The contents of our website is not part of this prospectus, and you should not consider the contents of our website in making an investment decision with respect to our ordinary shares. Puglisi & Associates is our agent in the United States, and its address is 850 Library Avenue, Suite 204 Newark, Delaware 19711.

All per share amounts and calculations in this Registration Statement and the accompanying financial statements do not reflect the effects of the planned Reverse Split.

Our independent registered public accounting firm indicated in its report on our financial statements for the year ended December 31, 2018, as included elsewhere in this registration statement, that conditions raise substantial doubts about our ability to continue as a "going concern." In addition, our financial status creates substantial doubt whether we will continue as a going concern.

Implications of Being an "Emerging Growth Company" and a Foreign Private Issuer

As a company with less than $1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- reduced executive compensation disclosure;
- exemptions from the requirement to hold a non-binding advisory vote on executive compensation, including golden parachute compensation; and
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002.

We may take advantage of these provisions until December 31, 2022 or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company upon the earlier to occur of: (1) the last day of the fiscal year in which we have total annual gross revenue of $1.07 billion or more; (2) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (3) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, or the SEC. In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards applicable to public companies.

We currently report and will continue to report under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as a non-U.S. company with foreign private issuer status. Even after we no longer qualify as an emerging growth company, as long as we continue to qualify as a foreign private issuer under the Exchange Act, we will be exempt from certain provisions of the Exchange Act that are applicable to U.S. domestic public companies, including:

- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations with respect to a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their share ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial statements and other specified information, and current reports on Form 8-K upon the occurrence of specified significant events, although we intend to report our results of operations voluntarily on a quarterly basis.

Both foreign private issuers and emerging growth companies are also exempt from certain more stringent executive compensation disclosure rules. Thus, even if we no longer qualify as an emerging growth company, but remain a foreign private issuer, we will continue to be exempt from the more stringent compensation disclosures required of companies that are neither an emerging growth company nor a foreign private issuer.

We would cease to be a foreign private issuer at such time as more than 50% of our outstanding voting securities are held by U.S. residents, and any one of the following three circumstances applies: (i) the majority of our executive officers or directors are U.S. citizens or residents, (ii) more than 50% of our assets are located in the United States or (iii) our business is administered principally in the United States.

In this prospectus, we have taken advantage of certain of the reduced reporting requirements as a result of being an emerging growth company and a foreign private issuer. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold equity securities.

The Offering

Number of shares outstanding before the offering	101,502,961 ordinary shares.
Securities being offered by the Company	24,000,000 units, with each unit consisting of one ordinary share and two warrants, each to purchase one ordinary share.
Offering price	$ per unit.
Number of shares outstanding immediately after the offering	125,502,961 ordinary shares, assuming no exercise of the warrants.
Over-Allotment Option	We have granted the underwriters an option for a period of 45 days after the date of this prospectus to purchase up to an additional 3,600,000 units, up to an additional 3,600,000 ordinary shares and/or up to an additional 7,200,000 warrants.
Proposed Nasdaq Capital Market listing	We are in the process of applying to list our ordinary shares and warrants on the Nasdaq Capital Market under the symbols "TOMD" and "TOMDW," respectively
OTCQB Symbol for our ordinary shares	"TOMDF"
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately $ million, or approximately $ million if the underwriters exercise their option to purchase additional units, ordinary shares and/or warrants in full, after deducting the estimated underwriting discount and estimated offering expenses payable by us, based on the public offering price of $ per ordinary share, without giving effect to the potential exercise of the warrants. We intend to use the net proceeds from this offering, together with our existing cash and cash equivalents and short-term deposits: (i) to repay our outstanding convertible bridge loans, (ii) to fund clinical development and clinical trials of our products, and (iii) for general corporate purposes and working capital. See "*Use of Proceeds*" for a complete description.
Terms of the warrants offered as part of the units	Each unit issued in this offering includes two warrants, each to purchase one ordinary share at an exercise price of $ per ordinary share. The warrants are exercisable immediately and will expire on the fifth anniversary date of the closing of this offering. This prospectus also relates to the offering of the ordinary shares issuable upon exercise of the warrants. See "*Description of Share Capital – Warrants Included in the Units*" for a complete description.
Underwriters' Warrants	We are obligated to issue Dawson James Securities Inc. or its designees at the closing of this offering warrants to purchase the number of ordinary shares equal to 8% of the aggregate number of ordinary shares sold in this offering. The underwriters' warrants will be exercisable at any time beginning six months after the closing of this offering, in whole or in part, and will expire five years after the effective date of the registration statement of which this prospectus forms a part. The exercise price of the underwriters' warrants will equal 125% of the public offering price. This prospectus also relates to the offering of ordinary shares issuable upon exercise of the underwriters' warrants.
Risk Factors	See "*Risk Factors*" and the other information in this prospectus for a discussion of the factors you should consider before deciding to invest in our ordinary shares.

Unless otherwise indicated, all information in this prospectus assumes or gives effect to:

- no exercise of the underwriters' option to purchase up to an additional 3,600,000 units, up to an additional 3,600,000 ordinary shares or up to an additional 7,200,000 warrants.

Summary Financial Data

The following tables summarize our consolidated financial data. We have derived the following statements of operations data for the years ended December 31, 2018, 2017, and 2016, and balance sheet data as of December 31, 2018 and 2017, from our audited consolidated financial statements included elsewhere in this prospectus. Our selected consolidated statements of operations data for the years ended December 31, 2015 and 2014, and the selected consolidated balance sheet data as of December 31, 2016, 2015, and 2014 have been derived from our audited consolidated financial statements not included in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future, and our results for any interim period are not necessarily indicative of results that may be expected for any full year. The following consolidated summary financial data should be read in conjunction with "Selected Consolidated Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus.

U.S. dollars in thousands, except share data	Year Ended December 31,				
Consolidated Statements of Operations Data	**2018**	**2017**	**2016**	**2015**	**2014**
Research and development expenses, net	$ (459)	(721)	(318)	(374)	(336)
General and administrative expenses	(920)	(617)	(411)	(457)	(64)
Operating loss	(1,379)	(1,338)	(729)	(831)	(401)
Financing income (expenses), net	921	(1,337)	75	12	(79)
Net loss	(458)	(2,675)	(653)	(819)	(322)
Net loss per share (basic and diluted)	$ (0.006)	(0.04)	(0.01)	(0.02)	(0.01)
Basic and diluted weighted average number of Ordinary Shares outstanding	70,869,924	68,587,261	62,467,556	45,190,017	28,450,908

Balance Sheet Data

U.S. dollars in thousands, except share data	Year Ended December 31,				
	2018	**2017**	**2016**	**2015**	**2014**
Cash and cash equivalents	$ 64	$ 683	$ 439	$ 156	$ 61
Working capital (deficit)	$ (1,093)	$ 468	$ 325	$ 107	$ 25
Total assets	$ 199	$ 816	$ 584	$ 292	$ 129
Total current liabilities	$ 1,199	$ 245	$ 135	$ 79	$ 100
Total long-term liabilities	$ 217	$ 1,911	$ 853	$ 742	$ 617
Shareholders' deficit	$ (1,216)	$ (1,340)	$ (404)	$ (528)	$ (588)
Number of Ordinary Shares outstanding	72,399,932	70,256,911	63,747,504	59,125,670	33,352,200
Number of Preferred Shares Outstanding	-	-	3,333,471	3,096,195	3,000,000

RISK FACTORS

An investment in our ordinary shares involves a high degree of risk. You should carefully consider the following factors and other information in this prospectus before deciding to invest in us. If any of the following risks actually occur, our business, financial condition, results of operations and prospects for growth would likely suffer. As a result, you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may materially and adversely affect our business, financial condition and results of operations. See also "*Cautionary Statement Regarding Forward-Looking Statements*."

Risks Related to Our Business

We have a history of losses, may incur future losses and may not achieve profitability.

We are a clinical-stage medical diagnostics company with a limited operating history. We have incurred net losses in each fiscal year since we commenced operations in 2010. We incurred net losses of $653,461, $2,675,372, and $457,541 in the fiscal years ended December 31, 2016, 2017, and 2018, respectively. As of December 31, 2018, our accumulated deficit was $5,693,353. Our losses could continue for the foreseeable future, as we continue our investment in research and development and clinical trials to complete the development of our technology and to attain regulatory approvals, begin the commercialization efforts for our cancer detection kits, increase our marketing and selling expenses, and incur additional costs as a result of being a publicly reporting company in the United States. The extent of our future operating losses and the timing of becoming profitable are highly uncertain, and we may never achieve or sustain profitability.

Even if this offering is successful, we have a need for substantial additional financing and will have to significantly delay, curtail or cease operations if we are unable to secure such financing.

The Company requires substantial additional financing to fund its operations. As of March 31, 2019, our unaudited cash holdings were $212,000. In 2018, we managed our research and development activities taking into account our available resources. We continued with clinical trials at Kaplan Hospital and Beilinson Hospital (Israel) for TM-B1 and TM-C1, but did not expand our clinical trials activities. We believe that our currently available capital resources, together with the net proceeds of this offering, will be sufficient to fund our operations and meet our obligations for up to eighteen months. We will need to raise additional funds to expand the commercialization of our products.

We will require significant additional financing in the future to fund our operations. Our future funding requirements will depend on many factors, including, but not limited to:

- the progress, results and costs of our current and planned clinical trials of our current products and our other future products;
- the cost, timing and outcomes of regulatory review of our products and our other future products;
- the scope, progress, results and costs of product development, laboratory testing, manufacturing, preclinical development and clinical trials for any other products that we may develop or otherwise obtain in the future;
- the cost of our future activities, including establishing sales, marketing and distribution capabilities for any product candidates in any particular geography where we receive marketing approval for such products;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims; and
- the level of revenue, if any, received from commercial sales of any products for which we receive marketing approval.

In order to market and sell our products in Israel, we require the approval of the Israeli Ministry of Health, which approval we have obtained. To the best of our knowledge, approval of our products by the Ministry of Health requires us to comply with CE mark approval and International Organization for Standardization (ISO) 13485 (both of which we have already obtained).

Identifying potential products and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our products, if approved, may not achieve commercial success. Our product revenue, if any, will be derived from or based on sales of products that may not be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our products.

Furthermore, if adequate additional financing on acceptable terms is not available, we may not be able to develop our cancer detection kits at the rate or to the stage we desire. and we may have to delay or abandon the commercialization of our cancer detection kits. Alternatively, we may be required to prematurely license to third parties the rights to further develop or to commercialize our cancer detection kits on terms that are not favorable to us. Any of these factors could materially adversely affect our business, financial condition and results of operations.

We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all, and the terms of any financing may adversely affect the interests or rights of our shareholders. Even if we believe that we have sufficient funds for our current or future operating plans, we may seek additional capital if market conditions are favorable or if we have specific strategic considerations. The issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our shares to decline.

The report of our independent registered public accounting firm expresses substantial doubt about our ability to continue as a going concern.

Our independent registered public accounting firm indicated in its report on our financial statements for the year ended December 31, 2018, that conditions exist that raise substantial doubt about our ability to continue as a "going concern." A going concern paragraph included in our independent registered public accounting firm's report on our consolidated financial statements could impair investor perceptions and our ability to finance our operations through the sale of equity, incurring debt, or other financing alternatives. Our ability to continue as a going concern will depend upon many factors beyond our control including the availability and terms of future funding. If we are unable to achieve our goals and raise the necessary funds to finance our operations, our business would be jeopardized, and we may not be able to continue. If we ceased operations, it is likely that all of our investors would lose their investment.

We may not succeed in completing the development of our products, commercializing our products or generating significant revenues.

Since commencing our operations, we have focused on the research and development and limited clinical trials of our cancer detection kits. Our ability to generate revenues and achieve profitability depends on our ability to successfully complete the development of our products, obtain market approval and generate significant revenues. The future success of our business cannot be determined at this time, and we do not anticipate generating revenues from product sales for the foreseeable future. In addition, we face a number of challenges with respect to our future commercialization efforts, including, among others, that:

- we may not have adequate financial or other resources to complete the development of our product, including two stages of clinical development that are necessary in order to commercialize our products;
- we may not be able to manufacture our products in commercial quantities, at an adequate quality or at an acceptable cost;
- we may not be able to meet the timing schedule for (a) completing successful clinical trials in the U.S.; and (b) receiving U.S. Food and Drug Administration, or FDA, approval within our goal of approximately two to four years;
- we may not be able to maintain our CE mark due to the regulatory changes;
- we may never receive FDA approval for our intended development plans;
- we may not be able to establish adequate sales, marketing and distribution channels;
- healthcare professionals and patients may not accept our cancer detection kits;

- technological breakthroughs in cancer detection, treatment and prevention may reduce the demand for our products;
- changes in the market for cancer detection, new alliances between existing market participants and the entrance of new market participants may interfere with our market penetration efforts;
- third-party payors may not agree to reimburse patients for any or all of the purchase price of our products, which may adversely affect patients' willingness to purchase our cancer detection kits;
- uncertainty as to market demand may result in inefficient pricing of our cancer detection kits;
- we may face third-party claims of intellectual property infringement;
- we may fail to obtain or maintain regulatory approvals for our cancer detection kits in our target markets or may face adverse regulatory or legal actions relating to our cancer detection kits even if regulatory approval is obtained; and
- we are dependent upon the results of ongoing clinical studies relating to our cancer detection kits and the products of our competitors. We may fail in obtaining positive results.

If we are unable to meet any one or more of these challenges successfully, our ability to effectively commercialize our cancer detection kits could be limited, which in turn could have a material adverse effect on our business, financial condition and results of operations.

We are currently in the process of improving our technology and adapting to the high throughput methodology.

We plan to change our protocol and measurement instrument as well as our sample handling in order to adapt it to new high throughput methodology. The changes we plan to implement in the protocol and measurement instrument are significant. The new protocol aims to be more robust, reproducible, fast and easy to handle, however, this transformation from the older manual protocol to the new protocol incurs several risks. To our management's knowledge, the new protocol will not impact the previously obtained European Conformity, or CE, mark of approval of the TBIA method. The results may not be as promising as the former version and although some procedures may be more reproducible, these procedures will unfortunately damage some molecules, which were part of the diagnostic features in the previous protocol.

The previous tests we performed were preliminary or limited un-blinded studies.

We consider the tests conducted by us, as of the current date, under our method, to be preliminary or limited, as they include a relatively small number of test subjects. Thus, there is a risk in having less sufficient sensitivity and/or specificity in the trials we plan on conducting with larger populations, in comparison to the preliminary data we have gathered thus far. Increasing the population can increase the variance in the medical condition of the control patients as well as the cancer patients, thus affecting our test performances with regard to cancer detection.

If healthcare professionals do not recommend our product to their patients, our cancer detection kits may not achieve market acceptance and we may not become profitable.

Cancer detection candidates are generally referred to a specified device by their healthcare professional and detection technologies are purchased by prescription. If healthcare professionals, including physicians, do not recommend or prescribe our product to their patients, our cancer detection kits may not achieve market acceptance and we may not become profitable. In addition, physicians have historically been slow to change their medical diagnostic and treatment practices because of perceived liability risks arising from the use of new products. Delayed adoption of our cancer detection kits by healthcare professionals could lead to a delayed adoption by patients and third-party payors. Healthcare professionals may not recommend or prescribe our cancer detection kits until certain conditions have been satisfied, including, among others:

- sufficient long-term clinical evidence to convince them to supplement their existing detection methods and device recommendations;
- recommendations from other prominent physicians, educators and/or associations that our cancer detection kits are safe and effective;

- obtainment of favorable data from clinical studies for our cancer detection kits; and
- availability of reimbursement or insurance coverage from third-party payors.

We cannot predict when, if ever, healthcare professionals and patients may adopt the use of our cancer detection kits. Even if favorable data is obtained from clinical studies for our cancer detection kits, there can be no assurance that prominent physicians would endorse it or that future clinical studies will continue to produce favorable data regarding our cancer detection kits. In addition, prolonged market exposure may also be a pre-requisite to reimbursement or insurance coverage from third-party payors. If our cancer detection kits do not achieve an adequate level of acceptance by patients, healthcare professionals and third-party payors, we may not generate significant product revenues and we may not become profitable.

Our reliance on limited source suppliers could harm our ability to meet demand for our product in a timely manner or within budget.

We currently depend on a limited number of source suppliers for some of the components necessary for the production of our product. Our current suppliers have been able to supply the required quantities of such components to date. However, if the supply of these components is disrupted or terminated or if our current suppliers are unable to supply required quantities of components, we may not be able to find alternative sources for these key components in a timely manner. Although we are planning to maintain strategic inventory of key components, the inventory may not be sufficient to satisfy the demand for our products if such supply is interrupted or otherwise affected by catastrophic events. As a result, we may be unable to meet the demand for our cancer detection kits, which could harm our ability to generate revenues, lead to customer dissatisfaction and damage our reputation. If we are required to change the manufacturer of any of these key components, there may be a significant delay in locating a suitable alternative manufacturer. The delays associated with the identification of a new manufacturer could delay our ability to manufacture our cancer detection kits in a timely manner or within budget. Furthermore, in the event that the manufacturer of a key component of our cancer detection kits ceases operations or otherwise ceases to do business with us, we may not have access to the information necessary to enable another supplier to manufacture the component. The occurrence of any of these events could harm our ability to meet demand for our cancer detection kits in a timely manner or within budget.

The use of any of our cancer detection kits could result in product liability or similar claims that could have an adverse effect on our business, financial condition, results of operations and our reputation.

Our business exposes us to an inherent risk of potential product liability or similar claims related to the manufacturing, marketing and sale of medical devices. The medical device industry has historically been litigious, and we face financial exposure to product liability or similar claims if the use of our cancer detection kits were to cause or contribute to injury or death, including, without limitation, harm to the body caused by the procedure or inaccurate diagnoses from the procedure that could affect treatment options. There is also the possibility that defects in the design or manufacture of any of these products might necessitate a product recall. Although we plan to maintain product liability insurance, the coverage limits of these policies may not be adequate to cover future claims. In the future, we may be unable to maintain product liability insurance on acceptable terms or at reasonable costs and such insurance may not provide us with adequate coverage against potential liabilities. A product liability claim, regardless of merit or ultimate outcome, or any product recall could result in substantial costs to us, damage to our reputation, customer dissatisfaction and frustration, and a substantial diversion of management attention. A successful claim brought against us in excess of, or outside of, our insurance coverage could have a material adverse effect on our business, financial condition, results of operations and our reputation.

In addition, from time to time, we may become involved in various lawsuits and legal proceedings, which arise, in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. Our management is currently not aware of any such legal proceedings or claims that we believe will have a material adverse effect on our business, financial condition or operating results.

We are entering a potentially highly competitive market.

The diagnostic, pharmaceutical and biopharmaceutical industries are characterized by intense competition and rapid, significant technological changes. Many companies, research institutions and universities are conducting research and development in a number of areas similar to those that we focus on that could lead to the development of new products which could possibly compete with our own. Most of the companies against which we will compete have substantially greater financial, technical, manufacturing, marketing, distribution and other resources. A number of these companies may have or may develop technologies for developing products for detecting various cancers that could prove to be the same or even superior to ours. We expect technological developments in the diagnostic, pharmaceutical, biopharmaceutical and related fields to occur at a rapid rate, and we believe competition will intensify as advances in these fields are made.

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

We are highly dependent on the principal members of our management, research and development team and scientific staff. In order to implement our business strategy, we will need to retain our key personnel with expertise in the areas of research and development, clinical testing, government regulation, manufacturing, finance, marketing and sales. The inability to recruit and retain qualified personnel, or the loss of the services of our executive officers, without proper replacement, may impede the progress of our development and commercialization objectives.

Any disruption at our facility could materially adversely affect our business, financial condition and results of operations.

We take precautions to safeguard our facility, including obtaining insurance coverage and implementing health and safety protocols and off-site storage of computer data. However, a natural or other disaster, such as a fire, flood or an armed conflict involving Israel, as detailed further below, could damage or destroy our facility and our manufacturing equipment or inventory, cause substantial delays in our operations and otherwise cause us to incur additional unanticipated expenses. In addition, the insurance we maintain against fires, floods and other natural disasters may not be adequate to cover our losses in any particular case and it does not cover losses resulting from armed conflicts or terrorist attacks in Israel. Damage to our facility, our other property or to any of our suppliers, whether located in Israel or elsewhere, due to fire, a natural disaster or casualty event or an armed conflict, could materially adversely affect our business, financial condition and results of operations, with or without insurance.

We may face tax liability as a result of the Amarantus transaction.

On February 27, 2019, the Company entered into a joint venture agreement with Amarantus, pursuant to which the Company issued Ordinary Share representing 19.99% of the Company to Amarantus, in exchange for Amarantus transferring to the Company 19.99% of Breakthrough, a wholly owned subsidiary of Amarantus, and for Amarantus assigning its amended and restated license agreement with the University of Leipzig for an exclusive license to develop and commercialize the LymPro Test®, an immune-based neurodiagnostic blood test for the detection of Alzheimer's disease to Breakthrough. On April 14, 2019, the Company notified Amarantus of the Company's decision to exercise its option to acquire the remaining 80.01% of Breakthrough held by Amarantus in exchange for the issuance to Amarantus of Ordinary Shares of the Company representing an additional thirty percent (30%) of the Company, such that the Company will own 100% of Breakthrough, and Amarantus will own 49.99% of the Company. At the annual meeting of shareholders of the Company held on April 29, 2019, the Company's shareholders voteed on a resolution approving the Company's exercise of this option. To the extent that the value of the assets transferred to the Company in the transaction is not comparable to the value of the shares of the Company issued to Amarantus in this transaction, then the Company may face a tax liability.

Risks Related to Our Intellectual Property

We may not successfully maintain our existing license agreement with BGU and Soroka, and we are currently not in compliance with the repayment terms of the license agreement, which could adversely affect our ability to develop and commercialize our product candidates.

We rely on our existing License Agreement with B.G. Negev Technologies and Applications Ltd., an affiliate of BGU, and Mor Research Applications Ltd., an affiliate of Soroka, with respect to the development of our core cancer-screening technology, TBIA. We will rely on Breakthrough's license agreement with the University of Leipzig with respect to the development of our Alzheimer's detection technology. Our business also relies on establishing new collaborative and licensing arrangements in the future. Our failure to maintain our existing licenses, or to develop new collaborative and licensing arrangements in the future, could adversely affect our ability to develop and commercialize our products and could adversely affect our business prospects, financial condition or ability to develop and commercialize our products. With respect to our cancer-screening technology, we are not currently in compliance with the repayment terms of the License Agreement with our licensor, BG Negev. As such, we are currently negotiating an amendment to the License Agreement which would allow us to pay the abovementioned payments at a later date.

We may not be able to further establish or maintain such licensing and collaboration arrangements necessary to develop and commercialize our products. Even if we are able to maintain or establish licensing or collaboration arrangements, these arrangements may not be on favorable terms and may contain provisions that will restrict our ability to develop, test and market our product. Any failure to maintain or establish licensing or collaboration arrangements on favorable terms could adversely affect our business prospects, financial condition or ability to develop and commercialize our products.

Our license agreement contains provisions that could give rise to disputes regarding the rights and obligations of the parties. These and other possible disagreements could lead to termination of the agreement or delays in collaborative research, development, supply, or commercialization of certain products, or could require or result in litigation or arbitration. Moreover, disagreements could arise with our collaborators over rights to intellectual property or our rights to share in any of the future revenues of products developed by our collaborators. These kinds of disagreements could result in costly and time-consuming litigation. Any such conflicts with our collaborators could reduce our ability to obtain future collaboration agreements and could have a negative impact on our relationship with existing collaborators.

If we are unable to protect our intellectual property rights, our competitive position could be harmed.

Our success and ability to compete depends in large part upon our ability to protect our intellectual property. We face several risks and uncertainties in connection with our intellectual property rights, including, among others:

- pending and future patent applications may not result in the issuance of patents or, if issued, may not be issued in a form that will be advantageous to us;
- our issued patents may be challenged, invalidated or legally circumvented by third parties;
- our patents may not be upheld as valid and enforceable or prevent the development of competitive products;
- the eligibility of certain inventions related to diagnostic medicine, more specifically diagnostic methods and processes, for patent protection in the United States has been limited recently which may affect our ability to enforce our issued patents in the United States or may make it difficult to obtain broad patent protection going forward in the United States;
- for a variety of reasons, we may decide not to file for patent protection on various improvements or additional features; and
- intellectual property protection and/or enforcement may be unavailable or limited in some countries where laws or law enforcement practices may not protect our proprietary rights to the same extent as the laws of the United States, the European Union, or the EU, or Israel.

Consequently, our competitors could develop, manufacture and sell products that directly compete with our products, which could decrease our sales and diminish our ability to compete. In addition, competitors could attempt to develop their own competitive technologies that fall outside of our intellectual property rights. If our intellectual property does not adequately protect us from our competitors' products and methods, our competitive position could be materially adversely affected.

Because the medical device industry is litigious, we are susceptible to intellectual property suits that could cause us to incur substantial costs or pay substantial damages or prohibit us from selling our cancer detection kits.

There is a substantial amount of litigation over patent and other intellectual property rights in the medical device industry. Whether or not a product infringes a patent involves complex legal and factual considerations, the determination of which is often uncertain. Our management is presently unaware of any other parties' valid patents and proprietary rights which our evolving product designs would infringe. Searches typically performed to identify potentially infringed patents of third parties are often not conclusive and, because patent applications can take many years to issue, there may be applications now pending, which may later result in issued patents which our current or future products may infringe. In addition, our competitors or other parties may assert that our cancer detection kits and the methods employed may be covered by patents held by them. If any of our products infringes a valid patent, we could be prevented from manufacturing or selling such product unless we are able to obtain a license or able to redesign the product in such a manner as to avoid infringement. A license may not always be available or may require us to pay substantial royalties. We also may not be successful in any attempt to redesign our product to avoid infringement. Infringement and other intellectual property claims, with or without merit, can be expensive and time-consuming to litigate and could divert our management's attention from operating our business.

The steps we have taken to protect our intellectual property may not be adequate, which could have a material adverse effect on our ability to compete in the market.

In addition to filing patent applications, we rely on confidentiality, non-compete, non-disclosure and assignment of inventions provisions, as appropriate, in our agreements with our employees, consultants, and service providers, to protect and otherwise seek to control access to, and distribution of, our proprietary information. These measures may not be adequate to protect our intellectual property from unauthorized disclosure, third-party infringement or misappropriation, for the following reasons:

- the agreements may be breached, may not provide the scope of protection we believe they provide or may be determined to be unenforceable;
- we may have inadequate remedies for any breach;
- proprietary information could be disclosed to our competitors; or
- others may independently develop substantially equivalent or superior proprietary information and techniques or otherwise gain access to our trade secrets or disclose such technologies.

Specifically, with respect to non-compete agreements, we may be unable to enforce these agreements, in whole or in part, and it may be difficult for us to restrict our competitors from gaining the expertise that our former employees gained while working for us. If our intellectual property is disclosed or misappropriated, it could harm our ability to protect our rights and could have a material adverse effect on our business, financial condition and results of operations.

We may need to initiate lawsuits to protect or enforce our patents and other intellectual property rights, which could be expensive and, if we lose, could cause us to lose some of our intellectual property rights, which would harm our ability to compete in the market.

We rely on patents to protect a portion of our intellectual property and our competitive position. Patent law relating to the scope of claims in the technology fields in which we operate is still evolving and, consequently, patent positions in the medical device industry are generally uncertain. In order to protect or enforce our patent rights, we may initiate patent and related litigation against third parties, such as infringement suits or interference proceedings. Any lawsuits that we initiate could be expensive, take significant time and divert our management's attention from other business concerns and the outcome of litigation to enforce our intellectual property rights in patents, copyrights, trade secrets or trademarks is highly unpredictable. Litigation also puts our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing. In addition, we may provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, including attorney fees, if any, may not be commercially valuable. The occurrence of any of these events could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Regulations

If we or our future distributors do not obtain and maintain the necessary regulatory clearances or approvals in a specific country or region, we will not be able to market and sell our cancer detection kits or future products in that country or region.

We intend to market our cancer detection kits in a number of international markets. To be able to market and sell our cancer detection kits in a specific country or region, we or our distributors must comply with the regulations of that country or region. While the regulations of some countries do not impose barriers to marketing and selling part or all of our products or only require notification, others require that we or our distributors obtain the approval of a specified regulatory authority. These regulations, including the requirements for approvals and the time required for regulatory review, vary from country to country. Obtaining regulatory approvals is expensive and time-consuming, and we cannot be certain that we or our distributors will receive regulatory approvals for our cancer detection kits or any future products in each country or region in which we plan to market such products. If we modify our cancer detection kits or any future products, we or our distributors may need to apply for new regulatory approvals or regulatory authorities may need to review the planned changes before we are permitted to sell them.

The Medicines and Healthcare products Regulatory Agency, or MHRA, is the United Kingdom-based European Authority responsible for the issuance of CE Mark approval. In 2013, our regulatory authorized representative in Europe submitted an application to the MHRA for the CE Mark approval of our TBIA method. We obtained this approval on December 9, 2013 with the receipt of a Certificate of Conformance from our regulatory authorized representative in Europe. The European regulatory demands regarding IVD have recently been revised and major changes need to be made in order to keep our CE Mark. These changes need to be made until 2022. We may not meet the quality and safety standards required to maintain any authorizations we receive in the future or maintain the CE Certificate of Conformance that we have already received. If we or our distributors are unable to maintain our authorizations or CE Certificate of Conformance in a particular country or region, we will no longer be able to sell our cancer detection kits or any future products in that country or region, and our ability to generate revenues will be materially and adversely affected.

If we are unable to successfully complete clinical trials with respect to our cancer detection kits, we may be unable to receive regulatory approvals or clearances for our cancer detection kits and/or our ability to achieve market acceptance of our cancer detection kits will be harmed.

The development of cancer diagnostics typically includes pre-clinical studies. Certain other devices require the submission of data generated from clinical trials, which can be a long, expensive and uncertain process, subject to delays and failure at any stage. The data obtained from the studies and trials may be inadequate to support regulatory clearances or approvals, or to obtain third country approval equivalent to CE approval, or to allow market acceptance of the products being studied. Our cancer detection kits are currently undergoing clinical development.

We conducted clinical studies in cooperation with leading hospitals in Israel. A study with the Soroka (along with BGU) formed the basis of our methodology. We then conducted studies, with both Rabin Medical Center, or Rabin, and Kaplan Medical Center, or Kaplan, which focused on breast and colorectal cancers.

Currently, we are engaged in completing clinical trials at Kaplan Hospital and Beilinson Hospital concerning breast cancer and colorectal cancer that are required for product development. The data from these clinical trials may be used or required in order to obtain regulatory approvals for our products including for the purpose of seeking FDA approval.

As for the FDA, our products' intended use or other specifications that are under development today may not be accepted by the FDA. Under such circumstances, we may be required to change the intended use or specifications of our products, and be required to perform additional trials and provide new supportive material to the FDA.

We are an IVD company, developing proprietary technology which will analyze a blood sample to detect the presence of various cancers. Since we are not developing a drug, we believe that we will not need to submit an investigational new drug application to the FDA prior to conducting clinical trials in the U.S. We believe that we will only need institutional review board, or IRB, approval prior to conducting clinical trials in the U.S.

We expect that obtaining FDA approval for the marketing and selling of our products in the U.S. will take anywhere between two to four years and will cost us approximately $10 million to $15 million. As we do not have this amount of money, we would need to raise additional funds to perform clinical trials in the U.S. in order to receive FDA approval. If we are unable to raise such funds, we will not be able proceed with our efforts to obtain FDA approval. Inability to obtain FDA approval would significantly harm our viability as a company.

We estimate that we will need a "small pilot" clinical trial (less than 100 patients) to enable us to approach the FDA with the results and begin a dialogue with the FDA to seek the FDA's recommendation (not their approval) as to trial size and the protocols for future U.S. clinical trials. We plan to submit a formal application to the FDA for approval of the TBIA method after we have completed our clinical trials in the U.S.

Our intentions are to evaluate opening a Clinical Laboratory Improvement Amendments laboratory, or CLIA laboratory, and retain our product as a Laboratory Developed Test, or LDT, which are assays developed in the laboratory for internal use, in parallel to the FDA evaluation.

Further, any regulatory authority whose approval we will require in order to market and sell our products in any territory may require us to submit data on a greater number of patients than we originally anticipated and/or for a longer follow-up period or they may change the data collection requirements or data analysis applicable to our clinical trials.

The commencement or completion of any of our clinical studies or trials may be delayed or halted, or be inadequate to support regulatory clearance, approval or product acceptance, or to obtain local regulatory approvals in any country that we wish to sell our products, for numerous reasons, including, among others:

- patients do not enroll in the clinical trial at the rate we expect;
- patients do not comply with trial protocols;
- patient follow-up is not at the rate we expect;
- patients experience adverse side effects;
- patients die during a clinical trial, even though their death may be unrelated to our product;
- regulatory authorities do not approve a clinical trial protocol or a clinical trial, or place a clinical trial on hold;
- IRBs, Ethics Committees and third-party clinical investigators may delay or reject our trial protocol and Informed Consent Form;
- third-party clinical investigators decline to participate in a study or trial or do not perform a study or trial on our anticipated schedule or consistent with the investigator agreements, study or trial protocol, good clinical practices or FDA, IRBs, Ethics Committees, or other applicable requirements;
- third-party organizations such as the Contract Research Organization, do not perform data collection, monitoring and analysis in a timely or accurate manner or consistent with the study or trial protocol or investigational or statistical plans;
- regulatory inspections of our studies, trials or manufacturing facilities may require us to, among other things, undertake corrective action or suspend or terminate our studies or clinical trials;
- changes in governmental regulations or administrative actions;
- the interim or final results of the study or clinical trial are inconclusive or unfavorable as to safety or efficacy; and
- a regulatory agency or our notified body concludes that our trial design is or was inadequate to demonstrate different parameters of the assay.

The results of pre-clinical and clinical studies do not necessarily predict future clinical trial results, and predecessor clinical trial results may not be repeated in subsequent clinical trials. Additionally, any regulatory authority whose approval we will require in order to market and sell our products in any territory may disagree with our interpretation of the data from our pre-clinical studies and clinical trials, or may find the clinical trial design, conduct or results inadequate to demonstrate safety or efficacy, and may require us to pursue additional pre-clinical studies or clinical trials, which could further delay the clearance or approval of the sale of our products. The data we collect from our non-clinical testing, our pre-clinical studies and other clinical trials may not be sufficient to support regulatory approval.

If the third parties on which we rely to conduct our clinical trials and clinical development do not perform as contractually required or expected, we may not be able to obtain regulatory clearance or approval for, or commercialize, our cancer detection kits or future products.

We do not have the ability to independently conduct our clinical trials for our cancer detection kits and we must rely on third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct such trials. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if these third parties need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our pre-clinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory clearance for, or successfully commercialize, our cancer detection kits or future products on a timely basis, if at all, and our business, operating results and prospects may be adversely affected. Furthermore, our third-party clinical trial investigators may be delayed in conducting our clinical trials for reasons outside of their control.

The results of our clinical trials may not support our product claims or may result in the discovery of adverse side effects.

Even if our clinical trials are completed as planned, we cannot be certain that their results will support our product claims or that any regulatory authority whose approval we will require in order to market and sell our products in any territory will agree with our conclusions regarding them. Success in pre-clinical studies and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that clinical trials will replicate the results of prior trials and pre-clinical studies. The clinical trial process may fail to demonstrate that our cancer detection kits, or any future products, are safe and effective for the proposed indicated uses, which could cause us to abandon a product and may delay development of others. Any delay or termination of our clinical trials will delay the filing of our product submissions and, ultimately, our ability to commercialize our cancer detection kits, or any future products, and generate revenues. It is also possible that patients enrolled in clinical trials will experience adverse side effects that are not currently part of the product candidate's profile.

Our cancer detection kits may in the future be subject to product recalls that could harm our reputation, business and financial results.

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture. In the case of the FDA, the authority to require a recall must be based on an FDA finding that there is a reasonable probability that the device would cause serious injury or death. In addition, foreign governmental bodies have the authority to require the recall of our products in the event of material deficiencies or defects in design or manufacture. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Once marketed, recalls of any of our products, including our cancer detection kits, would divert managerial and financial resources and have an adverse effect on our business, financial condition and results of operations. The FDA requires that certain classifications of recalls be reported to the FDA within 10 working days after the recall is initiated. Companies are required to maintain certain records of recalls, even if they are not reportable to the FDA. We may initiate voluntary recalls involving our products in the future that we determine do not require us to notify the FDA. If the FDA disagrees with our determinations, they could require us to report those actions as recalls. A future recall announcement could harm our reputation with customers and negatively affect our sales. In addition, the FDA could take enforcement action against us based on our failure to report the recalls when they were conducted.

If we are unable to achieve reimbursement and coverage from third-party payors for laboratory tests using our cancer detection kits, or if reimbursement is insufficient to create an economic benefit for purchasing or using our cancer detection kits when compared to alternative tests, demand for our products may not grow at the rate we expect.

The demand for our cancer detection kits will depend significantly on the eligibility of the tests performed using our cancer detection kits for reimbursement through government-sponsored healthcare payment systems and private third-party payors. Reimbursement practices vary significantly from country to country and within some countries, by region, and we must obtain reimbursement approvals on a country-by-country and/or region-by-region basis. In general, the process of obtaining reimbursement and coverage approvals has been longer outside of the United States. We may not be able to obtain reimbursement approvals in a timely manner or at all and existing reimbursement and coverage policies may be revised from time to time by third-party payors. If physicians, hospitals and other healthcare providers are unable to obtain sufficient coverage and reimbursement from third-party payors for tests using our cancer detection kits, if reimbursement is, or is perceived by our customers to be, insufficient to create an economic incentive for purchasing or using our cancer detection kits, or if such reimbursement does not adequately compensate physicians and health care providers compared to the other tests they offer, demand for our products may not grow at the rate we expect.

Federal and state privacy laws, and equivalent laws of third countries, may increase our costs of operation and expose us to civil and criminal sanctions.

The Health Insurance Portability and Accountability Act of 1996, as amended, and the regulations that have been issued under it, or collectively HIPAA, and similar laws outside the United States, contain substantial restrictions and requirements with respect to the use and disclosure of individuals' protected health information. The HIPAA privacy rules prohibit "covered entities," such as healthcare providers and health plans, from using or disclosing an individual's protected health information, unless the use or disclosure is authorized by the individual or is specifically required or permitted under the privacy rules. Under the HIPAA security rules, covered entities must establish administrative, physical and technical safeguards to protect the confidentiality, integrity and availability of electronic protected health information maintained or transmitted by them or by others on their behalf. While we do not believe that we will be a covered entity under HIPAA, we believe many of our customers will be covered entities subject to HIPAA. Such customers may require us to enter into business associate agreements, which will obligate us to safeguard certain health information we obtain in the course of our relationship with them, restrict the manner in which we use and disclose such information and impose liability on us for failure to meet our contractual obligations.

In addition, under The Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, which was signed into law as part of the U.S. stimulus package in February 2009, certain of HIPAA's privacy and security requirements are now also directly applicable to "business associates" of covered entities and subject them to direct governmental enforcement for failure to comply with these requirements. We may be deemed as a "business associate" of some of our customers. As a result, we may be subject as a "business associate" to civil and criminal penalties for failure to comply with applicable privacy and security rule requirements. Moreover, HITECH created a new requirement obligating "business associates" to report any breach of unsecured, individually identifiable health information to their covered entity customers and imposes penalties for failing to do so.

In addition to HIPAA, most U.S. states have enacted patient confidentiality laws that protect against the disclosure of confidential medical information, and many U.S. states have adopted or are considering adopting further legislation in this area, including privacy safeguards, security standards, and data security breach notification requirements. These U.S. state laws, which may be even more stringent than the HIPAA requirements, are not preempted by the federal requirements, and we are therefore required to comply with them to the extent they are applicable to our operations.

These and other possible changes to HIPAA or other U.S. federal or state laws or regulations, or comparable laws and regulations in countries where we conduct business, could affect our business and the costs of compliance could be significant. Failure by us to comply with any of the standards regarding patient privacy, identity theft prevention and detection, and data security may subject us to penalties, including civil monetary penalties and in some circumstances, criminal penalties. In addition, such failure may damage our reputation and adversely affect our ability to retain customers and attract new customers.

The protection of personal data, particularly patient data, is subject to strict laws and regulations in many countries. The collection and use of personal health data in the EU is governed by the provisions of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, commonly known as the Data Protection Directive. The Directive imposes a number of requirements including an obligation to seek the consent of individuals to whom the personal data relates, the information that must be provided to the individuals, notification of data processing obligations to the competent national data protection authorities of individual EU Member States and the security and confidentiality of the personal data. The Data Protection Directive also imposes strict rules on the transfer of personal data out of the EU to the U.S. Failure to comply with the requirements of the Data Protection Directive and the related national data protection laws of the EU Member States may result in fines and other administrative penalties and harm our business. We may incur extensive costs in ensuring compliance with these laws and regulations, particularly if we are considered to be a data controller within the meaning of the Data Protection Directive.

Once we commercialize our product, if ever, security breaches, loss of data and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.

Once we commercialize our product, in the ordinary course of our business, it is highly likely that we and our third-party providers will collect and store sensitive data, including legally protected health information and personally identifiable information about patients, our healthcare provider customers and payors. We also may store sensitive intellectual property and other proprietary business information, including that of our customers and payors. We plan to manage and maintain our data utilizing a combination of on-site systems and cloud-based data center systems. This data will encompass a wide variety of business-critical information, including research and development information, commercial information and business and financial information.

We face four primary risks relative to protecting this critical information: loss of access risk, inappropriate disclosure risk, inappropriate modification risk and the risk of our being unable to identify and audit our controls over the first three risks.

We will be highly dependent on information technology networks and systems, including the Internet, to securely process, transmit and store this critical information. Security breaches of this infrastructure, including physical or electronic break-ins, computer viruses, attacks by hackers and similar breaches, can create system disruptions, shutdowns or unauthorized disclosure or modification of confidential information. The secure processing, storage, maintenance and transmission of this critical information will be vital to our operations and business strategy, and we plan to devote significant resources to protecting such information. Although we will take measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure, and that of our third-party providers, may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other disruptions.

A security breach or privacy violation that leads to disclosure or modification of or prevents access to consumer information (including personally identifiable information or protected health information) could harm our reputation, compel us to comply with disparate state breach notification laws, require us to verify the correctness of database contents and otherwise subject us to liability under laws that protect personal data, resulting in increased costs or loss of revenue. If we are unable to prevent such security breaches or privacy violations or implement satisfactory remedial measures, our operations could be disrupted, and we may suffer loss of reputation, financial loss and other regulatory penalties because of lost or misappropriated information, including sensitive consumer data. In addition, these breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above.

Any such breach or interruption could compromise our networks or those of our third-party providers, and the information stored there could be inaccessible or could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Any such interruption in access, improper access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, such as HIPAA, and regulatory penalties. Unauthorized access, loss or dissemination could also disrupt our operations, including our ability to perform tests, provide test results, bill payers or patients, process claims and appeals, provide customer assistance services, conduct research and development activities, collect, process and prepare company financial information, provide information about our current and future products and other patient and clinician education and outreach efforts through our website, and manage the administrative aspects of our business and damage our reputation, any of which could adversely affect our business. Any such breach could also result in the compromise of our trade secrets and other proprietary information, which could adversely affect our competitive position.

In addition, the interpretation and application of consumer, health-related, privacy and data protection laws in the U.S., the EU and elsewhere are often uncertain, contradictory and in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our practices. If so, this could result in government-imposed fines or orders requiring that we change our practices, which could adversely affect our business. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices and compliance procedures in a manner adverse to our business.

If we fail to comply with the U.S. federal Anti-Kickback Statute and similar state and third country laws, we could be subject to criminal and civil penalties and exclusion from federally funded healthcare programs including the Medicare and Medicaid programs and equivalent third country programs, which would have a material adverse effect on our business and results of operations.

A provision of the Social Security Act, commonly referred to as the federal Anti-Kickback Statute, prohibits the knowing and willful offer, payment, solicitation or receipt of any form of remuneration, directly or indirectly, in cash or in kind, to induce or reward the referring, ordering, leasing, purchasing or arranging for, or recommending the ordering, purchasing or leasing of, items or services payable, in whole or in part, by Medicare, Medicaid or any other federal healthcare program. Although there are a number of statutory exemptions and regulatory safe harbors to the federal Anti-Kickback Statute protecting certain common business arrangements and activities from prosecution or regulatory sanctions, the exemptions and safe harbors are drawn narrowly, and practices that do not fit squarely within an exemption or safe harbor may be subject to scrutiny. The federal Anti-Kickback Statute is very broad in scope and many of its provisions have not been uniformly or definitively interpreted by existing case law or regulations. In addition, most of the states have adopted laws similar to the federal Anti-Kickback Statute, and some of these laws are even broader than the federal Anti-Kickback Statute in that their prohibitions may apply to items or services reimbursed under Medicaid and other state programs or, in several states, apply regardless of the source of payment. Violations of the federal Anti-Kickback Statute may result in substantial criminal, civil or administrative penalties, damages, fines and exclusion from participation in federal healthcare programs.

All of our future financial relationships with U.S. healthcare providers, purchasers, formulary managers, and others who provide products or services to federal healthcare program beneficiaries will potentially be governed by the federal Anti-Kickback Statute and similar state laws. We believe our operations will be in compliance with the federal Anti-Kickback Statute and similar state laws. However, we cannot be certain that we will not be subject to investigations or litigation alleging violations of these laws, which could be time-consuming and costly to us and could divert management's attention from operating our business, which in turn could have a material adverse effect on our business. In addition, if our arrangements were found to violate the federal Anti-Kickback Statute or similar state laws, the consequences of such violations would likely have a material adverse effect on our business, results of operations and financial condition.

There are other federal and state laws that may affect our ability to operate, including the federal civil False Claims Act, which prohibits, among other things, individuals or entities from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment of government funds or knowingly making, using or causing to be made or used, a false record or statement material to an obligation to pay money to the government or knowingly concealing or knowingly and improperly avoiding, decreasing, or concealing an obligation to pay money to the federal government. Moreover, we may be subject to other federal false claim laws, including, among others, federal criminal healthcare fraud and false statement statutes that extend to non-government health benefit programs. Moreover, there are analogous state laws. Violations of these laws can result in substantial criminal, civil or administrative penalties, damages, fines and exclusion from participation in federal healthcare programs.

Similar restrictions are imposed by the national legislation of many third countries in which our medical devices will be marketed. Moreover, the provisions of the Foreign Corrupt Practices Act of 1997 and other similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from providing money or anything of value to officials of foreign governments, foreign political parties, or international organizations with the intent to obtain or retain business or seek a business advantage. Recently, there has been a substantial increase in anti-bribery law enforcement activity by U.S. regulators, with more aggressive and frequent investigations and enforcement by both the SEC and the Department of Justice. A determination that our operations or activities violated U.S. or foreign laws or regulations could result in imposition of substantial fines, interruption of business, loss of supplier, vendor or other third-party relationships, termination of necessary licenses and permits, and other legal or equitable sanctions. In addition, lawsuits brought by private litigants may also follow as a consequence.

Risks Related to Our Operations in Israel

Exchange rate fluctuations between the U.S. dollar, the NIS and the Euro and inflation may negatively affect our earnings and we may not be able to hedge our currency exchange risks successfully.

The U.S. dollar is our functional and reporting currency. However, a significant portion of our operating expenses, including personnel and facilities related expenses, are incurred in NIS. As a result, we are exposed to the risks that the NIS may appreciate relative to the U.S. dollar, or, if the NIS instead devalues relative to the U.S. dollar, that the inflation rate in Israel may exceed such rate of devaluation of the NIS, or that the timing of such devaluation may lag behind inflation in Israel. In any such event, the dollar cost of our operations in Israel would increase and our dollar-denominated results of operations would be adversely affected. In addition, we expect to incur operating expenses denominated in various currencies, and therefore, our operating results are also subject to fluctuations due to changes in the various exchange rates. Given our general lack of currency hedging arrangements to protect us from fluctuations in the exchange rates of the NIS, the Euro and other foreign currencies in relation to the U.S. dollar (and/or from inflation of such foreign currencies), we may be exposed to material adverse effects from such movements. We cannot predict any future trends in the rate of inflation in Israel or the rate of devaluation (if any) of the NIS against any other currency.

Our principal offices, research and development facilities and some of our suppliers are located in Israel and, therefore, our business, financial condition and results of operation may be adversely affected by political, economic and military instability in Israel.

We are incorporated under Israeli law and our principal executive offices are located in Israel. In addition, all of our employees and officers, and most of our directors, are residents of Israel. Accordingly, political, economic and military conditions in Israel may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring Arab countries, the Hamas (an Islamist militia and political group that has historically controlled the Gaza strip) and the Hezbollah (an Islamist militia and political group based in Lebanon). Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations. Ongoing and revived hostilities or other Israeli political or economic factors, such as, an interruption of operations at the Tel Aviv airport, could prevent or delay shipments of our components or products. If continued or resumed, these hostilities may negatively affect business conditions in Israel in general and our business in particular. In the event that hostilities disrupt the ongoing operation of our facilities or the airports and seaports on which we depend to import and export our supplies and product candidates, our operations may be materially adversely affected.

In addition, instability in the region may lead to deterioration in the political and trade relationships that exist between the State of Israel and certain other countries. Any armed conflicts, terrorist activities or political instability in the region could adversely affect business conditions, could harm our results of operations and could make it more difficult for us to raise capital. Parties with whom we do business may sometimes decline to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements when necessary in order to meet our business partners face to face. Several countries, principally in the Middle East, 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. Similarly, Israeli companies are limited in conducting business with entities from several countries. For instance, in 2008, the Israeli legislature passed a law forbidding any investments in entities that transact business with Iran. In addition, the political and security situation in Israel may result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in such agreements.

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

Furthermore, in the past, the State of Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on our operating results, financial conditions or the expansion of our business. Similarly, Israeli corporations are limited in conducting business with entities from several countries.

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

The rights and responsibilities of the holders of our Ordinary Shares are governed by our articles of association, as most recently amended on March 16, 2017, or the Amended Articles, and by Israeli law. These rights and responsibilities differ in some material respects from the rights and responsibilities of shareholders in 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 a general meeting of shareholders on matters such as amendments to a company's articles of association, increases in a company's authorized share capital, mergers and acquisitions and related party transactions requiring shareholder approval. In addition, a shareholder who is aware that it possesses the power to determine the outcome of a shareholder vote or to appoint or prevent the appointment of a director or executive officer in the company has a duty of fairness toward the company. There is limited case law available to assist us in understanding the nature of this duty or the implications of these provisions. These provisions may be interpreted to impose additional obligations and liabilities on holders of our Ordinary Shares that are not typically imposed on shareholders of U.S. corporations.

It may be difficult to enforce a judgment of a U.S. court against us, our officers and directors in Israel or the United States, to assert U.S. securities laws claims in Israel or to serve process on our officers and directors.

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

Provisions of Israeli law and our Amended Articles may delay, prevent or otherwise impede a merger with, or an acquisition of, us, even when the terms of such a transaction are favorable to us and our shareholders.

Israeli corporate law regulates mergers, requires tender offers for acquisitions of shares above specified thresholds, requires special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to such types of transactions. For example, a tender offer for all of a company's issued and outstanding shares can only be completed if the acquirer receives positive responses from the holders of at least 95% of the issued share capital and the approval of a majority of the offerees that do not have a personal interest in the tender offer, unless at least 98% of the company's outstanding shares are tendered. Furthermore, the shareholders, including those who indicated their acceptance of the tender offer (unless the acquirer stipulated in its tender offer that a shareholder that accepts the offer may not seek appraisal rights), may, at any time within six months following the completion of the tender offer, petition an Israeli court to alter the consideration for the acquisition. In addition, a merger may not be consummated unless at least 50 days have passed from the date on which a proposal for approval of the merger was filed by each party with the Israeli Registrar of Companies and at least 30 days have passed from the date on which the merger was approved by the shareholders of each party. See "*Description of Share Capital – Acquisitions Under Israeli Law*" for additional information.

Furthermore, Israeli tax considerations may make potential transactions unappealing to us or to our shareholders whose country of residence does not have a tax treaty with Israel exempting such shareholders from Israeli tax. For example, Israeli tax law does not recognize tax-free share exchanges to the same extent as U.S. tax law. With respect to mergers, Israeli tax law allows for tax deferral in certain circumstances but makes the deferral contingent on the fulfillment of a number of conditions, including, in some cases, a holding period of two years from the date of the transaction during which sales and dispositions of shares of the participating companies are subject to certain restrictions. 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 disposition of the shares has occurred.

We received Israeli government grants for certain of our research and development activities. The terms of those grants may require us to pay royalties and to satisfy specified conditions in order to manufacture products and transfer technologies outside of Israel. We may be required to pay penalties in addition to repayment of the grants.

From inception through December 31, 2018, we have been awarded an aggregate of approximately $272,237 in the form of grants from Israel Innovation Authority, or the IIA, formerly known as Israel's Office of the Chief Scientist of the Ministry of Economy. The requirements and restrictions for such grants are found in the Israeli Encouragement of Research and Development Law, 5744-1984 and the regulations, or the Research Law. Under the Research Law, royalties of 3% to 5% on the revenues derived from sales of products or services developed in whole or in part using these IIA grants are payable to the Israeli government. We developed our technologies, at least in part, with funds from these grants, and accordingly we would be obligated to pay these royalties on sales of any of our product candidates that achieve regulatory approval. The maximum aggregate royalties paid generally cannot exceed 100% of the grants made to us, plus annual interest equal to the 12-month LIBOR applicable to dollar deposits, as published on the first business day of each calendar year. As of December 31, 2018, we had not paid any royalties to the IIA. In 2018, we did not receive a grant from the IIA. When a company develops know-how, technology or products using IIA grants, the terms of these grants and the Research Law restrict the transfer of such know-how, and the transfer of manufacturing or manufacturing rights of such products, technologies or know-how outside of Israel, without the prior approval of the IIA. Therefore, the discretionary approval of an IIA committee would be required for any transfer to third parties inside or outside of Israel of know-how or manufacturing or manufacturing rights related to those aspects of such technologies. We may not receive those approvals. Furthermore, the IIA may impose certain conditions on any arrangement under which it permits us to transfer technology or development out of Israel

The transfer of IIA-supported technology or know-how outside of Israel may involve the payment of significant amounts, depending upon the value of the transferred technology or know-how, our research and development expenses, the amount of IIA support, the time of completion of the IIA-supported research project and other factors. These restrictions and requirements for payment may impair our ability to sell or otherwise transfer our technology assets outside of Israel or to outsource or transfer development or manufacturing activities with respect to any product or technology outside of Israel. Furthermore, the consideration available to our shareholders in a transaction involving the transfer outside of Israel of technology or know-how developed with IIA funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay to the IIA.

These restrictions will continue to apply even after we have repaid the full amount of royalties on the grants. For the years ended December 31, 2016, 2017, and 2018, we recorded grants totaling $166,046, $0, and $0 from the IIA, respectively. The grants represented 34%, 0%, and 0%, respectively, of our gross research and development expenditures for the years ended December 31, 2016, 2017, and 2018.

Risks Related to Our Ordinary Shares, the Warrants and this Offering

An active trading market for our Ordinary Shares and warrants may not develop and our shareholders may not be able to resell their Ordinary Shares.

Although our Ordinary Shares are quoted on the OTCQB, an active trading market for our Ordinary Shares has not developed. Although we are in the process of applying to have our ordinary shares and warrants listed on The Nasdaq Capital Market, an active trading market for our shares may never develop or be sustained following this offering. We cannot predict the extent to which an active market for our ordinary shares or warrants will develop or be sustained after the listing of such securities on Nasdaq. If an active market for our ordinary shares or warrants does not develop, it may be difficult for you to sell securities you purchase in this offering without depressing the market price for the shares or warrants, or at all.

Future issuance of our Ordinary Shares could dilute the interests of existing shareholders.

We may issue additional Ordinary Shares in the future. The issuance of a substantial number of Ordinary Shares could have the effect of substantially diluting the interests of our shareholders. In addition, the sale of a substantial amount of Ordinary Shares in the public market, in the initial issuance, in a situation in which we acquire a company and the acquired company receives Ordinary Shares as consideration and the acquired company subsequently sells its Ordinary Shares, or by investors who acquired such Ordinary Shares in a private placement, could have an adverse effect on the market price of our Ordinary Shares.

We have a significant number of options and warrants outstanding, and while these options and warrants are outstanding, it may be more difficult to raise additional equity capital.

As of March 31, 2019, we had outstanding options and warrants to purchase 1,758,315 and 4,730,906 Ordinary Shares, respectively. In addition, in connection with our recent bridge financing transaction, we have issued warrants for the purchase of Ordinary Shares, with the actual number of warrants to be determined following the closing of this offering. The holders of these options and warrants are given the opportunity to profit from a rise in the market price of our Ordinary Shares. We may find it more difficult to raise additional equity capital while these options and warrants are outstanding. At any time during which these warrants are likely to be exercised, we may be unable to obtain additional equity capital on more favorable terms from other sources. Additionally, the exercise of these options and warrants will cause the increase of our outstanding Ordinary Shares, which could have the effect of substantially diluting the interests of our current shareholders.

Sales of a substantial number of shares of our ordinary shares in the public market by our existing shareholders could cause our share price to fall.

Sales of a substantial number of shares of our ordinary shares in the public market, or the perception that these sales might occur, could depress the market price of our ordinary shares and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our ordinary shares. All of the shares owned by our directors, officers and shareholders that own over 5% of our ordinary shares on a fully diluted basis are subject to lock-up agreements with the underwriters of this offering that restrict such shareholders' ability to transfer our ordinary shares for at least six months from the date of this prospectus. All of our outstanding shares held by our directors, officers and shareholders that own over 5% of our ordinary shares on a fully diluted basis will become eligible for unrestricted sale upon expiration of the lockup period, as described in the sections of this prospectus entitled "*Shares Eligible for Future Sale*" and "*Underwriting*." In addition, shares issued or issuable upon exercise of options and warrants vested as of the expiration of the lock-up period will be eligible for sale at that time. Sales of shares by these shareholders could have a material adverse effect on the trading price of our ordinary shares. We intend to register the offering, issuance, and sale of all ordinary shares that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "*Underwriting*" section of this prospectus. Also, we have granted "piggyback" registration rights to the holders of the convertible debt securities we issued during the first quarter of fiscal 2019, giving such holders the right to include the resale of our ordinary shares issuable to them upon conversion of the convertible debt securities in any registration statement we file, other than the registration statement of which this prospectus forms a part and any registration statements filed on Form S-8. Upon the effectiveness of such future registration statement, the holders of piggyback registration rights will be able to freely sell their ordinary shares in the public market without restriction, which sales could materially and adversely affect the trading price of our ordinary shares.

We are an Emerging Growth Company, which may reduce the amount of information available to investors.

The Jumpstart Our Business Start-ups Act, or the JOBS Act, and our status as a foreign private issuer will allow us to postpone the date by which we must comply with some of the laws and regulations intended to protect investors and to reduce the amount of information we provide in our reports filed with the SEC, which could undermine investor confidence in our company and adversely affect the market price of our Ordinary Shares.

For as long as we remain an "emerging growth company" as defined in the JOBS Act, we intend to take advantage of certain exemptions from various requirements that are applicable to public companies that are not emerging growth companies including:

- the provisions of the Sarbanes-Oxley Act requiring that our independent registered public accounting firm provide an attestation report on the effectiveness of our internal control over financial reporting;

- Section 107 of the JOBS Act, which provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. This means that an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We may elect to delay such adoption of new or revised accounting standards. As a result of this adoption, our financial statements may not be comparable to companies that comply with the public company effective date; and

- any rules that may be adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation or a supplement to the auditor's report on the financial statements.

We intend to take advantage of these exemptions until we are no longer an "emerging growth company." We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) ending on December 31, 2022, (b) in which we have total annual gross revenue of at least $1.07 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our Ordinary Shares that is held by non-affiliates exceeds $700 million as of the prior June 30, and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

We cannot predict if investors will find our Ordinary Shares less attractive because we may rely on these exemptions. If some investors find our Ordinary Shares less attractive as a result, there may be a less active trading market for our Ordinary Shares, and our share price may be more volatile and may decline.

We are a foreign private issuer and, as a result, we are not subject to U.S. proxy rules and are subject to reporting obligations that, to some extent, are more lenient and less frequent than those applicable to a U.S. issuer.

Because we qualify as a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the Exchange Act that are applicable to U.S. publicly reporting companies, including (i) the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act, (ii) the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time, and (iii) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q containing unaudited financial and other specified information, or current reports on Form 8-K, upon the occurrence of specified significant events. In addition, while U.S. domestic issuers that are not large accelerated filers or accelerated filers are required to file their annual reports on Form 10-K within 90 days after the end of each fiscal year, foreign private issuers are not required to file their annual report on Form 20-F until 120 days after the end of each fiscal year. Foreign private issuers are also exempt from the Regulation Fair Disclosure, aimed at preventing issuers from making selective disclosures of material information.

We have never paid cash dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our Ordinary Shares will likely depend on whether the price of our Ordinary Shares increases, which may not occur.

We have not paid cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the Israeli Companies Law 5759-1999, or the Companies Law, imposes restrictions on our ability to declare and pay dividends. As a result, capital appreciation, if any, of our Ordinary Shares will be your sole source of gain for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from your investment in our Ordinary Shares if the price of our Ordinary Shares increases beyond the price in which you originally acquired the Ordinary Shares.

The potential future application of the SEC's "penny stock" rules to our Ordinary Shares could limit trading activity in the market, and our shareholders may find it more difficult to sell their shares.

If our Ordinary Shares trade at less than $5.00 per share we will be subject to the SEC's penny stock rules. Penny stocks generally are equity securities with a price of less than $5.00. Penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document that provides information about penny stocks and the risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer's account. The broker-dealer must also make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These requirements may have the effect of reducing the level of trading activity, if any, in the secondary market for a security that becomes subject to the penny stock rules. The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from effecting transactions in our securities, which could severely limit their market price and liquidity of our securities. These requirements may restrict the ability of broker-dealers to sell our Ordinary Shares and may affect our shareholders' ability to resell their Ordinary Shares.

In the event a market develops for our Ordinary Shares, the market price of our Ordinary Shares may be volatile.

In the event a market develops for our Ordinary Shares, the market price of our Ordinary Shares may be highly volatile. Some of the factors that may materially affect the market price of our Ordinary Shares are beyond our control, such as changes in financial estimates by industry and securities analysts, conditions or trends in the industry in which we operate or sales of our Ordinary Shares. These factors may materially adversely affect the market price of our Ordinary Shares, regardless of our performance. In addition, the public stock markets have experienced extreme price and trading volume volatility. This volatility has significantly affected the market prices of securities of many companies for reasons frequently unrelated to the operating performance of the specific companies. These broad market fluctuations may adversely affect the market price of our Ordinary Shares.

Our executive officers, directors and principal shareholders will maintain the ability to exert significant control over matters submitted to our shareholders for approval.

Assuming the sale by us of 24,000,000 units in this offering (or 27,600,000 units if the underwriters exercise their option to purchase additional shares in full), and assuming the formal closing of the Amarantus transaction, our executive officers, directors and principal shareholders (in particular, Amarantus) who owned more than 5% of our outstanding ordinary shares before this offering will, in the aggregate, beneficially own shares representing approximately 55.58% (or 54.5% if the underwriters exercise in full their option to purchase additional units, ordinary shares and/or warrants) of our share capital following the completion of this offering. Amarantus, which will own approximately 49.99% of our outstanding ordinary shares prior to this offering assuming the formal closing of the Amarantus transaction, will beneficially own shares representing approximately 43.38% (or 42.54% if the underwriters exercise in full their option to purchase additional units, ordinary shares and/or warrants) of our share capital following the completion of this offering. As a result, if these shareholders were to act together, they would be able to control all matters submitted to our shareholders for approval, as well as our management and affairs. For example, these persons, if they act together, would control the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of voting power could delay or prevent an acquisition of our company on terms that other shareholders may desire or result in management of our company that our public shareholders disagree with.

If you purchase our ordinary shares in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The public offering price of the units offered by us in this offering will be substantially higher than the net tangible book value per share of our ordinary shares. Therefore, if you purchase units in this offering, you will pay a price per unit that substantially exceeds our net tangible book value per share after this offering. To the extent outstanding options and warrants are exercised, you will incur further dilution. Based on the public offering price of $ per unit, you will experience immediate dilution of $ per share, representing the difference between our as adjusted net tangible book value per share after giving effect to this offering at the assumed initial public offering price. In addition, purchasers of units in this offering will have contributed approximately % of the aggregate price paid by all purchasers of our shares but will own only approximately % of our ordinary shares outstanding after this offering.

You may experience dilution of your ownership interest due to the issuance of additional ordinary shares upon the conversion of our convertible debt, especially since our convertible debt has fluctuating conversion rates that are set at a discount to market prices of our ordinary shares during the period immediately preceding conversion.

We have raised approximately $1.6 million in financing through the issuance of convertible debt. While our intent is to repay these convertible loans from the proceeds from this offering, in the event we do not repay our convertible debt prior to the maturity date for these loans, the lenders may choose to convert their loans, which are convertible into ordinary shares of the Company after the maturity date at a conversion price equal to 70% of the average closing bid price of the Company's Ordinary Shares in the five days prior to the conversion. In the event the Company defaults under the loan agreement, the conversion price will be reduced to 60% of the average closing bid price of the Company's Ordinary Shares in the 15 days prior to the conversion. This could result in material dilution to existing shareholders of the Company. Because the conversion price is based upon the trading prices of our ordinary shares at the time of conversion, the number of ordinary shares into which the convertible debt may be converted may increase without an upper bound. If the trading prices of our common shares are low when the conversion price of the convertible debt is determined, we would be required to issue a greater number of ordinary shares to the converting debtholder, which could cause substantial dilution to our shareholders. In addition, if any or all of the holders of our convertible debt convert and then sell our common stock, this could result in an imbalance of supply and demand for our common stock and reduce our stock price. The further our stock price declines, the further the adjustment of the conversion price will fall and the greater the number of ordinary shares we will have to issue upon conversion, resulting in further dilution to our shareholders. Because a market price-based conversion formula can lead to dramatic stock price reductions and corresponding negative effects on both a company and its shareholders, convertible security financings with market price-based conversion ratios have colloquially been called "floorless," "toxic," "death spiral," and "ratchet" convertibles.

The trading price of our ordinary shares may be reduced as a result of our grant of registration rights.

We have granted the lenders who participated in our convertible bridge loan financing with piggyback registration rights. This mean that they will have the right to require us to register their shares for resale under the Securities Act in the event we file a registration statement with the SEC following the filing of the Registration Statement on Form F-1 of which this prospectus forms a part. Registration of those shares for resale under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of such registration. Any sales of the registered securities by these shareholders could adversely affect the trading price of our ordinary shares.

Our management will have broad discretion in the use of the net proceeds from this offering and may allocate the net proceeds from this offering in ways that you and other shareholders may not approve.

Our management will have broad discretion in the use of the net proceeds, including for any of the purposes described in the section titled "*Use of Proceeds*," and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. The failure of our management to use these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities and depositary institutions. These investments may not yield a favorable return to our shareholders.

The warrants to be issued to investors in this offering are speculative in nature.

The warrants to be issued to investors in this offering do not confer any rights of ordinary share ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to purchase ordinary shares at $ per ordinary share for a limited period of time. There can be no assurance that the fair market value of our ordinary shares will ever equal or exceed the exercise price of the warrants, and consequently, whether it will ever be profitable for holders of the warrants to exercise the warrants.

If we are or become classified as a passive foreign investment company, our U.S. shareholders may suffer adverse tax consequences as a result.

Generally, for any taxable year, if at least 75% of our gross income is passive income, or at least 50% of the value of our assets is attributable to assets that produce passive income or are held for the production of passive income, including cash, we would be characterized as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes. For purposes of these tests, passive income includes dividends, interest gains from commodities and securities transactions, the excess of gains over losses from the disposition of assets which produce passive income (including amounts derived by reason of the temporary investment of funds raised in offerings of our shares) and rents and royalties other than rents and royalties which are received from unrelated parties in connection with the active conduct of a trade or business. If we are characterized as a PFIC, our U.S. shareholders 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, and having interest charges apply to distributions by us and gains from the sales of our shares.

Our status as a PFIC will depend on the nature and composition of our income and the nature, composition and value of our assets (which, assuming we are not a "controlled foreign corporation," or a CFC, under Section 957(a) of the Internal Revenue Code of 1986, as amended, or the Code, for the year being tested, may be determined based on the fair market value of each asset, with the value of goodwill and going concern value determined in large part by reference to the market value of our common shares, which may be volatile). Our status may also depend, in part, on how quickly we utilize the cash proceeds from this offering in our business. Based upon the value of our assets, including any goodwill, and the nature and composition of our income and assets, we do not believe that we were classified as a PFIC for the taxable year ended December 31, 2018 and we do not believe that we will be classified as a PFIC for the taxable year ending December 31, 2019 or in the immediately foreseeable future. Because the determination of whether we are a PFIC for any taxable year is a factual determination made annually after the end of each taxable year, there can be no assurance that we will not be considered a PFIC in any taxable year. Accordingly, our legal counsel expresses no opinion with respect to our PFIC status for our taxable year ended December 31, 2018, and also expresses no opinion with regard to our expectations regarding our PFIC status in the future.

The tax consequences that would apply if we are classified as a PFIC would also be different from those described above if a U.S. shareholder were able to make a valid qualified electing fund, or QEF, election. At this time, we do not expect to provide U.S. shareholders with the information necessary for a U.S. shareholder to make a QEF election. Prospective investors should assume that a QEF election will not be available.

The intended tax effects of our corporate structure and intercompany arrangements depend on the application of the tax laws of various jurisdictions and on how we operate our business.

Significant judgment is required in evaluating our tax positions and determining our provision for income taxes. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. For example, our effective tax rates could be adversely affected by changes in foreign currency exchange rates or by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations. As we intend to operate in numerous countries and taxing jurisdictions, the application of tax laws can be subject to diverging and sometimes conflicting interpretations by tax authorities of these jurisdictions. It is not uncommon for taxing authorities in different countries to have conflicting views, for instance, with respect to, among other things, the manner in which the arm's length standard is applied for transfer pricing purposes, or with respect to the valuation of intellectual property. In addition, tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. For example, on December 22, 2017, the Tax Cuts and Jobs Act was enacted, which introduced a comprehensive set of tax reforms. We continue to assess the impact of such tax reform legislation on our business and may determine that changes to our structure, practice or tax positions are necessary in light of the Tax Cuts and Jobs Act. Certain impacts of this legislation have been taken into account in our financial statements, including the reduction of the U.S. corporate income tax rate from the previous 35 percent to 21 percent. The Tax Cuts and Jobs Act in conjunction with the tax laws of other jurisdictions in which we operate, however, may require consideration of changes to our structure and the manner in which we conduct our business. Such changes may nevertheless be ineffective in avoiding an increase in our consolidated tax liability, which could adversely affect our financial condition, results of operations and cash flows.

If tax authorities in any of the countries in which we operate were to successfully challenge our transfer prices as not reflecting arms' length transactions, they could require us to adjust our transfer prices and thereby reallocate our income to reflect these revised transfer prices, which could result in a higher tax liability to us. In addition, if the country from which the income is reallocated does not agree with the reallocation, both countries could tax the same income, potentially resulting in double taxation. If tax authorities were to allocate income to a higher tax jurisdiction, subject our income to double taxation or assess interest and penalties, it would increase our consolidated tax liability, which could adversely affect our financial condition, results of operations and cash flows.

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

Some of our operations in Israel may entitle us to certain tax benefits under the Law for the Encouragement of Capital Investments, 5719-1959, or the Investment Law, once we begin to produce revenue. If we do not meet the requirements for maintaining these benefits, they may be reduced or cancelled and the relevant operations would be subject to Israeli corporate tax at the standard rate, which is set at 23% in 2018 and thereafter. In addition to being subject to the standard corporate tax rate, we could be required to refund any tax benefits that we will receive, plus interest and penalties thereon. Even if we continue to meet the relevant requirements, the tax benefits that our current "Preferred Enterprise" is entitled to may not be continued in the future at their current levels or at all. If these tax benefits were reduced or eliminated, the amount of taxes that we will pay would likely increase, as all of our operations would consequently be subject to corporate tax at the standard rate, which could adversely affect our results of operations. Additionally, if we increase our activities outside of Israel, for example, by way of acquisitions, our increased activities may not be eligible for inclusion in Israeli tax benefits programs.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they adversely change their recommendations or publish negative reports regarding our business or our shares, our share price and trading volume could decline.

The trading market for our ordinary shares will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. We do not have any control over these analysts, and we cannot provide any assurance that analysts will cover us or provide favorable coverage. If any of the analysts who may cover us adversely change their recommendation regarding our shares, or provide more favorable relative recommendations about our competitors, our share price would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Some discussions in this prospectus may contain forward-looking statements that involve risks and uncertainties. These statements relate to future events or future financial performance. A number of important factors could cause our actual results to differ materially from those expressed in or implied by any forward-looking statements made by us in this prospectus. Forward-looking statements are often identified by words like: "believe," "expect," "estimate," "anticipate," "intend," "project," "may," "will," "should," "plans," "predicts," "potential" or "continue" or the negative of these terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks in the section titled "*Risk Factors*" beginning on page 7, that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. In addition, you are directed to factors discussed in the "*Description of Business*" section beginning on page 39, the "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" section beginning on page 32, as well as those discussed elsewhere in this prospectus.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, or achievements. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to actual results.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of ordinary shares in this offering will be approximately $ million, after deducting the estimated underwriting discount and estimated offering expenses payable by us, based on the public offering price of $ per unit. If the underwriters exercise their option in full to purchase up to an additional 3,600,000 units, up to 3,600,000 additional ordinary shares or up to an additional 7,200,000 warrants, we estimate that the net proceeds to us from this offering will be approximately $ million, after deducting the estimated underwriting discount and estimated offering expenses payable by us. This amount does not include the proceeds that we may receive in connection with the exercise of the warrants included in the units. We cannot predict when or if the warrants will be exercised, and it is possible that the warrants will expire and never be exercised.

We intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, available for sale and short-term deposits, as follows:

- approximately $1.8 million to repay the outstanding convertible bridge loans;
- approximately $ million to fund further research and development, clinical trials, and commercialization of our cancer screening and diagnosis products and our blood tests for the early detection of neurodegenerative disorders, such as Alzheimer's disease;
- the balance for other general corporate purposes, including general and administrative expenses and working capital.

We may also use a portion of the net proceeds from this offering to acquire or invest in complementary products, technologies or businesses, although we have no present agreements or commitments to do so.

Although we currently anticipate that we will use the net proceeds from this offering as described above, there may be circumstances where a reallocation of funds is necessary. Due to the uncertainties inherent in the clinical development and regulatory approval process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for any of the above purposes on a stand-alone basis. Amounts and timing of our actual expenditures will depend upon a number of factors, including our sales, marketing and commercialization efforts, regulatory approval and demand for our product candidates, operating costs and other factors described under "*Risk Factors*" in this prospectus. Accordingly, our management will have flexibility in applying the net proceeds from this offering. An investor will not have the opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use the proceeds.

Based on our current plans, we believe that the net proceeds from this offering together with our existing cash and cash equivalents, available-for-sale financial assets and short-term deposits will be sufficient to enable us to commercialize our breast cancer screening products, further develop our colon cancer screening product, and develop our LymPro assay for the detection of neurodegenerative disorders. We have based this estimate on assumptions that may prove to be incorrect, and we could use our available capital resources sooner than we currently expect.

Pending our application of the net proceeds from this offering, we plan to invest such proceeds in in short-term, investment-grade, interest-bearing securities and depositary institutions.

DILUTION

If you invest in our securities in this offering, your interest will be immediately diluted to the extent of the difference between the public offering price per unit in this offering and the as further adjusted net tangible book value per ordinary share after this offering. Dilution results from the fact that the public offering price per ordinary share and corresponding warrant is substantially in excess of the net tangible book value per ordinary share. As of December 31, 2018, we had a historical net tangible book value of $(1.2 million), or $(0.0168) per ordinary share. Our net tangible book value per share represents total tangible assets less total liabilities, divided by the number of ordinary shares outstanding on December 31, 2018.

After giving effect to the sale of ordinary shares and warrants in this offering at the public offering price of $ per ordinary share and corresponding warrant (attributing none of the combined public offering price to the warrants offered hereby), after deducting the estimated underwriting discount and estimated offering expenses and after adjusting for the issuance of additional ordinary shares to Amarantus upon the formal closing of the Amarantus transaction, our as adjusted net tangible book value at December 31, 2018 would have been $ per share. This represents an immediate increase in as adjusted net tangible book value of $ per share to existing shareholders and immediate dilution of $ per ordinary share to new investors.

The following table illustrates this dilution per ordinary share:

Public offering price per unit		$
Historical net tangible book value per ordinary share as of December 31, 2018	$ (0.0168)	
Increase in as adjusted net tangible book value per ordinary share	$	
As adjusted net tangible book value per ordinary share after this offering		$
Dilution per ordinary share to new investors participating in this offering		$

If the underwriters exercise in full their option to purchase additional units, ordinary shares and/or warrants, the as adjusted net tangible book value will increase to $ per ordinary share, representing an immediate increase in as adjusted net tangible book value to existing shareholders of $ per ordinary share and an immediate dilution of $ per ordinary share to new investors participating in this offering. The foregoing table and calculations assume that the warrants sold in the offering are not exercised.

We may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our equity holders.

The following table shows, as of December 31, 2018, on an as-adjusted basis, the number of ordinary shares purchased from us, the total consideration paid to us and the average price paid per share by existing shareholders and by new investors purchasing ordinary shares in this offering at the public offering price of $ per ordinary share, before deducting the estimated underwriting discount and estimated offering expenses payable by us:

(in thousands, except share and per share amounts and percentages)	**Shares Subscribed for/Purchased**		**Total Consideration**		**Average Price per Share**
	Number	**Percent**	**Number**	**Percent**	
Existing shareholders (Dec. 31, 2018)	72,399,932	75.1%	$	%	$
Investors participating in this offering*	24,000,000	24.9%			
Total	96,399,932	100%	$	100.0%	

* Before deducting estimated offering expenses

DIVIDEND POLICY

We have not declared or paid any dividend since inception on our ordinary shares. We do not anticipate that we will declare or pay dividends in the foreseeable future on our ordinary shares. Instead, we anticipate that all of our earnings will be used for the operation and growth of our business. Any future determination to declare cash dividends would be subject to the discretion of our board of directors and would depend upon various factors, including our results of operations, financial condition and liquidity requirements, restrictions that may be imposed by applicable law and our contracts and other factors deemed relevant by our board of directors.

CAPITALIZATION

The following table sets forth our consolidated capitalization as of December 31, 2018:

- on an actual basis, as determined in accordance with US GAAP; and
- on an as-adjusted basis to reflect the net proceeds from our sale of 24,000,000 units in this offering at the public offering price of $ per unit, after deducting the underwriting discounts and commissions and the estimated offering expenses and after adjusting for the issuance of additional ordinary shares to Amarantus upon the formal closing of the Amarantus transaction.

This table should be read in conjunction with the "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and "*Use of Proceeds*" sections, as well as our audited financial statements, included elsewhere in this prospectus. The following table assumes (i) no exercise by the underwriters of the overallotment option to purchase additional units, additional ordinary shares and/or additional warrants in this offering and (ii) no exercise of the warrants sold in the offering.

	Year Ended December 31, 2018	
U.S. dollars in thousands	**Actual**	**As adjusted**
Cash and cash equivalents	$ 64	
Working capital (deficit)	$ (1,093)	
Total assets	$ 199	
Total current liabilities	$ 1,199	
Total long-term liabilities	$ 217	
Shareholders' equity (deficit)	$ (1,216)	
Number of Ordinary Shares outstanding	72,399,932	

PRICE RANGE OF OUR ORDINARY SHARES

Our ordinary shares have been quoted on the OTCQB under the symbol "TOMDF" since March 7, 2017. The OTCQB is a regulated quotation service that displays real-time quotes, last-sale prices, and volume information in over-the-counter equity securities. The OTCQB is a quotation medium for subscribing members, not an issuer listing service, and should not be confused with The NASDAQ Stock Market.

On September 18, 2019, the last reported sale price of our ordinary shares on the OTCQB was $0.27 per ordinary share.

Holders

We had 63 holders of record for our ordinary shares as of June 30, 2019.

ENFORCEABILITY OF CIVIL LIABILITIES

We are incorporated under the laws of the State of Israel. Service of process upon us and upon our directors and officers and the Israeli experts named in this prospectus, substantially all of whom reside outside the United States, may be difficult to obtain within the United States. Furthermore, because substantially all of our assets, and those of our directors and officers and the Israeli experts named herein, are located outside the United States, any judgment obtained in the United States against us or any of these persons may not be collectible within the United States.

We have been informed by our legal counsel in Israel that it may be difficult to assert U.S. securities laws claims in original actions instituted in Israel. Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws on the grounds that Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not 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 by expert witnesses, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law.

Subject to certain time limitations and legal procedures, Israeli courts may enforce a U.S. judgment in a civil matter, including a judgment based upon the civil liability provisions of the Securities Act and the Exchange Act and including a monetary or compensatory judgment in a non-civil matter, provided that, among other things:

- the judgment was rendered by a court which was, according to the laws of the state of the court, competent to render the judgment;
- the judgment may no longer be appealed;
- the obligation imposed by the judgment is enforceable according to the rules relating to the enforceability of judgments in Israel and the substance of the judgment is not contrary to public policy; and
- the judgment is executory in the state in which it was given.

Even if such conditions are met, an Israeli court may not declare a foreign civil judgment enforceable if:

- the judgment was given in a state whose laws do not provide for the enforcement of judgments of Israeli courts (subject to exceptional cases);
- the enforcement of the judgment is likely to prejudice the sovereignty or security of the State of Israel;
- the judgment was obtained by fraud;
- the opportunity given to the defendant to bring its arguments and evidence before the court was not reasonable in the opinion of the Israeli court;
- the judgment was rendered by a court not competent to render it according to the laws of private international law as they apply in Israel;
- the judgment is contradictory to another judgment that was given in the same matter between the same parties and that is still valid; or
- at the time the action was brought in the foreign court, a lawsuit in the same matter and between the same parties was pending before a court or tribunal in Israel.

Foreign judgments enforced by Israeli courts will generally be payable in Israeli currency, which can then be converted into non-Israeli currency and transferred out of Israel. The usual practice in an action before an Israeli court to recover an amount in a non-Israeli currency is for the Israeli court to render judgment for the equivalent amount in Israeli currency at the rate of exchange in force on the date of the judgment, but the judgment debtor may make payment in foreign currency. Pending collection, the amount of the judgment of an Israeli court stated in Israeli currency ordinarily will be linked to the Israeli consumer price index plus interest at the annual statutory rate set by Israeli regulations prevailing at that time. Judgment creditors must bear the risk of unfavorable exchange rates.

SELECTED CONSOLIDATED FINANCIAL DATA

The following tables summarize our financial data. We have derived the following statements of operations data for the years ended December 31, 2018, 2017 and 2016 and the balance sheet data as of December 31, 2018 and 2017 from our audited consolidated financial statements included elsewhere in this prospectus, which have been prepared in accordance with US GAAP. Our selected consolidated statements of operations data for the years ended December 31, 2015 and 2014, and the selected consolidated balance sheet data as of December 31, 2016, 2015, and 2014 have been derived from our audited consolidated financial statements not included in this prospectus.

Our historical results are not necessarily indicative of the results that may be expected in the future, and our results for any interim period are not necessarily indicative of results that may be expected for any full year. The following selected financial data should be read in conjunction with "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and our consolidated financial statements and related notes included elsewhere in this prospectus

U.S. dollars in thousands, except share data	Year Ended December 31,				
Consolidated Statements of Operations Data	**2018**	**2017**	**2016**	**2015**	**2014**
Research and development expenses, net	$ (459)	(721)	(318)	(374)	(336)
General and administrative expenses	(920)	(617)	(411)	(457)	(64)
Operating loss	(1,379)	(1,338)	(729)	(831)	(401)
Financing income (expenses), net	921	(1,337)	75	12	(79)
Net loss	(458)	(2,675)	(653)	(819)	(322)
Net loss per share (basic and diluted)	$ (0.006)	(0.04)	(0.01)	(0.02)	(0.01)
Basic and diluted weighted average number of Ordinary Shares outstanding	70,869,924	68,587,261	62,467,556	45,190,017	28,450,908

Balance Sheet Data

U.S. dollars in thousands, except share data	Year Ended December 31,				
	2018	**2017**	**2016**	**2015**	**2014**
Cash and cash equivalents	$ 64	$ 683	$ 439	$ 156	$ 61
Working capital (deficit)	$ (1,093)	$ 468	$ 325	$ 107	$ 25
Total assets	$ 199	$ 816	$ 584	$ 292	$ 129
Total current liabilities	$ 1,199	$ 245	$ 135	$ 79	$ 100
Total long-term liabilities	$ 217	$ 1,911	$ 853	$ 742	$ 617
Shareholders' deficit	$ (1,216)	$ (1,340)	$ (404)	$ (528)	$ (588)
Number of Ordinary Shares outstanding	72,399,932	70,256,911	63,747,504	59,125,670	33,352,200
Number of Preferred Shares Outstanding	-	-	3,333,471	3,096,195	3,000,000

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with our financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under "*Risk Factors*" and elsewhere in this prospectus. We report financial information under US GAAP and our financial statements were prepared in accordance with generally accepted accounting principles in the United States. Unless otherwise indicated, U.S. dollar convenience translations of NIS amounts presented in this prospectus for the period ended on December 31, 2018 are translated using the rate of NIS 3.748 to $1.00, the exchange rate reported by the Bank of Israel on December 31, 2018, and U.S. dollar convenience translations of NIS amounts presented in this prospectus for the period ended December 31, 2017 are translated using the rate of NIS 3.467 to $1.00, the exchange rate reported by the Bank of Israel on December 31, 2017, and U.S. dollar convenience translations of NIS amounts presented in this prospectus for the period ended on December 31, 2016 are translated using the rate of NIS 3.845 to $1.00, the exchange rate reported by the Bank of Israel on December 31, 2016.

Overview

We are an IVD for cancer diagnosis company, engaged in the development of a series of cancer detection kits designed to detect a variety of cancers from blood samples based on our TBIA, a proprietary method for detection of solid tumors using peripheral blood analysis. The method incorporates biochemistry, physics and signal processing. The TBIA detection method is based on the cancer's influence on the immune system which triggers biochemical changes in PBMC, and plasma. Our core technology, TBIA, is based on research conducted and technology invented by the research teams at BGU and Soroka, whose intellectual property has been licensed to us by affiliates of BGU and Soroka in consideration of our contractual obligation to pay certain licensing fees. On December 9, 2013, our TBIA method obtained the CE mark approval. In addition, we are engaged in the development of blood tests for the early detection of neurodegenerative disorders, such as Alzheimer's disease. We are pursuing this activity through our subsidiary, Breakthrough, which holds an exclusive license to the LymPro Test®, an immune-based neurodiagnostic blood test developed at the University of Leipzig.

We believe that our clinical results conducted to date demonstrate the capability to simply and rapidly detect malignant breast and colon tumors in comparison to a controlled healthy group. We anticipate that future broad clinical studies should reveal the full potential of our technology. We believe our proprietary innovation is conducive to constant improvement in the algorithm as we ascend the learning curve, thereby perfecting our test performances and expand the intended population with each test. Accordingly, we will be required to continue to devote substantial resources and efforts to research and development activities in order to potentially achieve and maintain a competitive position in this field. We plan to increase our products portfolio and improve the existing products by improving the algorithms and optimizing and automating the process. As of March 31, 2019, our unaudited cash holdings were $212,000.

One of our objectives in the next two years is to make our products known in the medical and scientific fields by publishing peer reviewed, high impact articles in medical journals about our TBIA method. During this period, we plan to begin selling our products in Israel, Europe and the Far East and to prepare the groundwork for FDA approval in the United States. We will also focus on enhancing our TBIA proprietary automation and algorithms in order to obtain a higher level of accuracy and reproducibility for the results of the blood tests. In addition, we believe that automating the process will reduce the relevant costs for the general public. We believe that proper robots and optimized spectrometers will enhance our method to the higher productivity levels needed for the TBIA detection tool to be able to perform a higher volume of tests.

Prior to selling our products, we first need to complete the automation process. This process includes several steps including qualifying a robust new test protocol, making our test measurement more automated in order to reduce our dependency on the skills of lab technicians, installing the proper web cloud data warehouse, and integrating a full business-to-business network. We plan to protect the confidentiality of patient medical data and personally identifiable information by means of: (i) having a secure facility where the data and information we hold will be stored; and (ii) requiring our third-party providers of data storage to comply with HIPAA and applicable state privacy and security laws and regulations. These changes will enable our customers to run the tests with lower costs while obtaining faster results. To the knowledge of our management, these changes will not impact the previously obtained CE mark approval of the TBIA method. At this point there can be no assurance that our plan will be implemented in accordance with what we currently envision, and future clinical results may lead to different conclusions about our products.

We are an IVD company, developing proprietary technology which will analyze a blood test to detect the presence of various cancers. As we are not developing a drug, we believe that we will not need to submit an investigational new drug application to the FDA prior to conducting clinical trials in the U.S. We believe that we will only need IRB approval prior to conducting clinical trials in the U.S.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which we have prepared in accordance with U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported revenue and expenses during the reporting periods. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in the notes to our consolidated financial statements appearing elsewhere in this prospectus, 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: (i) 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 (ii) changes in the estimate could have a material impact on our financial condition or results of operations.

Government Grants from the Israeli Innovation Authority (IIA) (formerly the Office of the Chief Scientist)

Research and development expenses are charged to operations as incurred. Grants received by the Company from the Government of Israel through the IIA for the development of approved projects are recognized as a reduction of expenses against the related costs incurred.

Royalty-bearing grants from the IIA for funding approved research and development projects are recognized at the time the Company is entitled to such grants (i.e. at the time that there is reasonable assurance that the Company will comply with the conditions attached to the grant and that there is reasonable assurance that the grant will be received), on the basis of the costs incurred and reduce research and development costs. The cumulative research and development grants received by the Company from inception through December 2018 amounted to $272,237.

Share-Based Compensation

The Company measures and recognizes the compensation expense for all equity-based payments to employees based on their estimated fair values in accordance with ASC 718, "Compensation-Stock Compensation". Share-based payments including grants of stock options are recognized in the statement of comprehensive loss as an operating expense based on the fair value of the award at the date of grant. The fair value of stock options granted is estimated using the Black-Scholes option-pricing model. The Company has expensed compensation costs, net of estimated forfeitures, applying the accelerated vesting method, over the requisite service period or over the implicit service period when a performance condition affects the vesting, and it is considered probable that the performance condition will be achieved.

Share-based payments awarded to consultants (non-employees) are accounted for in accordance with ASC Topic 505-50, "Equity-Based Payments to Non-Employees."

Results of Operations

We have not generated any revenue from operations since our commencement of business. Our current operating expenses consist of two components - research and development expenses, and general and administrative expenses.

Research and Development Expenses

Our research and development expenses consist primarily of salaries and related personnel expenses, subcontracted work and consulting, liabilities for royalties and other related research and development expenses.

The following table discloses the breakdown of research and development expenses:

	Year ended December 31		
	2018	2017	2016
Salaries and related expenses	$ 178,486	$ 144,250	$ 145,997
Stock-based compensation	12,077	22,883	48,056
Professional fees	22,271	18,888	37,426
Laboratory and materials, Clinical trials	70,779	143,644	109,299
Patent expenses	82,367	65,654	24,956
Rent and maintenance	40,146	58,381	41,289
Liability for minimum royalties expenses	--	238,000	50,000
Depreciation	25,650	24,083	20,695
Travel expenses	3,804	2,152	2,942
Insurance and other expenses	23,604	2,592	3,293
	459,184	720,527	483,953
Less: Grants from the OCS and others	-	-	(166,046)
	$ 459,184	$ 720,527	$ 317,907

We expect that our research and development expenses will materially increase as we plan to rapidly recruit more employees in order to accelerate our research and development efforts. We anticipate that our expanded research and development efforts will include recruiting additional software developers to enhance our software; hiring additional lab technicians; performing additional clinical trials for our various blood screening tests, and expanding our production and quality assurance teams to support commercialization.

General and administrative

General and administrative expenses consist primarily of salaries, share-based compensation expense, professional service fees (for accounting, legal, bookkeeping, intellectual property and facilities), directors fee and insurance and other general and administrative expenses.

The following table discloses the breakdown of general and administrative expenses:

	Year ended December 31		
	2018	2017	2016
Salaries and related expenses	$ 190,207	$ 67,541	$ 29,254
Stock-based compensation	35,595	90,875	162,124
Communication and investor relations	230,194	83,836	5,121
Professional fees	269,980	224,407	150,341
Insurance and other expenses	193,718	150,428	64,142
	$ 919,694	$ 617,087	$ 410,982

Comparison of the year ended December 31, 2018 to the year ended December 31, 2017

Research and Development Expenses. Our net research and development expenses for the year ended December 31, 2018 were $459,184, compared to $720,527 for the year ended December 31, 2017, representing a net decrease of $261,343, or 36.23%. The decrease in 2018 is primarily due to liabilities to minimum royalties that posted in 2017 to reflect the present value of the liability we have to Ben Gurion University and a decrease in laboratory and materials expenses resulting from decreased activities due to limited resources in 2018.

General and Administrative Expenses. Our expenses for the year ended December 31, 2018 were $919,694, compared to $617,087 for the year ended December 31, 2017, providing an increase of $302,607 or 51%. The increase is primarily due to the increase from communication and investor relations expenses and an increase in salaries and related expenses mainly related to the hiring of our new CEO.

Finance Income and Expenses. Our net finance (Income) expenses for the year ended December 31, 2018 was ($921,337), compared to expenses of $1,337,758 for the year ended December 31, 2017, providing a decrease of $2,259,095. The decrease is primarily due to the change in the fair value of warrants liability in the amount of $2,027,908 and inducement related to warrants exercised in the amount of $166,500, and the impact of exchange rate transaction of $114,687. We issued warrants that are classified as liability instruments. As such, the fair value of these warrants is re-measured at the end of each accounting period with changes in this fair value reflected in the financial statement caption “Long Term Liabilities.” The exchange rate differentials affected the balances appearing on the balance sheet.

Net Loss. Our net loss for the year ended December 31, 2018 was $457,541, compared to $2,675,372 for the year ended December 31, 2017, providing a $2,217,831 decrease in the amount of the loss or an 82.9% decrease. The decrease is primarily due to the change in the fair value of warrants liability, inducement related to warrants exercised, and research and development expenses.

Comparison of the year ended December 31, 2017 to the year ended December 31, 2016

Research and Development Expenses. Our net research and development expenses for the year ended December 31, 2017 were $720,527, compared to $317,907 for the year ended December 31, 2016, representing a net increase of $402,620, or 126%. The increase is primarily due to research and development grants we have received from the IIA and Horizon 2020 (the EU Framework Program for Research and Innovation) of $166,000 in 2016 that are included as an offset to research and development expenses in 2016, and royalties expenses to B.G. Negev Technologies and Applications Ltd., an affiliate of BGU.

General and Administrative Expenses. Our expenses for the year ended December 31, 2017 were $617,087, compared to $410,982 for the year ended December 31, 2016, providing an increase of $206,105 or 50.1%. The increase is primarily due to the increase from professional services expenses.

Finance Income and Expenses. Our net finance expenses for the year ended December 31, 2017 was $1,337,758, compared to income of $75,428 for the year ended December 31, 2016, providing an increase of $1,413,186. The increase is primarily due to the change in the fair value of warrants liability in the amount of $1,101,229 and inducement related to warrants exercised in the amount of 166,500. We issued warrants that are classified as liability instruments. As such, the fair value of these warrants is re-measured at the end of each accounting period with changes in this fair value reflected in the financial statement caption "Long Term Liabilities." The exchange rate differentials affected the balances appearing on the balance sheet.

Net Loss. Our net loss for the year ended December 31, 2017 was $2,675,372, compared to $653,461 for the year ended December 31, 2016, providing a $2,021,911 increase in the amount of the loss or a 309% increase. The increase is primarily due to the change in the fair value of warrants liability, inducement related to warrants exercised and research and development expenses.

Going Concern Uncertainty

We devoted substantially all of our efforts to research and development and raising capital and have not yet generated any revenues. The development and commercialization of our products are expected to require substantial further expenditures. We have not yet generated any revenues from operations, and therefore we are dependent upon external sources for financing our operations. Since inception, we have incurred substantial accumulated losses and negative operating cash flow and have a significant shareholders' deficit. These factors raise substantial doubt about our ability to continue as a going concern. Our financial statements for the year ended December 31, 2018 do not include any adjustments that might result from the outcome of this uncertainty. As of March 31, 2019, our unaudited cash holdings were $212,000. We plan to finance our operations through the sale of equity and, to the extent available, short term and long-term loans. There can be no assurance that we will succeed in obtaining the necessary financing to continue our operations. See also "*Risk Factors*" under the caption "The report of our independent registered public accounting firm expresses substantial doubt about our ability to continue as a going concern."

Liquidity and Capital Resources

Overview

To date, we have funded our operations primarily with loans, grants from the IIA, and issuing Ordinary Shares and warrants.

The table below presents our cash flows:

STATEMENTS OF CASH FLOWS

U.S. dollars in thousands	For the Year ended December 31,		
	2018	**2017**	**2016**
Cash flows from operating activities:			
Loss for the year	$ (458)	$ (2,675)	$ (653)
Adjustments to reconcile loss for the year to net cash used in operating activities:			
Depreciation	26	24	21
Liability for minimum royalties	50	238	50
Change in fair value of warrants liability and fair value of warrants expired	(926)	1,101	(118)
Stock-based compensation	48	114	210
Inducement related to warrants exercised	-	167	-
Financing expenses of long term loans & other Shekel denominated balances	(48)	67	8
Changes in operating assets and liabilities:			
Decrease (increase) in other current assets	(13)	1	6
Increase (decrease) in accounts payable	163	(22)	14
(Decrease) increase in other current liabilities	102	81	(8)
Net cash used in operating activities	(1,056)	(904)	(469)
Cash flows from investing activities			
Purchase of property and equipment	(15)	(4)	(35)
Net cash used in investing activities	(15)	(4)	(35)
Cash flows from financing activities			
Proceeds received from issuance of convertible bridge loan	27	-	-
Proceeds allocated to Ordinary Shares, net	80	563	567
Proceeds allocated to warrants	20	-	244
Proceeds allocated from exercise of warrants	324	599	-
Proceeds from exercise of stock options	-	0.226	0.273
Repayments of shareholders loans	-	-	(24)
Net cash provided by financing activities	451	1,162	788
(Decrease) Increase in cash and cash equivalents	(620)	224	283
Cash, cash equivalents and restricted cash at beginning of the year	693	439	156
Cash, cash equivalents and restricted cash at end of the year	$ 73	$ 693	$ 439

Operating Activities

Net cash used in operating activities for the year ended December 31, 2018 was $1,056,296, compared to $904,410 in the year ended December 31, 2017, and $469,389 in the year ended December 31, 2016. The increase in the net cash used in operating activities in 2018 compared to 2017 was not material. The increase in the net cash used in operating activities in 2017 compared to 2016 is primarily due to an increase in operating expenses mainly due to the research and development activities that were performed in 2017 and the general and administrative expenses incurred in 2017.

Investing Activities

Net cash used in investing activities for the for the year ended December 31, 2018 was $15,370, compared to net cash used in the year ended December 31, 2017 of $3,596, compared to net cash used in the year ended December 31, 2016 of $34,971.

Financing Activities

Net cash provided by financing activities for the year ended December 31, 2018 was $451,258, compared to net cash provided by financing activities for the year ended December 31, 2017 of $1,162,230, compared to net cash provided by financing activities for the year ended December 31, 2016 of $787,759. This decrease is primarily due to cash received in 2018 from the exercise of warrants, proceeds from private placements, and proceeds from convertible loans.

Current Outlook

As of March 31, 2019, our unaudited cash holdings were $212,000.

We cannot assure that our cancer detection kits will be commercialized, work as indicated, or that they will receive regulatory approval and that we will earn revenues sufficient to support our operations or that we will ever be profitable. Furthermore, other than our plan to raise funds in this public offering, we have no committed source of financing. If we do not raise the necessary funds in this public offering, we may be required to severely curtail, or even to cease, our operations.

We have limited experience with IVD. While we expect that we will need approximately $1.5 million to commercialize our cancer screening products, our budget estimates may not be accurate. As further work is performed, additional work may become necessary or a change in plans or workload may occur. Such changes may have an adverse impact on our estimated budget. Such changes may also have an adverse impact on our projected timeline of product commercialization.

Funding Requirements

We believe that our existing funds, together with the net proceeds from this offering, will enable us to fund our operating expenses and capital expenditure requirements for the next eighteen months. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

Our present and future funding requirements will depend on many factors, including, among other things:

- the progress, timing and completion of our clinical trials for our breast cancer products;
- the progress, timing and completion of preclinical studies and clinical trials for our colon cancer product and any of our other future products;
- the costs related to obtaining regulatory approval for our products, and any delays we may encounter as a result of regulatory requirements or adverse clinical trial results with respect to any of these products'
- selling, marketing and patent-related activities undertaken in connection with the commercialization of our products, and costs involved in the development of an effective sales and marketing organization;
- the costs involved in filing and prosecuting patent applications and obtaining, maintaining and enforcing patents or defending against claims or infringements raised by third parties, and license royalties or other amounts we may be required to pay to obtain rights to third party intellectual property rights; and
- establishing a sales, marketing and distribution infrastructure and scale up manufacturing capabilities to commercialize any products for which we obtain regulatory approval.

Furthermore, we expect to continue to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

Until such time, if ever, as we can generate substantial product revenue, we may finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of any additional securities may include liquidation or other preferences that adversely affect your rights as a shareholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us.

If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market products that we would otherwise prefer to develop and market ourselves.

In addition, if we are unable to raise additional funds when needed, we may need to do one or more of the following:

- seek strategic alliances or business combinations

- attempt to sell our company;
- cease operations; or
- declare bankruptcy.

Any debt financing secured by us in the future could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions.

The above conditions raise substantial doubt about our ability to continue as a going concern. The financial statements included elsewhere herein were prepared under the assumption that we would continue our operations as a going concern. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. Without additional funds from debt or equity financing, sales of our intellectual property or technologies, or from a business combination or a similar transaction, we will soon exhaust our resources and will be unable to continue operations. If we cannot continue as a viable entity, our shareholders may lose some or all of their investment in us.

Our management intends to attempt to secure additional required funding primarily through additional equity or debt financings. We may also seek to secure required funding through sales or out-licensing of intellectual property assets, seeking partnerships with other pharmaceutical companies or third parties to co-develop and fund research and development efforts, or similar transactions. However, there can be no assurance that we will be able to obtain required funding. If we are unsuccessful in securing funding from any of these sources, we will defer, reduce or eliminate certain planned expenditures in our research protocols. If we do not have sufficient funds to continue operations, we could be required to seek bankruptcy protection or other alternatives that could result in our shareholders losing some or all of their investment in us.

Off-Balance Sheet Arrangements

We currently do not have any off-balance sheet arrangements.

Tabular Disclosure of Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2018:

	Payments due by period				
(US$)	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
Shareholders' loans (1)	611,925	611,925	-	-	-
Royalties to BGU (2)	373,000	185,000			188,000
Total (3)	984,925	796,925	-	-	188,000

(1) Between the years 2011 and 2014, we received loans from two shareholders. The loans are denominated in NIS, mature on December 31, 2019 and bear no interest. The loans are linked to the Israeli CPI as of January 1, 2015. The loans may be repaid by us from time to time according to our cash availability.

(2) This balance was measured based on the future cash payments discounted using an interest rate of 21%, which represents, according to management's estimate, the applicable rate of risk for us.

(3) This does not include the repayment of approximately $272,237 of grants we received from the IIA and interest thereon, which shall be repaid as royalties upon the commercialization of our products.

The amounts owed by us under the convertible bridge loan financing are not included in this table because the convertible bridge loan transactions were entered into in 2019, subsequent to the 2018 fiscal year end.

Quantitative and Qualitative Disclosure about Market Risk

Market risk is the risk of loss related to changes in market prices, including interest rates and foreign exchange rates, of financial instruments that may adversely impact our financial position, results of operations or cash flows.

Foreign currency exchange risk

The U.S. dollar is our functional and reporting currency. However, a portion of our operating expenses are incurred in NIS. As a result, we are exposed to the risk that the NIS may appreciate relative to the dollar, or, if the NIS instead devalues relative to the dollar, that the inflation rate in Israel may exceed such rate of devaluation of the NIS, or that the timing of such devaluation may lag behind inflation in Israel. In any such event, the dollar cost of our operations in Israel would increase and our dollar-denominated results of operations would be adversely affected. We cannot predict any future trends in the rate of inflation in Israel or the rate of devaluation, if any, of the NIS against the dollar. If the dollar cost of our operations in Israel increases, our dollar-measured results of operations will be adversely affected. We have a similar issue to a lesser extent with certain Euro-denominated expenses in connection with our material costs. Our operations also could be adversely affected if we are unable to effectively hedge against currency fluctuations in the future. We expect that the percentage of our NIS denominated expenses will materially decrease in the near future, therefore reducing our exposure to exchange rate fluctuations.

We do not currently engage in currency hedging activities in order to reduce this currency exposure, but we may begin to do so in the future. Instruments that may be used to hedge future risks may include currency forward and swap contracts. These instruments may be used to selectively manage risks, but there can be no assurance that we will be fully protected against material currency fluctuations.

Liquidity risk

We monitor forecasts of our liquidity reserve (comprising cash and cash equivalents available-for-sale financial assets and short-term deposits). We generally carry this out based on our expected cash flows in accordance with practice and limits set by our management. We are in the research and development stage and we are therefore exposed to liquidity risk. However, we believe that our existing funds, together with the net proceeds from this offering, will enable us to fund our operating expenses and capital expenditure requirements for the next eighteen months.

DESCRIPTION OF BUSINESS

Overview of the Company

We are a clinical-stage cancer in-vitro diagnostic, or IVD, company engaged in the development of a series of cancer detection kits designed to detect a variety of cancers from blood samples based on our Todos Biochemical Infrared Analysis method, or TBIA, a proprietary technology for detection of solid tumors using peripheral blood analysis. The method incorporates biochemistry, physics and signal processing. The TBIA detection method is based on the cancer's influence on the immune system which triggers biochemical changes in peripheral blood mononuclear cells, or PBMC, and plasma. Our core technology, TBIA, is based on research conducted and technology invented by the research teams at Ben Gurion University, or BGU, and Soroka Medical Center of Israel, or Soroka, whose intellectual property has been licensed to us in consideration of our contractual obligation to pay certain licensing fees. In addition, through our subsidiary Breakthrough, we are engaged in the development of blood tests for the early detection of neurodegenerative disorders, such as Alzheimer's disease.

Recent Developments

Reverse Split

At our annual general meeting of shareholders held on April 29, 2019, our shareholders voted to approve the Reverse Split of the Company's ordinary shares within a range of 10:1 to 150:1, to be effective at the ratio and on a date to be determined by the Board of Directors of the Company. Although the shareholders approved the Reverse Split, all per share amounts and calculations in this prospectus and the accompanying consolidated financial statements do not reflect the effects of the Reverse Split, as the Board of Directors has not determined the final ratio or the effective date of the Reverse Split.

Amarantus Transaction

Background

Amarantus had entered into the License Agreement with the University of Leipzig, pursuant to which Amarantus obtained the License to develop and commercialize the LymPro Test®, an immune-based neurodiagnostic blood test for the detection of Alzheimer's disease.

On February 27, 2019, the Company entered into a joint venture agreement with Amarantus, pursuant to which the Company issued Ordinary Shares representing 19.99% of the Company to Amarantus, in exchange for Amarantus transferring to the Company 19.99% of the outstanding equity securities of Breakthrough, a wholly owned subsidiary of Amarantus, and for Amarantus assigning the License Agreement to Breakthrough. In addition, as part of the transaction, the Company provided Amarantus with an interest-free loan in the amount of $45,000 to be used to pay certain financial obligations of Amarantus owed to the University of Leipzig prior to the assignment of the License to Breakthrough, in connection with the license agreement and a related sponsored research agreement. The maturity date of the loan is May 1, 2019. In addition, the Company provided Breakthrough with an interest-free loan in the amount of $135,000 to be used to pay certain financial obligations of Breakthrough owed to the University of Leipzig after the assignment of the License to Breakthrough, in connection with the license agreement and the related sponsored research agreement. The maturity date of this loan is September 30, 2019. To date, the Company has loaned Amarantus and Breakthrough a total of $502,000 to cover fees owed by Amarantus and Breakthrough to the University of Leipzig in connection with the license agreement and the sponsored research agreement.

As part of the joint venture with Amarantus, the Company was granted an option to acquire the remaining 80.01% of Breakthrough held by Amarantus in exchange for the issuance to Amarantus of Ordinary Shares of the Company representing an additional thirty percent (30%) of the Company, such that upon consummation of the transaction the Company will own 100% of Breakthrough and Amarantus will own 49.99% of the Company.

Exercise of the Option

On April 14, 2019, we notified Amarantus of our decision to exercise our option. The consummation of the change of control transaction with Amarantus, whereby we issue to Amarantus an additional thirty percent (30%) of the Company in exchange for obtaining Amarantus's 80.01% ownership stake in our jointly-owned subsidiary Breakthrough, such that we will own 100% of Breakthrough and Amarantus will own 49.99% of the Company, is subject to shareholder approval. At the annual meeting of shareholders of the Company held on April 29, 2019, the Company's shareholders voted on a resolution approving the Company's exercise of this option. We expect the formal closing of the exercise of the option to take place this week.

The LymPro Test is a diagnostic blood test that determines the ability of peripheral blood lymphocytes (PBLs) and monocytes to withstand an exogenous mitogenic stimulation that induces them to enter the cell cycle. Scientists believe that certain diseases, most notably Alzheimer's disease, may be the result of compromised cellular machinery that leads to aberrant cell cycle re-entry by neurons which then leads to apoptosis. LymPro Test uses peripheral blood lymphocytes as a surrogate for neuronal cell function, suggesting a common relationship between PBLs and neurons in the brain. The LymPro Test focuses on measuring immune markers that are directly linked to the cell proliferation processes and expands our understanding of how the body's immune system responds to disease. The Company believes that the LymPro Test may use the body's immune system response to diagnose early and monitor the progression of Alzheimer's disease, which has the potential to be an invaluable tool for pharmaceutical companies' development of novel treatments for Alzheimer's.

Convertible Bridge Loan Transaction

We recently raised $1,473,750 from the sale of convertible notes, which have an outstanding principal balance of $1,637,500. On February 27, 2019, we entered into the first of several convertible bridge loan agreements, and have issued notes and warrants relating thereto, to obtain aggregate loans in the principal amount of $1,637,500 from several private lenders, to finance the Company's activities through the consummation of a proposed public offering and our planned uplisting to the NASDAQ Capital Market. The loans, which have an original issue discount of ten percent (10%), bear interest at a flat rate of ten percent (10%) and have a maturity date six months after receipt of the loan funds. The loans are convertible into ordinary shares of the Company after the maturity date at a conversion price equal to 70% of the average closing bid price of the Company's Ordinary Shares in the five days prior to the conversion. In the event the Company defaults under the loan agreement, the conversion price will be reduced to 60% of the average closing bid price of the Company's Ordinary Shares in the 15 days prior to the conversion. In addition, each lender received a warrant to purchase an amount of Ordinary Shares equal to 25% of the amount loaned by such lender, with the warrant exercise price to be equal to the offering price in the proposed public offering, or, in the event the loan is converted into shares, the warrant exercise price will be equal to the applicable closing bid price of the Company's shares at the time of the conversion of the loan. The warrant may be exercised only during the period beginning on the date that is six months after the date that the warrant exercise price and the number of warrant shares are determined, and ending on the date that is three years thereafter.

We are in default of some of the convertible loan agreements since the maturity date has passed and we have not repaid the loans that have become due.

On March 10, 2019, we entered into an amendment to the bridge loan agreement that we had entered into on February 27, 2019. The amendment provides for a 10% penalty if we repay the loan prior to the maturity date. In addition, we agreed to grant each lender a warrant to purchase an additional amount of of our Ordinary Shares equal to 25% of the amount loaned by such lender, under the same terms as the original warrant, but with a warrant exercise price equal to 150% of the closing bid price of our shares on the day prior to the closing of the bridge loan transaction.

Distribution Agreements

On December 20, 2018, we entered into a Marketing and Reseller Agreement with Care G.B. Plus Ltd. ("Care") for the resale of our breast cancer screening products in Israel. We appointed Care as our exclusive distributor in Israel, and Care undertook to establish at least one laboratory in Israel to support the assay protocol and to run a fifty (50) patient pilot trial to evaluate the performance of the laboratory and Care's support team. Care is fifty-percent owned by Assaf Gold, who was the beneficial owner of 5.49% of our issued and outstanding shares at the time the Care agreement was signed by the Company.

On March 28, 2019, we entered into a Distribution Agreement with Orot Plus Ltd. for the distribution of our breast cancer screening products in Romania and Austria. We appointed Orot as our exclusive distributor in Romania and Austria, and Orot undertook to utilize local laboratories or establish its own laboratories in the territory to support the assay protocol and to run a fifty (50) patient survey to evaluate the performance of our products.

Industry Overview

Cancer is the second largest cause of morbidity and mortality worldwide. According to the World Health Organization, in 2012, 14 million people were newly diagnosed with cancer and there were 8.8 million cancer-related deaths in 2015. The number of cancer related deaths is expected to rise by 70% in the next twenty years. The World Health Organization further states that early detection can greatly reduce the current mortality rates. The cost of cancer in the EU alone was stated at over 51 billion Euro for 2009 (Report From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions published September 23, 2014). Meanwhile, the cost of cancer in the United States for the year 2001 was over $88.7 billion. The costs of cancer in terms of lives and suffering as well as financial, are staggering on a global basis.

While much work must be done to reduce the incidence rates of cancer and the treatment of cancer itself, we believe the early detection of cancer is a critical step towards saving lives. The EU has established a target of conducting cancer detection for 300 million people, annually. In 2008, only 56 million cancer detections were preformed (International Agency for Research on Cancer, Cancer Detection in EU 2008). Similarly, the United States has set a target to screen 200 million people per year (American Cancer Society, Cancer Detection in 2008).

Although cancer detections are necessary if not vital, there are many reasons that they are not more widely used. We believe these reasons include:

- High cost per screen;
- Uncomfortable for the patient (mammogram, colonoscopy, MRI);
- Not accessible to large segments of the population;
- Risk is involved (Radiation and Invasive tests);
- Requires specialists to interpret results; and
- Low sensitivity or specificity.

In summary, we believe that a large segment of world-wide population who need to be checked regularly for cancer forego the detection process due to the above reasons.

Products

Cancer Detection Assays

Our product serves as a preliminary cancer detection tool and cannot be regarded as providing a final diagnosis. Our product consists of a blood test that causes what we believe to be minor risk and pain to the patient (as demonstrated by the diagram below) that is analyzed by our proprietary technology to detect the presence of various cancers. Our test analysis results will be provided to the healthcare provider who may decide to refer the patient for additional detections such as a mammogram or a colonoscopy for further determination of cancer presence. Our cancer detection product includes kits with several consumables needed for blood extraction, for isolation of blood components, and for spectral measurements. The analysis of the spectra is performed utilizing our proprietary software. Each kit includes blood collection disposable tubes and liquids, and other disposable tubes and liquids for the blood separation lab work. We also provide a slide that is used by the lab to measure the sample by the spectrometer. The size of the kit is in the range of 30cm x 30cm x 30cm.

We develop several products for cancer screening and diagnosis as follows:

TM-B1 is a test designed specifically for breast cancer screening. It is indicated for women who meet the following criteria: female subjects aged 25 years and older, without a diagnosis of inflammatory or autoimmune disease. TM-B1 is to be used as a diagnostic method to indicate whether a malignancy is present or not. TM-B1 assay results should be used in conjunction with other common diagnostic tests as part of breast cancer screening.

TM-B2, which is also designed for breast cancer screening, is a test indicated for women who meet the following criteria: Female subjects, aged 25 years and older, without a diagnosis of inflammatory or autoimmune disease, who were diagnosed as presenting with a Breast Imaging-Reporting and Data System, or BI-RADS, score of three or four (or equivalent). TM-B2 is to be used to further assess if a malignancy is present or not. TM-B2 test results should be used in conjunction with other common diagnostic tests as part of breast cancer screening and should not be used as stand-alone assay.

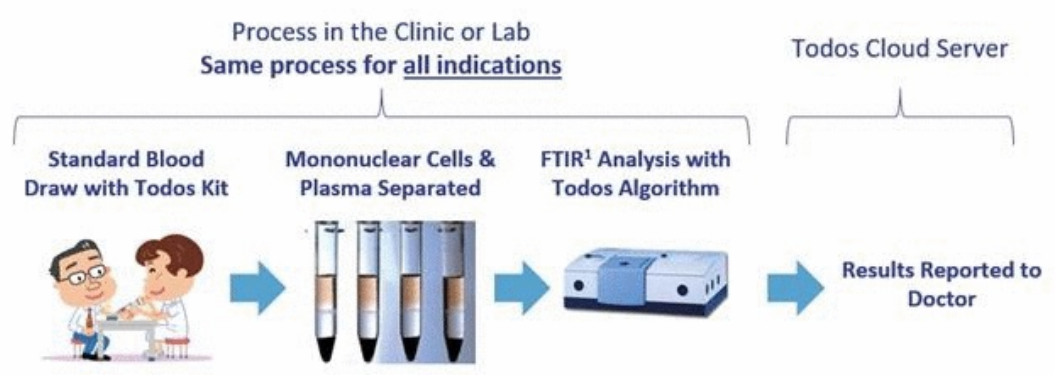
The TM-C1 is a test designed for colon cancer screening and is intended for the qualitative detection, and for the semi-quantitative detection, of biochemical characteristics of the infrared readings of peripheral blood mononuclear cells and plasma, which may be indicative of polyps and colorectal cancer. The TM-C1 screening method may integrate with an overall screening program for colorectal cancer.

Alzheimer's Detection Assay

Utilizing a proprietary assay developed at the University of Leipzig, the LymPro Test determines cell cycle dysfunction by mitogenic stimulation of peripheral lymphocytes and conducting routine flow cytometry testing indicating evidence of or lack of dysfunction. We are engaged in further research and development to enable us to use the Lympro Test to diagnose early and monitor the progression of Alzheimer's disease.

Work Flow

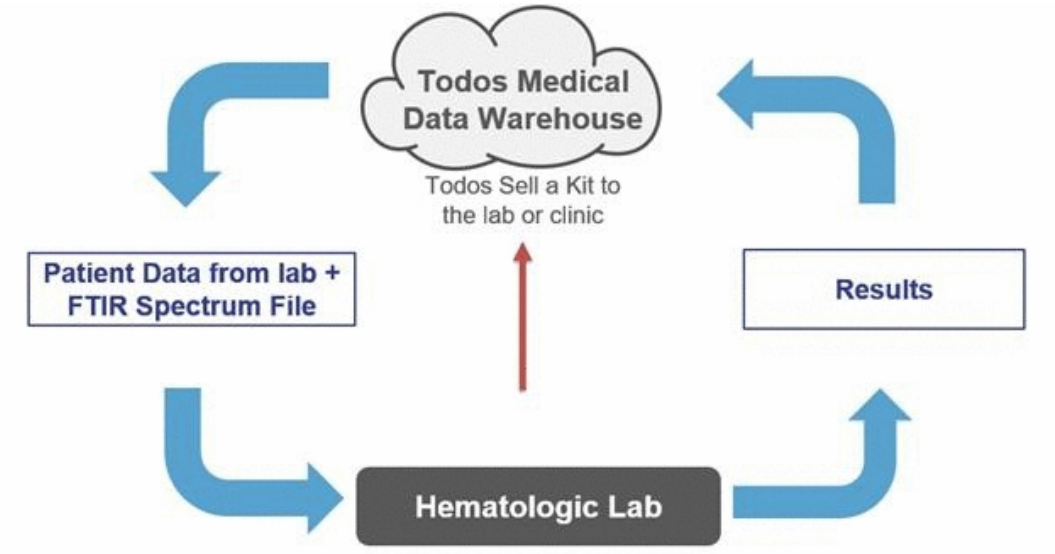
A blood sample is taken from the patient in the clinic. The blood sample is then sent to a laboratory for mononuclear cells (PBMC) and plasma separation. After the separation, the PBMC and the plasma are sent to a laboratory for infrared spectral measurement by a Fourier Transform Infra-Red (FTIR) spectrometer. The data from the FTIR spectrometer is sent to our server via the internet cloud, which then processes the data and sends the screening results via the internet cloud to the patient's physician.



[1] Fourier Transform Infra-Red (FTIR) spectroscopic analysis of the immune system's response to cancer

Data flow

We will sell the test kit to the lab or clinic, that lab will process the blood sample and send the spectrum from the spectrometer to our server via the internet cloud. After our analysis (instant process) we will send the results to the lab.



Our Challenges

Because we are still in the clinical trials stage, we are subject to certain challenges, including, among others:

- our technology has been tested on a limited basis and therefore we cannot assure the product's clinical value;
- although we have obtained CE mark approval for our tests in the EU, the European regulatory demands, regarding IVD, have been recently revised and major changes need to be made in order to keep our CE Mark. These changes need to be made by 2022. It will require significant efforts and funds to update our test accordingly;

- although we have obtained CE mark approval for our tests in the EU, we still need to obtain the requisite regulatory approvals in the United States and other markets where we plan to focus our commercialization efforts;

- We need to raise an amount of capital sufficient to continue the development of our technology, obtain the requisite regulatory approvals, and commercialize our current and future products; and

- we need to obtain reimbursement coverage from third-party payors for procedures using our tests.

Our ability to operate our business and achieve our goals and strategies is subject to numerous risks as described more fully in "*Risk Factors*" above.

The Technology

In the last decade many scientific articles have been published showing that the body's immune system detects the existence of cancer but, for various reasons, fails to attack it. For our developed detection methodology, only a small amount of peripheral blood from the patient is needed. The method is multidisciplinary and incorporates hematology, biochemistry, physics and signal processing and is based on infrared spectroscopy measurements of the blood sample and computerized analysis. The basic concept in our technology is to measure the biochemical changes in the PBMC and plasma, due to cancer presence. As the PBMC are part of the body's immune system, we believe our methodology will detect overall biochemical changes of the immune system due to cancer presence. The technology involves special IR, measurement of a blood sample. We are using the Fourier Transform Infrared Analysis, or FTIR, spectrometer for reading the biochemical content of the PBMC and plasma. We believe the FTIR has some unique advantages in this aspect as it requires no reagents and the reading is swift. Most of the biochemical materials can be detected using the FTIR. The test uses conventional lab methods and the mathematical analysis is made automatically by proprietary algorithms.

The TBIA detection method is based on the cancer's influence on the immune system which triggers cellular and biochemical changes in the PBMC and plasma. These biochemical changes are detected by the FTIR whose results undergo rigorous testing of sophisticated signal processing in order to detect if the entire biochemical signature under detection have the typical biochemical indications for cancer existence. The principle behind our proprietary technology, TBIA, is to observe the immune system response to tumor presence anywhere in the body rather than looking for the tumor cells themselves. We analyze multiple elements of the biochemical signature (including proteins, lipids, nucleic acids and carbohydrates) of the effected immune cells from the peripheral blood in conjunction with plasma using infrared spectroscopy, instead of focusing on a single specific protein as a biomarker.

Our research, using spectral analysis, thus far indicates that the "IR signatures" of several types of cancer are significantly distinct from the "IR signatures" of healthy patients. These differences can be related to several biological effects which exist during malignancy.

Licensing Agreements

BG Negev Research and License Agreement

In April 2010, we entered into a research and license agreement with BG Negev and Mor Research Applications Ltd. (a wholly owned subsidiary of Clalit Medical Services - Israel), or together with BG Negev, the Licensor. The Licensor, pursuant to the agreement, granted us an exclusive, worldwide, license to commercialize certain intellectual property covered by the agreement (i.e. research, development, manufacturing, marketing, distribution, and sale of any product containing the licensable IP under the agreement).

Pursuant to the agreement, we are under an obligation to pay to the Licensor a minimum annual royalty of $10,000 in 2015, $25,000 in 2016 and, from 2017 through the termination of the agreement, $50,000 per year. We have not paid any royalties yet under the Agreement. In March 2017, we agreed with the Licensor that the $85,000 we currently owe the Licensor will be paid by us by the earlier of (a) August 2017, or (b) our sale of equity securities to investors with gross proceeds to the Company of at least $10,000,000. We are not currently in compliance with the repayment terms of the license agreement with our Licensor. As such, we are currently negotiating an amendment to the license agreement which would allow us to pay the accrued but unpaid payments due thereunder at a later date. Once there are sales of products or sublicensing receipts based on the licensed intellectual property, we are under an obligation to pay the Licensor a certain percentage of such sales or sublicensing receipts, as running royalties, but in any event not less than the minimum annual royalties. Any minimum annual royalties will be credited against the running royalties in any given year.

The following table sets forth the percentage of our net sales that we will pay as royalties to the Licensor:

○ leukemia related products	3.0%
○ other products	2.5%
○ in certain limited circumstances, rates may be reduced to	2.0%
On fixed sublicense income (with no sub license income on sales by sub licensee):	
○ leukemia related products	20.0%
○ other products	15.0%
On fixed sublicense income (with Company income on sales by the sub licensee.	
These rates are in addition to the net sales rates listed above.):	
○ leukemia related products	10.0%
○ Other products	7.5%

The minimum royalties will be paid to the Licensor regardless of whether we are able to generate sales from the products arising from the usage of the license.

The license agreement is for an unlimited term, unless terminated earlier by either of the parties under certain circumstances as described in the agreement, including termination as a result of a material breach or a failure to comply with a material term by the other party, as a result of liquidation or insolvency of the other party. In addition, we were entitled to terminate the agreement if at any time, during the period of 7 years following the effective date of the transaction, we, at our sole discretion, would determine that commercialization of the leukemia licensed products is not commercially viable.

Dr. Udi Zelig, our Chief Technical Officer, is one of the inventors of the know-how licensed under the agreement and is entitled to receive from BG Negev between 10% to 15% of all payments that BG Negev is entitled to receive from us under the license agreement.

University of Leipzig License Agreement

On November 7, 2018, Amarantus entered into an amended license agreement with the University of Leipzig (the "Leipzig License Agreement") whereby the University of Leipzig granted Amarantus an exclusive license to the University of Leipzig's patent that underlies the Lympro Test. As part of the Amarantus transaction, Amarantus assigned the Leipzig License Agreement to our subsidiary, Breakthrough.

Under the Leipzig License Agreement, the licensee is required to pay the University of Leipzig the following fees and royalties:

- a license issuance fee of $80,000 as partial reimbursement of patent expenses related to the patent rights;
- an annual royalty of $35,000 on the first and second anniversary of the effective date of the Leipzig License Agreement, and an annual royalty of $15,000 on each subsequent anniversary of the effective date;
- the following milestone payments:
  - $75,000 on first commercial sale of a licensed product;
  - $150,000 on obtaining first FDA approval for a licensed product; and
  - $150,000 upon reaching $5,000,000 in cumulative net sales;
- the annual royalty and milestone payments will be treated as an advance on royalty payments due from sales, and after the royalties from sales equal the aggregate annual royalty and the milestone payments made, a royalty of 3% of net sales, provided that with regard to each country in which a licensed product is sold, after seven years, the royalty will be reduced to 2% of net sales; and
- 10% of non-royalty sub-licensing income.

Clinical Trials

Our plan was to conduct two-stage clinical trials - the first was a training stage and the second is a validation stage. We define, in consultation with our bio-statisticians, our algorithm development team and our future hospital partners, the number of participants needed for each clinical trial. While the minimum number we are targeting is 200 participants per trial, the number may vary from trial to trial.

We completed the first stage (training) for breast cancer detection at a single site in Israel and a single site in Singapore. We intend to complete the first stage of the clinical trials for colorectal cancer detection at two sites in Israel. In the training stage, we aim to train our algorithm to: (a) determine the final performances of the test in terms of accuracy and reproducibility; and (b) optimize the algorithm so that it will be compatible with the population of a country where we perform such clinical trials. In this process, we make the necessary adaptation to our proprietary technology, using mathematical tools in order to reach substantially the same diagnosis results as are found in earlier clinical studies we conducted between 2010 and 2013, as described under "*Description of Business - Past Clinical Studies*" (which form the baseline of comparison). This baseline may, in the future, include the diagnosis results found in the fifth clinical study, which ended on October 2017, described under "*Description of Business – Past Clinical Studies*."

Once the necessary adaptation to our proprietary technology is made, the second stage of clinical trials will be to validate that the tests are indeed able to detect breast cancer and colorectal cancer. Prior to beginning any clinical trials, a local Institutional review board, or IRB, needs to grant us approval to begin the trial. The second stage (validation) is a blinded trial and intended to verify the performances of our product following the aforementioned amendments implemented following the first stage. The validation may not meet our expectations, regulatory demands and/or other partner's demands.

Past Clinical Studies

Four clinical studies whose results were published in what we believe to be well-known peer-reviewed journals have been conducted to date, all of which were not blind tests. The first of these studies was conducted by B.G. Negev Technologies and Applications Ltd., or BG Negev, a wholly owned subsidiary of BGU, while we conducted the other three studies. The goal of these studies was to evaluate whether TBIA could be a novel, simple, and low-cost method for the early detection of cancer.

"Sensitivity" as used below is the number of detected cancers divided by the full population having cancer that participated in the study. A sensitivity of 100% means that our product detected cancer in all of the people with cancer that were diagnosed using our product. A sensitivity of 80% means that out of 100 people with cancer the test will detect 80 people as being diagnosed with the relevant cancer and the rest will be defined as healthy.

"Specificity" as used below is the number of detected healthy subjects divided by the full population of healthy subjects that participated in the study. A specificity of 80% means that out of 100 healthy people who participated in the study - we diagnosed 80 people as healthy. The 20 other healthy subjects were falsely diagnosed as having cancer.

The First Study was conducted by BGU. This study included 15 acute leukemic children, 19 children who had a high fever with a diagnosis of infection or inflammation, and 27 healthy volunteers. T test and cluster analysis was done with the following results for control versus leukemia and infection versus leukemia. For all, P value <= 0.05. Cluster analysis - all cancers were distinct in a different branch for healthy and infection. Based on the chosen wave numbers the cluster analysis was able to distinguish completely between leukemia and control groups. The first objective of the study was to distinguish between children diagnosed as having acute leukemia and healthy subjects by FTIR spectroscopy analysis of PBMCs. The second objective was to follow and analyze leukemic patients' response to chemotherapy by FTIR spectroscopy of PBMCs in comparison to what we believe to be the standard practice of bone marrow examination by flow cytometry. A third objective of the clinical trial was to distinguish between leukemic children and children with similar clinical symptoms such as high fever and white blood count (which also appears following infection or inflammation) using FTIR technology.

Results of First Study:

The first objective was achieved successfully - all subjects, healthy and leukemic, were diagnosed correctly - 100% sensitivity and specificity. The second objective of the follow-up treatment was achieved by identifying three different responses to treatment by FTIR method - good, intermediate and unfavorable response. FTIR identified responses to treatment earlier (33 days vs. 100 days) than flow-cytometry analysis of bone marrow. A good response (meaning, a good response to chemotherapy) was a fast return of the PBMC values towards normal control values (according to the FTIR method). An intermediate response was a slow return of the PBMC values towards normal control values. An unfavorable response was the PBMC values not returning towards normal control values. No T test was done in order to distinguish between the three tendencies. The third objective was achieved as well. The children having similar symptoms to leukemia were successfully distinguished from children with acute leukemia by FTIR analysis - 100% sensitivity and specificity. These results were published in the Biochimica et Biophysica Acta (Zelig et al. Biochimica et Biophysica Acta 1810 (2011) 827-835).

Below are details regarding the other four studies that we completed on our own. The results are described in terms of sensitivity and specificity.

The Second Study included 41 cancer patients and 45 healthy volunteers. This study was intended to evaluate the utility of our method in detecting several types of cancers using an advance computerized algorithm. The performances of the algorithm presented what we believe were promising results for breast and colorectal cancer as well as other cancers. Following these results, we chose to focus our efforts into the detection of breast and colorectal cancers.

The first objective of the study was to distinguish between cancer patients of multiple types and healthy subjects by FTIR spectroscopy analysis of PBMCs and plasma - we refer to this as the TM-T1 method - our product for diagnosing multiple types of cancers. All patients were diagnosed by standard practice such as histopathology of tissue samples taken from the tumor. The second objective was to distinguish between different types of cancers utilizing FTIR spectroscopy analysis of PBMCs and plasma.

Results of Second Study:

The first objective of the study was achieved successfully - 93% sensitivity for detecting different types of cancers and 80% specificity for identifying correctly the healthy population. As for the second objective, although different spectral patterns were observed for each type of cancer, indicating that there is the potential of successful classification between the various cancers, the statistical parameters were not established due to low patient numbers for each individual type of cancer, preventing a reliable statistical analysis. As for this objective, our observation was qualitative rather than quantitative. We will need to conduct larger trials in the future in order to better understand and distinguish between different cancers. The results of the study were published in the Institute of Electrical and Electronics Engineers Journal (Ostrovsky et al. IEEE Transactions on Biomedical Engineering, Vol. 60, No. 2, February 2013, 343-353).

The Third Study was conducted between April 27, 2011 and April 26, 2013 at Rabin in Israel. The number of the study was 0336-10-RMC and its purpose was evaluation of our detection method for breast cancer. This study included 29 breast cancer patients and 30 subjects who were healthy or had benign tumors. All subjects were tested for breast cancer by standard detection procedures (mammography / ultrasound) and had not yet undergone surgical treatment, chemotherapy or radiotherapy.

The first objective of the study was to distinguish between cancer patients and healthy subjects or patients having a benign tumor using FTIR spectroscopy analysis of PBMCs and plasma - we refer to this as the TM-B1 method - our product for diagnosing breast cancer. The second objective was to distinguish between three groups: cancer patients, patients having benign tumors, and healthy subjects without pathological findings related to breast tumors.

Results of Third Study:

The first objective of the study was achieved successfully - approximately 90% sensitivity for detection of breast cancer and approximately 80% specificity for identifying correctly the healthy patients and patients with benign tumors. As for the second objective, although different spectral patterns were observed for each group - healthy, benign, and malignant, the statistical parameters were not established due to low patient numbers in each group, preventing a reliable statistical analysis. As for this objective, our observation was qualitative rather than quantitative. We will need to conduct larger trials in the future in order to better understand and distinguish between different groups. The results of the study were published in the BMC Cancer Journal (Zelig et al. BMC Cancer (2015) 15:408).

The Fourth Study was conducted between April 27, 2011 and April 26, 2013 at the Rabin in Israel. The number of the study was 0336-10-RMC and its purpose was to evaluate our detection method for colorectal cancer. This study included 30 colorectal cancer and high-grade dysplasia, or HGD, patients, 10 patients with benign polyps and 18 healthy subjects, all tested for colorectal cancer by colonoscopy. The premalignant HGD was joined with the malignant group.

The first objective of the study was to distinguish between cancer patients and healthy subjects using FTIR spectroscopy analysis of PBMCs and plasma, which we refer to as the "TM-C1 method", our product for diagnosing colorectal cancer. The second objective was to distinguish between three groups: colorectal cancer patients, patients having benign tumors, and healthy subjects without pathological findings related to colorectal tumors such as polyps.

Results of Fourth Study:

The first objective of the study was achieved successfully - approximately 82% sensitivity for detection of colorectal cancer and approximately 71% specificity for detecting healthy populations without pathological findings. The benign tumors were classified in between the cancer and healthy groups. As for the second objective, although different spectral patterns were observed for each group - healthy, benign, and malignant, the statistical parameters were not established due to low patient numbers in each group preventing a reliable statistical analysis. As for this objective, our observation was qualitative rather than quantitative. We will need to conduct larger trials in the future in order to better understand and distinguish between different groups. The results of the study were published in the Journal of Gastroenterology (Barlev et al. Journal of Gastroenterology (First Online: 26 June 2015): 1-8.).

Clinical Studies in Process

Multi-center (Kaplan and Rabin) breast cancer verification (training) study

The objectives of the multi-center breast cancer verification study are twofold. The first objective is to distinguish between cancer patients and healthy subjects or patients having benign tumors using FTIR spectroscopy analysis of PBMCs and plasma - the TBIA method. The second objective is to distinguish between all three groups: cancer patients, patients with benign tumors, and healthy subjects without pathological findings related to breast tumors.

Kaplan Medical Center Trial

On June 6, 2013, we initiated a verification study at Kaplan Medical Center in Israel. The number of the study is 0152-12-KMC. The recruiting phase at Kaplan has been completed and included 220 patients. All subjects were tested for breast cancer by standard detection procedures (mammography / ultrasound / biopsy) and have not yet undergone surgical treatment, chemotherapy or radiotherapy. We added Rabin Medical Center as an additional site for this multi-center study. The number of the study at Rabin Medical Center is 0386-17-RMC and will include about 105 patients.

We are in the process of analyzing the results. In the training phase, an accuracy (sensitivity and specificity) of about 90% was demonstrated. The validation phase has not been completed yet; hence, final results for this study are not yet available.

Rabin Medical Center Trial

We added Rabin Medical Center as an additional site for this multi-center study. The number of the study at Rabin Medical Center is 0386-17-RMC and will include about 105 patients. The recruitment of patients for this trial is still in progress.

Singapore breast cancer verification (training) study

On June 1, 2016, we entered into a clinical trial agreement with the Singapore Hospital for a training trial. We made a judgment, along with the Singapore Hospital, that 280 participants is the appropriate number for the purpose of this training trial. This clinical study evaluated, in terms of sensitivity and specificity, our TM-B1 method for the detection of malignant and benign breast cancer tumors in comparison with standard diagnostic methods.

Under the agreement, the Singapore Hospital was primarily in charge of the recruitment procedure and blood sample collection from recruited participants, all pursuant to the clinical study protocol, which was approved by the Singapore Centralized IRB in April 2016. The Singapore Hospital also provided the prognosis of the recruited participants which will enable us to measure the sensitivity and specificity of the TM-B1 method.

Enrolment of the patients has been completed and we are in the process of analyzing the results.

Multi-center (Rabin and Kaplan) colon cancer verification (training) study

In addition, on April 27, 2017, we commenced a training study at Rabin Medical Center for TM-C1 for colorectal cancer screening. The Kaplan site is about to join Rabin Medical Center as a multi-center study. In total we aim to recruit 350 patients. The study is prospective, un-blinded, tree arms.

Multi-center (Rabin and Kaplan) breast cancer validation study

On January 22, 2018, we initiated the validation study at Kaplan for screening for breast cancer. NIH number NCT03343691. Rabin intends to join to this study as a multi-center study. A total of 200 patients are expected to participate in the multi-center validation study. The study is prospective, blinded, double arm.

Intellectual Property

The proprietary nature of, and protection for, our current and/or any future product candidates, processes and know-how are important to our business as is our ability to operate without infringing on the proprietary rights of others, and to prevent others from infringing our proprietary rights. We seek patent protection in the United States and internationally for our current and future product candidates we may develop and other technology. In order to protect our proprietary technologies, we rely on combinations of application for patent and trade secret protection, as well as confidentiality agreements with employees, consultants, and third parties.

We have filed and own all rights in the following patent applications, all of which are currently pending or have been issued as patents:

Category I: These applications relate to analysis of an IR spectrum of a PBMC sample. Claims are generally directed to indicating the presence of a solid tumor based on analysis of an IR spectrum of a PBMC sample.

(1) US Patent Application 13/701,262. This has claims for a method (process). The claims in this application are generally directed to indicating the presence of a solid tumor in breast tissue based on analysis of an IR spectrum of a PBMC sample. On March 28, 2017, this application issued as US Patent 9,606,057. This patent is expected to expire on June 1, 2031.

(2) US Patent Application 15/443,674. This application is a continuation application of US 13/701,262 and has claims for a method (process) and is expected to expire on June 1, 2031. The claims in this application are generally directed to indicating the presence of a solid tumor in tissue of a gastrointestinal tract based on analysis of an IR spectrum of a PBMC sample.

(3) European Patent Application No. 11789348.7. This has claims for a method (process) and a system and is expected to expire on June 1, 2031. On April 17, 2019, we received an intention to grant notice from the European Patent Office regarding this application.

(4) Israel Patent Application 223,237. This has claims for a method (process), a system, and for a computer program product and is expected to expire on June 1, 2031.

Category II: These applications relate to analysis of an IR spectrum of a blood plasma sample. Claims are generally directed to indicating the presence of a solid tumor based on analysis of an IR spectrum of a blood plasma sample.

(5) US Patent Application 14/116,506. This has claims for a method (process), a system, and for a computer program product. The claims in this application are generally directed to indicating the presence of a solid tumor in a gastrointestinal tract based on analysis of an IR spectrum of a blood plasma sample. On August 1, 2017, this application issued as US Patent 9,719,937. This patent is expected to expire on May 10, 2032.

(6) US Patent Application 15/645,168. This application is a continuation application of US 14/116,506. This has claims for a method (process), a system, and for a computer program product and is expected to expire on May 10, 2032. The claims in this application are generally directed to indicating the presence of a solid tumor in breast tissue based on analysis of an IR spectrum of a blood plasma sample.

(7) European Patent Application No. 12782256.7. This has claims for a method (process) and a system and is expected to expire on May 10, 2032.

(8) Israel Patent Application 229,109. This has claims for a method (process), a system, and for a computer program product and is expected to expire on May 10, 2032. This application issued as Israel Patent Application 229,109 on September 1, 2018.

(9) US Patent Application 16/173838. This application is a continuation application of US 15/645,168. This has claims for a method (process), a system, and a computer program product and is expected to expire on May 10, 2032. The claims in this application are generally directed to indicating the presence of a solid tumor in lung tissue based on analysis of an IR spectrum of a blood plasma sample. The application received a Notice of Allowance on April 3, 2019.

Category III: These applications relate to analysis of an IR spectrum of a blood plasma sample and PBMC samples.

(10) US Patent Application 14/894,128. This has claims for a method (process). The claims in this application are generally directed to (i) analysis of an IR spectrum of a PBMC to indicate the presence of a benign tumor in breast tissue and in the gastrointestinal tract, and (ii) analysis of an IR spectrum of a blood plasma sample to indicate the presence of a benign tumor. On October 31, 2017, this application issued as US Patent 9,804,145. This patent is expected to expire on November 14, 2033.

(11) US Patent Application 15/785,801. This application is a continuation application of US 14/894,128. This has claims for a method (process), a system, and for a computer program product and is expected to expire on November 14, 2033. The claims in this application are generally directed to (i) analysis of an IR spectrum of a PBMC sample, and a blood plasma sample to indicate the presence of a benign tumor in ovarian tissue, and (ii) preparation of a sample for analyzing by infrared spectroscopy.

(12) European Patent Application No. 13885931.9. This has claims for a method (process) and is expected to expire on November 14, 2033. The claims in this application are generally directed to indicating the presence of a benign tumor in breast tissue based on analysis of an IR spectrum of a PBMC sample. This application has been granted as a patent and mention of the grant was published on January 2, 2019. This patent is validated in Germany, France, United Kingdom and Holland.

(13) European Patent Application No. 18214760.3. This application is a divisional application of European Patent Application No. 13885931.9 and is expected to expire on November 14, 2033. This application has claims for a method (process). The claims in this application are generally directed to indicating the presence of a benign tumor in the gastrointestinal tract based on analysis of an IR spectrum of a PBMC sample.

There are no patents or patent applications which are licensed to the Company pursuant to the Company's License agreement with BG Negev and Mor Research Applications Ltd. (a wholly owned subsidiary of Clalit Medical Services - Israel) referenced below. Nevertheless, the Company's products are based on intellectual property licensed from BG Negev and Mor.

There are no patents or patent applications which are licensed to the Company from any other entity.

Breakthrough licenses the following patents and patent applications:

LymPro:
o German Patent 19936035
o PCT/EP2004/010889 (expired)

MSPrecise:
o US Patent Application 15/546,171
o Chinese Patent Application No. 201480075681.6

NeuroPro:
o US Patent 9,547,012

To the knowledge of the Company's management, there are no contested proceedings or third-party claims over any of our patent applications. Our success depends upon our ability to protect our technologies through intellectual property agreements including patents, trademarks, know-how, and confidentiality agreements. However, there can be no assurance that the above-mentioned patent applications will be approved by the appropriate agencies.

All of the technology for which the patents are sought is owned by the Company. Our patents are entirely owned by the Company.

The Company has also filed applications in the United States and Israel to register the Todos name as a trademark.

Competition

Current prevailing cancer detection tests utilize the standard procedures which, we believe, are typically uncomfortable, such as colonoscopy for colorectal cancer and mammography for breast cancer. In addition, we believe, these tests generally have medium to low sensitivities/specificity, along with adverse risks. Furthermore, many of the existing detection methods depend on the technician's or the physician's capabilities, knowledge and interpretation. The existing detection methods also carry a high cost.

In light of these drawbacks, our assays will be a part of standard clinical protocol for cancer screening and not a replacement of any of these gold standard procedures. Our aim is to improve the screening process, reducing false negatives and increasing sensitivity, thus, saving lives, pain and expenses.

Many of our anticipated competitors, such as those listed in the below table, have substantially greater financial, technical, and other resources and larger, more established marketing, sales and distribution systems than we have. Many of our competitors also offer broad product lines outside of the diagnostic testing market and have brand recognition. Moreover, our competitors may make rapid technological developments that may result in our intended technologies and products becoming obsolete before we are able to enter the market, recover the expenses incurred to develop them or generate significant revenue. Our success will depend, in part, on our ability to develop our intended products in a timely manner, keep our future products current with advancing technologies, achieve market acceptance of our future products, gain name recognition and a positive reputation in the healthcare industry, and establish successful marketing, sales and distribution efforts.

Company	Symbol	Company Description
Exact Sciences	EXAS	Marketing Cologuard stool-based detection test for the detection of colorectal cancer
Volition Rx	VNRX	Developing blood-based diagnostic tests for colorectal, lung, prostate, ovarian and other cancer types based on nucleosomics
Epigenomics	EPGNF	Engages in developing and commercializing in vitro diagnostic tests for the detection and diagnosis of cancer (EpiproColon - methylated Septin9 DNA in human plasma)
Cancer Genetics	CGIX	Focuses on developing and commercializing proprietary genomic tests to improve and personalize the diagnosis and response to treatment of cancer.

Sources and Availability of Products and Supplies

The nature of our products does not mandate any dependence on one or a few major products or suppliers, but if we are required to change our current suppliers of the components of our products, we may encounter significant delay in locating suitable alternative suppliers.

Existing or Probable Government Regulations

Our cancer screening products are subject to governmental regulation, which regulation may be different for each country or region where we intend to commercialize our products. We plan to initially commercialize our products in Israel and the European Union (EU), and then afterwards enter the U.S. market.

EU

In Europe, medical devices are regulated by self-certification through the CE Mark system. Under the system, developers and manufacturers must operate a Quality System and validate medical devices in a limited clinical trial to demonstrate the manufacturer has met analytical and clinical performance criteria. We have implemented an International Organization for Standardization standard - ISO 13485 - quality management system for the design and manufacture of medical devices. ISO 13485 addresses managerial awareness of regulatory requirements, control systems, inspection and traceability, device design, risk and performance criteria as well as verification for corrective and preventative measures for device failure. ISO 13485 certification establishes conformity to specific European Union directives related to medical devices and allows CE Marking and sale of the device.

The Medicines and Healthcare products Regulatory Agency, or MHRA, is the United Kingdom-based European Authority responsible for the issuance of CE Mark approval. In 2013, our regulatory authorized representative in Europe submitted an application to the MHRA for the CE Mark approval of our TBIA method. We obtained this approval on December 9, 2013 with the receipt of a Certificate of Conformance from our regulatory authorized representative in Europe. The European regulatory demands regarding IVD have recently been revised and major changes need to be made in order to keep our CE Mark. These changes need to be made until 2022.

The new European In Vitro Diagnostic Regulation (IVDR - 2017/746), or the IVDR, became effective as of May 25, 2017, marking the start of a transition period for manufacturers selling IVD devices into Europe. The IVDR, which replaces IVD Directive (98/79/EC), or the Directive, has a transition period of five years, after which the IVDR will apply in full, and no new applications pursuant to the Directive will be accepted. Manufacturers have the duration of the five-year transition period to update their technical documentation and processes to meet the new, more stringent EU regulatory requirements. We believe that the most challenging areas under the IVDR will be regarding the classification of products and the performance evaluation of IVDs, which will not only include the classic clinical performance and analytical performance but also scientific validity, the role and responsibilities of the economic actors of the supply chain, the traceability and the transparency of the devices with, in particular, the introduction of the UDI-system and an expanded EUDAMED database.

During 2019, we plan to commence updating our technical files in accordance with the new IVDR.

Israel

In Israel, medical devices are regulated by the Israeli Ministry of Health (MoH) medical device department.

On January 23, 2019, we applied to the MoH for approval for our products and we have obtained MoH approval.

U.S.

United States federal and state governmental agencies subject the health care industry to intense regulatory scrutiny, including heightened civil and criminal enforcement efforts. The federal government scrutinizes, among other things, the marketing, labeling, promotion, manufacturing and export of diagnostic health care products. Our cancer screening products fall within the IVD medical device category and are subject to FDA clearance or approval in the United States.

The federal government has increased funding in recent years to fight health care fraud, and various agencies, such as the United States Department of Justice, the Office of Inspector General of the Department of Health and Human Services, or OIG, and state Medicaid fraud control units, are coordinating their enforcement efforts.

In the United States, we anticipate that our cancer screening products will have to be cleared through the FDA's premarket notification or 510(k), process or its premarket approval, or PMA, process. The determination of whether a 510(k) or a PMA is necessary will depend in part on the proposed indications for use and the FDA's assessment of the risk associated with the use of the IVD for a particular indication.

Research and Development Activities and Costs

For information regarding our clinical studies, please see above under the caption "– *Clinical Studies in Process*."

For the years ended December 31, 2018, 2017 and 2016, we incurred $459,184, $720,527, and $317,907, respectively, of net research and development expense.

Our research and development efforts are financed in part through grants received from the IIA. As of December 31, 2018, we have received an aggregate amount of $272,237 from the IIA. Aside from payment of royalties to the IIA, we are required to comply with the requirements of the Research Law. Under the Research Law, royalties of 3% to 3.5% on the revenues derived from sales of products or services developed in whole or in part using these IIA grants are payable to the Israeli government. We developed our technologies, at least in part, with funds from these grants, and accordingly we would be obligated to pay these royalties on sales of any of our product candidates that achieve regulatory approval. The maximum aggregate royalties paid generally cannot exceed 100% of the grants made to us, plus annual interest equal to the 12-month LIBOR applicable to dollar deposits, as published on the first business day of each calendar year.

Production and Manufacturing

We are revising our production line for kits for laboratories and physicians. All of our product production is conducted under ISO 13485 and by conforming to CE instructions, we aim to reduce risks and be more prepared for commercialization of our assays.

We currently have several third-party suppliers, from various geographic locations, that provide us with raw materials. While we are currently relying on these suppliers, we plan to locate other suppliers upon strict inspection. We plan to have a minimum of two suppliers for each component in our system and it is our intention to eventually produce the raw material internally. However, because we are in a highly specialized industry, there can be no assurance that we will be able to achieve that.

Listed below are our current material suppliers. There is no assurance that they will be able to continue supply of our raw materials or that, if necessary, we will be able find replacement vendors on a timely basis on favorable terms.

List of the raw material suppliers for kits

SUPPLIERS	MATERIAL
BD	PUSH BUTTON SET 21G GREEN
BD	Vacutainer® K2EDTA 6 mL Blood collection tube
Eppendorf	Pipette tips 100-1000 ?l
Eppendorf	Pipette tips 0.1-10 ?l
Eppendorf	Centrifuge tube 50 ml
Eppendorf	Eppendorf tubes 1.5 ml
Grenier	Freezing vials 2.0 ml
Grenier	Leucosep® 50 ml tube

Costs and Effects of Compliance with Environmental Laws and Regulations

We are not in a business that involves the use of materials in a manufacturing stage where such materials are likely to result in the violation of any existing environmental rules and/or regulations. Further, we do not own any real property that could lead to liability as a landowner. However, until our distributors establish local laboratories in their respective territories, we expect to receive blood samples for analysis. We currently comply and will continue to comply with all Israeli Ministry of Health regulations governing the handling of blood samples, and all Israeli laws and regulations regarding the disposal of biohazard waste, including blood samples. The cost of compliance with these regulations has not been material. Therefore, we do not anticipate that there will be any substantial costs associated with the compliance of environmental laws and regulations.

Employees

As of December 31, 2018, we had four full-time employees and two part-time employees, all located in Israel.

In addition, we engage specialists and consultants in fields such as optics, physics, medicine, mathematical algorithms, biochemistry, regulatory and patents from time to time as required by our operations. Furthermore, Mr. David Ben Naim, our Chief Financial Officer, is engaged by us as an external consultant.

Sales and Marketing

We currently do not sell our products. Our goal is to have a diversified pool of customers worldwide, including the United States. However, we plan to focus initially on the Western EU nations, Singapore and Israel since we have the CE mark, whereas entering the U.S. market will require more time, effort and substantial funding in order to obtain FDA approval. Assuming we successfully raise additional funding, over the next 12 months we plan to commence clinical trials in Israel and Singapore in order to complete the trials and validation stages prior to commencement of sales. Furthermore, once the clinical trials tests are successfully completed in Singapore, we plan to apply to obtain regulatory approvals in Singapore to sell our products there. Our plans depend on us financing our operations through the sale of equity, incurring debt, or other financing alternatives.

Organizational Structure

Assuming the formal closing of the Amarantus option, we have two wholly-owned subsidiaries: Todos Medical Singapore Pte. Ltd., which is incorporated in Singapore, and Breakthrough, which is incorporated in Nevada.

Property, Plant and Equipment

We do not own any real property. Our offices, research and development facility and in-house laboratory are located at our headquarters at 1 Hamada Street, Rehovot, Israel, where we currently occupy approximately 108 square meters for a monthly consideration of NIS 7,400 (approximately $2,000). The lease automatically renewed for an additional one year on February 1, 2019. Lease payments are linked to the Israeli Consumer Price Index, or CPI, based on the CPI published on February 15, 2015. We own lab equipment, including a spectroscopy, with an aggregate value of approximately $157,000, which is being allocated as a depreciation expense over the useful life of the equipment.

We consider our current office space sufficient to meet our anticipated needs for the foreseeable future and is suitable for the conduct of our business.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form F-1 covering the securities in this offering. This prospectus, which forms part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. Some items are omitted in accordance with the rules and regulations of the SEC. For further information regarding both our Company and the securities in this offering, we refer you to the registration statement and the exhibits to the registration statement filed as part of the registration statement. The SEC maintains an internet site at www.sec.gov, from which you can electronically access the registration statement, including the exhibits to the registration statement. We also maintain a website at http://www.todosmedical.com. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

LEGAL PROCEEDINGS

We are not a party to existing or pending legal proceedings against us, and we have no knowledge of any threatened litigation, nor are we involved as a plaintiff in any proceeding or pending litigation. There are no proceedings in which any of our Directors, officers or any of their respective affiliates, or any beneficial stockholder, is an adverse party or has a material interest adverse to our interest.

DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

Our Directors hold office until the next annual general meeting of the stockholders or until their successors are elected and qualified, except for our External Directors who are elected for a term of three years. Our officers are appointed by our Board of Directors and hold office until the earlier of their death, retirement, resignation, or removal.

Our officers and Directors and their ages and positions are as follows:

Name	Age	Position(s)
Dr. Herman Weiss	48	Chief Executive Officer and Director
Rami Zigdon	55	Chief Business Officer and Director
Udi Zelig	39	Chief Technology Officer
David Ben Naim	50	Chief Financial Officer
Alon Ostrovitzky	33	Director
Moshe Schlisser	29	Director
Moshe Abramovitz	36	Director
Colin Bier	72	Director
Alon Shalev	46	External Director
Ronit Even-Zahav Meitin	53	External Director

Dr. Herman Weiss, CEO and Director

Dr. Herman Weiss has been a director since June 22, 2017. Dr. Weiss was appointed CEO of the Company on July 30, 2018. Dr. Weiss previously served as the vice president of medical affairs and clinical development at Juniper Pharmaceuticals Inc. in Boston, MA. Before that, Dr. Weiss previously served as the Global Medical Director of women's health and bone health at Teva Pharmaceutical Industries, Ltd. in Petah Tikve, Israel. Dr. Weiss has served as a consultant to multiple medical device and pharmaceutical companies, including American medical systems and venture capital firms in New York City, and also founded and served as the chief medical officer of FibroControl, a biotech medical device company in Herzliya, Israel. Dr. Weiss owns multiple patents and is the author of numerous publications in the area of women's health and gynecology. Dr. Weiss holds an M.B.A. from the George Washington University, Washington DC, an M.D. from the Ohio State University College of Medicine, and a B.A. in Philosophy (summa cum laude) from the Ramapo College of New Jersey. The Board has concluded that Dr. Weiss should serve as director of the Company because of his extensive medical knowledge and experience, and his extensive business development and executive experience.

Rami Zigdon, Chief Business Officer and Director

Mr. Rami Zigdon was appointed CBO of the Company on July 30, 2018. Before that, he served as our Chief Executive Officer from our inception in 2010 and also served as a director on our board from May 12, 2011 until June 3, 2015. On May 10, 2016, he was elected again to serve as a director. Since January 2016, Mr. Zigdon has also served as a director on the board of our subsidiary, Todos Singapore. Mr. Zigdon is an experienced business manager of technology-based companies. From 2003 to 2009, Mr. Zigdon served as the Israeli country manager of Renesas Technology, a leading Japanese semiconductors corporation. Prior to his position at Renesas, Mr. Zigdon served as the manager of Hitachi Semiconductors Israel and as the embedded systems group manager at RDT. Mr. Zigdon has held various technical and management positions at Scitex Belgium, NI Medical and Spectronix. Mr. Zigdon graduated with honors from the Hebrew University of Jerusalem and holds a B.S in Biology from the Hebrew University of Jerusalem, a B.S. in Electrical Engineering from the Ben Gurion University of the Negev, and an MBA from the Heriot-Watt University, Edinburgh. The Board has concluded that Mr. Zigdon should serve as director of the Company because of his scientific knowledge, his experience in managing technology-based companies, and his knowledge of the Company.

Udi Zelig, Chief Technology Officer

Dr. Udi Zelig has served as our full-time Chief Technology Officer since January 1, 2012. Prior to that, Dr. Zelig served as our non-employee Chief Technology Officer from our inception through November 15, 2009, while concurrently being employed by Crow Technologies 1977, Ltd. Dr. Zelig is a nuclear and biomedical engineer with more than a decade of research experience in conducting and managing of in-vitro and clinical experiments. His main field of research concerns various applications of infrared spectroscopy for blood cancer detection and investigation of chemotherapeutic drug influence on blood cells. Dr. Zelig is the author of numerous scientific publications in leading biophysics and medicinal journals. Dr. Zelig holds a B.S. in Nuclear Engineering, a Master of Science and a Ph.D. in bio-medical engineering, all from the Ben-Gurion University of the Negev.

David Ben Naim, Chief Financial Officer

Mr. David Ben Naim has served as our Chief Financial Officer since January 2018. Since 2014, Mr. Ben Naim has been the owner and manager of DBN Finance, a company that provides full outsourcing financial services to companies located in Israel. From 2012 until 2014, Mr. Ben Naim served as the chief financial officer of Insuline Medical Inc., which is traded on the Tel Aviv Stock Exchange, or TASE, under the symbol INSL. Mr. Ben Naim served as the chief financial officer for Crow Technologies 1977, Ltd. (OTCQB - CRWTF) from 2008 until 2011 and for Ilex Medical Limited (TASE) from 2007 until 2008. Other positions held by Mr. Ben Naim include, in connection with his ownership of DBN Finance, chief financial officer since 2016 of Microbot Medical (Nasdaq - MBOT) and Vonetize PLC (TASE - VNTZ). Additionally, Mr. Ben Naim served as the Corporate Controller of Tadiran Telecom Limited from 2003 until 2007. Mr. Ben Naim holds an MBA from Ono Academic College as well as a C.P.A. license from the Ramat Gan College.

Alon Ostrovitzky, Director

Mr. Alon Ostrovitzky has been a director since December 5, 2013. Since 2008, Mr. Ostrovitzky has acted as the President of Ostrovitzky Holdings Company, a company which has developed a variety of real estate projects in the Czech Republic, Germany, and Israel. As President, Mr. Ostrovitzky supervised sub-contractors and service providers among other things. Mr. Ostrovitzky has also developed and spearheaded renewable energy projects in Greece, planned and oversaw construction of photo-voltaic parks in Greece, and provided management for a medical center (Dialysis and specialists) in the Czech Republic. Mr. Ostrovitzky holds a B.A. in business administration from the Interdisciplinary Center Herzliya, where he specialized in finance, and also studied economics at Tel Aviv University. The Board has concluded that Mr. Ostrovitzky should serve as a director of the Company because of his management and business development knowledge and experience.

Moshe Schlisser, Director

Mr. Moshe Schlisser has been a director since February 27, 2016. Mr. Schlisser currently also serves as a director at SmartGreen Ltd, Tantel Group Ltd and III Pte Ltd. Mr. Schlisser is a General Partner at Shefa Capital Ltd a growth venture fund with a focus on mid to later stage deep technology investments. Mr. Schlisser held managerial positions in various investment firms and has experience with investments, structured finance and mergers and acquisitions. In 2010, Mr. Schlisser co-founded and currently serves as a director of a soup kitchen in Jerusalem that serves to over 50 homeless and underprivileged individuals a hot prepared dinner every night and that delivers weekend food packages to over 250 underprivileged families. The Board has concluded that Mr. Schlisser should serve as a director of the Company because of his extensive business development knowledge and experience.

Moshe Abramovitz, Director

Mr. Moshe Abramovitz has been a director since February 27, 2016. Mr. Abramovitz has held managerial positions in various organizations (Israeli companies and charities) including serving as the deputy chief executive officer of A.S. Mehadrin Ltd. since 2008. Mr. Abramovitz holds a B.A. in business administration, specializing in information systems, from Ono Academic College and an MBA in business administration specializing in business strategy from Ono Academic College. Mr. Abramowitz received training and a certificate to serve as a mediator from Bar Ilan University. The Board has concluded that Mr. Abramovitz should serve as a director of the Company because of his extensive business knowledge and experience.

Colin Bier, Director

Dr. Colin Bier was added to the Board of Directors on March 25, 2019. Dr. Bier currently serves as Managing Director of ABA BioResearch, Inc. From September 2013 until 2018, he served as a Corporate Advisor of Amarantus Bioscience Holdings, Inc. He also served as a Senior Advisor of TVM V Life Science Ventures and NGN Capital. From November 2001 to June 15, 2002, Dr. Bier served as Chairman of the Board and Chief Executive Officer of Soligenix, Inc. From 1996 through 2008, Dr. Bier was a Director of Neurochem Inc. Dr. Bier serves as a Director of Lomir Biomedical Inc., a private company in the business of the design and manufacture of animal jackets for laboratory animal species, of Mount Sinai Hospital Montreal, and of Receptagen Ltd., a Canadian publicly traded biopharmaceutical company. He has published more than twenty-five scientific articles in his field in peer-reviewed journals. Dr. Bier received his Ph.D. in Experimental Pathology from Colorado State University in 1978 and then pursued additional training in experimental pathology and toxicology as a Medical Research Council Postdoctoral Fellow and the Dr. Douglas James Fellow in the Department of Pathology, McGill University. He received his M.Sc. from Long Island University in 1974, and his B.A. from Sir George Williams University in 1967. The Board has concluded that Dr. Bier should serve as a director of the Company because of his extensive scientific knowledge and management experience.

Alon Shalev, Director

Mr.Alon Shalev has been a director since June 22, 2017. Mr. Shalev led BrainsGate from its inception phase, into its European clinical trials with a highly innovative technological and clinical platform. Subsequently, he led Nicast from initial exploratory work in different fields through a process of application definition, prioritization and selection, and into its First-In-Man clinical trials as well as the CE approval process. Under his direction, Nicast has become the first medical device company to introduce an implantable medical device based on polymer electrospinning. In 2008, Mr. Shalev started generating the core IP upon which Endospan was later founded. Mr. Shalev has been the chief executive officer of Endospan since 2013 and also serves on its board of directors. Mr. Shalev is an inventor of numerous patents in the medical field. Mr. Shalev holds an MS in Solid State Electronics, Physical Electronics (cum laude) and a B.S. in Electrical Engineering both from Tel Aviv University. The Board has concluded that Mr. Shalev should serve as a director of the Company because of his extensive technical and business knowledge and experience.

Ronit Even-Zahav Meitin, Director

Ms. Ronit Even-Zahav Meitin has been a director since June 22, 2017. Since 2014, Ms. Even Zahav Meitin has provided financial consulting services to various companies. Previously, Ms. Even Zahav Meitin served as chief financial officer with the Afcon Group (a public company traded on the TASE). Ms. Even-Zahav Meitin also serves as a director and chairperson of the finance committee for Cross Israeli Highway (a governmental company), and as an independent director in Inter Green Ltd. (a public company traded on the TASE). Until 2012, Ms. Even-Zahav Meitin served, among other positions, as chief financial officer of Paz Industries and Services (Oil) and a director of its subsidiaries. Ms. Even-Zahav Meitin is a certified accountant in Israel and holds a BA in Accounting and Economics from Tel Aviv University and an MBA in Finance from Bar Ilan University. The Board has concluded that Ms. Even-Zahav Meitin should serve as a director of the Company because of her extensive financial and business knowledge and experience.

Foreign Private Issuer

Under the Companies Law, companies incorporated under the laws of the State of Israel whose shares are publicly traded, including companies with shares quoted on the OTCQB or listed on The Nasdaq Stock Market, are considered public companies under Israeli law and are required to comply with various corporate governance requirements under Israeli law relating to matters such as external directors, the audit committee, the compensation committee and an internal auditor. This is the case even if our shares are not listed on a stock exchange in Israel. These requirements are in addition to the corporate governance requirements imposed by the Listing Rules of the Nasdaq Stock Market and other applicable provisions of U.S. securities laws to which we are subject (as a foreign private issuer).

We are currently a "foreign private issuer" under the U.S. securities laws and the Nasdaq corporate governance rules. We would cease to be a foreign private issuer at such time as more than 50% of our outstanding voting securities are held by U.S. residents and any one of the following three circumstances applies: (i) the majority of our executive officers or directors are U.S. citizens or residents, (ii) more than 50% of our assets are located in the United States or (iii) our business is administered principally in the United States. As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our executive officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. Also, we are not required to comply with Regulation FD, which restricts the selective disclosure of material information. However, we are required to file with the SEC, within 120 days after the end of each fiscal year, or such applicable time as required by the SEC, an annual report on Form 20-F containing financial statements audited by an independent registered public accounting firm, and to submit to the SEC from time to time, on Form 6-K, reports of information that would likely be material to an investment decision in our ordinary shares.

As a foreign private issuer, we are permitted to follow certain Israeli corporate governance practices instead of the Nasdaq corporate governance rules, provided that we disclose which requirements we are not following and the equivalent Israeli requirement.

Board Practices

General

According to the Companies Law, 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. Our executive officers are responsible for our day-to-day management and have individual responsibilities established by our Board of Directors. Executive officers are appointed by and serve at the discretion of our Board of Directors, subject to any applicable employment agreements we have entered into with the executive officers.

Under the Companies Law, we are not required to have a majority of independent directors. We are required to appoint at least two external directors. According to our Amended Articles, our Board of Directors must consist of at least five and not more than nine directors, including external directors. Currently, our Board of Directors consists of eight directors. Pursuant to our Amended Articles, other than the external directors, for whom special election requirements apply under the Companies Law, our directors are elected at an annual or special general meeting of our shareholders and serve on our Board of Directors until the next annual general meeting at which one or more directors are elected or until they are removed by the majority of our shareholders at an annual or special general meeting of our shareholders or upon the occurrence of certain events, in accordance with the Companies Law and our Amended Articles. In addition, our Amended Articles allow our Board of Directors to appoint directors, other than external directors, to fill vacancies on our Board of Directors to serve until the next annual meeting or special general meeting, or earlier if required by our Amended Articles or applicable law. For additional information concerning external directors, see "– *External Directors*" below.

Under the Companies Law, our Board of Directors must determine the minimum number of directors who are required to have financial and accounting expertise. Under applicable regulations, a director with financial and accounting expertise is a director who, by reason of his or her education, professional experience and skill, has a high level of proficiency in and understanding of business accounting matters and financial statements. He or she must be able to thoroughly comprehend the financial statements of the listed company and initiate debate regarding the manner in which financial information is presented. In determining the number of directors required to have such expertise, a company's board of directors must consider, among other things, the type and size of the company and the scope and complexity of its operations. Our Board of Directors has determined that we require at least one director with the requisite financial and accounting expertise.

The term office holder is defined in the Companies Law as a general manager, chief business manager, deputy general manager, vice general manager, executive vice president, vice president, or any other person assuming the responsibilities of any of the foregoing positions, without regard to such person's title, or a director or any other manager directly subordinate to the general manager.

External Directors

Under the Companies Law, a public company is required to appoint at least two external directors to serve on its board of directors. External directors must meet stringent standards of independence. As of the date hereof, our external directors are Ms. Ronit Even-Zahav and Mr. Alon Shalev.

The provisions of the Companies Law set forth special approval requirements for the election of external directors. External directors must be elected by a majority vote of the shares present and voting on the matter at a shareholders meeting, provided that either:

- such majority includes at least a majority of the shares held by all shareholders who are non-controlling shareholders and shareholders who do not have a personal interest in the election of the external director (other than a personal interest not deriving from a relationship with a controlling shareholder) that are voted at the meeting, excluding abstentions, which we refer to as a disinterested majority;

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

The term "controlling shareholder" is defined in the Companies Law as a shareholder with the ability to direct the activities of a company, other than by virtue of being an office holder. A shareholder is deemed 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 50% or more of the directors of a company or its general manager.

The term "personal interest" is defined in the Companies Law as a person's or entity's personal interest in an act or a transaction of a company, (i) including the personal interest of (a) any spouse, sibling, parent, grandparent or descendant of the persons, any descendant, sibling or parent of a spouse of the person and the spouse of any of the foregoing; and (b) an entity in which the person or entity or any of the foregoing relatives of the person serves as a director or the chief executive officer, owns at least 5% of its issued share capital or voting rights or has the right to appoint one or more directors or the chief executive officer, but (ii) excluding a personal interest arising solely from the ownership of shares. In the case of a person voting by proxy, "personal interest" includes the personal interest of the proxy holder or the shareholder granting the proxy (even if the proxy holder has no personal interest in the matter), whether or not the proxy holder has discretion how to vote.

The initial term of an external director is three years. Thereafter, an external director may be reelected by shareholders to serve in that capacity for up to two additional three-year terms, provided that either:

- his or her service for each such additional term is recommended by one or more shareholders holding at least 1% of the company's voting rights and is approved at a shareholders meeting by a disinterested majority, where the total number of shares held by non-controlling, disinterested shareholders voting for such reelection exceeds 2% of the aggregate voting rights in the company, and provided further that the external director is not an affiliated or competing shareholder, as defined in the Companies Law, or a relative of such a shareholder at the time of the appointment, and is not affiliated with such a shareholder at the time of appointment or within the two years preceding the date of appointment; or

- his or her service for each such additional term is recommended by the board of directors and is approved at a shareholders meeting by the same majority required for the initial election of an external director (as described above).

External directors may be removed only by a special general meeting of shareholders called by the board of directors after the board has determined that circumstances allow such dismissal, at the same special majority of shareholders required for their election or by a court, and in both cases only if the external directors cease to meet the statutory qualifications for their appointment or if they violate their duty of loyalty to our company. In the event of a vacancy created by an external director which causes the company to have fewer than two external directors, the board of directors is required under the Companies Law to call a shareholders meeting as soon as possible to appoint such number of new external directors in order that the company thereafter has two external directors.

Each committee of the board of directors that exercises the powers of the board of directors must include at least one external director, except that the audit committee and the compensation committee must include all external directors then serving on the board of directors. Under the Companies Law, external directors of a company are prohibited from receiving, directly or indirectly, any compensation for their services as external directors other than pursuant to the Companies Law and the regulations promulgated thereunder. Compensation of an external director is determined prior to his or her appointment and may not be changed during any three-year term subject to certain exceptions.

The Companies Law provides that a person is not qualified to serve as an external director if (i) the person is a relative of a controlling shareholder of the company, or (ii) if that person or his or her relative, partner, employer, another person to whom he or she was directly or indirectly subordinate, or any entity under the person's control, has or had, during the two years preceding the date of appointment as an external director: (a) any affiliation with the company, with any person or entity controlling the company or a relative of such person at the time of appointment, or with any entity controlled by or under common control with the company at the time of appointment or during the two years preceding the appointment; or (b) in the case of a company with no controlling shareholder or a shareholder holding 25% or more of its voting rights, had at the date of appointment as an external director, any affiliation with a person then serving as chairman of the board or chief executive officer, a holder of 5% or more of the issued share capital or voting power in the company or the most senior financial officer.

The term "relative" is defined as a spouse, sibling, parent, grandparent or descendant; spouse's sibling, parent or descendant; and the spouse of each of the foregoing persons.

The term "affiliation" includes (subject to certain exceptions): an employment relationship; a business or professional relationship even if not maintained on a regular basis (excluding insignificant relationships); control; and service as an office holder, excluding service as a director in a private company prior to the initial public offering of its shares if such director was appointed as a director of the private company in order to serve as an external director following the initial public offering.

In addition, no person may serve as an external director if that person's positions or professional or other activities create, or may create, a conflict of interest with that person's responsibilities as a director or otherwise interfere with that person's ability to serve as a director or if the person is an employee of the Israel Securities Authority or of an Israeli stock exchange. A person may furthermore not continue to serve as an external director if he or she received direct or indirect compensation other than as permitted by the Companies Law and the regulations promulgated thereunder.

Following the termination of an external director's service on a board of directors, such former external director and his or her spouse and children and other relatives may not be provided a direct or indirect benefit by the company, its controlling shareholder or any entity under its controlling shareholder's control. This includes engagement as an officer or director of the company or a company controlled by its controlling shareholder or employment by, or provision of services to, any such company for consideration, either directly or indirectly, including through a corporation controlled by such person. This restriction extends for a period of two years with regard to the former external director and his or her spouse or child and for one year with respect to other relatives of the former external director.

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

According to the Companies Law and regulations promulgated under the Companies Law, a person may be appointed as an external director only if he or she has professional qualifications or if he or she has accounting and financial expertise (each, as defined below). At least one of the external directors must be determined by our Board of Directors to have accounting and financial expertise. We have determined that Ms. Ronit Even-Zahav has accounting and financial expertise.

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

Audit Committee

Israeli Companies Law Requirements

Under the Companies Law, a public company is required to appoint an audit committee which must be comprised of at least three directors, including all of the external directors, one of whom must serve as chairman of the committee.

In addition, under the Companies Law, the audit committee of a publicly traded company must consist of a majority of unaffiliated directors, within the meaning of the Companies Law. In general, an "unaffiliated director" under the Companies Law is defined as either an external director or a director who meets the following criteria:

- the audit committee has determined that he or she meets the qualifications for being appointed as an external director, except for (i) the requirement that the director be an Israeli resident (which does not apply to companies such as ours whose securities have been offered outside of Israel or are listed outside of Israel); and (ii) the requirement for accounting and financial expertise or professional qualifications; and

- he or she has not served as a director of the company for a period exceeding nine consecutive years. For this purpose, a break of less than two years in the service shall not be deemed to interrupt the continuation of the service.

Nasdaq requirements

Under the Nasdaq Rules, we are required to maintain an audit committee consisting of at least three independent directors, all of whom are financially literate and one of whom has accounting or related financial management expertise.

The audit committee may not include the chairman of the board, a controlling shareholder of the company or a relative of a controlling shareholder, a director employed by or providing services on a regular basis to the company, to a controlling shareholder or to an entity controlled by a controlling shareholder or a director who derives most of his or her income from a controlling shareholder.

Audit Committee Charter

Our Board of Directors plans to adopt an audit committee charter setting forth the responsibilities of the audit committee consistent with the regulations of the SEC, as well as the requirements for audit committees under the Companies Law, including the following:

- oversight of our independent registered public accounting firm and recommending the engagement, compensation or termination of engagement of our independent registered public accounting firm to the board of directors or shareholders for their approval, as applicable, in accordance with the requirements of the Companies Law;

- recommending the engagement or termination of the person filling the office of our internal auditor; and

- recommending the terms of audit and non-audit services provided by the independent registered public accounting firm for pre-approval by the board or shareholders for their approval, as applicable, in accordance with the requirements of the Companies Law.

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

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

- determining whether there are deficiencies in the business management practices of our company, including in consultation with our internal auditor or the independent auditor, and making recommendations to the board of directors to improve such practices;

- determining whether to approve certain related party transactions (including transactions in which an office holder has a personal interest) and whether such transaction is extraordinary or material under Companies Law (see "– *Approval of Related Party Transactions under Israeli Law*");

- determining whether a competitive process must be implemented for the approval of certain transactions with controlling shareholders or a relative thereof or in which a controlling shareholder has a personal interest (whether or not the transaction is an extraordinary transaction), under the supervision of the audit committee or other party determined by the audit committee and in accordance with standards determined by the audit committee, or whether a different process determined by the audit committee should be implemented for the approval of such transactions;

- determining the process for the approval of certain transactions with controlling shareholders or in which a controlling shareholder has a personal interest that the audit committee has determined are not extraordinary transactions but are not immaterial transactions;

- where the board approves the working plan of the internal auditor, to examine such working plan before its submission to the board and proposing amendments thereto;

- examining our internal controls and internal auditor's performance, including whether the internal auditor has sufficient resources and tools to dispose of its responsibilities;

- examining the scope of our auditor's work and compensation and submitting a recommendation with respect thereto to our Board of Directors or shareholders, depending on which of them is considering the compensation of our auditor; and

- establishing procedures for the handling of employees' complaints as to the management of our business and the protection to be provided to such employees.

Our audit committee consists of Ms. Ronit Even-Zahav Meitin, who serves as the chairperson, Mr. Alon Shalev, and Mr. Moshe Abramovitz. Ms. Even-Zahav Meitin serves as Chairman of the committee. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and the Nasdaq corporate governance rules and are independent directors under such rules. Our board of directors has determined that Ms. Ronit Even-Zahav Meitin is an "audit committee financial expert" as defined by the SEC rules and has the requisite financial experience as defined by the Nasdaq Rules. Our board of directors has determined that each member of our audit committee is independent as such term is defined in Rule 10A-3 under the Exchange Act, and that each member of our audit committee satisfies the additional requirements applicable under the Nasdaq Rules to members of audit committees.

Financial Statement Examination Committee

Under the Companies Law, the board of directors of a public company must appoint a financial statement examination committee, which consists of members with accounting and financial expertise or the ability to read and understand financial statements. Our audit committee holds the responsibilities and duties of a financial statement examination committee, as permitted under the relevant regulations promulgated under the Companies Law. From time to time, as necessary and required in order to approve our financial statements, the audit committee will hold separate meetings prior to the scheduled meetings of the board in respect of the financial statements. The function of a financial statement examination committee is to discuss and provide recommendations to the board of directors (including reporting any deficiencies found) with respect to the following issues: (a) estimations and assessments made in connection with the preparation of financial statements; (b) internal controls related to the financial statements; (c) completeness and appropriateness of the disclosure in the financial statements; (d) the accounting policies adopted and the accounting treatment implemented in material matters of the Company; and (e) value evaluation, including the assumptions and assessments on which evaluations are based and the supporting data in the financial statements.

Compensation Committee and Compensation Policy

Under the Companies Law, the board of directors of any public company must appoint a compensation committee. The compensation committee must be comprised of at least three directors, including all of the external directors, who must constitute a majority of the members of the compensation committee. Each compensation committee member that is not an external director must be a director whose compensation does not exceed an amount that may be paid to an external director under regulations promulgated under the Companies Law. The compensation committee is subject to the same Companies Law restrictions as the audit committee as to who may not be a member of the committee. See "– *Audit Committee - Israeli Companies Law Requirements*."

In accordance with the Companies Law, the roles of the compensation committee are, among others, as follows:

- recommending to the board of directors the approval of the compensation policy for office holders and, once every three years, any extensions to a compensation policy that was adopted for a period of more than three years;
- reviewing the implementation of the compensation policy and periodically recommending to the board of directors any amendments or updates of the compensation plan;
- resolving whether or not to approve arrangements with respect to the terms of office and employment of office holders; and
- exempting, under certain circumstances, a transaction with our chief executive officer from the approval of the general meeting of our shareholders.

Our compensation committee consists of Ms. Ronit Even-Zahav Meitin, , Mr. Alon Shalev, who serves as the chairman, and Mr. Moshe Abramovitz. Our board of directors has determined that each member of our compensation committee is independent under the Nasdaq Rules, including the additional independence requirements applicable to the members of a compensation committee.

Compensation Committee Charter

Our Board of Directors plans to adopt a compensation committee charter setting forth the responsibilities of the committee consistent with the Nasdaq Rules and the Companies Law, which include among others:

- recommending to the board of directors for its approval (i) a compensation policy; (ii) whether a compensation policy should continue in effect, if the then-current policy has a term of greater than three years (approval of either a new compensation policy or the continuation of an existing compensation policy must in any case occur every three years); and (iii) periodic updates to the compensation policy. See "– *Compensation Policy*." In addition, the compensation committee is required to periodically examine the implementation of the compensation policy;
- the approval of the terms of employment and service of office holders (including determining whether the compensation terms of a candidate for chief executive officer of the company need not be brought to approval of the shareholders); and
- reviewing and approving grants of options and other incentive awards to persons other than office holders to the extent such authority is delegated by our Board of Directors, subject to the limitations on such delegation as provided in the Companies Law.

Compensation Policy

In general, under the Companies Law, a public company must have a compensation policy approved by the Board of Directors after receiving and considering the recommendations of the compensation committee. In addition, our compensation policy must be approved at least once every three years, first, by our Board of Directors, upon recommendation of our compensation committee, and second, by a simple majority of the ordinary shares present, in person or by proxy, and voting at a shareholders meeting, provided that either:

- such majority includes at least a majority of the shares held by shareholders who are not controlling shareholders and do not have a personal interest in such compensation arrangement and who are present and voting (excluding abstentions); or
- the total number of shares of non-controlling shareholders and shareholders who do not have a personal interest in the compensation arrangement and who vote against the arrangement, does not exceed 2% of the company's aggregate voting rights.

We refer to this as the Special Approval for Compensation. Under the Companies Law, subject to certain conditions, the Board of Directors may ratify the compensation policy even if it is not ratified by the shareholders.

Pursuant to the Companies Law, under special circumstances, the Board of Directors may approve the compensation policy despite the objection of the shareholders on the condition that the compensation committee and then the Board of Directors decide, on the basis of detailed arguments and after discussing again the compensation policy, that approval of the compensation policy, despite the objection of the meeting of shareholders, is for the benefit of the company.

The compensation policy must be based on certain considerations, include certain provisions and needs to reference certain matters as set forth in the Companies Law.

The compensation policy must serve as the basis for decisions concerning 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, including advancement of the company's objectives, business plan and long-term strategy, and creation of appropriate incentives for office holders. It must also consider, among other things, the company's risk management, size and the nature of its operations.

The compensation policy must furthermore consider the following additional factors:

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

The compensation policy must also include, among others:

- with regard to variable components;
    - with the exception of office holders who report directly to the chief executive officer, determining the variable components on long-term performance basis and on measurable criteria; however, the company may determine that an immaterial part of the variable components of the compensation package of an office holder's shall be awarded based on non-measurable criteria, if such amount is not higher than three monthly salaries per annum, while taking into account such office holder contribution to the company;
    - the ratio between variable and fixed components, as well as the limit of the values of variable components at the time of their grant.
- a condition under which the office holder will return to the company, according to conditions to be set forth in the compensation policy, any amounts paid as part of his or her terms of employment, if such amounts were paid based on information later to be discovered to be wrong, and such information was restated in the company's financial statements;
- the minimum holding or vesting period of variable equity-based components to be set in the terms of office or employment, as applicable, while taking into consideration long-term incentives; and
- a limit to retirement grants.

Our compensation policy is designed to promote retention and motivation of directors and executive officers, incentivize superior individual excellence, align the interests of our directors and executive officers with our long-term performance and provide a risk management tool. To that end, a portion of an executive officer compensation package is targeted to reflect our short and long-term goals, as well as the executive officer's individual performance. On the other hand, our compensation policy includes measures designed to reduce the executive officer's incentives to take excessive risks that may harm us in the long-term, such as limits on the value of cash bonuses and equity-based compensation, limitations on the ratio between the variable and the total compensation of an executive officer and minimum vesting periods for equity-based compensation.

Our compensation policy also addresses our executive officer's individual characteristics (such as his or her respective position, education, scope of responsibilities and contribution to the attainment of our goals) as the basis for compensation variation among our executive officers, and considers the internal ratios between compensation of our executive officers and directors and other employees. Pursuant to our compensation policy, the compensation that may be granted to an executive officer may include: base salary, annual bonuses and other cash bonuses (such as a signing bonus and special bonuses with respect to any special achievements, such as outstanding personal achievement, outstanding personal effort or outstanding company performance), equity-based compensation, benefits and retirement and termination of service arrangements. All cash bonuses are limited to a maximum amount linked to the executive officer's base salary. In addition, the total variable compensation components (cash bonuses and equity-based compensation) may not exceed 90% of each executive officer's total compensation package with respect to any given calendar year.

An annual cash bonus may be awarded to executive officers upon the attainment of pre-set periodic objectives and individual targets. The annual cash bonus that may be granted to our executive officers other than our chief executive officer will be based on performance objectives and a discretionary evaluation of the executive officer's overall performance by our chief executive officer and subject to minimum thresholds. The annual cash bonus that may be granted to executive officers other than our chief executive officer may be based entirely on a discretionary evaluation. Furthermore, our chief executive officer will be entitled to recommend performance objectives, and such performance objectives will be approved by our compensation committee (and, if required by law, by our board of directors).

The performance measurable objectives of our chief executive officer will be determined annually by our compensation committee and board of directors, will include the weight to be assigned to each achievement in the overall evaluation. A less significant portion of the chief executive officer's annual cash bonus may be based on a discretionary evaluation of the chief executive officer's overall performance by the compensation committee and the board of directors based on quantitative and qualitative criteria.

The equity-based compensation under our compensation policy for our executive officers (including members of our board of directors) is designed in a manner consistent with the underlying objectives in determining the base salary and the annual cash bonus, with its main objectives being to enhance the alignment between the executive officers' interests with our long-term interests and those of our shareholders and to strengthen the retention and the motivation of executive officers in the long term. Our compensation policy provides for executive officer compensation in the form of share options or other equity-based awards, such as restricted shares and restricted share units, in accordance with our share incentive plan then in place. All equity-based incentives granted to executive officers shall be subject to vesting periods in order to promote long-term retention of the awarded executive officers. The equity-based compensation shall be granted from time to time and be individually determined and awarded according to the performance, educational background, prior business experience, qualifications, role and the personal responsibilities of the executive officer.

In addition, our compensation policy contains compensation recovery provisions which allows us under certain conditions to recover bonuses paid in excess, enables our chief executive officer to approve an immaterial change in the terms of employment of an executive officer (provided that the changes of the terms of employment are in accordance our compensation policy) and allows us to exculpate, indemnify and insure our executive officers and directors subject to certain limitations set forth thereto.

Our compensation policy also provides for compensation to the members of our board of directors either (i) in accordance with the amounts provided in the Companies Regulations (Rules Regarding the Compensation and Expenses of an External Director) of 2000, as amended by the Companies Regulations (Relief for Public Companies Traded in Stock Exchange Outside of Israel) of 2000, as such regulations may be amended from time to time, or (ii) in accordance with the amounts determined in our compensation policy.

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. An internal auditor may not be:

- a person (or a relative of a person) who holds more than 5% of the company's outstanding shares or voting rights;
- a person (or a relative of a person) who has the power to appoint a director or the general manager of the company;
- an office holder, within the meaning of the Companies Law (including a director and the general manager) of the company (or a relative thereof); or
- a member of the company's independent accounting firm, or anyone on his or her behalf.

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.

Our internal auditor is Mr. Doron Levin. Mr. Levin has extensive experience with internal and financial audit work, and has provided internal audit/SOX services to public companies for over 14 years. He established his own independent consulting firm in 2009.

Approval of Related Party Transactions under Israeli Law

Fiduciary Duties of Office Holders

The Companies Law codifies the fiduciary duties that office holders owe to a company.

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 care includes a duty to use reasonable means to obtain:

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

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

- refrain from any conflict of interest between the performance of his or her duties to the company and his or her other duties or personal affairs;
- refrain from any activity that is competitive with the company;
- refrain from exploiting any business opportunity of the company to receive a personal gain for himself or herself or others; and
- disclose to the company any information or documents relating to the company's affairs which the office holder received as a result of his or her position as an office holder.

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

Disclosure of Personal Interests of an Office Holder

The Companies Law requires that an office holder promptly disclose to the company any "personal interest" that he or she may be aware of and all related material information or documents concerning any existing or proposed transaction with the company. An interested office holder's disclosure must be made promptly and in any event no later than the first meeting of the board of directors at which the transaction is considered. A personal interest includes an interest of any person in an act or transaction of a company, including a personal interest of such person's relative or of a corporate entity in which such person or a relative of such person holds 5% or more of the outstanding shares or voting rights, is a director or general manager or in which he or she has the right to appoint at least one director or the general manager, but excluding a personal interest arising from one's ownership of shares in the company. A personal interest includes the personal interest of a person for whom the office holder holds a voting proxy or the personal interest of the office holder with respect to his or her vote on behalf of a person for whom he or she holds a proxy even if such shareholder has no personal interest in the matter. An office holder is not, however, obliged to disclose a personal interest if it derives solely from the personal interest of his or her relative in a transaction that is not considered an extraordinary transaction. Under the Companies Law, an extraordinary transaction is defined as any of the following: a transaction other than in the ordinary course of business; a transaction that is not on market terms; or a transaction that may have a material impact on a company's profitability, assets or liabilities.

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

Approval of Transactions with Officer Holders

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

Disclosure of Personal Interests of Controlling Shareholders and Approval of Certain Transactions

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

- at least a majority of the shares held by all shareholders who do not have a personal interest in the transaction and who are present and voting on the matter approves the transaction, excluding abstentions; or

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

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

To the extent that any such transaction with a controlling shareholder is for a period of more than three years, approval is required once every three years, unless, with respect to any such extraordinary transactions, the audit committee determines that the duration of the transaction is reasonable given the related circumstances.

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

Pursuant to regulations promulgated under the Companies Law, certain transactions with a controlling shareholder or his or her relative, or with directors, relating to terms of service or employment that would otherwise require approval of a company's shareholders may be exempt from shareholder approval upon certain determinations of the audit committee and board of directors. Under these regulations, a shareholder holding at least 1% of the issued share capital or voting power of the company may require, within 14 days of the publication or announcement of such determinations, that despite such determinations by the audit committee and the board of directors, such transaction will require shareholder approval under the same majority requirements that would otherwise apply to such transactions.

In addition, disclosure of a personal interest in a private placement of a public company (including disclosure of any material fact or document) is required by (i) a shareholder holding 5% or more of the company's issued and outstanding capital or its voting rights whose holdings will increase as result of the private placement and a shareholder who will hold 5% or more of the company's issued and outstanding capital or its voting rights as a result of the private placement, if 20% or more of the company's outstanding share capital prior to the private placement is issued in the private placement and the payment for which is not only in cash or listed securities or the transaction is not on market terms; and (ii) a person or entity that will become a controlling shareholder as a result of the private placement.

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 or her power in the company, including, among other things, in voting at a meeting of shareholder with respect to the following matters:

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

In addition, a shareholder has a general duty to refrain from discriminating against other shareholders.

Certain shareholders have a duty of fairness toward the company. These shareholders include any controlling shareholder, any shareholder who knows that he or she 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 other power towards the company. The Companies Law does not define the substance of the duty of fairness, except to state that the remedies generally available upon a breach of contract will also apply in the event of a breach of the duty to act with fairness.

Exculpation, Insurance and Indemnification of Directors and Officers

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 include such a provision, to the fullest extent permitted by law. The company may not exculpate in advance a director from liability arising out of a prohibited dividend or other distribution to shareholders.

Under the Companies Law and the Israeli Securities Law, 5728-1968, or the Israeli Securities Law, a company may indemnify an office holder in respect of the following liabilities and expenses incurred for acts performed by him or her as an office holder, either pursuant to an undertaking made in advance of any such event or following an event, provided its articles of association include a provision authorizing such indemnification:

- a financial liability imposed on him or her in favor of another person pursuant to a judgment, including a settlement or arbitrator's award approved by a court. However, if an undertaking to indemnify an office holder with respect to such liability is provided in advance, then such 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 foreseen events and amount or criteria;

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

- 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; and

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

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

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

- a breach of the duty of care to the company or to a third party, to the extent such a breach does not arise out of the negligent conduct of the office holder;

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

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

Under the Companies Law, a company may not indemnify, exculpate or enter into an insurance contract for office holder liability, for any of the following:

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

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

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

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

Under the Israeli Companies Law, exculpation, indemnification and insurance of office holders in a public company must be approved by the compensation committee and the board of directors and, with respect to the chief executive officer or a director or under certain circumstances, also by the shareholders.

Our Amended Articles permits us to exculpate, indemnify and insure our office holders to the fullest extent permitted under the Companies Law. We have entered into indemnification and exculpation agreements with each of our directors. This indemnification is limited to events determined as foreseeable by our Board of Directors based on our activities, as set forth in the indemnification agreements.

We have obtained directors' and officers' liability insurance for the benefit of our office holders and intend to continue to maintain such coverage and pay all premiums thereunder to the fullest extent permitted by the Companies Law, with coverage of $5 million in the aggregate.

Compensation of Directors and Executive Officers

Directors. Under the Companies Law, the compensation of our directors requires the approval of our compensation committee, the subsequent approval of the board of directors and, unless exempted under regulations promulgated under the Companies Law, the approval of the shareholders at a general meeting. If the compensation of our directors is inconsistent with our stated compensation policy, then those provisions that must be included in the compensation policy according to the Companies Law must have been considered by the compensation committee and board of directors, and shareholder approval will also be required, provided that:

- at least a majority of the shares held by all shareholders who are not controlling shareholders and do not have a personal interest in such matter, present and voting at such meeting, are voted in favor of the compensation package, excluding abstentions; or

- the total number of shares of non-controlling shareholders and shareholders who do not have a personal interest in such matter voting against the compensation package does not exceed two percent (2%) of the aggregate voting rights in the company.

Executive officers other than the chief executive officer. The Companies Law requires the approval of the compensation of a public company's executive officers (other than the chief executive officer) in the following order: (i) the compensation committee, (ii) the company's board of directors, and (iii) if such compensation arrangement is inconsistent with the company's stated compensation policy, the company's shareholders (by a special majority vote as discussed above with respect to the approval of director compensation). However, if the shareholders of the company do not approve a compensation arrangement with an executive officer that is inconsistent with the company's stated compensation policy, the compensation committee and board of directors may override the shareholders' decision if each of the compensation committee and the board of directors provide detailed reasons for their decision.

Chief executive officer. Under the Companies Law, the compensation of a public company's chief executive officer is required to be approved by: (i) the company's compensation committee; (ii) the company's board of directors, and (iii) the company's shareholders (by a special majority vote as discussed above with respect to the approval of director compensation). However, if the shareholders of the company do not approve the compensation arrangement with the chief executive officer, the compensation committee and board of directors may override the shareholders' decision if each of the compensation committee and the board of directors provide a detailed report for their decision. The approval of each of the compensation committee and the board of directors should be in accordance with the company's stated compensation policy; however, in special circumstances, they may approve compensation terms of a chief executive officer that are inconsistent with such policy provided that they have considered those provisions that must be included in the compensation policy according to the Companies Law and that shareholder approval was obtained (by a special majority vote as discussed above with respect to the approval of director compensation). In addition, the compensation committee may waive the shareholder approval requirement with regards to the approval of the engagement terms of a candidate for the chief executive officer position, if they determine that the compensation arrangement is consistent with the company's stated compensation policy, and that the chief executive officer did not have a prior business relationship with the company or a controlling shareholder of the company and that subjecting the approval of the engagement to a shareholder vote would impede the company's ability to employ the chief executive officer candidate.

Involvement in Legal Proceedings

None of our Directors, nominee for Directors or officers has appeared as a party during the past ten years in any legal proceedings that may bear on his ability or integrity to serve as a Director or officer of the Company.

Code of Ethics

We have adopted a written code of ethics that applies to our officers and employees, including our principal executive officer, principal financial officer, principal controller and persons performing similar functions as well as our directors. Our Code of Business Conduct and Ethics is posted on our website at www.todosmedical.com. If we make any amendment to the Code of Business Conduct and Ethics or grant any waivers, including any implicit waiver, from a provision of the code, we will disclose the nature of such amendment or waiver on our website to the extent required by the rules and regulations of the SEC. We have not granted any waivers under our Code of Business Conduct and Ethics.

DIRECTOR AND EXECUTIVE COMPENSATION

Compensation of Executive Officers and Directors

The following table presents in the aggregate of all compensation we paid to all of our directors and executive officers as a group for work during or with respect to the year ended December 31, 2018. The table does not include any amounts we paid to reimburse any of such persons for costs incurred in providing us with services during this period.

All amounts reported in the tables below reflect the cost to our Company, in thousands of U.S. Dollars, for the year ended December 31, 2018. Amounts paid in NIS are translated into U.S. dollars at the rate of NIS 3.6 is equal to $1.00, based on the average representative rate of exchange between the NIS and the U.S. dollar as reported by the Bank of Israel in the year ended December 31, 2018.

	Salary and Related Benefits, including Pension, Retirement and Other Similar Benefits	Share Based Compensation
All directors and executive officers as a group, consisting of ten (10) persons	$ 351,000	$ 48,000

Compensation of Directors

Except for the directors who serve on our audit committee, we did not pay any compensation to our directors. In the year ended December 31, 2018, we paid $21,600 to each of Ronit Even-Zahav Meitin, Alon Shalev, and Moshe Abramovitz, the three members of our audit committee.

We do not have any written agreements with any director providing for benefits upon the termination of such director's relationship with us.

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

Compensation of Executive Officers

In accordance with the Companies Law, the table below reflects the compensation granted to our four most highly compensated officers during or with respect to the year ended December 31, 2018.

Annual Compensation - in thousands of USD - convenience translation

Executive Officers	Salary and Related Benefits, including Pension, Retirement and Other Similar Benefits	Share Based Compensation	Total
Herman Weiss, M.D., CEO	$ 83(1)	$ -	$ 83
Rami Zigdon, CBO	$ 72	$ 36	$ 108
Udi Zelig, CTO	$ 81	$ 12	$ 93
David Ben Naim, CFO	$ 50	$ -	$ 50
	$ 286	**$ 48**	**$ 334**

(1) This amount was not paid to the CEO in 2018; rather the Company made a provision in its financial statements to reflect a compensation liability to Dr. Weiss.

Employment Agreements with Executive Officers

We have entered into written employment agreements with each of our executive officers. These agreements contain provisions regarding non-competition, confidentiality of information and assignment of inventions. The enforceability of covenants not to compete in Israel and the United States is subject to limitations. For example, Israeli courts have recently required employers seeking to enforce non-compete undertakings of a former employee to demonstrate that the competitive activities of the former employee will harm one of a limited number of material interests of the employer which have been recognized by the courts, such as the secrecy of a company's confidential commercial information or its intellectual property. In addition, we have entered into agreements with each executive officer and director, pursuant to which, we have agreed to indemnify each of them up to a certain amount and to the extent that these liabilities are not covered by directors and officers insurance.

The following compensation package for our CEO was approved by our shareholders at the annual general meeting of shareholders held on April 29, 2019:

- *Salary*: NIS 47,840 per month
- *Bonus*: Annual performance bonus of up to 35% of annual salary + 1% additional options, linked to the achievement of performance goals to be established by the Board of Directors each year.
- *Equity*: The Company will grant the CEO options to purchase 5% of the Company's issued and outstanding shares as of March 25, 2019, at an exercise price equal to the fair market value of the Company's shares on the date of grant, in accordance with the following vesting schedule:
  - 25% will vest on grant
  - 25% will vest on the consummation of the Company's planned public offering (the "Public Offering Date")
  - 25% will vest quarterly in the first year following the Public Offering Date
  - 25% will vest quarterly in the second year following the Public Offering Date
- *Notice Period*: 3 months
- *Severance Payments*: 6 months' salary following effective date of termination
- *Change in Control Payment*: In the event the CEO is terminated due to a change of control, the Company will pay the CEO 12 months' salary (instead of the 6 months' salary) following the effective date of termination.
- *Change in Control Acceleration*: In the event of a change of control transaction following the Public Offering Date vesting will be accelerated, and all of the options will become fully vested.

The Company has entered into an employment agreement with Dr. Weiss that includes the compensation terms described above.

Effective as of May 1, 2015, we entered into an employment agreement with Mr. Zigdon, our former CEO and current CBO. The agreement was approved by our Board on August 16, 2015. Currently, the employment agreement is in full force and effect. The agreement may be terminated by either party with ninety days' prior written notice or by us under exceptional circumstances as detailed in the agreement. Pursuant to the agreement, Mr. Zigdon is entitled to a gross monthly salary of NIS 15,000 (approximately $3,900) linked to the Israeli CPI known at the effective date of the agreement as well as reimbursement of vehicle expenses up to an annual amount of NIS 16,000 (approximately $4,200). The gross monthly salary shall be increased to NIS 25,000 (approximately $6,600) as from the date on which the Company shall have cash at its bank account at least NIS 3,500,000 (approximately $920,000 (the "Triggering Date") that is sourced from capital injections/non-repayable amounts only, as confirmed by the Company's CFO in writing. In the event that during the term of the Agreement, on a certain date, the Company shall have at least NIS 4 million (approximately $1.05 million) cash at its bank account that is sourced from capital injection/non-repayable amounts only, as confirmed by the Company's CFO, Mr. Zigdon shall be entitled to a payment in the sum of NIS 12,333 (approximately $3,200) multiplied by the number of calendar months that had passed from the effective date of the agreement and until the month ending prior to the Triggering Date. Furthermore, Mr. Zigdon is entitled to options to purchase our shares, subject to an option plan which was adopted by the appropriate organs of the Company. Mr. Zigdon is entitled to customary fringe benefits under Israeli laws. If the agreement is terminated by us, other than for "cause" as defined in the agreement, Mr. Zigdon shall be entitled to an adjustment bonus equal to 3 times the last gross monthly salary or in the event that we will have more than $3 million cash at hand, the adjustment bonus shall be equal to 6 times the last gross monthly salary. The agreement contains provisions regarding non-competition, confidentiality of information and assignment of inventions.

Out of the 1,241,163 employee option shares that had been granted to Mr. Zigdon, 103,428 vested options were exercised by Mr. Zigdon and are currently held by ESOP Management & Trust Services Ltd. for the benefit of Mr. Zigdon. As of June 30, 2019, 749,869 (42.6%) of these employee option shares have vested and are unexercised. All of the options expire on January 11, 2021.

On January 1, 2012 we entered into an employment agreement with Dr. Zelig, our Chief Technology Officer. Pursuant to the agreement, Dr. Zelig is employed by us on a full-time basis. The agreement may be terminated by either party with 30 days' prior written notice or by us under exceptional circumstances as detailed in the agreement. Under the agreement, Dr. Zelig is entitled to a gross monthly compensation of NIS 16,000 (approximately $4,100) as well as global monthly gross payment for overtime of NIS 2,500 (approximately $650). Dr. Zelig is entitled to a company car and cellular phone in connection with his employment with us. Dr. Zelig is entitled to customary fringe benefits under Israeli laws as well as contributions (by our Company and by Dr. Zelig) to an education fund, at the rates specified in the agreement. Under the Company's employee option plan, Dr. Zelig has been granted 620,581 employee options, of which 387,862 employee options have vested and are unexercised as of March 31, 2019. All of the options expire on January 11, 2021.

Options and Incentive Plans and Awards

In November 2015, the Board of Directors adopted the Todos Medical Ltd. 2015 Share Option Plan, or the Option Plan. The Option Plan generally permits the reservation, allocation and issuance of share options to our employees, directors or consultants. As of December 31, 2018, 1,758,315 options to purchase our Ordinary Shares have been granted under the Option Plan and 4,241,685 Ordinary Shares were available for future option grants under the Option Plan. As of March 31, 2019, 1,137,731 options are exercisable. Unless terminated earlier by our Board of Directors, the Option Plan will terminate ten years from its date of adoption.

Our Board of Directors administers the Option Plan, including (i) designating participants in the Option Plan; (ii) determining the terms and provisions of respective option agreements, including the number of shares to be covered by each option, exercisability, transferability, and other terms and conditions of the option; (iii) accelerating the right of an option-holder to exercise any previously granted option; (iv) determining the fair market value of the shares; and (v) interpreting the provisions and supervising the administration of the Option Plan. Our Board of Directors may amend or discontinue the Option Plan at any time, except that generally no amendment may impair the rights of an option-holder without his or her written consent.

Share options granted to Israeli employees under the Option Plan may be granted pursuant to the provisions of Section 102 of the Israeli Income Tax Ordinance. Any options granted pursuant to such provision will be issued to a trustee and be held by the trustee for at least two years from the date of grant of the options, as required under the Israeli tax ordinance.

Upon termination of employment or service for any reason, other than for cause or death or disability, the option-holder may exercise his or her vested options within 90 days of the date of termination. If we terminate an option-holder's employment or service for cause, all of the employee's options, whether vested or unvested, expire on the termination date. Upon termination of employment or service due to death or disability, the option-holder or his or her estate may exercise his or her vested options within twelve months from the date of death or disability. An option may not, however, be exercised after the option's expiration date.

Options are non-transferable except in the event of an option holder's death.

If we are party to a merger or consolidation, outstanding options and shares acquired under the Option Plan will be subject to the agreement of merger or consolidation, which will provide for one or more of the following: (i) the continuation of such options by us, (ii) the assumption of such options by the surviving corporation or its parent, (iii) the substitution by the surviving corporation or its parent of new options, (iv) the cancellation of the such options in exchange for payment equaling the market value of the shares subject to the option less the exercise price, or (v) full exercisability of the option and full vesting of the shares subject to the option.

In the event of any variation in our share capital, including a share dividend, share split, combination or exchange of shares, recapitalization, or any other like event, the number, class and kind of shares subject to the Option Plan and outstanding options, and the exercise prices of the options, will be appropriately and equitably adjusted so as to maintain the proportionate number of shares without changing the aggregate exercise price of the options.

No individual grants or agreements regarding future payouts under non-stock price-based plans have been made to any executive officer or any Director or any employee or consultant since our inception; accordingly, no future payouts under non-stock price-based plans or agreements have been granted or entered into or exercised by any of the officers or Directors or employees or consultants since we were founded.

Warrants

The Company granted 600,000 warrants, 4,518,406 warrants, and 3,106,000 warrants during 2018, 2016 and 2015, respectively.

The outstanding warrants and the terms of these warrants as of December 31, 2018 are as follows:

Issuance date	Outstanding as of December 31, 2018	Exercise Price	Exercisable as of December 31, 2018	Exercisable Through
Series (2015)	1,502,500	$ 0.5	1,502,500	April 2021
Series (2016)	2,628,406	$ 0.5	2,628,406	May 2019
Series (2018)	600,000	$ 0.125	600,000	November 2021
	4,730,906		4,730,906	

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of September 18, 2019 (assuming the formal closing of the Amarantus option described in *Description of Business – Recent Developments* above) by:

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

The beneficial ownership of our ordinary shares is determined in accordance with the rules of the SEC and generally includes any 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 ordinary shares issuable pursuant to options and warrants that are currently exercisable or exercisable within 60 days of September 18, 2019 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 has been computed on the basis of 166,518,340 ordinary shares outstanding as of September 18, 2019.

Unless otherwise noted below, the address of each shareholder, director and executive officer is c/o Todos Medical Ltd., 1 HaMada St., Rehovot, Israel.

Except as indicated in footnotes to this table, we believe that the shareholders named in this table have sole voting and investment power with respect to all shares shown to be beneficially owned by them, based on information provided to us by such shareholders. The shareholders listed below do not have any different voting rights from any of our other shareholders.

	No. of Shares Beneficially Owned	Percentage Owned [1]
Holders of more than 5% of our voting securities:		
Amarantus Bioscience Holdings, Inc.[2]	83,484,438	49.99%
Assaf Gold[3]	9,225,000	5.53%
D.P.H. Investments Ltd.[4]	8,280,000	4.97%
Directors and executive officers:		
Dr. Herman Weiss, CEO and Director	300,000	*
Rami Zigdon, CBO and Director[7]	3,423,850	2.05%
Moshe Abramovitz, Director	0	*
Alon Ostrovitzky, Director	0	*
Moshe Schlisser, Director	0	*
Colin Bier, Director	0	*
Ronit Even-Zahav Meitin, Director	0	*
Alon Shalev, Director	0	*
Udi Zelig, CTO	927,375	*
David Ben Naim, CFO	0	*
All directors and executive officers as a group (10 persons)	4,651,225	2.79%

* Indicates beneficial ownership of less than 1% of the total ordinary shares outstanding

(1) The percentages shown are based on 166,518,340 Ordinary Shares issued and outstanding as of September 18, 2019. In addition, the percentages shown assume the formal closing of the exercise of the Amarantus option.

(2) The shareholders of the Company have approved the Company's exercise of its option to acquire 100% of Breakthrough in exchange for issuing to Amarantus an additional 30% of the Company such that Amarnatus will hold 49.99% of the Company. These additional shares will be issued to Amarantus upon the formal closing of the exercise of the option which we expect to take place within the coming weeks.

(3) Assaf Gold is the owner of Sorry Doll Ltd., which owns 3,500,000 Ordinary Shares, including options to purchase 3,500,000 Ordinary Shares, and of Care G.B. Plus Ltd., which owns 2,225,000 Ordinary Shares.

(4) D.P.H. Investments Ltd., or DPH, is an entity that has 18 shareholders, none of whom own more than 17% of DPH. Moshe Abramovitz, a member of our Board of Directors since February 27, 2016, is also a shareholder of DPH. At least five shareholders need to agree before any action with regard to these shares can be taken by DPH. Pursuant to its February 2016 investment, DPH had the right to appoint two members to our Board of Directors. Moshe Schlisser and Moshe Abramovitz were appointed as DPH's representatives on our Board of Directors. Since March 16, 2017 (the date of approval of the Amended Articles), none of our shareholders maintain rights different from the rights of other shareholders, and DPH no longer has the right to appoint two members to our Board of Directors. Messrs. Schlisser and Abramovitz remain Board members.

(5) Includes 749,869 employee options which are currently exercisable. Out of the 1,241,163 employee option shares that had been granted to Mr. Zigdon in January 2016, 103,428 vested options were exercised by Mr. Zigdon and are currently held by ESOP Management & Trust Services Ltd. for the benefit of Mr. Zigdon. As of March 31, 2019, 749,869 (42.6%) of these employee option shares have vested and are unexercised.

We are unaware of any contract or other arrangement the operation of which may at a subsequent date result in a change in control of our Company.

Record Holders

Based upon a review of the information provided to us by our transfer agent, as of June 30, 2019, there were a total of 63 holders of record of our shares, of which four record holders who hold 19,746,074 shares, or approximately 21.8% of our outstanding shares, had a registered address in the U.S., thirty-eight (38) holders had registered addresses in Israel, 14 holders had registered addresses in Singapore, three holders had registered addresses in Canada, two holders had registered addresses in the United Kingdom, one holder had a registered address in Germany, and one holder had a registered address in Cyprus.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of material transactions, or series of related material transactions since January 1, 2018, to which we are a party and in which the other parties include our directors, executive officers, holders of more than 5% of our voting securities, or any member of the immediate family of any of the foregoing persons.

Reseller Agreement with Care G.B. Plus

On December 28, 2018 we entered into a Marketing and Reseller Agreement with Care G.B. Plus Ltd. for the resale of our breast cancer screening products in Israel. Care G.B. Plus is owned by Assaf Gold, who was the beneficial owner of 5.49% of our issued and outstanding shares at the time the Care G.B. agreement was signed by the Company. Pursuant to the agreement, we appointed Care G.B. as our exclusive distributor in Israel, and Care G.B. Plus undertook to establish at least one laboratory in Israel to support the assay protocol and to run a fifty (50) patient pilot trial to evaluate the performance of the laboratory and Care G.B. Plus's support team. At the annual general meeting of shareholders of the Company held on April 29, 2019, the Company's shareholders approved the Company's entry into this reseller agreement.

Loans from Shareholders

Sorry Doll Ltd. and S.B. Nihul Mekarkein Ltd.

Mr. Yitzhak Ostrovitzky, the father of one of the Company's directors, Alon Ostrovitzky, granted the Company a loan in order to fund the Company's ongoing operations. This loan had not been memorialized in a written document. Rather, the lender was present during meetings of the Board of Directors, at which the terms of repayment were approved and agreed upon.

By agreement dated November 28, 2018, Yitzhak Ostrovitzky assigned the unpaid balance of his loan in the amount of approximately $350,000 to Sorry Doll Ltd. ("Sorry Doll") and S.B. Nihul Mekarkein Ltd. ("S.B. Nihul") (together, the "Assignees"). Sorry Doll is owned by Assaf Gold, who was the beneficial owner of 5.49% of our issued and outstanding shares at the time the assignment agreement was signed. S.B. Nihul, while not a related party at the time of the assignment of the loan, will become a related in the event the loan is converted into shares, as described below.

The Company and the Assignees agreed that, subject to shareholder approval, instead of having the Company repay the loan to the Assignees, the Company will convert the outstanding balance of the Assignees' loan in the amount of approximately $350,000 into 3,500,000 Ordinary Shares of the Company, par value NIS 0.01, at a conversion price of ten cents (US$0.10) per share, and grant to each of the Assignees an option to purchase 3,500,000 Ordinary Shares of the Company, par value NIS 0.01, at an exercise price of twenty cents (US$0.20) per share. The option shall be in effect for five years from November 28, 2018.

Following the conversion of the loan and the grant of the options, Assaf Gold, owned 9,225,000 Ordinary Shares, representing 9.82% of the Company prior to the consummation of the Amarantus change of control transaction (assuming exercise of the options), and S.B. Nihul held 6,500,000 Ordinary Shares, representing 6.92% of the Company prior to the consummation of the Amarantus change of control transaction (assuming exercise of the options).

At the annual general meeting of shareholders of the Company held on April 29, 2019, the Company's shareholders voted on approving the Company's entry into this loan conversion agreement.

Royalty Payments from BG Negev to our Chief Technology Officer

Dr. Udi Zelig, our Chief Technical Officer, is one of the inventors of the know-how licensed under the agreement, and is entitled to receive from BG Negev between 10% to 15% of all payments that BG Negev is entitled to receive from us under the license agreement.

Share Transfer from Crow Technologies

On May 2011, Crow Technologies 1977, Ltd. (a company in which Mr. Shmuel Melman, one of our principal shareholders, is one of the controlling shareholders), or Crow, and Mr. Rami Zigdon entered into a share transfer agreement, whereby Mr. Zigdon acquired from Crow 100% of our share capital. Pursuant to the share transfer agreement, Crow was granted the exclusive right to produce our products at a price which will be 50% higher than the fair market value of such production in Israel. We believe that the exclusive right held by Crow is immaterial to the ultimate price for which we will sell our products or the overall cost of producing our products since the exclusive right to manufacture components applies only to electronic components, of which there are not any in our products.

Iberica Investments LLC Consulting Agreement

In February 2015, we entered into a consulting agreement with Iberica Investments LLC, or Iberica, and A.S. Iber Israel Ltd., or Iber, in which, Mr. Moshe Schlisser, who serves as our director, and Mr. Ephraim Schlisser (the father of Mr. Moshe Schlisser and a member of the Wasserman Group) hold managerial positions. Pursuant to the agreement, Iberica agreed to provide assistance with our fundraising efforts, in consideration for up to 10% of the total value of the benefit derived by us, and Iberica assigned its rights and obligations to Iber. From January 1, 2015 through December 31, 2018, we have paid Iber and Iberica approximately $317,000, pursuant to this consulting agreement. On November 29, 2018, we terminated this agreement.

Warrants Granted to Dr. Schmitt

On January 17, 2017, we granted Dr. Schmitt, one of the advisors on our Advisory Board, warrants to purchase 620,521 Ordinary Shares at an exercise price of NIS 0.01 per share. As of March 10, 2019, all of these warrants are fully vested. The warrants granted to Dr. Schmitt were issued in consideration of consultancy services provided to us under a consulting agreement dated October 18, 2016. The agreement's initial two-year term has expired, and the parties are negotiating an extension of the term.

DESCRIPTION OF SHARE CAPITAL

The following description of our share capital and provisions of our Amended Articles is a summary and does not purport to be complete. This summary is subject to the Israeli Companies Law and to the complete text of our Amended Articles.

General

As of September 18, 2019, our authorized share capital consists 1,000,000,000 ordinary shares, par value NIS 0.01 per share, of which 101,502,961 shares are issued and outstanding. Upon the closing of this offering, without taking into consideration the effects of the Reverse Split, our authorized share capital will consist of 1,000,000,000 ordinary shares, par value NIS 0.01 per share, of which 125,502,961 will be issued and outstanding (assuming that the underwriters do not exercise their option to purchase additional units, ordinary shares and/or warrants). All of our outstanding ordinary shares are validly issued, fully paid and non-assessable. Our ordinary shares are not redeemable and do not have any preemptive rights.

Registration Number and Purposes of the Company

Our registration number with the Israeli Registrar of Companies is 51-443712-8. Our purpose as set forth in our amended articles of association is to engage in any lawful activity. Our Articles state that the liability of our shareholders is limited, subject to the provisions of the Israeli Companies Law.

Transfer of Shares

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

Election of Directors

Our ordinary shares do not have cumulative voting rights for the election of directors. As a result, the holders of a majority of the voting power represented at a shareholders meeting have the power to elect all of our directors, subject to the special approval requirements for external directors described under "*Directors, Executive Officers, Promotors and Control Persons – Board Practices – External Directors*."

Under our amended articles of association, our Board must consist of at least three directors but no more than nine directors, including two external directors as required by the Israeli Companies Law. Pursuant to our amended articles of association, other than the external directors, for whom special election requirements apply under the Israeli Companies Law, each of our directors will be appointed by a simple majority vote of holders of our voting shares, participating and voting at an annual general meeting of our shareholders. Each director (other than external directors) will hold office until the next annual general meeting following the annual general meeting at which they were elected and until his or her successor is elected and qualified, or until the occurrence of certain events, in accordance with the Israeli Companies Law and our amended and restated articles of association, including his or her earlier resignation, death or removal by a vote of the majority of the voting power of our shareholders at a general meeting of until his or her office expires by operation of law. In addition, our amended articles of association allow our Board to appoint directors (other than external directors) to fill vacancies on the Board to serve for a term of office equal to the remaining period of the term of office of the directors(s) whose office(s) have been vacated. External directors are elected for an initial term of three years, may be elected for additional terms of three years each under certain circumstances, and may be removed from office pursuant to the terms of the Israeli Companies Law. See "*Directors, Executive Officers, Promotors and Control Persons – Board Practices – External Directors*."

Dividend and Liquidation Rights

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

Pursuant to the Israeli Companies Law, we may declare and pay dividends only if, upon the determination of our board of directors, there is no reasonable concern that the distribution will prevent us from being able to meet the terms of our existing and foreseeable obligations as they become due. Under the Israeli Companies Law, the distribution amount is further limited to the greater of retained earnings or earnings generated over the two most recent years legally available for distribution 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 or earnings generated over the two most recent years legally available for distribution, we must 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 our ordinary shares in proportion to the nominal value of their shareholdings. This right, as well as the right to receive dividends, may be affected by the grant of preferential dividend or distribution rights to the holders of a class of shares with preferential rights that may be authorized in the future.

Exchange Controls

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

Shareholder Meetings

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

Furthermore, the Israeli Companies Law requires that resolutions regarding the following matters be approved by our shareholders at a general meeting:

- amendments to our articles of association;
- appointment, terms of service and termination of service of our auditors;
- appointment of external directors;
- approval of certain related party transactions;
- increases or reductions of our authorized share capital;
- mergers; and
- the exercise of our board of director's powers by a general meeting, if our board of directors is unable to exercise its powers and the exercise of any of its powers is essential for our proper management.

Subject to the provisions of the Israeli Companies Law and regulations promulgated thereunder, shareholders entitled to participate and vote at general meetings are the shareholders of record on a date to be decided by the board of directors, which, as a company listed on an exchange outside Israel, may be between four and 40 days prior to the date of the meeting.

The Israeli Companies Law requires that a notice of any annual general meeting or special general meeting be provided to shareholders at least 21 days prior to the meeting and if the agenda of the meeting includes, among other things, the appointment or removal of directors, the approval of transactions with office holders or interested or related parties, an approval of a merger or the approval of the compensation policy, notice must be provided at least 35 days prior to the meeting.

Under the Israeli Companies Law, our shareholders are not permitted to take action via written consent in lieu of a meeting.

Voting Rights

Quorum Requirements

Pursuant to our amended articles of association, holders of our ordinary shares have one vote for each ordinary share held on all matters submitted to a vote before the shareholders at a general meeting. The quorum required for general meetings of our shareholders is at least two shareholders present in person, by proxy or written ballot, who hold or represent between them at least 25% of the total outstanding voting rights (or if a higher percentage is required by law, such higher percentage), within half an hour of the time fixed for the commencement of the meeting. A meeting adjourned for lack of a quorum is adjourned either to the same day in the following week at the same time and place or to such day, time and place as specified in the notice of the meeting or to such day, time and place as the chairman of the general meeting shall determine. At the reconvened meeting, at least two shareholders present in person or by proxy shall constitute a lawful quorum, unless the meeting of shareholders was convened at the demand of shareholders, in which case, the quorum shall be the presence of one or more shareholders holding at least 5% of our issued share capital and at least one percent of the voting power of our shares, or one or more shareholders with at least 5% of the voting power of our shares.

Vote Requirements

Our amended articles of association provide that all resolutions of our shareholders require a simple majority vote, unless otherwise required by the Israeli Companies Law or by our amended articles of association. Under the Israeli Companies Law, certain actions require a special majority, including: (i) appointment of external directors, requiring the approval described above under "*Directors, Executive Officers, Promotors and Control Persons – Board Practices – External Directors*"; (ii) approval of an extraordinary transaction with a controlling shareholder or in which the controlling shareholder has a personal interest and the terms of employment or other engagement of the controlling shareholder or a relative of the controlling shareholder (even if not extraordinary), requiring the approval described above under "*Directors, Executive Officers, Promotors and Control Persons – Approval of Related Party Transactions under Israeli Law – Disclosure of Personal Interests of Controlling Shareholders and Approval of Certain Transactions*"; (iii) approval of a compensation policy, requiring the approval described under "*Directors, Executive Officers, Promoters and Control Persons – Board Practices – Compensation Committee and Compensation Policy*"; and (iv) approval of executive officer compensation inconsistent with our office holder compensation policy or the compensation of our chief executive officer (subject to limited exceptions), requiring the approval described above under "*Directors, Executive Officers, Promotors and Control Persons – Approval of Related Party Transactions under Israeli Law – Disclosure of Personal Interests of Controlling Shareholders and Approval of Certain Transactions*."

In addition, under the Israeli Companies Law the authorization of the chairman of the board to assume the role or responsibilities of the chief executive officer, or the authorization of the chief executive officer or his or her relative thereof to assume the role or responsibilities of the chairman of the board, for periods of no longer than three years each, is subject to receipt of the approval of a majority of the shares voting on the matter, provided that either (i) included in such majority are at least two-thirds of the shares of shareholders who are non-controlling shareholders and shareholders who do not have a personal interest in the resolution that are voted at the meeting on the matter (excluding any abstentions); or (ii) the total number of shares of shareholders specified in clause (i) who voted against the resolution does not exceed 2% of the voting rights in the company.

Another exception to the simple majority vote requirement is a resolution for the voluntary winding up, or an approval of a scheme of arrangement or reorganization, of the company pursuant to Section 350 of the Israeli Companies Law, which requires the approval of holders of 75% of the voting rights represented at the meeting and voting on the resolution.

Access to Corporate Records

Under the Israeli Companies Law, shareholders are provided access to: minutes of the general meetings of our shareholders; our shareholders register and principal shareholders register, articles of association and financial statements; and any document that we are required by law to file publicly with the Israeli Companies Registrar or the Israel Securities Authority. In addition, shareholders may request to be provided with any document in the company's possession related to an action or transaction requiring shareholder approval under the related party transaction provisions of the Israeli Companies Law. We may deny this request if we believe it has not been made in good faith or if such denial is necessary to protect our interest or protect a trade secret or patent.

Modification of Class Rights

Under the Israeli Companies Law and our amended articles of association, the rights attached to any class of shares, such as voting, liquidation and dividend rights, may be modified or cancelled by adoption of a resolution by the holders of a majority of all shares as one class, without any required separate resolution of any class of shares, or otherwise in accordance with the rights attached to such class of shares, as set forth in our amended articles of association.

Registration Rights

The Company granted the participants in the convertible bridge loan transactions in February through June 2019 piggy-back registration rights with regard to their shares issued in connection therewith, excluding, however, this Form F-1 and any F-8/S-8 Registration Statement of the Company.

Acquisitions under Israeli Law

Full Tender Offer

A person wishing to acquire shares of an Israeli public company, and who would as a result hold over 90% of the target company's issued and outstanding share capital, is required by the Israeli 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. A person wishing to acquire shares of an Israeli public company, and who would as a result hold over 90% of the issued and outstanding share capital of a certain class of shares of the company, is required to make a tender offer to all of the shareholders who hold shares of the relevant class for the purchase of all of the issued and outstanding shares of that class. If the shareholders who do not accept the offer hold less than 5% of the issued and outstanding share capital of the company or of the applicable class, and more than half of the shareholders who do not have a personal interest in the offer accept the offer, all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. However, a tender offer will also be accepted if the shareholders who do not accept the offer hold less than 2% of the issued and outstanding share capital of the company or of the applicable class of shares.

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

If (a) the shareholders who did not respond or accept the tender offer hold at least 5% 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 Israeli 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, if there is no other shareholder that holds 25% or more of the voting rights in the company, subject to exceptions. Similarly, the Israeli Companies Law provides that an acquisition of shares in 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 more than 45% of the voting rights in the company, if there is no other shareholder of the company who holds more than 45% of the voting rights in the company, subject to certain exceptions. No tender offer is required if the acquisition of shares: (i) occurs in the context of a private placement, that was approved by the company's shareholders and whose purpose is to give the acquirer at least 25% of the voting rights in the company if there is no person who holds 25% or more of the voting rights in the company, or as a private placement whose purpose is to give the acquirer 45% of the voting rights in the company, if there is no person who holds 45% of the voting rights in the company; (ii) was from a holder of 25% or more of the voting rights in the company following which the purchaser will hold 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 following which the purchaser will hold more than 45% of the voting rights in the company.

A special tender offer must be extended to all shareholders of a company but the offeror is not required to purchase shares representing more than 5% of the voting power attached to the company's outstanding shares, regardless of how many shares are tendered by shareholders. A special tender offer may be consummated only if (i) at least 5% of the voting power attached to the company's outstanding shares will be acquired by the offeror; and (ii) the number of shares tendered in the offer exceeds the number of shares whose holders objected to the offer (excluding the purchaser, its controlling shareholders, holders of 25% or more of the voting rights in the company or any person having a personal interest in the acceptance of the tender offer, or anyone on their behalf, including any such person's relatives and entities under their control). If a special tender offer is accepted, then the purchaser or any person or entity controlling it, at the time of the offer, and any person or entity 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 Israeli Companies Law permits merger transactions if approved by each party's board of directors and, unless certain requirements described under the Israeli Companies Law are met, by a majority vote of each party's shares, and, in the case of the target company, a majority vote of each class of its shares, voted on the proposed merger at a shareholders meeting. The board of directors of a merging company may not approve the merger if it determines that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of the merging entities.

For purposes of the shareholder vote of a merging company whose shares are held by the other merging company or a person or entity holding 25% or more of any of the means of control of the other merging entity, unless a court rules otherwise, the merger will not be deemed approved if a majority of the votes of shares voting on the matter at the shareholders meeting (excluding abstentions) that are held by parties other than the other party to the merger, or by any other person or entity who holds 25% or more of the voting rights or the right to appoint 25% or more of the directors of the other party, or any one on their behalf including their relatives or corporations controlled by any of them, vote against the merger. If, however, the merger involves a merger with a company's own controlling shareholder or if the controlling shareholder has a personal interest in the merger, then the merger is instead subject to the same Special Majority approval that governs all extraordinary transactions with controlling shareholders (as described under "*Directors, Executive Officers, Promotors and Control Persons – Approval of Related Party Transactions under Israeli Law – Disclosure of Personal Interests of Controlling Shareholders and Approval of Certain Transactions*").

If the transaction would have been approved by the shareholders of a merging company 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 valuation of the merging companies and the consideration offered to the shareholders.

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 the merging entities, and may further give instructions to secure the rights of creditors.

In addition, a merger may not be consummated unless at least 50 days have passed from the date on which a proposal for approval of the merger was filed by each party with the Israeli Registrar of Companies and at least 30 days have passed from the date on which the merger was approved by the shareholders of each party.

Anti-Takeover Measures under Israeli Law

The Israeli Companies Law allow us to create and issue shares having rights different from those attached to our ordinary shares, including shares providing certain preferred rights with respect to voting, distributions or other matters and shares having preemptive rights. , Currently no preferred shares are authorized under our amended articles of association. In the future, if we do authorize, create and issue a specific class of preferred shares, such class of shares, depending on the specific rights that may be attached to it, may have the ability to frustrate or prevent a takeover or otherwise prevent our shareholders from realizing a potential premium over the market value of their ordinary shares. The authorization and designation of a class of preferred shares will require an amendment to our amended articles of association, which requires the prior approval of the holders of a majority of the voting power attached to our issued and outstanding shares at a general meeting. The convening of the meeting, the shareholders entitled to participate and the majority vote required to be obtained at such a meeting will be subject to the requirements set forth in the Israeli Companies Law and our articles of association as described above in "– *Voting Rights*."

Borrowing Powers

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

Changes in Capital

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

Transfer Agent and Registrar

Our transfer agent is Word Wide Stock Transfer, LLC, 1 University Plaza Drive #505, Hackensack, NJ, phone number: (201) 820-2008, and fax number: (201) 820-2010.

Listing

We are in the process of applying to have our ordinary shares listed on The Nasdaq Capital Market under the symbol "TOMD".

Warrants Included in the Offering

Public Warrants. This offering of units includes ordinary shares and warrants to purchase additional ordinary shares. Accordingly, upon completion of this offering we will have an additional 48,000,000 ordinary share purchase warrants outstanding (55,200,000 if all of the Units reserved for the over-allotment are sold), with each warrant exercisable for one ordinary share at an exercise price of $, exercisable for a period of five years from the closing of the offering. The warrant holders must pay the exercise price in cash upon exercise of the warrants, unless the warrant holders are utilizing the cashless exercise provision of the warrants, which is only available in certain circumstances, such as if the issuance and sale of the underlying shares is not registered with the SEC pursuant to an effective registration statement. We intend to keep the registration statement of which this prospectus forms a part effective when the warrants are exercised. Except as otherwise provided in the warrants or by virtue of such holder's ownership of ordinary shares, the holder of a warrant does not have the rights or privileges of a holder of our ordinary shares, including any voting rights, until the holder exercises the warrant.

The number of warrants outstanding, and the exercise price of those securities, will be adjusted proportionately in the event of a reverse or forward stock split of our ordinary shares, a recapitalization or reclassification of our ordinary shares, payment of dividends or distributions in shares to our shareholders, or similar transactions. In the event that the Company effects a rights offering to its common stock holders or a pro rata distribution of its assets among its shareholders, then the holder of the warrants will have the right to participate in such distribution and rights offering to the extent of their pro rata share of the Company's outstanding ordinary shares assuming they owned the number of ordinary shares issuable upon the exercise of their warrants. In the event of a "Fundamental Transaction" by the Company, such as a merger or consolidation of it with another company, the sale or other disposition of all or substantially all of the Company's assets in one or a series of related transactions, a purchase offer, tender offer or exchange offer, or any reclassification, reorganization or recapitalization of the Company's ordinary shares, then the warrant holder will have the right to receive, for each ordinary share issuable upon the exercise of the warrant, at the option of the holder, the number of ordinary shares of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration payable as a result of the Fundamental Transaction, that would have been issued or conveyed to the warrant holder had the holder exercised the warrant immediately preceding the closing of the Fundamental Transaction. In lieu of receiving such ordinary shares and additional consideration in the Fundamental Transaction, the warrant holder may elect to have the Company or the successor entity purchase the warrant holder's warrant for its fair market value measured by the Black Scholes method.

A holder will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of our ordinary shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after such election.

The Company will promptly notify the warrant holders in writing of any adjustment to the exercise price or to the number of the outstanding warrants, declaration of a dividend or other distribution, a special non-recurring cash dividend on or a redemption of the ordinary shares, the authorization of a rights offering, the approval of the shareholders required for any proposed reclassification of the ordinary shares, a consolidation or merger by the Company, sale of all or substantially all of the assets of the Company, any compulsory share exchange, or the authorization of any voluntary or involuntary dissolution, liquidation, or winding up of the Company.

The warrants contain a contractual provision stating that all questions concerning the construction, validity, enforcement and interpretation of the warrants are governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law.

We are in the process of applying to have the warrants listed on The NASDAQ Capital Market under the symbol "TOMDW."

Representative Warrants. We will issue ordinary share purchase warrants to the underwriter of this offering equal to 8% of the ordinary shares included in the units ("Underwriter's Warrants"). Each Underwriter's Warrant is exercisable for one share of common stock on a cash or cashless basis at an exercise price of $ (or 125% of the unit price). The Underwriter's Warrants will be non-exercisable for one hundred eighty (180) days after the closing of this offering, and will expire after five years from the effective date of the registration statement of which this prospectus forms a part. The holder of an Underwriter's Warrant must pay the exercise price in cash upon exercise of such warrants, unless it is utilizing the cashless exercise provision of the Underwriter's Warrants, which is only available in certain circumstances, such as if the issuance and sale of the underlying shares is not registered with the SEC pursuant to an effective registration statement. We intend to keep the registration statement of which this prospectus forms a part effective when the warrants are exercised. Except as otherwise provided in the Underwriter's Warrants or by virtue of such holder's ownership of ordinary shares, the holder of an Underwriter's Warrant does not have the rights or privileges of a holder of our ordinary shares, including any voting rights, until the holder exercises the warrant.

The number of Underwriter's Warrants outstanding and the exercise price of those securities will be adjusted proportionately, as permitted by FINRA Rule 5110(f)(2)(G), in the event of a reverse or forward stock split of our ordinary shares, a recapitalization or reclassification of our ordinary shares In the event of a "Fundamental Transaction" by the Company, such as a merger or consolidation of it with another company, the sale or other disposition of all or substantially all of the Company's assets in one or a series of related transactions, a purchase offer, tender offer or exchange offer, or any reclassification, reorganization or recapitalization of the Company's ordinary shares, then the warrant holder will have the right to receive, for each ordinary share issuable upon the exercise of the warrant, at the option of the holder, the number of ordinary shares of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration payable as a result of the Fundamental Transaction that would have been issued or conveyed to the warrant holder had the holder exercised the warrant immediately preceding the closing of the Fundamental Transaction. In lieu of receiving such ordinary shares and additional consideration in the Fundamental Transaction, the warrant holder may elect to have the Company or the successor entity purchase the warrant holder's warrant for its fair market value measured by the Black Scholes method.

A holder of Underwriter's Warrants will not have the right to exercise any portion of such warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of our ordinary shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Underwriter's Warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after such election.

The Company will promptly notify the holders of the Underwriter's Warrants in writing of any adjustment to the exercise price or to the number of the outstanding warrants, declaration of a dividend or other distribution, a special non-recurring cash dividend on or redemption of the ordinary shares, the authorization of a rights offering, the approval of the shareholders required for any proposed reclassification of the ordinary shares, a consolidation or merger by the Company, sale of all or substantially all of the assets of the Company, any compulsory share exchange, or the authorization of any voluntary or involuntary dissolution, liquidation, or winding up of the Company.

We have not applied, and do not intend to apply, for listing of the Underwriter's Warrants on any securities exchange or other trading system.

SHARES ELIGIBLE FOR FUTURE SALE

Assuming that the underwriters do not exercise their option to purchase additional units, ordinary shares and/or warrants with respect to this offering and assuming no exercise of options outstanding following this offering, we will have an aggregate of ordinary shares outstanding upon the closing of this offering. Of these shares, the ordinary shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, unless purchased by "affiliates" (as that term is defined under Rule 144 of the Securities Act, or Rule 144), who may sell only the volume of shares described below and whose sales would be subject to additional restrictions described below.

The remaining ordinary shares of the Company held by our existing shareholders, other than those ordinary shares sold in our June 2017 registered public offering, are deemed to be "restricted securities" under Rule 144. Subject to certain contractual restrictions, including the lock-up agreements described below, restricted securities may only be sold in the public market pursuant to an effective registration statement under the Securities Act or pursuant to an exemption from registration under Rule 144 under the Securities Act. These rules are summarized below. Sales of these shares in the public market after the restrictions under the lock-up agreements lapse, or the perception that those sales may occur, could cause the prevailing market price of our ordinary shares to decrease or to be lower than it might be in the absence of those sales or perceptions.

Eligibility of Restricted Shares for Sale in the Public Market

The following indicates approximately when the ordinary shares that are not being sold in this offering, but which will be outstanding at the time at which this offering is complete, will be eligible for sale into the public market under the provisions of Rule 144 (but subject to the further contractual restrictions arising under the lock-up agreements described below):

- with respect to non-affiliates of the Company who hold an aggregate of 43,202,334 ordinary shares, following the expiration of a non-affiliate's six-month holding period and subject to our compliance with the current public information requirements under Rule 144; and

- with respect to affiliates of the Company who hold an aggregate of 22,338,224 ordinary shares, following the expiration of an affiliate's six-month holding period and subject to our compliance with the current public information requirements under Rule 144, and subject to the volume, manner of sale and other limitations under Rule 144 applicable to securities held by affiliates.

Under Rule 144 as currently in effect, a person (or persons whose shares are aggregated) who is not considered to have been one of our affiliates at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than one of our affiliates, is entitled to sell his, her or its shares under Rule 144 without complying with the provisions relating to the availability of current public information or with any other conditions under Rule 144.

Lock-Up Agreements

All of our directors and executive officers and holders that own over 5% of our ordinary shares on a fully-diluted basis have signed lock-up agreements. Pursuant to such lock-up agreements, such persons have agreed, subject to certain exceptions, not to sell or otherwise dispose of ordinary shares or any securities convertible into or exchangeable for ordinary shares for a period of 180 days after the date of this prospectus without the prior written consent of the underwriters, in their sole discretion, at any time, release all or any portion of the ordinary shares from the restrictions in any such agreement.

TAXATION

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

Material Israeli Tax Considerations

The following is a summary of the material Israeli tax laws applicable to us, and some Israeli Government programs benefiting us. This section also contains a discussion of some Israeli tax consequences to persons owning our ordinary shares. This summary does not discuss all the aspects of Israeli tax law that may be relevant to a particular investor in light of his or her personal investment circumstances or to some types of investors subject to special treatment under Israeli law. Examples of this kind of investor include traders in securities or persons that own, directly or indirectly, 10% or more of our outstanding voting capital, all of whom are subject to special tax regimes not covered in this discussion. Some parts of this discussion are based on a new tax legislation which has not been subject to judicial or administrative interpretation. The discussion should not be construed as legal or professional tax advice and does not cover all possible tax considerations.

SHAREHOLDERS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE ISRAELI OR OTHER TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR ORDINARY SHARES, INCLUDING, IN PARTICULAR, THE EFFECT OF ANY NON-U.S., STATE OR LOCAL TAXES.

General Corporate Tax Structure in Israel

Israeli resident companies are generally subject to corporate tax on their taxable income at the rate of 24% for the 2017 tax year (23% in 2018 and thereafter). However, the effective tax rate payable by a company that derives income from a Preferred Enterprise or a Technology Enterprise (as discussed below) may be considerably less. Capital gains derived by an Israeli resident company are subject to tax at the prevailing corporate tax rate.

Law for the Encouragement of Industry (Taxes), 1969

The Law for the Encouragement of Industry (Taxes), 1969, or the Industry Encouragement Law, provides certain tax benefits for an "Industrial Company". The Industry Encouragement Law defines an "Industrial Company" as an Israeli resident company incorporated in Israel, of which 90% or more of its income in any tax year, other than income from certain government loans, is derived from an "Industrial Enterprise" owned by it and located in Israel or in the "Area", in accordance with the definition in the section 3a of the Israeli Income Tax Ordinance (New Version) 1961, or the Ordinance. An "Industrial Enterprise" is defined as an enterprise which is held by an Industrial Company whose principal activity in any 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 patents and rights to use a patent and know-how that were purchased in good faith and are used for the development or advancement of the Industrial Enterprise, commencing from the tax year where the Industrial Enterprise began to use them;
- under certain conditions, the right to elect to file consolidated tax returns with Israeli Industrial Companies controlled by it; and
- expenses related to a public offering are deductible in equal amounts over three years commencing on the year of this offering.

We believe that we 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 to us in the future.

Tax Benefits under the Law for the Encouragement of Capital Investments, 1959

The Law for the Encouragement of Capital Investments, 1959, generally referred to as the "Investment Law", provides certain incentives for capital investments in production facilities (or other eligible assets).

The Investment Law was significantly amended several times over the recent years, with the three most significant changes effective as of April 1, 2005, referred to in this prospectus as the 2005 Amendment, as of January 1, 2011, referred to in this prospectus as the 2011 Amendment, and as of January 1, 2017, referred to in this prospectus 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 amended Investment Law. Similarly, the 2011 Amendment introduced new benefits to replace those granted in accordance with the provisions of the Investment Law in effect prior to the 2011 Amendment. However, companies entitled to benefits under the Investment Law as in effect prior to January 1, 2011 were entitled to choose to continue to enjoy such benefits, provided that certain conditions are met, or elect instead, irrevocably, to forego such benefits and have the benefits of the 2011 Amendment apply. The 2017 Amendment introduces new benefits for Technological Enterprises, alongside the existing tax benefits. We did not utilize any of the benefits for which we were eligible under the Investment Law prior to the 2011 Amendment, and starting in the 2017 tax year we elected to apply for the new benefits under the 2011 Amendment.

Tax benefits under the 2011 Amendment

On December 29, 2010, the Israeli Parliament approved the 2011 Amendment. The 2011 Amendment significantly revised the tax incentive regime in Israel and commenced on January 1, 2011.

The 2011 Amendment canceled the availability of the tax benefits granted under the Investment Law prior to 2011 and, instead, introduced new tax benefits for income generated by a "Preferred Company" through its "Preferred Enterprise" (as such terms are defined in the Investment Law) as of January 1, 2011. The definition of a Preferred Company includes a company incorporated in Israel that is not fully owned by a governmental entity, and that has, among other things, Preferred Enterprise status and is controlled and managed from Israel.

A Preferred Company is entitled to a reduced corporate tax rate with respect to the income attributed to the Preferred Enterprise, at the following rates:

Tax Year	Development Region "A"	Other Areas within Israel
2011-2012	10%	15%
2013	7%	12.5%
2014-2016	9%	16%
2017 onwards[(1)]	7.5%	16%

(1) In December 2016, the Israeli Parliament (the Knesset) approved an amendment to the Investments Law pursuant to which the tax rate applicable to Preferred Enterprises in Development Region "A" would be reduced to 7.5% as of January 1, 2017.

The classification of income generated from the provision of usage rights in know-how or software that were developed in the Preferred Enterprise, as well as royalty income received with respect to such usage, as Preferred Enterprise income is subject to the issuance if a pre-ruling from the Israeli Tax Authority stipulates that such income is associated with the productive activity of the Preferred Enterprise in Israel.

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

The 2011 Amendment also revised the grant track to apply only to the approved programs located in Development Region "A" and shall provide not only cash grants (as prior to the 2011 Amendment) but also the granting of loans. The rates for grants and loans shall not be fixed but up to 20% of the amount of the approved investment (may be increased with additional 4%). In addition, a company owning a Preferred Enterprise under the grant track may be entitled also to the tax benefits which are prescribed for a Preferred Enterprise.

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

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

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

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

Dividends distributed by a Preferred Technology Enterprise or a Special Preferred Technology Enterprise, paid out of Preferred Technology Income, are subject to withholding tax at source at the rate of 20%, and if distributed to a foreign company and other conditions are met, the withholding tax rate will be 4%.

We are examining the impact of the 2017 Amendment and the degree to which we will qualify as a Preferred Technology Enterprise or Special Preferred Technology Enterprise, and the amount of Preferred Technology Income that we may have, or other benefits that we may receive from the 2017 Amendment.

Taxation of the Company Shareholders

Capital Gains

Capital gain tax is imposed on the disposal of capital assets by an Israeli resident, and on the disposal of such assets by a non-Israel resident if those assets are either (i) located in Israel, (ii) are shares or a right to a share in an Israeli resident corporation, or (iii) represent, directly or indirectly, rights to assets located in Israel, unless a tax treaty between Israel and the seller's country of residence provides otherwise. The Ordinance distinguishes between "Real Capital Gain" and the "Inflationary Surplus". Real Capital Gain is the excess of the total capital gain over Inflationary Surplus computed generally on the basis of the increase in the Israeli CPI between the date of purchase and the date of disposal.

The Real Capital Gain accrued by individuals on the sale of our ordinary shares (that were purchased after January 1, 2012, whether listed on a stock exchange or not) will be taxed at the rate of 25%. However, if such shareholder is a "Controlling Shareholder" (i.e., a person who holds, directly or indirectly, alone or together with such person's relative or another person who collaborates with such person on a permanent basis, 10% or more of one of the Israeli resident company's means of control) at the time of sale or at any time during the preceding twelve (12) months period and/or claims a deduction for interest and linkage differences expenses in connection with the purchase and holding of such shares, such gain will be taxed at the rate of 30%.

The Real Capital Gain derived by corporations will be generally subject to the ordinary corporate tax (24% in 2017 and 23% in 2018 and thereafter).

Individual shareholder dealing in securities, or to whom such income is otherwise taxable as ordinary business income are taxed in Israel at their marginal tax rates applicable to business income (up to 50% in 2017 and 2018, including Excess Tax as detailed below).

Notwithstanding the foregoing, capital gain derived from the sale of our ordinary shares by a non-Israeli resident (whether an individual or a corporation) shareholder may be exempt under the Ordinance from Israeli taxation provided that such shareholders did not acquire their shares prior to January 1, 2009 or acquired their shares after the Company was listed for trading on Nasdaq provided, among other things, that (i) such gains were not derived from a permanent business or business activity that the non-Israeli resident maintains in Israel, and (ii) such shareholders are not subject to the Israeli Income Tax Law (Inflationary Adjustments) 5745-1985. These provisions dealing with capital gain are not applicable to a person whose gains from selling or otherwise disposing of the shares are deemed to be business income. However, non-Israeli corporations will not be entitled to the foregoing exemptions if an Israeli resident (i) has a controlling interest of more than 25% in such non-Israeli corporation or (ii) is the beneficiary of or is entitled to 25% or more of the revenue or profits of such non-Israeli corporation, whether directly or indirectly.

In addition, the sale of shares may be exempt from Israeli capital gain 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, the U.S.-Israel Double Tax Treaty exempts U.S. resident holding the shares as a capital asset and is entitled to claim the benefits afforded to such a resident by the U.S.-Israel Double Tax Treaty, or a Treaty U.S. Resident, from Israeli capital gain tax in connection with such sale, provided (i) the U.S. resident owned, directly or indirectly, less than 10% of an Israeli resident company's voting power at any time within the 12 month period preceding such sale, subject to certain conditions; (ii) the seller, being an individual, is present in Israel for a period or periods of less than 183 days in the aggregate at the taxable year; and (iii) the capital gain from the sale, exchange or disposition was not derived through a permanent establishment that the U.S. resident maintains in Israel, (iv) the capital gains arising from such sale, exchange or disposition is not attributed to real estate located in Israel; or (v) the capital gains arising from such sale, exchange or disposition is not attributed to royalties. If any such case occurs, the sale, exchange or disposition of our ordinary shares would be subject to Israeli tax, to the extent applicable. However, under the U.S.-Israel Tax Treaty, such Treaty U.S. Resident would be permitted to claim a credit for such taxes against U.S. federal income tax imposed on any gain from such sale, exchange or disposition, under the circumstances and subject to the limitations specified in the U.S.-Israel Double Tax Treaty.

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 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.

Either the purchaser, the Israeli stockbrokers or financial institution through which the shares are held is obliged, subject to the above mentioned exemptions, to withhold tax upon the sale of securities on the amount of the consideration paid upon the sale of the securities at the rate of 25% in respect of an individual, or at a rate of corporate tax, in respect of a corporation (24% in 2017 and 23% in 2018 and thereafter).

At the sale of securities traded on a stock exchange a detailed return, including a computation of the tax due, must be filed and an advanced payment must be paid on January 31 and July 31 of every tax year in respect of sales of securities made within the previous six months. However, if all tax due was withheld at source according to applicable provisions of the Ordinance and regulations promulgated thereunder the aforementioned return need not be filed and no advance payment must be paid. Capital gain is also reportable on the annual income tax return.

Dividends

A distribution of dividends from income, which is not attributed to a Preferred Enterprise to an Israeli resident individual, will generally be subject to income tax at a rate of 25%. However, a 30% tax rate will apply if the dividend recipient is a "Controlling Shareholder" (as defined above) at the time of distribution or at any time during the preceding 12 months period.

Distribution of dividends from income attributed to a Preferred Enterprise is generally subject to a tax at a rate of 20%. However, if such dividends are distributed to an Israeli company, no tax is imposed (although, if such dividends are subsequently distributed to individuals or a non-Israeli company, withholding tax at a rate of 20% or such lower rate as may be provided in an applicable tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for an exemption) will apply). If the dividend is attributable partly to income derived from a Preferred Enterprise, and partly from other sources of income, the income tax rate will be a blended rate reflecting the relative portions of the types of income. We cannot assure you that we will designate the profits that we may distribute in a way that will reduce shareholders' tax liability.

If the recipient of the dividend is an Israeli resident corporation, such dividend will be exempt from income tax provided the income from which such dividend is distributed was derived or accrued within Israel.

The Ordinance generally provides that a non-Israeli resident (either individual or corporation) is subject to an Israeli income tax on the receipt of dividends at the rate of 25% (30% if the dividends recipient is a "Controlling Shareholder" (as defined above), at the time of distribution or at any time during the preceding 12 months period); those rates are subject to a reduced tax rate under the provisions of an applicable double tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate).

For example, under the U.S.-Israel Double Tax Treaty the following rates will apply in respect of dividends distributed by an Israeli resident company to a Treaty U.S. Resident: (i) if the Treaty U.S. Resident is a corporation which holds during that portion of the taxable year which precedes the date of payment of the dividend and during the whole of its prior taxable year (if any), at least 10% of the outstanding shares of the voting shares of the Israeli resident paying corporation and not more than 25% of the gross income of the Israeli resident paying corporation for such prior taxable year (if any) consists of certain type of interest or dividends – the maximum tax rate of withholding is 12.5%, and (ii) in all other cases, the tax rate is 25%, or the domestic rate (if such is lower). The aforementioned rates under the Israel U.S. Double Tax Treaty will not apply if the dividend income was derived through a permanent establishment that the Treaty U.S. Resident maintains in Israel. U.S. residents who are subject to Israeli withholding tax on a dividend may be entitled to a credit or deduction for United States federal income tax purposes in the amount of the taxes withheld, subject to detailed rules contained in U.S. tax legislation.

A non-Israeli resident who receives dividend income derived from or accrued from Israel, from which the full amount of tax was withheld at source, is generally exempt from the obligation to file tax returns in Israel with respect to such income, provided that (i) such income was not generated from business conducted in Israel by the taxpayer, and (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).

Payors of dividends on our shares, including the Israeli shareholder effectuating the transaction, or the financial institution through which the securities are held, are generally required, subject to any of the foregoing exemption, reduced tax rates and the demonstration of a shareholder of his, her or its foreign residency, to withhold taxes upon the distribution of dividends at a rate of 25%, provided that the shares are registered with a Nominee Company (for corporations and individuals).

Excess Tax

Individuals who are subject to tax in Israel are also subject to an additional tax at a rate of 3% in 2017 and thereafter, on annual income exceeding a certain threshold (NIS 640,000 for 2017 which amount is linked to the annual change in the Israeli consumer price index), including, but not limited to income derived from dividends, interest and capital gains.

Foreign Exchange Regulations

Non-residents of Israel who hold our ordinary shares are able to receive any dividends, and any amounts payable upon the dissolution, liquidation and winding up of our affairs, repayable in non-Israeli currency at the rate of exchange prevailing at the time of conversion. However, Israeli income tax is generally required to have been paid or withheld on these amounts. In addition, the statutory framework for the potential imposition of currency exchange control has not been eliminated, and may be restored at any time by administrative action.

Estate and gift tax

Israeli law presently does not impose estate or gift taxes.

Material U.S. Federal Income Tax Consequences to U.S. Holders

The following discussion describes the material U.S. federal income tax consequences relating to the ownership and disposition of our ordinary shares by U.S. Holders (as defined below). This discussion applies to U.S. Holders that purchase ordinary shares pursuant to this offering and hold such ordinary shares as capital assets within the meaning of Section 1221 of the U.S. Internal Revenue Code of 1986, as amended, or the Code. This discussion is based on the Code, U.S. Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect. This discussion does not address all of the U.S. federal income tax consequences that may be relevant to specific U.S. Holders in light of their particular circumstances or to U.S. Holders subject to special treatment under U.S. federal income tax law (such as certain financial institutions, insurance companies, broker-dealers and traders in securities or other persons that generally mark their securities to market for U.S. federal income tax purposes, tax-exempt entities, retirement plans, regulated investment companies, real estate investment trusts, certain former citizens or residents of the United States, persons who hold ordinary shares as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or integrated investment, persons who received their ordinary shares as compensatory payments, persons that have a "functional currency" other than the U.S. dollar, persons that own directly, indirectly or through attribution 10% or more of our shares by vote or value, persons who are subject to Section 451(b) of the Code, corporations that accumulate earnings to avoid U.S. federal income tax, partnerships and other pass-through entities and arrangements that are classified as partnerships for U.S. federal income tax purposes, and investors in such pass-through entities). This discussion does not address any U.S. state or local or non-U.S. tax consequences or any U.S. federal estate, gift or alternative minimum tax consequences.

As used in this discussion, the term "U.S. Holder" means a beneficial owner of ordinary shares that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust (x) with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more United States persons have the authority to control all of its substantial decisions or (y) that has elected under applicable U.S. Treasury regulations to be treated as a domestic trust for U.S. federal income tax purposes.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds ordinary shares, the U.S. federal income tax consequences relating to an investment in the ordinary shares will depend in part upon the status and activities of such entity or arrangement and the particular partner. Any such entity or arrangement should consult its own tax advisor regarding the U.S. federal income tax consequences applicable to it and its partners of the purchase, ownership and disposition of ordinary shares.

Persons considering an investment in ordinary shares should consult their own tax advisors as to the particular tax consequences applicable to them relating to the purchase, ownership and disposition of ordinary shares, including the applicability of U.S. federal, state and local tax laws and non-U.S. tax laws.

Passive Foreign Investment Company Consequences

In general, a corporation organized outside the United States will be treated as a passive foreign investment company, or PFIC, for any taxable year in which either (1) at least 75% of its gross income is "passive income", the PFIC income test, or (2) on average at least 50% of its assets, determined on a quarterly basis, are assets that produce passive income or are held for the production of passive income, the PFIC asset test. Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from the sale or exchange of property that gives rise to passive income. Assets that produce or are held for the production of passive income generally include cash, even if held as working capital or raised in a public offering, marketable securities, and other assets that may produce passive income. Generally, in determining whether a non-U.S. corporation is a PFIC, a proportionate share of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account.

Our status as a PFIC will depend on the nature and composition of our income and the nature, composition and value of our assets (which, assuming we are not a "controlled foreign corporation," or a CFC, under Section 957(a) of the Internal Revenue Code of 1986, as amended, or the Code, for the year being tested, may be determined based on the fair market value of each asset, with the value of goodwill and going concern value being determined in large part by reference to the market value of our common shares, which may be volatile). Based upon the value of our assets, including any goodwill and the nature and composition of our income and assets, we do not believe that we were classified as a PFIC for the taxable year ended December 31, 2018 and we do not believe that we will be classified as a PFIC for the taxable year ending December 31, 2019 or in the immediately foreseeable future. Even if we determine that we are not a PFIC for a taxable year, there can be no assurance that the IRS will agree with our conclusion and that the IRS would not successfully challenge our position. Our status as a PFIC is a fact-intensive determination made on an annual basis after the end of each taxable year. Accordingly, our U.S. counsel expresses no opinion with respect to our PFIC status for our taxable year ended December 31, 2018, and also expresses no opinion with regard to our expectations regarding our PFIC status in the future.

If we are a PFIC in any taxable year during which a U.S. Holder owns ordinary shares, the U.S. Holder could be liable for additional taxes and interest charges under the "PFIC excess distribution regime" upon (1) a distribution paid during a taxable year that is greater than 125% of the average annual distributions paid in the three preceding taxable years, or, if shorter, the U.S. Holder's holding period for the ordinary shares, and (2) any gain recognized on a sale, exchange or other disposition, including a pledge, of the ordinary shares, whether or not we continue to be a PFIC. Under the PFIC excess distribution regime, the tax on such distribution or gain would be determined by allocating the distribution or gain ratably over the U.S. Holder's holding period for ordinary shares. The amount allocated to the current taxable year (i.e., the year in which the distribution occurs or the gain is recognized) and any year prior to the first taxable year in which we are a PFIC will be taxed as ordinary income earned in the current taxable year. The amount allocated to other taxable years will be taxed at the highest marginal rates in effect for individuals or corporations, as applicable, to ordinary income for each such taxable year, and an interest charge, generally applicable to underpayments of tax, will be added to the tax.

If we are a PFIC for any year during which a U.S. Holder holds ordinary shares, we must generally continue to be treated as a PFIC by that holder for all succeeding years during which the U.S. Holder holds the ordinary shares, unless we cease to meet the requirements for PFIC status and the U.S. Holder makes a "deemed sale" election with respect to the ordinary shares. If the election is made, the U.S. Holder will be deemed to sell the ordinary shares it holds at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain recognized from such deemed sale would be taxed under the PFIC excess distribution regime. After the deemed sale election, the U.S. Holder's ordinary shares would not be treated as shares of a PFIC unless we subsequently become a PFIC.

If we are a PFIC for any taxable year during which a U.S. Holder holds ordinary shares and one of our non-U.S. corporate subsidiaries is also a PFIC (i.e., a lower-tier PFIC), such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC and would be taxed under the PFIC excess distribution regime on distributions by the lower-tier PFIC and on gain from the disposition of shares of the lower-tier PFIC even though such U.S. Holder would not receive the proceeds of those distributions or dispositions. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to our non-U.S. subsidiaries.

If we are a PFIC, a U.S. Holder will not be subject to tax under the PFIC excess distribution regime on distributions or gain recognized on ordinary shares if such U.S. Holder makes a valid "mark-to-market" election for our ordinary shares. A mark-to-market election is available to a U.S. Holder only for "marketable stock." Our ordinary shares will be marketable stock as long as they remain listed on The Nasdaq Capital Market and are regularly traded, other than in *de minimis* quantities, on at least 15 days during each calendar quarter. If a mark-to-market election is in effect, a U.S. Holder generally would take into account, as ordinary income for each taxable year of the U.S. holder, the excess of the fair market value of ordinary shares held at the end of such taxable year over the adjusted tax basis of such ordinary shares. The U.S. Holder would also take into account, as an ordinary loss each year, the excess of the adjusted tax basis of such ordinary shares over their fair market value at the end of the taxable year, but only to the extent of the excess of amounts previously included in income over ordinary losses deducted as a result of the mark-to-market election. The U.S. Holder's tax basis in ordinary shares would be adjusted to reflect any income or loss recognized as a result of the mark-to-market election. Any gain from a sale, exchange or other disposition of ordinary shares in any taxable year in which we are a PFIC would be treated as ordinary income and any loss from such sale, exchange or other disposition would be treated first as ordinary loss (to the extent of any net mark-to-market gains previously included in income) and thereafter as capital loss.

A mark-to-market election will not apply to ordinary shares for any taxable year during which we are not a PFIC, but will remain in effect with respect to any subsequent taxable year in which we become a PFIC. Such election will not apply to any non-U.S. subsidiaries that we may organize or acquire in the future. Accordingly, a U.S. Holder may continue to be subject to tax under the PFIC excess distribution regime with respect to any lower-tier PFICs that we may organize or acquire in the future notwithstanding the U.S. Holder's mark-to-market election for the ordinary shares.

The tax consequences that would apply if we are a PFIC would also be different from those described above if a U.S. Holder were able to make a valid qualified electing fund, or QEF, election. At this time, we do not expect to provide U.S. Holders with the information necessary for a U.S. Holder to make a QEF election. Prospective investors should assume that a QEF election will not be available.

Each U.S. person that is an investor of a PFIC is generally required to file an annual information return on IRS Form 8621 containing such information as the U.S. Treasury Department may require. The failure to file IRS Form 8621 could result in the imposition of penalties and the extension of the statute of limitations with respect to U.S. federal income tax.

The U.S. federal income tax rules relating to PFICs are very complex. Prospective U.S. investors are strongly urged to consult their own tax advisors with respect to the impact of PFIC status on the purchase, ownership and disposition of ordinary shares, the consequences to them of an investment in a PFIC, any elections available with respect to the ordinary shares and the IRS information reporting obligations with respect to the purchase, ownership and disposition of ordinary shares of a PFIC.

Distributions

As described in the section entitled "– *Dividend Policy*," we do not anticipate declaring or paying dividends to holders of our ordinary shares in the foreseeable future. However, if we make a distribution contrary to the expectation, subject to the discussion above under "— *Passive Foreign Investment Company Consequences*," a U.S. Holder that receives a distribution with respect to ordinary shares generally will be required to include the gross amount of such distribution in gross income as a dividend when actually or constructively received to the extent of the U.S. Holder's pro rata share of our current and/or accumulated earnings and profits (as determined under U.S. federal income tax principles). To the extent a distribution received by a U.S. Holder is not a dividend because it exceeds the U.S. Holder's pro rata share of our current and accumulated earnings and profits, it will be treated first as a tax-free return of capital and reduce (but not below zero) the adjusted tax basis of the U.S. Holder's ordinary shares. To the extent the distribution exceeds the adjusted tax basis of the U.S. Holder's ordinary shares, the remainder will be taxed as capital gain. Because we may not account for our earnings and profits in accordance with U.S. federal income tax principles, U.S. Holders should expect all distributions to be reported to them as dividends.

Distributions on ordinary shares that are treated as dividends generally will constitute income from sources outside the United States for foreign tax credit purposes and generally will constitute passive category income. Subject to certain complex conditions and limitations, Israeli taxes withheld on any distributions on ordinary shares may be eligible for credit against a U.S. Holder's federal income tax liability. The rules relating to the determination of the U.S. foreign tax credit are complex, and U.S. Holders should consult their tax advisors regarding the availability of a foreign tax credit in their particular circumstances and the possibility of claiming an itemized deduction (in lieu of the foreign tax credit) for any foreign taxes paid or withheld.

Dividends paid by a "qualified foreign corporation" are eligible for taxation to non-corporate U.S. Holders at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that certain requirements are met. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances. Distributions on ordinary shares that are treated as dividends generally will not be eligible for the "dividends received" deduction generally allowed to corporate shareholders with respect to dividends received from U.S. corporations.

A non-United States corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (a) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information provision, or (b) with respect to any dividend it pays on shares that are readily tradable on an established securities market in the United States. Our ordinary shares will generally be considered to be readily tradable on an established securities market in the United States if they are listed on The Nasdaq Capital Market, as we intend our common shares will be. We believe that we qualify as a resident of Israel for purposes of, and are eligible for the benefits of, the U.S.-Israel Double Tax Treaty, although there can be no assurance in this regard. Further, the IRS has determined that the U.S.-Israel Double Tax Treaty is satisfactory for purposes of the qualified dividend rules and that it includes an exchange of information provision. Therefore, subject to the discussion above under "— *Passive Foreign Investment Company Consequences*," if the U.S.-Israel Double Tax Treaty is applicable, or if our ordinary shares are readily tradable on an established securities market in the United States, such dividends will generally be "qualified dividend income" in the hands of individual U.S. Holders, provided that certain conditions are met, including holding period and the absence of certain risk reduction transaction requirements. Each U.S. Holder is advised to consult its tax advisors regarding the availability of the reduced tax rate on dividends with regard to its particular circumstances.

Sale, Exchange or Other Disposition of Ordinary Shares

Subject to the discussion above under "— *Passive Foreign Investment Company Consequences*," a U.S. Holder generally will recognize capital gain or loss for U.S. federal income tax purposes upon the sale, exchange or other disposition of ordinary shares in an amount equal to the difference, if any, between the amount realized (i.e., the amount of cash plus the fair market value of any property received) on the sale, exchange or other disposition and such U.S. Holder's adjusted tax basis in the ordinary shares. Such capital gain or loss generally will be long-term capital gain taxable at a reduced rate for non-corporate U.S. Holders or long-term capital loss if, on the date of sale, exchange or other disposition, the ordinary shares were held by the U.S. Holder for more than one year. Any capital gain of a non-corporate U.S. Holder that is not long-term capital gain is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations. Any gain or loss recognized from the sale or other disposition of ordinary shares will generally be gain or loss from sources within the United States for U.S. foreign tax credit purposes.

Medicare Tax

Certain U.S. Holders that are individuals, estates or trusts and whose income exceeds certain thresholds generally are subject to a 3.8% tax on all or a portion of their net investment income, which may include their gross dividend income and net gains from the disposition of ordinary shares. If you are a United States person that is an individual, estate or trust, you are encouraged to consult your tax advisors regarding the applicability of this Medicare tax to your income and gains in respect of your investment in ordinary shares.

Information Reporting and Backup Withholding

U.S. Holders may be required to file certain U.S. information reporting returns with the IRS with respect to an investment in ordinary shares, including, among others, IRS Form 8938 (Statement of Specified Foreign Financial Assets). As described above under "*Passive Foreign Investment Company Consequences*", each U.S. Holder who is a shareholder of a PFIC must file an annual report containing certain information. U.S. Holders paying more than US$100,000 for ordinary shares may be required to file IRS Form 926 (Return by a U.S. Transferor of Property to a Foreign Corporation) reporting this payment. Substantial penalties may be imposed upon a U.S. Holder that fails to comply with the required information reporting.

Dividends on and proceeds from the sale or other disposition of ordinary shares may be reported to the IRS unless the U.S. Holder establishes a basis for exemption. Backup withholding may apply to amounts subject to reporting if the holder (1) fails to provide an accurate United States taxpayer identification number or otherwise establish a basis for exemption (usually on IRS Form W-9), or (2) is described in certain other categories of persons. However, U.S. Holders that are corporations generally are excluded from these information reporting and backup withholding tax rules. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules generally will be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability if the required information is furnished by the U.S. Holder on a timely basis to the IRS.

U.S. Holders should consult their own tax advisors regarding the backup withholding tax and information reporting rules.

EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN ORDINARY SHARES IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

UNDERWRITING

We have entered into an underwriting agreement with Dawson James Securities Inc. and ViewTrade Securities, Inc., as the representatives of the underwriters (the "Representatives"), with respect to the units being offered. Subject to the terms and conditions of an underwriting agreement between us and the Representatives, we have agreed to sell to each underwriter named below, and each underwriter named below has severally agreed to purchase, at the public offering price less the underwriting discounts set forth on the cover page of this prospectus, the number of units listed next to its name in the following table:

Name of Underwriter	Number of Units
Dawson James Securities Inc.	
ViewTrade Securities, Inc.	
Total	24,000,000

The underwriters are committed to purchase 24,000,000 units offered by this prospectus. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated. The underwriters are not obligated to purchase the units covered by the underwriters' over-allotment option described below. The underwriters are offering the units, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Over-Allotment Option

We have granted to the underwriters an option, exercisable no later than 45 calendar days after the date of the underwriting agreement, to purchase up to an additional 3,600,000 units, 3,600,000 ordinary shares and/or 7,200,000 warrants, at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. The underwriters may exercise this option only to cover over-allotments, if any, made in connection with this offering. To the extent the option is exercised and the conditions of the underwriting agreement are satisfied, we will be obligated to sell to the underwriters, and the underwriters will be obligated to purchase, these additional units, ordinary shares or warrants.

Underwriter's Warrants

We have agreed to grant to the Representatives or their designees warrants to purchase a number of shares equal to eight percent (8%) of the total number of ordinary shares sold in this offering at an exercise price equal to 125% of the price per ordinary share sold in this offering. The warrants (the "Underwriter's Warrants") will contain a cashless exercise feature. Each Underwriter's Warrant is exercisable for one ordinary share on a cash or cashless basis at an exercise price of $ per share (or 125% of the price of each ordinary share sold in the offering). The Underwriter's Warrants will be non-exercisable for one hundred eighty (180) days after the effective date (the "Effective Date") of the registration statement of which this prospectus forms a part of this offering, and will expire five years after such Effective Date.

The number of Underwriter's Warrants outstanding, and the exercise price of those securities, will be adjusted proportionately, as permitted by FINRA Rule 5110(f)(2)(G).

Discounts and Commissions

The Representatives have advised us that the underwriters propose to offer the units directly to the public at the public offering price set forth on the cover of this prospectus. In addition, the Representatives may offer some of the units to other securities dealers at such price less a concession of up to $ per share. After the offering to the public, the offering price and other selling terms may be changed by the Representatives without changing the Company's proceeds from the underwriters' purchase of the units.

The following table summarizes the public offering price, underwriting commissions and proceeds before expenses to us assuming both no exercise and full exercise of the underwriters' option to purchase additional units, ordinary shares or warrants. The underwriting commissions are equal to the public offering price per unit less the amount per unit the underwriters pay us for the units.

	Per Unit(1)	Total Without Over Allotment	Total With Over Allotment
Public offering price	$		
Underwriting discounts and commissions	$		
Proceeds, before expenses, to us	$		

(1) The fees shown do not include the underwriters' warrants to purchase ordinary shares issuable to the underwriters at closing.

We estimate that the total expenses of the offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding underwriting discounts and commissions, will be approximately $450,000, all of which are payable by us. This figure includes expense reimbursements we have agreed to pay the Representatives for reimbursement of their expenses related to the offering, which is limited to a maximum of $135,000, of which up to a maximum of $125,000 shall be used to reimburse the underwriters for their legal expenses.

Lock-Up Agreements

We and each of our officers, directors, affiliates and certain existing stockholders aggregating at least 5% of our outstanding shares have agreed, subject to certain exceptions, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any ordinary shares or other securities convertible into or exercisable or exchangeable for ordinary shares for a period of six (6) months after this offering is completed without the prior written consent of the Representatives.

The Representatives may in their sole discretion and at any time without notice release some or all of the shares subject to lock-up agreements prior to the expiration of the lock-up period. When determining whether or not to release shares from the lock-up agreements, the Representatives will consider, among other factors, the security holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time.

Right of First Refusal

We have granted the Representatives a right of first refusal, for a period of 24 months from the commencement of sales of this offering, to act as sole and exclusive investment banker, book-runner, financial advisor, underwriter and/or placement agent, at the Representatives' sole and exclusive discretion, for each and every future public and private equity and debt offering, including all equity linked financings (each, a "Subject Transaction"), during such 24-month period, of the Company, or any successor to or subsidiary of the Company, on terms and conditions customary to the Representatives for such Subject Transactions.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make for these liabilities.

OTCQB and NASDAQ Capital Market

Our ordinary shares are presently quoted on the OTCQB marketplace under the symbol "TOMDF". We are in the process of applying to have our ordinary shares and warrants listed on The NASDAQ Capital Market under the symbols "TOMD" and "TOMDW," respectively. No assurance can be given that our application will be approved. Trading Quotes of securities on an over-the-counter marketplace may not be indicative of the market price of those securities on a national securities exchange.

Price Stabilization, Short Positions, and Penalty Bids

In connection with this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our ordinary shares. Specifically, the underwriters may over-allot in connection with this offering by selling more ordinary shares than are set forth on the cover page of this prospectus. This creates a short position in our ordinary shares for the underwriters' own accounts. The short position may be either a covered short position or a naked short position. In a covered short position, the number of ordinary shares over-allotted by the underwriters is not greater than the number of ordinary shares that they may purchase in the over-allotment option. In a naked short position, the number of ordinary shares involved is greater than the number of ordinary shares in the over-allotment option. To close out a short position, the underwriters may elect to exercise all or part of the over-allotment option. The underwriters may also elect to stabilize the price of our ordinary shares or reduce any short position by bidding for, and purchasing, ordinary shares in the open market.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter or dealer repays selling concessions allowed to it for distributing a security in this offering because the underwriter repurchases that security in stabilizing or short covering transactions.

Finally, the underwriters may bid for, and purchase, shares of our ordinary shares in market making transactions, including "passive" market making transactions as described below.

These activities may stabilize or maintain the market price of our ordinary shares at a price that is higher than the price that might otherwise exist in the absence of these activities. The underwriters are not required to engage in these activities, and may discontinue any of these activities at any time without notice. These transactions may be effected on NASDAQ, in the over-the-counter market, or otherwise.

In connection with this offering, the underwriters and selling group members, if any, or their affiliates may engage in passive market making transactions in our ordinary shares immediately prior to the commencement of sales in this offering, in accordance with Rule 103 of Regulation M under the Exchange Act. Rule 103 generally provides that:

- a passive market maker may not effect transactions or display bids for our ordinary shares in excess of the highest independent bid price by persons who are not passive market makers;
- net purchases by a passive market maker on each day are generally limited to 30% of the passive market maker's average daily trading volume in our ordinary shares during a specified two-month prior period or 200 shares, whichever is greater, and must be discontinued when that limit is reached; and
- passive market making bids must be identified as such.

Electronic Distribution

A prospectus in electronic format may be made available on a website maintained by the Representatives of the underwriters and may also be made available on a website maintained by other underwriters. The underwriters may agree to allocate a number of ordinary shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the Representatives of the underwriters to underwriters that may make Internet distributions on the same basis as other allocations. In connection with the offering, the underwriters or syndicate members may distribute prospectuses electronically.

The underwriters have informed us that they do not expect to confirm sales of ordinary shares offered by this prospectus to accounts over which they exercise discretionary authority.

Other than the prospectus in electronic or printed format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or any underwriter in its capacity as underwriter and should not be relied upon by investors.

Certain Relationships

Certain of the underwriters and their affiliates may provide, from time to time, investment banking and financial advisory services to us in the ordinary course of business, for which they may receive customary fees and commissions.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the shares offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to this offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Israel

The shares offered by this prospectus have not been approved or disapproved by the Israeli Securities Authority (the "ISA"), nor have such shares been registered for sale in Israel. The shares and warrants may not be offered or sold, directly or indirectly, to the public in Israel, absent the publication of a prospectus. The ISA has not issued permits, approvals or licenses in connection with this offering or publishing the prospectus; nor has it authenticated the details included herein, confirmed their reliability or completeness, or rendered an opinion as to the quality of the shares being offered.

This document does not constitute a prospectus under the Israeli Securities Law and has not been filed with or approved by the ISA. In the State of Israel, this document is being distributed only to, and is directed only at, and any offer of the ordinary shares is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange Ltd., underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors will be required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

EXPERTS AND LEGAL MATTERS

No expert or counsel named in this prospectus as having prepared or certified any part of this prospectus or having given an opinion upon the validity of the securities being registered or upon other legal matters in connection with the registration or offering of the ordinary shares was employed on a contingency basis or had, or is to receive, in connection with the offering, a substantial interest, directly or indirectly, in the registrant or its subsidiary. Nor was any such person connected with the Registrant or any of its parents, subsidiaries as a promoter, managing or principal underwriter, voting trustee, Director, officer or employee.

The financial statements included in this prospectus and elsewhere in the registration statement have been so included in reliance upon the report of Fahn Kanne, Grant Thornton, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

Certain legal matters, including the legality of the securities offered, will be passed upon for us by SRK Kronengold Law Offices. Schiff Hardin LLP, Washington, DC, is counsel for the underwriters in connection with this offering.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Fahn Kanne, Grant Thornton are our independent auditors. There have not been any disagreements with them on accounting and financial disclosure.

EXPENSES OF THIS OFFERING

The estimated expenses payable by us in connection with the offering described in this Registration Statement (other than the underwriting discounts and commissions) will be as set forth in the table below. With the exception of the U.S. Securities and Exchange Commission registration fee, the FINRA filing fee, and the Nasdaq Capital Market listing fee, all amounts are estimates. All such expenses will be borne by the Registrant.

Item	Amount to be Paid
SEC registration fee	$ 1,910
FINRA filing fee	1,310
The Nasdaq Capital Market listing fee	50,000
Printing and engraving expenses	3,500
Legal fees and expenses	100,000
Accounting fees and expenses	50,000
Miscellaneous expenses	243,280
Total	$ 450,000

TODOS MEDICAL LTD.

FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018

TODOS MEDICAL LTD.

FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
Board of Directors and Shareholders
Todos Medical Ltd.

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Opinion on the financial statements
We have audited the accompanying balance sheets of Todos Medical Ltd. (the "Company") as of December 31, 2018 and 2017, the related statements of loss, changes in shareholders' deficit, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

Going Concern
The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1A to the financial statements, the Company has incurred net losses since its inception, and has not yet generated any revenues. As of December 31, 2018, there is an accumulated deficit of $5,693,353 and shareholders' deficit of $1,215,934, and current liabilities exceed current assets by $1,092,651. These conditions, along with other matters as set forth in Note 1A, raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regards to these matters are also described in Note 1A. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

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

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

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting 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.

FAHN KANNE & CO. GRANT THORNTON ISRAEL
We have served as the Company's auditor since 2015.
Tel Aviv, Israel
March 27, 2019

Certified Public Accountants
Fahn Kanne & Co. is the Israeli member firm of Grant Thornton International Ltd

TODOS MEDICAL LTD.
BALANCE SHEETS
(U.S. dollars except share and per share amounts)

	Note	As of December 31, 2018	2017
ASSETS			
Current assets:			
Cash and cash equivalents		$ 63,550	$ 683,202
Restricted cash		9,343	10,099
Other current assets	3	32,990	19,754
Total current assets		105,883	713,055
Property and equipment, net	4	93,242	103,374
Total assets		$ 199,125	$ 816,429
LIABILITIES AND SHAREHOLDERS' DEFICIT			
Current liabilities:			
Short-term loans from third party, net	5	$ 18,012	$ -
Fair value of derivative liability related to conversion feature	5	9,000	
Liability for minimum royalties	6, 10B	185,000	135,000
Accounts payable		163,174	-
Short-term loans from shareholders	8	611,925	-
Other current liabilities	7	211,423	109,791
Total current liabilities		1,198,534	244,791
Non-current liabilities:			
Long-term loans from shareholders	8	-	659,526
Liability for minimum royalties – long-term	6, 10B	188,000	188,000
Derivative warrant liability	9	28,525	1,063,745
Total non-current liabilities		216,525	1,911,271
Commitments and contingent liabilities	10		
Shareholders' deficit:			
Ordinary Shares of NIS 0.01 par value each:	11	-	-
Authorized: 1,000,000,000 shares at December 31, 2018 and 2017. Issued and outstanding: 72,230,162 shares and 70,087,141 shares at December 31, 2018 and 2017, respectively		190,679	184,961
Additional paid-in capital		4,286,740	3,711,218
Accumulated deficit		(5,693,353)	(5,235,812)
Total shareholders' deficit		(1,215,934)	(1,339,633)
Total liabilities and shareholders' deficit		$ 199,125	$ 816,429

The accompanying notes are an integral part of these financial statements.

TODOS MEDICAL LTD.
STATEMENTS OF LOSS
(U.S. dollars except share and per share amounts)

	Note	Year ended December 31, 2018	2017	2016
Research and development expenses, net	13	$ 459,184	$ 720,527	$ 317,907
General and administrative expenses	14	919,694	617,087	410,982
Operating loss		(1,378,878)	(1,337,614)	(728,889)
Financing income (expenses), net	15	921,337	(1,337,758)	75,428
Net loss		$ (457,541)	$ (2,675,372)	$ (653,461)
Basic and diluted net loss per share	17	$ (0.006)	$ (0.04)	$ (0.01)
Basic and diluted weighted average number of ordinary shares outstanding		70,869,924	68,587,261	62,467,556

The accompanying notes are an integral part of these financial statements.

TODOS MEDICAL LTD.
STATEMENTS OF CHANGES IN SHAREHOLDERS' DEFICIT
(U.S. dollars except share and per share amounts)

	Preferred shares, NIS 0.01 Par Value		Ordinary shares, NIS 0.01 Par Value		Additional paid-in capital	Accumulated deficit	Total Shareholders' deficit
	Shares	Amount	Shares	Amount			
BALANCE AT DECEMBER 31, 2015	**3,096,195**	**8,810**	**59,125,670**	**154,781**	**1,215,878**	**(1,906,979)**	**(527,510)**
CHANGES DURING THE YEAR ENDED DECEMBER 31, 2016:							
Stock-based compensation	237,276	614	-	-	160,816	-	161,430
Issuance of ordinary shares, net of issuance expenses	-	-	4,518,406	11,669	554,900	-	566,569
Exercise of stock options	-	-	103,428	273	-	-	273
Stock-based compensation for consulting services	-	-	-	-	48,750	-	48,750
Net loss for the year	-	-	-	-	-	(653,461)	(653,461)
BALANCE AT DECEMBER 31, 2016	**3,333,471**	**9,424**	**63,747,504**	**166,723**	**1,980,344**	**(2,560,440)**	**(403,949)**
CHANGES DURING THE YEAR ENDED DECEMBER 31, 2017:							
Exercise of warrants, net of issuance expenses and amount classified to equity upon exercise (see Note 9)	-	-	1,665,000	4,625	1,058,475	-	1,063,100
Issuance of ordinary shares, net of issuance expenses	-	-	1,061,125	3,015	559,538	-	562,553
Exercise of stock options	-	-	81,432	226	-	-	226
Stock-based compensation	18,379	51	-	-	109,957	-	110,008
Conversion of preferred shares into ordinary shares	(3,351,850)	(9,475)	3,351,850	9,475	-	-	-
Stock-based compensation for consulting services	-	-	350,000	897	2,904	-	3,801
Net loss for the year	-	-	-	-	-	(2,675,372)	(2,675,372)
BALANCE AT DECEMBER 31, 2017	**-**	**$ -**	**70,256,911**	**$ 184,961**	**$ 3,711,218**	**$ (5,235,812)**	**$ (1,339,633)**
Exercise of warrants, net of issuance expenses and amount classified to equity upon exercise (see Note 9)	-	-	722,500	1,928	451,295	-	453,223
Issuance of ordinary shares	-	-	800,000	2,134	78,211	-	80,345
Exercise of stock options	-	-	620,521	1,656	(1,656)	-	-
Stock-based compensation	-	-	-	-	47,672	-	47,672
Net loss for the year	-	-	-	-	-	(457,541)	(457,541)
BALANCE AT DECEMBER 31, 2018	**-**	**-**	**72,399,932**	**$ 190,679**	**$ 4,286,740**	**$ (5,693,353)**	**$ (1,215,934)**

The accompanying notes are an integral part of these financial statements.

TODOS MEDICAL LTD.
STATEMENTS OF CASH FLOWS
(U.S. dollars except share and per share amounts)

	Year ended December 31		
	2018	**2017(*)**	**2016**
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (457,541)	$ (2,675,372)	$ (653,461)
Adjustments required to reconcile net loss to net cash used in operating activities:			
Depreciation	25,502	24,083	20,695
Liability for minimum royalties	50,000	238,000	50,000
Changes in fair value of warrants liability and fair value of warrants expired (see Note 9)	(925,910)	1,101,229	(117,577)
Stock-based compensation	47,672	113,758	210,180
Inducement related to warrants exercised (see Note 9)	-	166,500	-
Financing expenses of long-term loans and other NIS denominated balances	(47,589)	66,658	7,962
Decrease (increase) in other current assets	(13,236)	1,120	6,143
Increase (decrease) in accounts payables	163,174	(21,874)	14,491
Increase (decrease) in other current liabilities	101,632	81,488	(7,822)
Net cash used in operating activities	(1,056,296)	(904,410)	(469,389)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property and equipment	(15,370)	(3,596)	(34,971)
Net cash used in investing activities	(15,370)	(3,596)	(34,971)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds received from issuance of convertible bridge loan	27,000	-	-
Proceeds allocated to ordinary shares	80,345	562,604	566,569
Proceeds allocated to warrants	19,655	-	244,446
Proceeds from exercise of warrants, net	324,258	599,400	-
Proceeds from exercise of stock options	-	226	273
Repayments of shareholders loans	-	-	(23,529)
Net cash provided by financing activities	451,258	1,162,230	787,759
INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS, AND RESTRICTED CASH	(620,408)	224,254	283,399
CASH, CASH EQUIVALENTS, AND RESTIRICTED CASH AT BEGINNING OF YEAR	693,301	439,077	155,678
CASH, CASH EQUIVALENTS, AND RESTRICTED CASH AT END OF YEAR	$ 72,893	$ 693,301	$ 439,077
Supplemental disclosure of non-cash activities:			
Fair value of warrants liability classified to equity in connection with warrants exercised during the period (see Note 9)	$ 128,965	$ 297,200	$ -
During the reported period, the entire balance of preferred shares were converted into ordinary shares (see Note 11)	$ -	$ 9,424	$ -

(*) See Note 2D

The accompanying notes are an integral part of these financial statements.

NOTE 1 – GENERAL

A. Operations

Todos Medical Ltd. (the "Company") was incorporated under the laws of Israel and commenced its operations on April 22, 2010. The Company engages in the development of a series of patient-friendly blood tests for the purpose of early detection of a variety of cancers. The method incorporates biochemistry, physics and signal processing and is based on the cancer's influence on the immune system which triggers biochemical changes in peripheral blood mononuclear cells. These changes are measured by spectroscopy and examined through a processing algorithm.

The Company's products in development currently consist of individual kits being developed for blood test detection of breast cancer (TB), and colorectal cancer (TC). Since inception, the Company's operations have been limited to developing the products and raising capital to fund this development. The Company has not generated any revenues to date.

On January 27, 2016, the Company incorporated a wholly owned subsidiary in Singapore under the name: Todos Medical (Singapore) Pte Ltd. ("Todos Singapore") for the purpose of conducting clinical trials in the future in Singapore and to obtain possible Singapore government grants to partially finance the conducting of such operations. As of December 31, 2018, Todos Singapore has not yet commenced its business operations and as a result, consolidated financial statements were not prepared.

In August 2016, the Company's registration statement on Form F-1 was declared effective by the U.S. Securities & Exchange Commission, and as of March 2017, the Company's shares began to be quoted on the OTCQB under the symbol "TOMDF".

Going concern uncertainty

The Company has devoted substantially all of its efforts to research and development and raising capital and has not yet generated any revenues. The development and commercialization of the Company's products are expected to require substantial further expenditures. The Company has not yet generated any revenues from operations, and therefore it is dependent upon external sources for financing its operations. Since inception through December 31, 2018, the Company has incurred accumulated losses of $5,693,353, current liabilities exceed current assets by $1,092,651, and shareholders' deficit of $1,215,934 and negative operating cash flow for all periods. As of March 20, 2019, the total cash and cash equivalent balance (individual restricted cash) is approximately $310,000, such balance is expected to be sufficient for at least three months. Management has considered the significance of such condition in relation to the Company's ability to meet its current obligations and to achieve its business targets and determined that these conditions raise substantial doubt about the Company's ability to continue as a going concern. The Company plans to finance its operations through the sale of equity and to the extent available, short-term and long-term loans. There can be no assurance that the Company will succeed in obtaining the necessary financing to continue its operations as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

B. Risk factors

The Company has a limited operating history and faces various risks, including uncertainties regarding finalization of the development process, demand and market acceptance of the Company's products, the effects of technological changes, competition and the development of products by competitors. Additionally, other risk factors also exist, such as the ability to manage growth and the effect of planned expansion of operations on the Company's future results. In addition, the Company expects to continue incurring significant operating costs and losses in connection with the development of its products and marketing efforts. A previous discussed, the Company has not yet generated any revenues from its operations to fund its activities and therefore the Company is dependent on the receipt of additional funding in order to continue its operations.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (US GAAP).

A. Use of estimates in the preparation of financial statements

The preparation of the financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of expenses during the reporting periods. Actual results could differ from those estimates. As applicable to these financial statements, the most significant estimates and assumptions relate to the fair value measurement of the derivative warrants liability stock-based compensation and the going concern assumptions.

B. Functional currency

The currency of the primary economic environment in which the operations of the Company are conducted is the U.S dollar ("$" or "dollar"). Thus, the functional currency of the Company is the dollar (which is also the reporting currency of the Company).

C. Cash and cash equivalents

Cash equivalents are short-term highly liquid investments which include short term bank deposits (up to three months from date of deposit), that are not restricted as to withdrawals or use that are readily convertible to cash with maturities of three months or less as of the date acquired.

D. Restricted Cash

Restricted cash is invested in certificates of deposit, which are used to secure the Company's line of credit. For presentation of statement of cash flows purposes, restrict cash balances are included with cash and cash equivalents, when reconciling the reported period total amounts.

	December 31 2018	December 31 2017
Cash and cash equivalents	$ 63,550	$ 683,202
Restricted cash	9,343	10,099
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	$ 72,893	$ 693,301

There were no restricted cash amounts as of December 31, 2016.

E. Property, plant and equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets. When an asset is retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the respective accounts and the net difference less any amount realized from disposition is reflected in the Statements of Comprehensive Loss.

Rate of depreciation	%
Laboratory equipment	15
Furniture and equipment	7-15
Computers	33
Vehicle	15

F. Impairment of long-lived assets

The Company's long-lived assets are reviewed for impairment in accordance with Accounting Standards Codification ("ASC") Topic 360, "Property, Plant and Equipment", whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair value. To date the Company has not incurred any impairment losses.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES (cont.)

G. Deferred income taxes

The Company accounts for income taxes in accordance with ASC Topic 740, "Income Taxes". Accordingly, deferred income taxes are determined utilizing the asset and liability method based on the estimated future tax effects of differences between the financial accounting and the tax bases of assets and liabilities under the applicable tax law. Deferred tax balances are computed using the enacted tax rates expected to be in effect when these differences reverse. Valuation allowance in respect of deferred tax assets are provided for, if necessary, to reduce deferred tax assets is amounts more likely than not to be realized.

H. Convertible Bridge Loan

The Company has considered the provisions of ASC 815-40, "Derivatives and Hedging - Contracts in Entity's Own Equity" and determined that the embedded conversion feature of the convertible bridge loan should be bifurcated from the host instrument, as the embedded conversion feature is not considered indexed to the company's own stock (since the "fixed-for-fixed" concept is not met). accordingly, upon initial recognition, the embedded conversion feature was measured at fair value and the remaining proceeds were allocated to the loan component (Host). In subsequent periods the derivative liability related to the conversion feature is remeasured at fair value through profit or loss (with changes presented within financing income or expense, as applicable) and the remaining bridge loan component is measured at amortized cost. The amount that was allocated to the embedded conversion feature upon initial recognition, created a discount on the loan component. Such discount is amortized as interest expense to profit or loss over the term of the loan until its stated maturity.

I. Deferred income taxes

The Company accounts for uncertain tax positions in accordance with ASC Topic 740-10, which prescribes detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise's financial statements. According to ASC Topic 740-10, tax positions must meet a more-likely-than-not recognition threshold. The Company's accounting policy is to classify interest and penalties relating to uncertain tax positions under income taxes, however the Company did not recognize such items in its fiscal 2018, 2017 and 2016 financial statements and did not recognize any liability with respect to an unrecognized tax position in its balance sheets.

J. Liability for employee rights upon retirement

Israeli employees are entitled to severance pay of one month's salary for each year of employment, or a portion thereof. The Company satisfies its full obligation with respect to its Israeli employees by contributing one month of the employees' salary for each year of service into a fund managed by a third party. Neither the obligation, nor the amounts deposited on behalf of the employees for such obligation are recorded on the Balance Sheet, as the Company is legally released from the obligation to the employees once the amounts have been deposited. All deposits required through December 31, 2018 have been made.

K. Research and development expenses

Research and development expenses are charged to operations as incurred. Grants received by the Company from the Government of Israel through the Office of the Chief Scientist of the Ministry of Industry, Trade and Labor (the "OCS") for the development of approved projects are recognized as a reduction of expenses against the related costs incurred.

L. Royalty-bearing grants

Royalty-bearing grants from the OCS for funding approved research and development projects are recognized at the time the Company is entitled to such grants (i.e. at the time that there is reasonable assurance that the Company will comply with the conditions attached to the grant and that there is reasonable assurance that the grant will be received), on the basis of the costs incurred and reduce research and development costs - see Note 10A. and Note 13. The cumulative research and development grants received by the Company from inception through December 2018 amounted to $272,237.

As of December 31, 2018, and 2017, the Company did not accrue for or pay any royalties to the OCS as no revenue has yet been generated.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES (cont.)

M. Basic and diluted net loss per ordinary share

Basic net loss per ordinary share is computed by dividing the net loss for the period applicable to ordinary shareholders, by the weighted average number of ordinary shares outstanding during the period. Securities that may participate in dividends with the ordinary shares (such as the convertible preferred shares that were outstanding until March 16, 2017) are considered in the computation of basic loss per share under the two-class method. However, in periods of net loss, only the convertible preferred shares were considered, since such shares had a contractual obligation to share in the losses of the Company, in accordance with the guidance in ASC Topic 260-10.

Diluted loss per share gives effect to all potentially dilutive common shares outstanding during the year using the treasury stock method with respect to stock options and stock warrants and using the if-converted method with respect to convertible loans. In computing Diluted loss per share, the average stock price for the period is used in determining the number of shares assumed to be purchased from the exercise of stock options or warrants. Diluted loss per share excludes all potentially dilutive shares if their effect is anti-dilutive.

N. Stock-based compensation

The Company measures and recognizes the compensation expense for all equity-based payments to employees based on their estimated fair values in accordance with ASC 718, "Compensation-Stock Compensation". Share-based payments including grants of stock options are recognized in the statement of net loss as an operating expense based on the fair value of the award at the date of grant. The fair value of stock options granted is estimated using the Black-Scholes option-pricing model. The Company has expensed compensation costs, net of estimated forfeitures, applying the accelerated vesting method, over the requisite service period or over the implicit service period when a performance condition affects the vesting, and it is considered probable that the performance condition will be achieved.

Share-based payments awarded to consultants (non-employees) are accounted for in accordance with ASC Topic 505-50, "Equity-Based Payments to Non-Employees".

O. Fair Value Measurements

The Company measures and discloses fair value in accordance with the Financial Accounting Standards Board ("FASB"), Accounting Standards Codification 820, Fair Value Measurements and Disclosures ("ASC Topic 820"). ASC Topic 820 defines fair value, establishes a framework and gives guidance regarding the methods used for measuring fair value, and expands disclosures about fair value measurements. Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions there exists a three-tier fair-value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 – unadjusted quoted prices are available in active markets for identical assets or liabilities that the Company has the ability to access as of the measurement date

Level 2 – pricing inputs are other than quoted prices in active markets that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data.

Level 3 – pricing inputs are unobservable for the non-financial asset or liability and only used when there is little, if any, market activity for the non-financial asset or liability at the measurement date. The inputs into the determination of fair value require significant management judgment or estimation. Level 3 inputs are considered as the lowest priority within the fair value hierarchy. The valuation of the short-term liability relating to the warrants issued to the unit owners (see Note 2N and Note 9) falls under this category.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value.

The fair value of cash and cash equivalents is based on its demand value, which is equal to its carrying value. Additionally, the carrying value of all other short term monetary assets and liabilities are estimated to be equal to their fair value due to the short-term nature of these instruments.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES (cont.)

P. Warrants Liability

During 2018, 2016 and 2015, the Company issued 600,000, 4,518,406 and 3,106,000 warrants, respectively, to purchase shares of the Company's ordinary-stock in connection with a Private Placement Memorandum ("PPM"). The Company accounted for these warrants as a liability measured at fair value due to a provision included in the warrants agreement that provides the warrants holders with an option to require the Company to purchase their warrants for cash in an amount equal to their Black-Scholes Option Pricing Model value (the Black-Scholes Model), in the event that certain fundamental transactions (which some of them are not considered solely within the control of the Company) as defined in the warrant agreement, occur. The fair value of the warrants liability is estimated using the Black-Scholes Model which requires inputs such as the expected term of the warrants, share price volatility and risk-free interest rate. These assumptions are reviewed on a regular basis and changes in the estimated fair value of the outstanding warrants are recognized each reporting period as part of in the "Financing Expense, net" line in operations in the accompanying statement of loss.

Q. Concentrations of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents as well as certain other current assets that do not amount to a significant amount. Cash and cash equivalents, which are primarily held in Dollars and New Israeli Shekels, are deposited with major banks in Israel. Management believes that such financial institutions are financially sound and, accordingly, minimal credit risk exists with respect to these financial instruments. The Company does not have any significant off-balance-sheet concentration of credit risk, such as foreign exchange contracts, option contracts or other foreign hedging arrangements.

R. Contingencies

The Company records accruals for loss contingencies arising from claims, litigation and other sources when it is probable that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted periodically as assessments change or additional information becomes available. Legal costs incurred in connection with loss contingencies are expensed as incurred.

S. Recent Accounting Pronouncements

1. Commencing January 1, 2018, the Company early adopted ASU 2016-18, Statement of Company's consolidated financial statements Cash Flows (Topic 230): "Restricted Cash", which requires companies to include amounts generally described as restricted cash and restricted cash equivalents in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments in this update are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years.

   ASU 2016-18 requires application using a retrospective transition method. The Company adopted ASU 2016-18, January 1, 2018 using the retrospective transition method, as required by its provisions. As a result, the Company has retrospectively applied this guidance to the accompanying consolidated statement of cash flows for the year ended December 31, 2017. There were no restricted cash balances during 2016.

2. In May 2017, the FASB issued ASU 2017-09, "Compensation-Stock Compensation". The amendment provides guidance about which changes to terms or conditions of a share-based payment award require an entity to apply modification accounting. The guidance became effective for the fiscal year beginning on January 1, 2018, including interim periods within that year.

   This guidance had no material impact on the Company's consolidated financial statements.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES (cont.)

S. Recent Accounting Pronouncements (cont.)

3. In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-02 (Topic 842) "Leases". Topic 842 supersedes the lease requirements in ASC Topic 840, "Leases". Under Topic 842, lessees are required to recognize assets and liabilities on the balance sheet for most leases and provide enhanced disclosures. ASU No. 2016-02 is effective for interim and annual reporting periods beginning after December 15, 2018. In July 2018, the FASB issued amendments in ASU 2018-11, which provide a transition election to not restate comparative periods for the effects of applying the new standard. This transition election permits entities to change the date of initial application to the beginning of the earliest comparative period presented, or retrospectively at the beginning of the period of adoption through a cumulative-effect adjustment.

   The company is not involved in any financing leases as a lessor. Based on the current operating leases of the company as a lessee, the company believes that the provisions of ASU 2016-02 will not have a material impact on the financial statements.

4. In June 2018, the Financial Accounting Standards Board ("FASB") issued ASU 2018-07, "Improvements to Nonemployee Share-Based Payment Accounting", which simplifies the accounting for share-based payments granted to nonemployees for goods and services. Under the ASU, most of the guidance on such payments to nonemployees would be aligned with the requirements for share-based payments granted to employees. The changes take effect for public companies for fiscal years starting after December 15, 2018, including interim periods within that fiscal year. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606.

   The Company is currently evaluating the impact of adopting this standard on its financial statements and related disclosures, if any.

NOTE 3 – OTHER CURRENT ASSETS

	As of December 31,	
	2018	2017
Prepaid expenses	$ 21,000	$ -
Governmental institutions	6,117	8,444
Others	5,873	11,310
	$ 32,990	$ 19,754

NOTE 4 – PROPERTY AND EQUIPMENT, NET

	As of December 31,	
	2018	2017
Laboratory equipment & other	$ 151,065	$ 139,093
Computers	7,180	3,782
Vehicle	5,204	5,204
Furniture and equipment	13,046	13,046
	176,495	161,125
Less - accumulated depreciation	(83,253)	(57,751)
Total property and equipment, net	$ 93,242	$ 103,374

Related depreciation expense was $25,502 in 2018, $24,083 in 2017, and $20,695 in 2016.

NOTE 5 – SHORT-TERM LOANS FROM THIRD PARTY

On December 30, 2018, the Company signed a bridge loan agreement with an investor for a total amount of Thirty Thousand U.S. Dollars (US$30,000). The loan principal will bear interest at a flat rate of ten percent (10%) of the loan principal over the period of 6 months (the initial term of the loan). In addition, 10% of the loan principal was deducted upfront as an original issue discount. The loan principal plus the interest shall be due six (6) months after the date of the loan (the "Maturity Date").

The investor shall have at any time after the Maturity Date the option to convert the loan principal plus the unpaid interest into Ordinary Shares of the Company, at a conversion price equal to 70% of the lowest closing price of the Company's Ordinary Shares in the five (5) days prior to the conversion as quoted by Bloomberg, LP. In the event of default by the Company, the investor shall have the option to convert the loan principal plus the interest into Ordinary Shares of the Company, at a conversion price equal to 60% of the lowest closing price of the Company's Ordinary Shares in the fifteen (15) days prior to the conversion as quoted by Bloomberg, LP.

Upon the consummation of the Company's proposed public offering and upon listing to the NASDAQ Market System, the Company shall deliver to the investor an Ordinary Share Purchase Warrant (the "Warrant"), providing the investor with a right to purchase such number of fully-paid and non-assessable restricted Ordinary Shares of the Company that is equal in value to twenty-five percent (25%) of the investor's loan principal, at an exercise price that is equal to the price of the Company's shares in the public offering (the "Warrant Shares"), or in the event that the investor converts the loan principal into Ordinary Shares of the Company, then the Company shall issue the Warrant to such investor concurrently with the issuance of the conversion shares, and the exercise price for the Warrant Shares shall be the closing price of the Company's Ordinary Shares, as applicable, on the conversion date of the loan principal. The investor may exercise the Warrant at any time starting six (6) months following the grant of such Warrant and up to three (3) years thereafter. The table below details the carrying value of the loan as of December 31, 2018:

	As of December 31,	
	2018	2017
Short-term loan principal (see Note 10)	$ 30,012	$ -
Less: original issue discount	(3,000)	-
Less: Fair value of derivative instrument	(9,000)	-
	$ 18,012	$ -

NOTE 6 – LIABILITY FOR MINIMUM ROYALTIES

At inception of the Company, the Company entered into a license agreement with B.G. Negev Technologies and Applications Ltd. (a wholly owned subsidiary of Ben Gurion University – Israel) and Mor Research Applications Ltd. (a wholly owned subsidiary of Clalit Medical Services – Israel). According to the license agreement, the Company is committed to pay minimum royalties to the licensors some of which are payable without any connection to the Company's sales (see also Note 10B).

NOTE 7 – OTHER CURRENT LIABILITIES

	As of December 31,	
	2018	2017
Accrued payroll and related taxes	$ 111,076	$ 16,424
Provision for vacation	12,807	5,392
Accrued expenses	87,540	87,975
	$ 211,423	$ 109,791

NOTE 8 – SHORT-TERM LOANS FROM SHAREHOLDERS

During the years 2011-2014, the Company received loans from two separate shareholders. The loans mature on December 31, 2019 and bear no interest. The loans are denominated in New Israel Shekels (NIS) and are linked to the Israeli consumer price index as of January 1, 2015. The loans may be prepaid by the Company from time to time according to the Company's cash availability.

During 2016, the Company repaid one of the shareholders an aggregate amount of $23,529 on account of the loan.

In November 2018, the company entered into agreement with one of the shareholders to assign his loan in the amount of US$350,000 to S.B. Nihul Mekarkein Ltd. and Sorry Doll Ltd collectively (the beneficiary). According to the agreement, the Company and the beneficiary agreed to convert the loan into Ordinary Shares of the Company at a conversion price of US$0.10 per share, (3,500,000 Shares). The conversion of the loan into Ordinary Shares will be completed within 3 business days of shareholder approval of the conversion transaction. In addition, the Company agreed to grant the beneficiary an option to purchase twice the amount of the conversion shares, (7,000,000 ordinary shares) at a price-per-share of US$0.20 for a period of 5 years from the signing of the conversion agreement.

As the agreement is subject to the shareholder approval which has not yet been obtained, the loan as of the date of approval of these financial statements is presented according to the original terms and conditions, as a short-term loan.

NOTE 9 – DERIVATIVE WARRANTS LIABILITY

The Company allocated approximately $19,655, $244,000 and $168,000, for the years ended December 31, 2018, 2016 and 2015, respectively, of proceeds from its units under the Private Placement Memorandum ("PPM") (See also Note 10F. and 2M.) to the fair value of 600,000, 4,518,406 and 3,106,000 warrants issued during 2018, 2016 and 2015, respectively, in connection with the PPM that are classified as a liability. The warrants are classified as a liability because of provisions in such warrants that allow for the net cash settlement of such warrants in the event of certain fundamental transactions, as defined in the warrant agreement (some of which are not considered solely within the control of the Company).

The remaining outstanding warrants and terms as of December 31, 2018 and 2017 is as follows:

Issuance date	Outstanding as of December 31, 2017	Outstanding as of December 31, 2018	Exercise Price	Exercisable as of December 31, 2018	Exercisable Through
Series (2015)	3,106,000	1,502,500	$ 0.5	1,502,500	April 2021
Series (2016)	2,853,406	2,628,406	$ 0.5	2,628,406	May 2019
Series (2018)	-	600,000	$ 0.125	600,000	November 2021
	5,959,406	4,730,906			

Since certain conditions in the warrant agreements do not meet the specific conditions for equity classification, the Company is required to classify the fair value of these warrants as a liability, with changes in fair value to be recorded as income (loss) due to change in fair value of warrant liability. The estimated fair value of warrant liability at December 31, 2018 and December 31, 2017, was $28,525 and $1,063,745, respectively.

As quoted prices in active markets for identical or similar warrants are not available, the Company uses directly observable inputs in the valuation of its derivative warrant liabilities (level 3 measurement).

The Company uses the Black-Scholes valuation model to estimate fair value of these warrants. In using this model, the Company makes certain assumptions about risk-free interest rates, dividend yields, volatility, expected term of the warrants and other assumptions. Risk-free interest rates are derived from the yield on U.S. Treasury debt securities. Dividend yields are based on our historical dividend payments, which have been zero to date. The expected term of the warrants is based on the time to expiration of the warrants from the date of measurement.

NOTE 9 – DERIVATIVE WARRANTS LIABILITY (cont.)

During April 2017, the Company offered to the holders of the warrants to lower the exercise price of the warrants from $0.5 per share to $0.4 per share for a limited period of time of 8 weeks.

As a result of such offer, during May 2017, certain holders exercised 1,665,000 warrants into the same number of Ordinary Shares for cash consideration of $666,000.

The fair value of the inducement was measured in an amount of $166,500. Such amount was recognized as an additional financing expense in the Company's Statement of Loss for the year ended December 31, 2017.

As of the date of exercise, the fair value of the warrants exercised which amounted to $297,200 (after consideration of the effect of the inducement), was reclassified to equity rather than derivative warrant liabilities.

During May 2018, the Company offered to the holders of the warrants the option to convert 25% of the warrants into shares in exchange for extending the exercise the period of their warrants for an additional 3 years.

As a result of such offer, during May 2018, certain holders exercised 722,500 warrants into the same number of Ordinary Shares for cash consideration of $361,250.

As of December 2018, a total of 1,106,000 warrants from series (2015) expired in a total amount of $178,498.

The following table summarizes the observable inputs used in the valuation of the derivative warrant liabilities as of December 31, 2018 and December 31, 2017:

	As of December 31, 2018			As of December 31, 2017	
	Series (2015)	Series (2016)	Series (2018)	Series (2015)	Series (2016)
Share price (U.S. dollars)	$ 0.094	$ 0.094	$ 0.094	$ 0.59	$ 0.59
Exercise price (U.S. dollars)	$ 0.5	$ 0.5	$ 0.125	$ 0.5	$ 0.5
Expected volatility	63%	63%	63%	67%	67%
Risk-free interest rate	2.92%	2.92%	2.92%	1.0%	1.0%
Dividend yield	-	-	-	-	-
Expected term (years)	2.4	0.47	2.88	0.37	0.77

	Series (2015)	Series (2016)	Series (2018)	Total
Balances at December 31, 2016	$ 76,768	$ 182,948	-	$ 259,716
Exercised	-	(297,200)	-	(297,200)
Changes in fair value	477,648	623,581	-	1,101,229
Balances at December 31, 2017	$ 554,416	$ 509,329	-	$ 1,063,745
Amount classified to equity upon exercise	(88,803)	(40,162)	-	(128,965)
expired	(178,498)	-	-	(178,498)
Issued	-	-	19,655	19,655
Changes in fair value	(281,119)	(466,293)	-	(747,412)
Balances at December 31, 2018	$ 5,996	$ 2,874	19,655	$ 28,525

In accordance with ASC-820-10-50-2(g), the Company has performed a sensitivity analysis of the derivative warrant liabilities of the Company which are classified as level 3 financial instruments. The Company recalculated the value of warrants by applying a +/- 5% changes to the input variables in the Black-Scholes model that vary overtime, namely, the volatility and the risk-free rate. A 5.0% decrease or increase in volatility would not have materially changed the value of the warrants. A 5.0% decrease or increase in the risk-free rate would not have materially changed the value of the warrants; the value of the warrants is not strongly correlated with small changes in interest rates. The Company estimates the share price of $0.125 as share value representative of the last price the Company raised capital from private issuers in November 2018.As of December 31 2018 the Company recorded $925,910 in the finance expenses witch $178k relating to warrants expiration.

NOTE 10 – COMMITMENTS AND CONTINGENT LIABILITIES

A. From 2012 through 2013, the Company received grants from the OCS (Office of the Chief Scientist) in the total amount of $162,017, for its plans to develop a series of patient-friendly blood tests that enable the early detection of a variety of cancers (the "Development Plan"). Such contingent obligation has no expiration date. During 2016, the OCS approved further grants (under the same terms) up to a maximum amount of approximately $185,000, of which the Company received $110,220 during 2016. The receipt of such amounts is dependent on numerous conditions being met. No amounts were received during 2017 and 2018. The Company is required to pay royalties to the OCS at a rate of 3% in the first three years and 3.5% starting from the fourth year, of the proceeds from the sale of the Company's products arising from the Development Plan up to an amount equal to $272,237, plus annual interest equal to 12-month LIBOR applicable to dollar deposit.

B. At inception of the Company, the Company entered into a license agreement with B.G. Negev Technologies and Applications Ltd (a wholly owned subsidiary of Ben Gurion University – Israel) and Mor Research Applications Ltd. (a wholly owned subsidiary of Clalit Medical Services – Israel) (the "Licensors") in which the Company obtained an exclusive world-wide license to develop, research, commercialize, produce, market and sub-license, products based on the Licensors' technology. The Company's technology is built on this license which is therefore material to the Company. According to the license agreement, future royalties would be paid to the licensors based on the following royalty rates:

	%
On net sales of:	
• leukemia related products	3.0
• other products	2.5
• in certain limited circumstances, rates may be reduced to	2.0

	%
On fixed sublicense income (with no sublicense income on sales by sub licensee):	
• leukemia related products	20.0
• other products	15.0

	%
On fixed sublicense income (with sublicense income on sales by sub licensee):	
• leukemia related products	10.0
• other products	7.5

Without any connection to the Company's sales, the Company is required to pay minimum royalties to the Licensors according to the following schedule (subject to the termination clause described below):

1. Year 2015 - $10,000
2. Year 2016 - $25,000
3. Year 2017 and on - $50,000 per year.

In any specific year, the total royalties payable to the Licensors shall be the higher of:

- the regular royalties based on the royalty rates as described above and
- the minimum royalties.

The minimum royalties will be paid to the Licensors regardless of whether the Company succeeds in generating revenues from sales of the products arising from the usage of the Licensors' technology.

The license agreement is for an unlimited term, unless terminated earlier by either of the parties. Each party is entitled to terminate the agreement as a result of a material breach or a failure to comply with a material term by the other party, as a result of liquidation or insolvency of the other party ("Termination for Cause"). In addition, the Company was entitled to terminate the agreement if at any time, during the period of 7 years following the effective date of the transaction, the Company, at its sole discretion, determined that commercialization of the leukemia licensed products is not commercially viable. After such period, the Company is not entitled to terminate this license agreement other than in accordance with the Termination for Cause provisions. As of December 31, 2018, the Company did not reach a determination regarding the viability of the commercialization of the leukemia licensed products.

NOTE 10 – COMMITMENT AND CONTINGENT LIABILITIES (cont.)

B. (cont.)

However, since the 7-year period ended prior to December 31, 2018, the Company may not terminate the agreement other than Termination for Cause. The Company has accrued the amount of the non-cancellable minimum royalties and the future liability with respect to the commitment to pay minimum royalties to the Licensors for any future periods in a total amount of $373,000 of which $185,000 is considered a current liability and $188,000 is considered non-current. This balance was measured based on the future cash payments discounted using an interest rate of 21% which represents, according to management estimate, the applicable rate of risk for the Company.

During 2017, the Company and the Licensors agreed on an amendment to the agreement in respect of the years 2015, 2016 and 2017 (in an aggregate amount of $85,000), according to which the minimum royalties payable to the Licensors shall be paid on the earlier of (i) August 1, 2017; and (ii) within 3 days following the date on which the Company shall have received an equity investment with net proceeds of not less than $10,000,000. As of December 31, 2018, the Company had not paid any of the minimum royalties to the Licensors with respect to any of the years 2015 through 2018. The Company and the Licensor are negotiating to further amend the agreement in respect of the amounts of the minimum royalties.

C. In January 2015, the Company signed a one-year lease agreement for the lease of 108 sq. m. of office space in Rehovot, Israel for a monthly consideration of NIS 6,780 (approximately $1,830). The lease was renewed by the Company on February 1, 2018 for an additional term of one year at NIS 7,200 (approximately $1,892) per month, with automatic renewal for a second one-year period at NIS 7,400 per month, unless one party provides the other with written notice of non-renewal. Lease payments are linked to the Israeli CPI based on the CPI published on February 15, 2015, which until December 31, 2018, has not changed significantly. The total expected future lease commitments from January 2019 and onwards (until December 2019) are approximately NIS 84,000 ($22,000).

D. In October 2015, the Company signed an agreement with a non-Israeli company to procure governmental and quasi-governmental grants to support the research and development of the Company. The agreed upon fee for such service is totally dependent on the success of obtaining such grants, so that the Company will never incur a net cost in this regard. After paying approximately $56,000, the Company will thereafter pay 10% of the grants received. During 2016, the Company received approximately $56,000, which was paid out as per the above-mentioned agreement. As of December 31, 2018, the Company did not receive and does not expect to receive any amounts regarding this agreement.

E. Care G.B Plus Ltd

On December 20, 2018, the Company signed an exclusive reseller agreement with Care G.B. Plus Ltd (the Reseller) to market, distribute, and resell the Company's breast cancer screening products to customers located in and taking delivery in the State of Israel (the Territory). The agreement is subject to approval by the shareholders of the Company.

The Reseller's exclusive right to market and sell the Products in the Territory is subject to the Reseller achieving milestones set by both parties. As of December 31, 2018, the Company has not yet generated any sales.

F. Ostrovitsky loan conversion

In November 2018, the Company entered into agreement with one of its shareholders to assign his loan to S.B. Nihul Mekarkein Ltd. and Sorry Doll Ltd. (the beneficiary). According to the agreement, the Company and the beneficiary agreed to convert the loan into ordinary shares of the Company at price of US$0.10 per share- (3,500,000 Shares). The conversion of the loan into ordinary shares shall be completed subject to the approval of the shareholders of the Company. In addition, the Company agreed to grant the beneficiary an option to purchase twice the amount of the converted stocks, (7,000,000 ordinary shares), to be available to purchase at a stock price of US$0.20 per share, for a period of 5 years from the signing of this contract. (See Note 8).

G. On November 24, 2018, the Company entered into a binding letter of intent with Amarantus Bioscience Holdings, Inc. ("Amarantus"), a biotechnology holding company, for the establishment of a joint venture to develop LymPro Test®, an immune-based neurodiagnostic blood test originally developed at the University of Leipzig, as a diagnostic blood test for detection of Alzheimer's disease (the "Joint Venture Transaction"). Pursuant to the letter of intent, the Company undertook to issue to Amarantus 19.99% of the Company's outstanding ordinary shares, in exchange for 19.99% of Breakthrough Diagnostics, Inc., a wholly-owned subsidiary of Amarantus. As part of the joint venture transaction, all rights to the LymPro Test and certain other diagnostic assets will be assigned by Amarantus to Breakthrough Diagnostics. In addition, Amarantus undertook to grant the Company an exclusive option, in effect for sixty (60) days, to acquire the remaining 80.01% of Breakthrough Diagnostics in exchange for an additional 30.01% of the Company's outstanding shares. The exclusive option will be exercisable upon Amarantus entering into an amended and restated license agreement with the University of Leipzig. The closing of the joint venture transaction is subject to the Company raising $1,000,000 in equity or debt financing.

NOTE 10 – COMMITMENT AND CONTINGENT LIABILITIES (cont.)

H. On July 30, 2018, the Board of Directors of Todos Medical Ltd. resolved that Dr. Herman Weiss, will cease to serve as the Company's current Chairman of the Board of Directors, and appointed him as Chief Executive Officer of the Company effective immediately. Additionally, in conjunction with the appointment of Dr. Weiss as Chief Executive Officer, Rami Zigdon, the Company's then-current Chief Executive Officer, left his current position but was appointed as the Company's Chief Business Officer and will continue serving as a member of the Company's Board of Directors.

The Company's Compensation Committee and Board of Directors have approved the following compensation package for Dr. Weiss, to be retroactive to August 1, 2018, which will be presented to the shareholders of the Company for approval at the annual meeting of shareholders:

- *Salary*: NIS 47,840 per month
- *Bonus*: Annual performance bonus of up to 35% of annual salary + 1% additional options, linked to the achievement of performance goals to be established by the Board of Directors each year.
- *Equity*: The Company will grant the CEO options to purchase 5% of the Company's issued and outstanding shares as of March 25, 2019, at an exercise price equal to the fair market value of the Company's shares on the date of grant, in accordance with the following vesting schedule:
    - 25% will vest on grant
    - 25% will vest on the consummation of the Company's planned public offering (the "Public Offering Date")
    - 25% will vest quarterly in the first year following the Public Offering Date
    - 25% will vest quarterly in the second year following the Public Offering Date
- *Notice Period*: 3 months
- *Severance Payments*: 6 months' salary following effective date of termination
- *Change in Control Payment*: In the event the CEO is terminated due to a change of control, the Company will pay the CEO 12 months' salary (instead of the 6 months' salary) following the effective date of termination.
- *Change in Control Acceleration*: In the event of a change of control transaction following the Public Offering Date vesting will be accelerated, and all of the options will become fully vested.

The company made a provision in the financial statements of $83,000 to reflect the compensation liability to Dr. Herman Weiss for services provided as the chief executive officer, as part of other current liabilities (see Note 7).

NOTE 11 – SHAREHOLDERS' DEFICIT

Convertible Preferred Shares:

According to the Company's prior Articles of Association, which were revised on August 9, 2015, each preferred share entitled its holder to the following rights, until such preferred share is converted into an ordinary share: (a) the right to receive notices and participate in general meetings, vote there at, receive dividends whenever they are paid on the ordinary shares and to receive liquidation dividends from the assets of the Company upon liquidation; (b) anti-dilution right that is not transferrable; and (c) the right to appoint one (1) director, provided that the holder holds 5% or more of the issued share capital of the Company. During the reported periods all the issued and outstanding preferred shares were held by Mr. Zigdon, the CEO of the Company.

On March 16, 2017, and following the effective date of the registration of the securities of the Company for quotation on OTCQB, the Company's shareholders at a General Meeting adopted Amended and Restated Articles of Association of the Company and approved the conversion of all preferred shares into the same number of ordinary shares (total of 3,333,471 shares). Accordingly, as of December 31, 2017, there are no preferred shares issued and outstanding and the Company is no longer required to issue any additional preferred shares to Mr. Zigdon. Following the registration of securities and the conversion of the preferred shares, the Company issued to Mr. Zigdon 18,379 ordinary shares related to ordinary shares issued during 2017 prior to the March 2017 conversion date.

NOTE 11 – SHAREHOLDERS' DEFICIT (cont.)

Ordinary Shares:

A. Upon inception, the Company issued 3,000,000 Ordinary Shares of NIS 0.01 par value, which were held by the Company's previous CEO. Such Ordinary Shares were converted to Convertible Preferred Shares.

On January 29, 2012 the Company issued to an investor 27,000,000 Ordinary Shares of NIS 0.01 par value, upon the conversion of a $160,987 (NIS 600,000) loan.

As of that date, it was agreed between the investors who gained control over the Company and the then existing shareholder of the Company ("the former controlling shareholder") that the respective shares of the former controlling shareholder would be converted into preferred shares. For the preferred share rights and privileges refer to the beginning of Note 10 above.

B. Effective as of March 31, 2014, an investor was to be issued 123,900 ordinary shares in exchange for $57,356 (200,000 NIS) received by the Company in February, 2014. Although these shares had not yet formally been issued by December 31, 2014, they have been included in the shareholders' deficit (as receipt on account of shares) and loss per ordinary share relating to 2014. These shares were issued during 2015.

C. On October 7, 2014, the Company signed a share purchase agreement with certain investors for $350,593 in exchange for 9,000,000 ordinary shares of NIS 0.01 par value.

As the investment was to be executed in installments, the 9,000,000 shares were issued to a trustee that would hold the shares in trust until fully paid by the investors. The trustee released the shares to the investors following the completion of each significant transfer. As of December 31, 2014, the investor was entitled to 5,746,200 ordinary shares corresponding to an investment of $223,840. During 2015 all these shares were released to the investors and the remaining purchase amount was paid to the Company.

D. In March 2015, the general meeting of the shareholders resolved to increase the registered share capital and performed a share split so after the increase and share split, the registered share capital of the Company was increased from NIS 100,000 to NIS 10,000,000, divided into 990,000,000 ordinary shares par value NIS 0.01 each, and 10,000,000 preferred shares par value NIS 0.01 each of the Company. On this date the amended and restated articles of association were adopted. In March 2015, the board of directors approved the grant of 29 bonus shares for each 1 share of the Company held by the shareholders. Unless otherwise noted, all shares and per share amounts for all periods presented have been retroactively restated to reflect the split and the issuance of bonus shares.

E. In March 2015, the Company approved a private placement memorandum for a funding round of up to $ 2,000,000 and issuance of units for a price of $ 0.20 for each unit consisting of: (A) 1 ordinary share par value NIS 0.01 and (B) 1 three-year warrant to purchase 1 ordinary share par value NIS 0.01 of the Company at a price of $ 0.50.

During 2016 and 2015 the Company has raised the gross sum of $903,681 and $621,200, respectively, and issued 4,518,406 and 3,106,000, respectively, ordinary shares par value NIS 0.01 each and warrants to purchase an equal number of ordinary shares par value NIS 0.01 each. The proceeds of such units, net of related expenses (which amounted to $155,321), and net amounts allocated to the warrants recorded as a liability (see Notes 2N. and 8), were reflected in the shareholders' deficit, allocated between ordinary share capital and additional paid in capital, as applicable. The proportional amount of related expenses associated with the warrants' portion of the units, has been recorded under finance expenses.

During April 2017, the Company offered to the holders of the warrants to lower the exercise price of the warrants from $0.5 per share to $0.4 per share for a limited period of time of 8 weeks.

As a result of such offer, during May 2017, certain holders exercised 1,665,000 warrants to the same number of Ordinary Shares for a cash consideration of $666,000 (net amount of $599,400)

The fair value of the inducement was measured in an amount of $166,500. Such amount was recognized as an additional financing expense in the Company's Statement of Comprehensive Loss.

As of the date of exercise, the fair value of the warrants exercised which amounted to $297,200 (after consideration of the effect of the inducement), was reclassified to equity rather than derivative warrant liabilities.

NOTE 11 – SHAREHOLDERS' DEFICIT (cont.)

Ordinary Shares (cont.):

F. In October 2017, the Company signed a share purchase agreement with certain investors for $625,000 in exchange for 1,061,125 ordinary shares of NIS 0.01 par value. As of December 31, 2017, all of these ordinary shares were sold and the Company received net proceeds of $562,553.

G. In June 2015, the Company approved the issuance of 1,000,000 fully vested ordinary shares to Maxim Partners LLC ("Maxim") pursuant to an agreement entered with Maxim in April 2015 engaging Maxim to provide financial advisory and investment banking services to the Company. The fair value (based on recent share issuances - see Note 11F. above) of the issued shares of $200,000 was recorded as a stock-based expense, with a corresponding amount reflected in shareholders' deficit, allocated between ordinary share capital and additional paid in capital, as applicable. Maxim is entitled to certain registration rights. Under the agreement, in addition to the issuance of shares as mentioned above, the Company undertook to pay Maxim for such services, a fee of $10,000 per month, for the term of the agreement, accruing and payable only upon consummation of a financing transaction between the Company and a third party introduced by Maxim, in addition to a fee for a transaction consummated with such third party as detailed in the agreement and reimbursement of expenses in connection with such services provided. As of December 31, 2017, the Company has recorded a provision in the amount of $30,000. In addition, Maxim shall have a right of first offer for acting as lead book runner in the event that the Company shall seek to raise additional capital by way of an offering – private or public. The agreement is terminable by either party by a 30 days prior written notice.

   In December 2018, the Company entered into a new engagement agreement with Maxim which superseded the April 2015 agreement. Pursuant to the new agreement, the Company appointed Maxim as its exclusive financial and sole management underwriter in connection with a proposed public offering to raise up to $7 million. Maxim will be provided with an underwriting discount or spread of up to eight percent (8.0%) of the public offering price. Upon the Company's receipt of bridge financing, the Company shall transfer to Maxim, an amount of $15,000 as an advance to be applied towards such underwriting discount.

H. On May 8, 2016, Company's previous CEO exercised 103,428 options granted under the 2015 Israeli Option plan (see note 12 below) into 103,428 ordinary shares of the Company for total exercise price of $273.

I. On April 4, 2017, Company's employee exercised 81,432 options granted under the 2015 Israeli Option plan (see note 12 below) into 81,432 ordinary shares of the Company for total exercise price of $226. The remaining non-vested options of 228,858 were forfeited upon termination in accordance with the original terms of the options.

J. On August 15, 2018, a certain consultant converted 620,521 options to 620,521 ordinary share at an exercise price of NIS0.01.

K. On November 18, 2018, the Company signed a share purchase agreement with an investor for $100,000 in exchange for 800,000 ordinary shares of NIS 0.01 par value and 600,000 warrants for 3 years in exercise price of the lowest of $0.125 or the lowest price during the 5 trading days before the exercise notice.

Warrants and restricted stock:

A. On October 18, 2016, the Company entered into a Consulting agreement with a consultant (the "Consultant"), pursuant to which the Consultant undertook to provide strategic cooperation and technology consulting for a period of two years from the date of the agreement. Unless terminated, the agreement will be automatically renewed for consecutive one-year periods. Based on the agreement, the Company issued the Consultant 620,521 warrants to purchase ordinary shares of the Company at an exercise price of NIS 0.01 (approximately $0.0026) per share. The warrants expire 18 months following the commencement date. Out of the warrants, 232,696 warrants were immediately vested and the remaining are vested in 15 parts of 25,855 warrants starting October 31, 2016. The Company evaluated the fair value of the warrants using the Black-Scholes option pricing model assuming a 1% risk free interest rate, 0% dividend yield, and 67% volatility, and estimated the fair value of such warrants to be $91,490. As a result, the Company recognized compensation expenses in 2017 and 2016 in the amount of $41,360 and $45,746, respectively included in research and development expenses.

NOTE 11 – SHAREHOLDERS' DEFICIT (cont.)

Warrants and restricted stock (cont.):

B. On June 20, 2016, the Company entered into a Consulting Service Agreement with PCG Advisory Group ("PCG"), pursuant to which PCG undertook to provide the Company with markets advisory, investor relations and media strategies for a period of 7 months commencing the date of the agreement. As consideration for the above services the Company agreed to pay PCG a monthly cash compensation in the amount of $2,500. In addition, the Company undertook to issue to PCG 50,000 ordinary shares for each calendar month. As of December 31, 2016, the Company recorded a related stock-based compensation expense of $48,750 based on the fair value of the 325,000 shares (and a price per share of $0.15). During 2017, the Company recorded related stock-based compensation expense of $3,750 based on the fair value of the 25,000 shares (and a price per share of $0.15).

C. During May 2018, the Company offered to the holders of the warrants to exercise their warrants in exchange for extending their expiration date for an additional 3 years. As a result of such offer, during May 2018, certain holders exercised 722,500 warrants into the same number of Ordinary Shares for a cash consideration of $361,250. (See Note 9). The total costs paid regarding this transaction were approximately $36,000.

NOTE 12 – STOCK OPTIONS

On January 11, 2016, the Company's Board of Directors approved and adopted the Todos Medical Ltd. 2015 Israeli Share Option Plan (the "2015 Plan"), pursuant to which the Board may award options to purchase its ordinary shares to designated participants. Subject to the terms and conditions of the 2015 Plan, the Board of Directors has full authority in its discretion, from time to time and at any time, to determine (i) the designate participants; (ii) the terms and provisions of the respective Option Agreements, including, but not limited to, the number of Options to be granted to each Optionee, the number of Shares to be covered by each Option, provisions concerning the time and the extent to which the Options may be exercised and the nature and duration of restrictions as to the transferability or restrictions constituting substantial risk of forfeiture and to cancel or suspend awards, as necessary; (iii) determine the Fair Market Value of the Shares covered by each Option; (iv) make an election as to the type of Approved 102 Option under Israeli IRS law; (v) designate the type of Options; (vi) take any measures, and to take actions, as deemed necessary or advisable for the administration and implementation of the 2015 Plan; (vii) interpret the provisions of the 2015 Plan and to amend from time to time the terms of the 2015 Plan.

The 2015 Plan permits the grant of up to 6,000,000 options to purchase ordinary shares subject to adjustments set in the 2015 Plan. As of December 31, 2018, there were 4,241,685 ordinary shares available for future issuance under the 2015 Plan.

The following table presents the Company's stock option activity for employees and directors of the Company for the years ended December 31, 2018 and December 31, 2017:

	Number of Options	Weighted Average Exercise Price
Outstanding at December 31, 2017	1,758,315	0.0026
Granted	-	-
Exercised	-	-
Forfeited or expired	-	-
Outstanding at December 31, 2018	1,758,315	0.0026
Number of options exercisable at December 31, 2018	1,137,731	0.0026

	Number of Options	Weighted Average Exercise Price
Outstanding at December 31, 2016	2,068,605	0.0026
Granted	-	-
Exercised	(81,432)	0.0026
Forfeited or expired	(228,858)	-
Outstanding at December 31, 2017	1,758,315	0.0026
Number of options exercisable at December 31, 2017	827,443	0.0026

NOTE 12 – STOCK OPTIONS (cont.)

The fair value of options granted was estimated at the dates of grant using the Black-Scholes option pricing model. The following are the data and assumptions used:

	Years ended December 31, 2016
Dividend yield	0
Expected volatility (%) (*)	100%
Risk-free interest rate (%)	1%
Expected term (years) (**)	2.5
Exercise price (US dollars)	0.0026
Stock price (US dollars) (***)	0.15

(*) Due to the low trading volume of the Company's Common Stock, the expected volatility was based on the historical volatility of the share price of other public companies that operate in the same industry sector as the Company.

(**) Due to the fact that the Company does not have sufficient historical exercise data, the expected term was determined based on the "simplified method" in accordance with SEC Staff Accounting Bulletin No. 110.

(***) The Common Stock price, per share reflects the Company's management's estimation of the fair value per share of Common Stock. In reaching its estimation for 2016 grants, management considered, among other things, the valuation of the issuance of the shares under the private placement (see Note 11F above)

Costs incurred in respect of stock-based compensation for employees and directors, for the years ended December 31, 2018, 2017 and 2016 amounted to $47,672, $113,758 and 210,180, respectively.

The following table summarizes information about options to employees, officers and directors outstanding at December 31, 2018 under the plan:

	Options Outstanding		Options Exercisable	
Exercise Price	Number of Options	Weighted Average Remaining Contractual Life (Years)	Number of Options	Weighted Average Exercise Price
0.0026	1,758,315	2.03	1,137,731	0.0026

As of December 31, 2018, the aggregate intrinsic value for the options exercisable according to $0.094 price per share was $103,989 with a weighted average remaining contractual life of 2.03 years.

NOTE 13 – RESEARCH AND DEVELOPMENT EXPENSES, NET

	Year ended December 31		
	2018	2017	2016
Salaries and related expenses	$ 178,486	$ 144,250	$ 145,997
Stock-based compensation	12,077	22,883	48,056
Professional fees	22,271	18,888	37,426
Laboratory and materials	70,779	143,644	109,299
Patent expenses	82,367	65,654	24,956
Rent and maintenance	40,146	41,673	41,289
Liability for minimum royalty expenses (*)	--	238,000	50,000
Depreciation	25,650	24,083	20,695
Travel expenses	3,804	2,152	2,942
Insurance and other expenses	23,604	19,300	3,293
	459,184	720,527	483,953
Less: Grants from the OCS and others (**)	-	-	(166,046)
	$ 459,184	$ 720,527	$ 317,907

(*) See Note 10B.

(**) See Note 10A and 10D.

NOTE 14 – GENERAL AND ADMINISTRATIVE EXPENSES

	Year ended December 31		
	2018	2017	2016
Salaries and related expenses	$ 190,207	$ 67,541	$ 29,254
Stock-based compensation	35,595	90,875	162,124
Communication and investor relations	230,194	83,836	5,121
Professional fees (*)	269,980	224,407	150,341
Insurance and other expenses	193,718	150,428	64,142
	$ 919,694	$ 617,087	$ 410,982

(*) includes listing expenses

NOTE 15 – FINANCING INCOME (EXPENSES), NET

	Year ended December 31		
	2018	2017	2016
	US Dollars		
Change in fair value of warrants liability and fair value of warrants expired (see Note 9)	$ 925,910	$ (1,101,229)	$ 117,577
Inducement related to warrants exercised	-	(166,500)	-
Expenses related to issuing warrants	-	-	(34,272)
Exchange rate differences and other finance income (expenses)	45,427	(70,029)	(7,877)
Liability for minimum royalty expenses	(50,000)	--	--
Financing income (expenses), net	$ 921,337	$ (1,337,758)	$ 75,428

NOTE 16 – INCOME TAX

The Company files its income tax report in the state of Israel and is subject to taxation laws applicable in Israel.

A. On January 4, 2016, the Israeli parliament passed the Law for Amendment of the Income Tax Ordinance No. 216, which, among other things reduced the standard Israeli corporate income tax rate from 26.5% to 25% effective as of January 2016.

In December 2016, the Israeli parliament passed the Economic Efficiency Law (Legislative Amendments to Achieve Budget Targets for the 2017 and 2018 Budget), which set a further reduction of corporate tax from 25% to 23%. The provisions of the law included a Temporary Order stipulate that the corporate tax rate in 2017 will be 24%. As a result, the corporate tax rate that will apply in 2017 will be 24% and the corporate tax rate that will take effect from 2018 onwards will be 23%

B. The Company has final (considered final) tax assessments through the 2013 tax year.

C. As of December 31, 2018, the Company has carried forward losses for Israeli income tax purposes of approximately $3.7 million which can be offset against future taxable income for an indefinite period of time.

D. The Company is still in its development stage and has not yet generated revenues, therefore, it is more likely than not that sufficient taxable income will not be available for the tax losses to be utilized in the future. Therefore, a valuation allowance was recorded to reduce the deferred tax assets to its recoverable amounts.

	As of December, 31	
Composition of deferred tax assets:	**2018**	**2017**
Net loss carry-forward	$ 1,121,229	$ 814,000
Valuation allowance	(1,121,229)	(814,000)
	-	-

E. For the years ended December 31, 2018, 2017 and 2016, the following table reconciles the statutory income tax rate to the effective income tax rate:

	Year Ended December 31,		
	2018	**2017**	**2016**
Tax rate	23%	24%	25%
Tax expense (benefit) at statutory rate	$ (105,234)	$ (642,090)	$ (163,365)
Tax rate differential	-	28,057	(55,376)
Decrease in taxes from permanent differences in stock-based compensation	10,964	27,301	52,545
Decrease in taxes from permanent difference in warrants liabilities	(212,959)	304,254	29,394
Loss carryforwards-change in valuation allowance	307,229	282,478	136,802
Income tax expense (benefit)	$ -	$ -	$ -

NOTE 17 – LOSS PER ORDINARY SHARE

The loss and the weighted average number of ordinary shares used in computing basic and diluted loss per ordinary share for the years ended December 31, 2018, 2017 and 2016, are as follows:

	Year ended December 31		
	2018	**2017**	**2016**
Loss for the year	$ (457,541)	$ (2,675,372)	$ (653,461)
Less: Loss attributed to preferred shares	-	31,950	32,483
Loss for the year attributable to ordinary shareholders	$ (457,541)	$ (2,643,422)	$ (620,978)
Weighted average number of ordinary shares outstanding attributable to ordinary shareholders	70,869,924	68,587,261	62,467,556

During the years ended December 31, 2018, 2016 and 2015, 600,00, 4,518,406 and 3,106,000, three-year warrants, respectively, were issued - as described in Note 9. These warrants were not taken into account in calculating either the basic or diluted loss per ordinary share, as their effect was anti-dilutive. During the years ended December 31, 2018 and 2017 and 2016 there were no other potentially dilutive instruments (except for the convertible preferred shares).

During the years ended December 31, 2018, and 2017 and 2016 the total weighted average number of ordinary shares related to outstanding options and warrants excluded from the calculation of the diluted loss per share was 6,489,221 and 7,717,721 and 1,182,066 respectively.

NOTE 18 – RELATED PARTIES

A. Effective as of May 1, 2015, the Company entered into an employment agreement with Mr. Rami Zigdon, the previous chief executive officer of the Company, who owned all the Company's preferred shares. From the Company's inception to the effective date of the agreement, Mr. Zigdon provided the Company with management services as an independent contractor. As of the effective date of the agreement, Mr. Zigdon was employed as chief executive officer on a full-time basis. The agreement may be terminated by either party by ninety days written notice or by the Company under exceptional circumstances as detailed in the agreement. Pursuant to the agreement, Mr. Zigdon is entitled to a gross monthly salary of NIS 15,000 (approximately $3,900) linked to the Israeli CPI known at the effective date of the agreement as well as reimbursement of vehicle expenses up to an annual amount of NIS 16,000 (approximately $4,200). The gross monthly salary shall be increased to NIS 25,000 (approximately $6,600) from the date on which the Company shall have cash in its bank account of least NIS 3,500,000 (approximately $920,000) (the "Triggering Date") that is sourced from capital injections/non-repayable amounts only, as confirmed by the Company's CFO. In the event that during the term of the agreement, on a certain date the Company shall have at least NIS 4,000,000 (approximately $1,050,000) cash in its bank account that is sourced from capital injection/non-repayable amounts only, as confirmed by the Company's CFO, Mr. Zigdon shall be entitled to a payment in the sum of NIS 12,333 (approximately $ 3,200) multiplied by the number of calendar months that had passed from the effective date of the agreement and until the month ending prior to the Triggering Date. In addition, Mr. Zigdon is entitled to participate in the Company's incentive program that will be adopted by the Company. Furthermore, Mr. Zigdon will be entitled to options to purchase Company shares all subject to an option plan to be adopted by the appropriate organs of the Company. The number of options, vesting and such other terms of grant of the options are detailed in Note 18B. below. Mr. Zigdon is entitled to customary fringe benefits under Israeli laws. If the agreement is terminated by the Company, other than for "cause" as defined in the agreement, Mr. Zigdon shall be entitled to an adjustment bonus equal to 3 times the last gross monthly salary or in the event that the Company will have more than $3 Million cash in hand, the adjustment bonus shall be equal to 6 times his last gross monthly salary. The agreement contains provisions regarding non-competition, confidentiality of information and assignment of inventions.

On July 30, 2018, the Board of Directors of the Company resolved that Dr. Herman Weiss will cease to serve as the Company's current Chairman of the Board of Directors, and appointed him as Chief Executive Officer of the Company, effective immediately. Additionally, in conjunction with the appointment of Dr. Weiss as Chief Executive Officer, Rami Zigdon, the Company's previous Chief Executive Officer, left his position but was appointed as the Company's Chief Business Officer and will continue serving as a member of the Company's Board of Directors.

The Company intends to enter into an employment agreement with Dr. Weiss at a later date. (see Note 10)

NOTE 18 – RELATED PARTIES (cont.)

B. As part of the 2015 Plan described in Note 12 above, in November 2015, the Board of Directors of the Company approved the issuance of share options to three employees, including our previous CEO and CTO, at an exercise price of NIS 0.01 per share. Mr. Zigdon received 1,241,163 options of which, half vest over a period of twenty-four months, subject only to a service condition, and half of the options vest upon the achievement of 8 milestones which includes, among others, closing of equity financing of at least $2,000,000, obtaining FDA approval for the performance of clinical trials and other clinical measurements. Milestones which are not met within 48 months from the date of the grant (November 2019) shall expire. The fair value of the stock options granted to Mr. Zigdon was estimated at $183,049 (see Note 11 above). On May 8, 2016, Mr. Zigdon exercised 103,428 vested options into ordinary shares for total exercise price of $273. All of the options not exercised of exercisable shall expire on January 11, 2021. Compensation expenses recognized for the awards subject to performance conditions commence when the Company determines that achievement of the performance conditions is probable.

C. Moshe Schlisser (a director as of February 27, 2016) and Ephraim Schlisser (Moshe's father) hold managerial positions with a company named A.S. Ivor Israel Ltd. ("Ivor"). Ivor was assigned its rights and obligations from Iberica Investments LLC ("Iberica"), which was a party to a 2015 consulting agreement pursuant to which Iberica agreed to provide assistance with the Company's fundraising. During the years ended December 31, 2018 and 2017, the Company paid Ivor and Iberica approximately $36,150 and $128,000, respectively, pursuant to this consulting agreement. The Company terminated the Iberica consulting agreement, effective December 28, 2018.

D. Crow Technologies 1977 Ltd., a company engaged in the manufacturing of plastics and electronic components, has an exclusive right to manufacture products for the Company (and any component of the products) for a price that is higher by 50% to that of the market prices of manufacturing such products or components in Israel. As of the date hereof, Crow Technologies has not exercised its exclusive right. The products of the Company do not have any electronic parts. While the Company's products developed through the current date, do have plastic parts, the cost of these parts approximate $0.10 per unit. The Company believes that the exclusive right held by Crow Technologies is immaterial to the ultimate price for which the Company will sell its products or even the overall estimated cost of production of its products.

NOTE 19 – SUBSEQUENT EVENTS

Convertible bridge loan transaction

On February 27, 2019, we entered into a convertible bridge loan agreement, and issued notes and warrants relating thereto, to obtain an aggregate loan of $1,350,500 from several private lenders, including DPH Investment Ltd., a holder of 11.5% of our shares (as of such date), to finance the Company's activities through the consummation of a proposed public offering and our planned up listing to the NASDAQ Capital Market. The convertible bridge loan agreement signed on February 27, 2019 superseded and replaced the convertible bridge loan agreement for $30,000, signed on December 30, 2018, that is described in Note 5 above. The loan, which has an original issue discount of ten percent (10%), bears interest at a flat rate of ten percent (10%) and has a maturity date six months after receipt of the loan funds. The loan is convertible into ordinary shares of the Company after the maturity date at a conversion price equal to 70% of the average closing bid price of the Company's Ordinary Shares in the five days prior to the conversion. In the event the Company defaults under the loan agreement, the conversion price will be reduced to 60% of the average closing bid price of the Company's Ordinary Shares in the 15 days prior to the conversion. In addition, the lenders received 25% warrant coverage, with the warrant exercise price to be equal to the offering price in the proposed public offering, or, in the event the loan is converted into shares, the warrant exercise price will be equal to the applicable closing bid price of the Company's shares at the time of the conversion of the loan.

On March 10, 2019, we entered into an amendment to the bridge loan agreement. The amendment provides for a 10% penalty if we repay the loan prior to the maturity date. In addition, we agreed to grant the lenders an additional 25% warrant coverage, under the same terms as the original warrant, but with a warrant exercise price equal to 150% of the closing bid price of our shares on the day prior to the closing of the bridge loan transaction.

NOTE 19 – SUBSEQUENT EVENTS (cont.)

Amarantus Transaction

On February 27, 2019, the Company entered into a joint venture agreement with Amarantus Bioscience Holdings, Inc, pursuant to which the Company issued Ordinary Share representing 19.99% of the Company to Amarantus, in exchange for Amarantus transferring to the Company 19.99% of Breakthrough Diagnostics, Inc. ("Breakthrough"), a wholly-owned subsidiary of Amarantus, and for Amarantus assigning its amended and restated license agreement with the University of Leipzig for an exclusive license to develop and commercialize the LymPro Test®, an immune-based neurodiagnostic blood test for the detection of Alzheimer's disease (the "License"), to Breakthrough. In addition, as part of the transaction, the Company provided Amarantus with an interest-free loan in the amount of $45,000 to be used to pay certain financial obligations of Amarantus owed to the University of Leipzig prior to the assignment of the License to Breakthrough, in connection with the license agreement and a related sponsored research agreement. The maturity date of the loan is May 1, 2019. In addition, the Company provided Breakthrough with an interest-free loan in the amount of $135,000 to be used to pay certain financial obligations of Breakthrough owed to the University of Leipzig after the assignment of the License to Breakthrough, in connection with the license agreement and the related sponsored research agreement. The maturity date of this loan is September 30, 2019. The Company expects to loan up to an additional $180,000 to cover additional fees that will be owed by Breakthrough to the University of Leipzig in connection with the license agreement and the sponsored research agreement.

As part of the joint venture with Amarantus, the Company was granted an option, in effect for sixty (60) days, to acquire the remaining 80.01% of Breakthrough held by Amarantus in exchange for the issuance to Amarantus of Ordinary Shares of the Company representing an additional thirty percent (30%) of the Company, such that upon consummation of the transaction the Company will own 100% of Breakthrough and Amarantus will own 49.99% of the Company.

24,000,000 Units
Consisting of Ordinary Shares
and Warrants to Purchase Ordinary Shares

TODOS MEDICAL LTD.

PROSPECTUS

Dawson James Securities **ViewTrade Securities**

, 2019

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Indemnification of Directors, Officers, Employees and Agents

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

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

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

- reasonable litigation expenses, including reasonable attorneys' fees, incurred by the office holder as (1) a result of an investigation or proceeding instituted against him or her by an authority authorized to conduct such investigation or proceeding, provided that (i) no indictment was filed against such office holder as a result of such investigation or proceeding; and (ii) no financial liability was imposed upon him or her as a substitute for the criminal proceeding as a result of such investigation or proceeding or, if such financial liability was imposed, it was imposed with respect to an offense that does not require proof of criminal intent; or (2) in connection with a monetary sanction; a monetary liability imposed on him or her in favor of an injured party at an Administrative Procedure (as defined below) pursuant to Section 52(54)(a)(1)(a) of the Securities Law;

- expenses incurred by an office holder in connection with an Administrative Procedure under the Securities Law, including reasonable litigation expenses and reasonable attorneys' fees; and

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

"Administrative Procedure" is defined as a procedure pursuant to chapters H3 (Monetary Sanction by the Israeli Securities Authority), H4 (Administrative Enforcement Procedures of the Administrative Enforcement Committee) or I1 (Arrangement to prevent Procedures or Interruption of procedures subject to conditions) to the Securities Law.

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

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

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

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

- a monetary liability imposed on the office holder in favor of an injured party at an Administrative Procedure pursuant to Section 52(54)(a)(1)(a) of the Securities Law; and

- expenses incurred by an office holder in connection with an Administrative Procedure, including reasonable litigation expenses and reasonable attorneys' fees.

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

- a breach of duty of loyalty, except for indemnification and insurance for a breach of the duty of loyalty to the company to the extent that the office holder acted in good faith and had a reasonable basis to believe that the act would not harm the company;
- a breach of the duty of care committed intentionally or recklessly, excluding a breach arising out of the negligent conduct of the office holder;
- an act or omission committed with intent to derive illegal personal benefit; or
- a fine or forfeit levied against the office holder.

Under the Companies Law, exculpation, indemnification and insurance of office holders must be approved by the compensation committee and the board of directors and, with respect to certain office holders or under certain circumstances, also by the shareholders.

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

In the opinion of the SEC, however, indemnification of directors and office holders for liabilities arising under the Securities Act is against public policy and therefore unenforceable.

Recent Sales of Unregistered Securities

Set forth below are the sales of all securities of the registrant sold by the registrant within the past three years which were not registered under the Securities Act:

On June 20, 2016, the Company entered into a Consulting Service Agreement with PCG Advisory Group ("PCG"), pursuant to which PCG undertook to provide the Company with markets advisory, investor relations and media strategies for a period of 7 months commencing the date of the agreement. As partial consideration for the above services, the Company agreed to issue to PCG 50,000 ordinary shares for each calendar month of the term. The Company issued 350,000 ordinary shares to PCG.

On October 18, 2016, the Company entered into a Consulting Agreement with a consultant (the "Consultant"), pursuant to which the Consultant undertook to provide strategic cooperation and technology consulting for a period of two years from the date of the agreement. Unless terminated, the agreement will be automatically renewed for consecutive one-year periods. Based on the agreement, the Company issued to the Consultant 620,521 warrants to purchase ordinary shares of the Company at an exercise price of NIS 0.01 (approximately $0.0026) per share. The Consultant has exercised all of the warrants.

In October 2017, the Company signed a share purchase agreement with certain investors for an investment of $625,000 in exchange for the issuance of 1,061,125 ordinary shares.

On November 18, 2018, the Company signed a share purchase agreement with an investor for an investment of $100,000 in exchange for the issuance of 800,000 ordinary shares and 600,000 warrants with a three year exercise period at an exercise price of the lower of $0.125 or the lowest price during the 5 trading days before the exercise notice.

On February 27, 2019, the Company entered into a joint venture agreement with Amarantus, pursuant to which the Company issued 17,986,999 Ordinary Shares, representing 19.99% of the Company, to Amarantus, in exchange for Amarantus transferring to the Company 19.99% of the outstanding equity securities of Breakthrough, a wholly owned subsidiary of Amarantus, and for Amarantus assigning the University of Leipzig License Agreement to Breakthrough.

The Company recently raised $1,215,450 from the sale of convertible notes, which have an outstanding principal balance of $1,350,500. On February 27, 2019, we entered into a convertible bridge loan agreement, and have issued notes and warrants relating thereto, to obtain loans from several private lenders, including DPH Investment Ltd., a holder of 11.5% of our shares (as of such date), to finance the Company's activities through the consummation of a proposed public offering and our planned uplisting to the NASDAQ Capital Market. As of April 15, 2019, we have obtained $1,010,500 in bridge loan financing, and have commitments for an additional $340,000 subject to certain milestones. The loans, which have an original issue discount of ten percent (10%), bear interest at a flat rate of ten percent (10%) and have a maturity date six months after receipt of the loan funds. The loans are convertible into ordinary shares of the Company after the maturity date at a conversion price equal to 70% of the average closing bid price of the Company's Ordinary Shares in the five days prior to the conversion. In the event the Company defaults under the loan agreement, the conversion price will be reduced to 60% of the average closing bid price of the Company's Ordinary Shares in the 15 days prior to the conversion. In addition, each lender received a warrant to purchase an amount of ordinary shares equal to 25% of the amount loaned by such lender, with the warrant exercise price to be equal to the offering price in the proposed public offering, or, in the event its loan is converted into shares, the warrant exercise price will be equal to the applicable closing bid price of the Company's shares at the time of the conversion of the loan. The warrants may be exercised only during the period beginning on the date that is six months after the date that the warrant exercise price and the number of warrant shares are determined and ending on the date that is three years thereafter.

On March 10, 2019, we entered into an amendment to the bridge loan agreement. The amendment provides for a 10% penalty if we repay the loan prior to the maturity date. In addition, we agreed to grant each lender a warrant to purchase an additional amount of ordinary shares equal to 25% of the amount loaned by such lender, under the same terms as the original warrant, but with a warrant exercise price equal to 150% of the closing bid price of our shares on the day prior to the closing of the bridge loan transaction.

We claimed exemption from registration under the Securities Act for these issuances described above under Section 4(a)(2) or Regulation S promulgated under the Securities Act, as well as, with respect to grants of share options, under Rule 701 of the Securities Act as transactions pursuant to written compensatory plans or pursuant to a written contract relating to compensation. No form of general solicitation or general advertising was conducted in connection with any of these sales, and no underwriters were employed.

Exhibits and Financial Statement Schedules

(a) Exhibits: The following exhibits are included herein or incorporated herein by reference

Exhibit	Description
1.1	Form of Underwriting Agreement (filed as Exhibit 1.1 to the Company's Amendment No. 1 to Form F-1 (File No. 333-230981) filed on July 3, 2019 and incorporated herein by reference).
3.1	Amended and Restated Articles of Association of Todos Medical Ltd. (filed as Exhibit 99.1 to the Company's current report on Form 6-K (File No. 333-209744) filed on March 30, 2017 and incorporated herein by reference).
4.1	Form of Underwriter's Warrant (filed as Exhibit 4.1 to the Company's Amendment No. 1 to Form F-1 (File No. 333-230981) filed on July 3, 2019 and incorporated herein by reference).
4.2	Form of Public Warrant (filed as Exhibit 4.2 to the Company's Amendment No. 2 to Form F-1 (File No. 333-230981) filed on August 9, 2019 and incorporated herein by reference).
5.1	Opinion of SRK Kronengold Law Offices regarding the legality of the securities being registered (filed as Exhibit 5.1 to the Company's Amendment No. 1 to Form F-1 (File No. 333-230981) filed on July 3, 2019 and incorporated herein by reference).
10.1	Research and License Agreement with B.G. Negev Technologies and Applications Ltd. and Mor Research Applications Ltd., dated April 26, 2010, as amended June 25, 2012 (filed as Exhibit 10.1 to the Company's registration statement on Form F-1 (File No. 333-209744) filed on February 26, 2016, and incorporated herein by reference).
10.2	Addendum No. 2 to Research and License Agreement Dated March 19, 2017, as amended on June 25, 2012 with B.G. Negev Technologies and Applications Ltd. and Mor Research Applications Ltd. (filed as Exhibit 4.2 to Form 20-F (File No. 333-209744) filed on May 1, 2017 and incorporated herein by reference).
10.3	Summary English Translation of Lease Agreement for Corporate Offices in Rehovot, Israel (filed as Exhibit 10.4 to the Company's registration statement on Form F-1 (File No. 333-209744) filed on February 26, 2016 and incorporated herein by reference).
10.4	Todos Medical Ltd. 2015 Israeli Share Option Plan (filed as Exhibit 10.7 to the Company's registration statement on Form F-1 (File No. 333-209744) filed on February 26, 2016 and incorporated herein by reference).
10.5	Employment Agreement, dated March 16, 2017, between Todos Medical Singapore Pte Ltd. and Dr. Wee Yue Chew and warrant agreement, dated March 16, 2017, between Todos Medical Ltd. and Dr. Wee Yue Chew (filed as Exhibit 4.12 to Form 20-F (File No. 333-209744) filed on May 1, 2017, and incorporated herein by reference).
10.6	Convertible Bridge Loan Agreement, dated February 27, 2019, (filed as Exhibit 4.1 to the Company's Form 6-K filed on February 28, 2019, and incorporated herein by reference).
10.7	Amendment to Convertible Bridge Loan Agreement, dated February 27, 2019, (filed as Exhibit 4.1 to the Company's Form 6-K filed on March 12, 2019, and incorporated herein by reference).
10.8	Share Purchase and Assignment of License Agreement among Todos Medical Ltd., Amarantus Bioscience Holdings, Inc., and Breakthrough Diagnostics, Inc., dated February 27, 2019, (filed as Exhibit 4.4 to the Company's Form 6-K filed on February 28, 2019, and incorporated herein by reference).
10.9	Assignment and Loan Conversion Agreement among the Company, Adeline Holdings Ltd., Yitzhak Ostrovitsky, and Sorry Doll Ltd. and S.B. Nihul Merkakein Ltd., dated November 28, 2018, (filed as Exhibit 4.9 to the Company's Form 20-F filed on March 28, 2019, and incorporated herein by reference).
10.10	Marketing and Reseller Agreement, between the Company and Care G.B. Plus Ltd., dated December 20, 2018, (filed as Exhibit 4.10 to the Company's Form 20-F filed on March 28, 2019, and incorporated herein by reference).
10.11	Employment Agreement between the Company and Dr. Herman Weiss, dated March 25, 2019 (filed as Exhibit 10.11 to the Company's Amendment No. 1 to Form F-1 (File No. 333-230981) filed on July 3, 2019, and incorporated herein by reference).
23.1	Consent of Fahn Kanne, Grant Thornton (filed as Exhibit 23.1 to the Company's Amendment No. 4 to Form F-1 (File No. 333-230981) filed on September 4, 2019, and incorporated herein by reference).
23.2	Consent of Legal Counsel (incorporated in Exhibit 5.1).
24.1	Power of Attorney (contained on the signature page of the registration statement).

Undertakings

The undersigned Registrant hereby undertakes to:

(a) file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to:

(i) include any prospectus required by section 10(a)(3) of the Securities Act;

(ii) reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or together, represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in the registration statement.

(b) that, for the purpose of determining any liability under the Securities Act, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) to file a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

(d) that insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant, the Registrant has been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registration of expenses incurred or paid by a director, officer or controlling person to the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(e) that, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(f) that, for the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of the securities, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) any preliminary prospectus or prospectus of the Registrant relating to the offering filed pursuant to Rule 424;

(ii) any free writing prospectus relating to the offering prepared by or on behalf of the Registrant or used or referred to by the Registrant;

(iii) the portion of any other free writing prospectus relating to the offering containing material information about the Registrant or its securities provided by or on behalf of the Registrant; and

(iv) any other communication that is an offer in the offering made by the Registrant to the purchaser.

Signatures

In accordance with the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing this Form F-1 and has authorized this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Rehovot, Israel on September 23, 2019.

TODOS MEDICAL LTD.
(Registrant)

By: /s/ Herman Weiss
Dr. Herman Weiss
Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ David Ben Naim
David Ben Naim
Chief Financial Officer
(Principal Financial and Accounting Officer)

In accordance with the requirements of the Securities Act of 1933, this registration statement was signed by the following persons in the capacities and on the dates stated:

SIGNATURE	TITLE	DATE
/s/ Dr. Herman Weiss Dr. Herman Weiss	Chief Executive Officer (Principal Executive Officer) and Director	September 23, 2019
* David Ben Naim	Chief Financial Officer (Principal Financial and Accounting Officer)	September 23, 2019
* Rami Zigdon	Director	September 23, 2019
* Alon Ostrovitzky	Director	September 23, 2019
* Moshe Schlisser	Director	September 23, 2019
* Moshe Abramovitz	Director	September 23, 2019
* Colin Bier	Director	September 23, 2019
* Alon Shalev	Director	September 23, 2019

* By: /s/ Dr. Herman Weiss
Dr. Herman Weiss
Attorney-in-fact

SIGNATURE OF AUTHORIZED REPRESENTATIVE IN THE UNITED STATES

Pursuant to the Securities Act of 1933, as amended, the undersigned, the duly authorized representative in the United States of Todos Medical Ltd., has signed this registration statement on September 23, 2019.

Authorized U.S. Representative

/s/ Donald J. Puglisi
Managing Director
Puglisi & Associates