Check-Cap Ltd
Form F-1/A
February 18, 2015

As filed with the Securities and Exchange Commission on February 18, 2015.

Registration No. 333-201250

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

AMENDMENT NO. 6
TO
FORM F-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CHECK-CAP LTD.
(Exact name of Registrant as specified in its charter)

Israel	3844	Not Applicable
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

Check-Cap Building
Abba Hushi Avenue
P.O. Box 1271
Isfiya, 30090
Mount Carmel, Israel
+972-4-8303400

(Address, including zip code, and telephone number,
including area code, of Registrant's principal executive offices)

Puglisi & Associates
850 Library Avenue, Suite 204
Newark, Delaware 19711
302-738-6680

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mitchell S. Nussbaum, Esq.	Eran Yaniv, Adv.	Yvan-Claude Pierre, Esq.	Shlomo Landress, Adv.
Angela M. Dowd, Esq.	Sharon Rosen, Adv.	Daniel I. Goldberg, Esq.	Amit, Pollak, Matalon & Co.
Loeb & Loeb LLP	Fischer Behar Chen Well	Reed Smith LLP	Nitsba Tower,
345 Park Avenue	Orion & Co.	599 Lexington Avenue	17 Yitzhak Sadeh St.,

New York, New York 10154 (212) 407-4000 - Telephone (212) 407-4990 - Facsimile	3 Daniel Frisch Street Tel Aviv, 6473104, Israel +972 3 6944111 - Telephone +972 3 6091116 - Facsimile	New York, New York 10022 (212) 521-5400 - Telephone (212) 521-5450 - Facsimile	Tel Aviv 67775, Israel +972 3 568 9000 Telephone +972 3 568 9001 Facsimile

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

If any of the 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, or the Securities Act, check the following box. T

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. £

Calculation of Registration Fee

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee (1)(11)
Units of ordinary shares, par value NIS 0.20 and Series A Warrants (2)(3)(4)	$18,400,000	$2,138.10
Ordinary shares included in the Units (7)(9)	--	--
Series A Warrants included in the Units (9)	--	--
Ordinary shares underlying the Series A Warrants included in the Units (5)(7)	$11,500,000	$1,336.50
Long Term Incentive Warrants to be issued with the units (2)(3)(4)(9)	--	--
Ordinary shares underlying the Long Term Incentive Warrants to be issued with the units(6)(7)	$31,740,000	$3,688.20
Underwriter warrants(8)(9)	--	--
Ordinary shares underlying the underwriter warrants(7)(10)	$1,000,000	$116.20
TOTAL	$62,640,000	$7,279

(1) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(o) under the Securities Act.

(2) Each unit will consist of one ordinary share and one-half of a Series A Warrant to purchase one ordinary share. Each unit will be issued with one and one-half non-transferrable Long Term Incentive Warrants.

(3) Includes units and Long Term Incentive Warrants initially offered and sold outside the United States that may be resold from time to time in the United States either as part of their distribution or within 40 days after the later of the effective date of this registration statement and the date the units (and accompanying Long Term Incentive Warrants) are first bona fide offered to the public, and also includes units that may be purchased by the underwriters pursuant to an option to purchase additional units to cover over-allotments, if any. Neither the units nor the Long Term Incentive Warrants are being registered for the purpose of sales outside the United States.

(4) Estimated pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the aggregate offering price of an additional 300,000 units (together with the accompanying 450,000 Long Term Incentive Warrants) the underwriters have the option to purchase in this offering to cover over-allotments, if necessary.

---

(5) We have calculated the proposed maximum aggregate offering price of the ordinary shares underlying the Series A Warrants by assuming that such warrants are exercisable to purchase ordinary shares at a price per share equal to $10.00.

(6) We have calculated the proposed maximum aggregate offering price of the ordinary shares underlying the Long Term Incentive Warrants by assuming that such warrants are exercisable to purchase ordinary shares at a price per share equal to $9.20.

(7) Pursuant to Rule 416 of the Securities Act, the securities being registered hereunder include such additional securities as may be issued after the date hereof as a result of share splits, share dividends or similar transactions.

(8) We have agreed to issue, upon closing of this offering, compensation warrants exercisable commencing on a date which is one year after the effective date of this registration statement and expiring four years following the effective date of this registration statement representing 5% of the aggregate number of ordinary shares included in the units issued in the offering but not including the over-allotment option, or the "underwriter warrants," to Chardan Capital Markets, LLC. Resales of the underwriter warrants on a delayed or continuous basis pursuant to Rule 415 under the Securities Act are registered hereby. Resales of ordinary shares issuable upon exercise of the underwriter warrants are also being similarly registered on a delayed or continuous basis hereby. See "Underwriting."

(9) No fee required pursuant to Rule 457(g) under the Securities Act.

(10) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(g) under the Securities Act. We have calculated the proposed maximum aggregate offering price of the ordinary shares underlying the underwriters' warrants by assuming that such warrants are exercisable to purchase ordinary shares at a price per ordinary share equal to 125% of the price per ordinary share sold in this offering.

(11) The Registrant previously paid $7,279 in connection with the filing of this Registration Statement.

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 hereafter become effective in accordance with Section 8(a) of the Securities Act 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 contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the U.S. Securities and Exchange Commission. These securities may not be sold until the registration statement becomes effective. This prospectus is not an offer to sell and is not a solicitation of an offer to buy in any jurisdiction in which an offer, solicitation, or sale is not permitted.

PRELIMINARY PROSPECTUS — SUBJECT TO COMPLETION, DATED FEBRUARY 18, 2015

Check-Cap Ltd.
2,000,000 Units

Each Unit Consisting of One Ordinary Share and One-Half of a
Series A Warrant to Purchase One Ordinary Share
Together with
3,000,000 Long Term Incentive Warrants to Purchase Ordinary
Shares to be Issued with the Units

This is the initial public offering of securities of Check-Cap Ltd. We are offering to sell 2,000,000 units, each unit consisting of one ordinary share and one-half of a Series A Warrant to purchase one ordinary share. Each unit will be issued with one and one-half non-transferrable Long Term Incentive Warrants. Each whole Series A Warrant entitles the holder to purchase one ordinary share at an exercise price of $ (125% the offering price per unit, subject to adjustment as described herein). Each whole Series A Warrant will become exercisable 45 days after the date of this prospectus and will expire on , 2020. Upon vesting, each Long Term Incentive Warrant will entitle the holder to purchase one ordinary share at an exercise price of $ (115% of the offering price per unit, subject to adjustment as described herein). One-third of the Long Term Incentive Warrants held by each holder who has held the ordinary shares underlying the units issued in this offering for a period of one year following the closing date of this offering will vest and become exercisable on the first anniversary of the closing date of this offering. The remaining two-third of the Long Term Incentive Warrants held by each holder who has held the ordinary shares underlying the units issued in this offering for a period of two years following the closing date of this offering will vest and become exercisable on the second anniversary of the closing date of this offering. The Long Term Incentive Warrants will not be transferrable and will expire on , 2022. We currently expect the initial public offering price to be between $6.00 and $8.00 per unit.

Prior to this offering, there has been no public market for our securities. We have applied for the listing of our ordinary shares, our units and our Series A Warrants on the NASDAQ Capital Market under the symbols “CHEK,” “CHEKU” and “CHEKW,” respectively. There is no assurance that our applications will be approved. The Long Term Incentive Warrants will not be listed on any national securities exchange or other trading market.

The Series A Warrants and ordinary shares will trade together as units only during the first 45 days following the date of this prospectus, and thereafter, the units will automatically separate and the ordinary shares and Series A Warrants will trade separately, unless Chardan Capital Markets, LLC, as representative of the underwriters, determines that an earlier date is acceptable based upon, among other things, its assessment of the relative strengths of the securities markets and small capitalization companies in general, and the trading pattern of, and demand for, our securities in particular.

Concurrently with this offering, we expect to complete a private placement of approximately 1,714,286 units, or the Private Placement, at a purchase price per unit equal to the public offering price in accordance with Regulation S under the Securities Act of 1933, as amended, or the "Securities Act" or Regulation D under the Securities Act, to certain investors including certain of our affiliates. Each unit sold in the Private Placement will be issued with one and one-half non-transferrable Long Term Incentive Warrants. The issuance and sale of such units and Long Term Incentive Warrants will not be registered under the Securities Act. We expect to receive approximately $10,900,000 in aggregate net proceeds from the Private Placement. See "Summary-Recent Developments-Credit Line Agreement; Private Placement." The closing of the Private Placement is conditioned upon the completion of the offering to which this prospectus relates. However, the completion of the offering to which this prospectus relates is not conditioned upon the closing of the Private Placement.

We are an "emerging growth company" under applicable U.S. federal securities laws and may elect to comply with reduced public company reporting requirements. See "Implications of Being an Emerging Growth Company" on page 6 of this prospectus.

Investing in our securities involves a high degree of risk. You should read carefully the "Risk Factors" beginning on page 17 of this prospectus before investing in our securities that are the subject of this offering.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of the disclosures in this prospectus. Any representation to the contrary is a criminal offense.

	Per Unit	Total
Public offering price	$	$
Underwriting discount and commissions (1)	$	$
Proceeds, before expenses, to us	$	$

(1) We have also agreed to issue, upon closing of this offering, compensation warrants to Chardan Capital Markets, LLC as representative of the underwriters, entitling it to purchase up to 100,000 ordinary shares. For a description of other terms of the compensation warrants and a description of the additional compensation to be received by the underwriters see "Underwriting."

The underwriters have an option exercisable within 45 days from the date of this prospectus to purchase up to 300,000 of additional units (together with the accompanying 450,000 Long Term Incentive Warrants) from us at the public offering price, less the underwriting discount, solely to cover over-allotments. The units and Long Term Incentive Warrants issuable upon exercise of the underwriters' over-allotment option have been registered under the registration statement of which this prospectus forms a part. In addition to the underwriting discount, we have agreed to pay certain of the expenses of underwriters incurred in connection with this offering, see "Underwriting" beginning on page 162 of this prospectus.

The underwriters expect to deliver the units to purchasers on or about , 2015.

Joint Book-Running Managers

Chardan Capital Markets, LLC Maxim Group LLC

Co-Manager

Feltl and Company

, 2015

TABLE OF CONTENTS

You should rely only on the information contained in this prospectus, any amendment or supplement to this prospectus or any free writing prospectus prepared by us or on our behalf. We have not, and the underwriters have not, authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer of these securities, or soliciting any offers to buy these securities, in any jurisdiction where the offer or solicitation is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our securities.

Neither we nor any of the underwriters has done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required other than the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of our securities set forth in, and the possession and distribution of, this prospectus outside of the United States.

We obtained statistical data, market data and other industry data and forecasts used throughout this prospectus from market research, publicly available information and industry publications. While we believe that the statistical data, industry data and forecasts and market research are reliable, we have not independently verified the data.

PROSPECTUS SUMMARY

The following summary does not contain all of the information you should consider before investing in our securities. You should read the following summary together with the entire prospectus carefully, including the "Risk Factors" section beginning on page 17 and the financial statements and the accompanying notes to those financial statements beginning on page F-1 before making an investment decision. Unless otherwise indicated, all information in this prospectus assumes no exercise of the underwriters' over-allotment option and no exercise of the underwriter warrants. Unless the context otherwise requires, references to "we," "our," "us," "our company," and "Check-Cap" refer to Check-Cap Ltd., an Israeli company. The terms "dollar," "US$" or "$" refer to U.S. dollars, the lawful currency of the United States, and the term "NIS" refers to New Israeli Shekels, the lawful currency of the State of Israel. Unless otherwise indicated, U.S. dollar translation of NIS amounts presented in this prospectus are translated using the rate of $1.00 = NIS 3.4380, the exchange rate published by the Bank of Israel on June 30, 2014, and U.S. dollar translation of Euro amounts presented in this prospectus are translated using the rate of $1.00 = Euro 1.3693, the exchange rates published by the Wall Street Journal on June 30, 2014.

Our Company

We are a clinical stage medical diagnostics company engaged in the development of an ingestible imaging capsule that utilizes low-dose X-rays for the screening for colorectal cancer, or CRC. While CRC is the second leading cause of death from cancer in the United States and is largely preventable with early detection, about one-half of Americans over the age of 50 do not undergo any form of CRC screening due in large part to the pain, discomfort and embarrassment related to current screening methods. Unlike other structural screening methods that are designed to generate structural information of the colon for the detection of pre-cancerous polyps, such as optical colonoscopy, computed tomographic colonography, or CTC, and other capsule-based technology, our imaging capsule is designed to be ingested without any cleansing of the colon and to travel through the gastrointestinal tract naturally while the patient continues his or her normal daily routine. Furthermore, unlike the procedures for CRC imaging devices currently on the market, all of which

require the patient to fast for several hours prior to administration, the procedure for the Check-Cap device is designed to enable patients to continue eating normally. We believe that this solution will be attractive to both physicians and patients, thereby increasing the number of people willing to undergo screening for CRC.

Our imaging capsule is being designed to create a reconstructed three-dimensional image of the colon and to enable detection of clinically significant polyps with a high degree of sensitivity. Colon polyps are fleshy growths that occur on the lining of the colon. Polyps in the colon are extremely common, and when certain types of polyps grow large enough they can become cancerous.

Our imaging capsule will be swallowed by the patient and propelled by natural motility through the gastrointestinal tract and excreted naturally with no need for retrieval for data collection. Unlike other CRC screening methods, this process should not disrupt a patient's normal activities or require fasting. Our imaging capsule employs X-rays, which allow it to image the lining of the colon even when surrounded by intestinal content. As such, we believe that patients using our imaging capsule will not be required to undergo any prior bowel cleansing. The Radiation Safety Division of the Soreq Nuclear Research Center found, as set forth in its report of November 2010, that was prepared at our request and based on the information provided by us and the relevant methods and principles known at such time, or the Report, that the radiation dose to the patient in the proposed screening procedure utilizing the imaging device developed by us at that time in routine operation and normal conditions is low relative to the radiation dose involved in conventional imaging procedures using X-rays (such as fluoroscopy and CT) and is also low when compared to the radiation dose involved in established screening procedures such as mammography, all as more fully described in the Report.

Our imaging capsule is being designed to transmit the data it collects to an external data recorder that will be worn by the patient. The external data recorder is being designed to enable the transfer of the data to physicians, who will then utilize our data viewer software application to analyze the data collected by our imaging capsule. We intend for physicians to be able to review the colon's inner images at any location at any time, in less time than is required to perform an optical colonoscopy.

In order to enable a complete view of capsule positioning and motility, we have designed a Capsule Positioning

System, or CPS, which is mounted on the patient's back throughout the entire procedure. The CPS is being designed to provide the physician with accurate localization data aligned with a reconstructed image.

In the event that polyps are identified through our imaging capsule, the patient would be required to undergo a subsequent traditional colonoscopy procedure to examine, remove and biopsy the polyps. For those patients who require a subsequent polypectomy, concerns regarding pain, discomfort and embarrassment may still remain with respect to the subsequent polypectomy. We do not, however, believe that these concerns will make the use of our imaging capsule any less attractive to doctors and patients. Although patients who are initially screened utilizing a traditional colonoscopy could avoid the need for a second procedure if polyps are discovered because they could undergo a polypectomy during the initial screening, if necessary, we believe that our imaging capsule will still be attractive to doctors and patients since a large majority of patients who are screened will not require a subsequent polypectomy. According to a review published by the Agency for Healthcare Research and Quality in October 2008, out of 100 adults aged 50-75, only 25-30 persons have one or more polyps and only 15 persons have significant (10+mm) polyps.

A clinical proof-of-concept study, which was based on a 10-case study conducted at Tel Aviv Medical Center in Israel and used a prior version of our imaging capsule, did not identify any material safety or feasibility issues. The study demonstrated the applicability of our imaging technology to the human colon, generating images taken in the colon without any prior bowel-cleansing. All subjects ingested the capsule easily with smooth passage within the designated transit time, on average, within two to three days. There were no reported device-related adverse events. Mild effects on bowel movements were noted, which were determined to be related to the contrast agent and passed within one to two days after the capsule was excreted.

Another objective of the 10-case study was to estimate total radiation exposure for each case study. This was calculated using standard established factors for calculating effective radiation exposure, such as the duration of the capsule inside the body, and was based on the activity of the radiation source inside the imaging capsule and radiation energy, both of which were measured for each case study. The average calculated exposure for the entire procedure in the 10-case study, from ingestion of the capsule to excretion, was 0.03 mSv (STD 0.007 mSv). This level of radiation exposure is similar to a single chest X-ray (approximately 0.06mSv) and two orders of magnitude less than a CTC.

The 10-case clinical proof-of-concept study focused on assessing the safety and feasibility of the Check-Cap imaging system. The 10-case study is the first part of a multi-center, prospective clinical feasibility study to establish the safety, functionality and preliminary efficacy of the Check-Cap imaging system in patients eligible for CRC screening, by comparing results from the clinical feasibility study with those from non-invasive, low-sensitivity fecal occult blood tests, or FOBTs, and fecal immunochemical tests, or FITs, as well as from optical colonoscopies. The feasibility study is designed to include approximately 60 subjects. The study is being conducted in Israel at the Tel Aviv Medical Center and Laniado Hospital and is planned to also be conducted at the Erasmus University Medical Center in the Netherlands. The clinical feasibility study will evaluate the image resolution generated by the capsule in an unprepped human colon, will assess polyp imaging in various shapes and in different segments of the colon and will evaluate the safety of the device in terms of total and segmental transit time and analyze the effects of the presence of polyps and variable colon dimensions on these parameters. The study will seek to create a clinical atlas of images that will enable comparisons between images acquired by different CRC screening modalities. During the feasibility study we will collect data about the overall imaging of the colon's internal surfaces during the passage of the capsule to support the development of a correlation map of polyps identified through our imaging system with polyps imaged by optical colonoscopy and CTC. Additionally, the feasibility study will measure total radiation exposure and the distribution of contrast material within the colon.

Following the successful completion of the broader multi-center, prospective clinical feasibility study, we plan to submit during 2015 a request for CE marking for the marketing and sale of our capsule in the European Union. We expect to perform post-marketing studies in Europe following CE marking for the purpose of collecting additional clinical data to support market adoption. Subject to regulatory approval and available capital, we anticipate launching our product commercially in Europe during 2016.

We plan to conduct a second pre-IDE meeting, now referred to as a pre-submission meeting, with the U.S. Food and Drug Administration, or FDA, in late 2015, and subsequently to submit a request for the approval of an investigational device exemption, or IDE, for a pivotal study in the United States to (i) demonstrate device safety as evidenced by a lack of device-related serious adverse events; and (ii) provide efficacy data concerning our imaging capsule's sensitivity and specificity. We anticipate that FDA approval for the pivotal study will be subject to our providing sufficient clinical data from the multi-center, prospective clinical feasibility study. We also intend to pursue clinical trials for regulatory approvals in Japan and China in parallel to the U.S. pivotal study. Pivotal studies are expected, among other things, to compare the images of polyps identified by our imaging system with the same

polyps detected by traditional optical colonoscopy and CTC in instances where patients were referred after positive exam results. These clinical findings will be analyzed in comparison with results obtained from FOBTs and FITs. Subject to the successful completion of our clinical trials and the receipt of initial FDA approval for the marketing of our imaging capsule in the United States, we anticipate launching our product commercially in the United States during 2017.

We have submitted patent applications covering our technology in the United States, member states of the European Patent Organisation, Australia, Brazil, Canada, China, Hong Kong, India, Israel, Japan and South Korea. We have been granted patents for our core patent by the U.S. Patent and Trademark Office as well as from the European Patent Office, Australia, China, Hong Kong, Israel, India and Japan. We also filed patent applications describing the use of our imaging technology in several other medical applications.

Since our formation, we have not generated any revenue. We do not anticipate generating any revenue for the foreseeable future and we do not yet have any specific launch dates for our product. For the six months ended June 30, 2014, we had a total comprehensive loss of $2.2 million. For the year ended December 31, 2013, we had a total comprehensive loss of $4.0 million. As of June 30, 2014, we had an accumulated deficit of $24.7 million and a total shareholders' deficit of $998,000.

Industry Background

According to the American Cancer Society, or the ACS, CRC is the third most common cancer diagnosed and the second leading cause of death from cancer in the United States. The ACS estimates that in 2014, in the United States approximately 136,830 people are expected to be diagnosed with CRC and approximately 50,310 people will die from CRC. According to the World Health Organization, or the WHO, in 2012, in Europe there were an estimated 471,000 cases of CRC and approximately 228,000 died from the disease, and in Japan there were an estimated 112,675 cases of CRC and approximately 49,345 died from the disease. According to the WHO, in 2020 the expected numbers of cases of CRC are estimated to be 159,972 in the United States, 528,481 in Europe, 128,346 in Japan and 1,678,127 worldwide.

CRC screening can reduce death rates from CRC by detecting polyps at an earlier, more treatable stage. CRC is one of the few cancers that can be prevented through screening because pre-cancerous polyps, from which colon cancers often develop, can be identified and removed. Moreover, the five-year survival rate is greater than 90% for CRC patients diagnosed at an early, localized stage. However, less than 40% of cases are currently diagnosed at that stage. According to the Centers for Disease Control and Prevention, or the CDC, at least 6 out of every 10 deaths from CRC could be prevented if every adult age 50 years or older was screened regularly and approximately 30,000 lives could be saved each year in the United States if the screening recommendations were followed. The ACS' goal is to have 80% of those 50 years and older who are covered by the program screened by 2018.

Today, there is a range of options for CRC screening in the average risk population, with current technology falling into two general categories: (i) structural exams, such as optical colonoscopy, sigmoidoscopy, CTC and optical capsules (all of which require aggressive bowel preparation), which are invasive exams that enable physicians to visualize the colon for abnormalities; and (ii) stool tests, such as FOBTs, FITs and stool DNA tests, which test for blood and irregularities in DNA. Notwithstanding the many CRC screening alternatives, the fact that the tests are encouraged by clinicians and insurers and the clinical value of screening for CRC, a large portion of the population are still reticent to undergo CRC screening and are not satisfied with the currently available alternatives.

The ACS recommends that men and women over the age of 50 undergo an optical colonoscopy every 10 years or other structural tests, such as sigmoidoscopy or virtual colonoscopy, every five years or alternatively, a FOBT should be performed every year. According to the U.S. Census Bureau, as of mid-2014, there were projected to be approximately 91 million Americans aged 50-75 years. Assuming the longest screening interval of 10 years, the addressable annual U.S. patient population is at least 9.1 million.

Optical colonoscopy is currently considered the most reliable method for detecting disorders of the colon and is the standard screening tool for early detection of colon cancer. Optical colonoscopy demonstrates a high degree (approximately 95%) of sensitivity (i.e., detection of individuals with cancer) and specificity (i.e., avoiding false negative results). Optical colonoscopy involves the insertion of a flexible colonoscope, which is an approximately160 centimeters long endoscope, by a physician into a patient's colon through the anus in order to visually inspect the interior of the colon. Air must be pumped in through the rectum in a process called "insufflation." Sigmoidoscopy, or FSIG, is an endoscopic procedure that examines the lower part of the colon lumen. The exam may be performed

with a variety of endoscopic instruments, including a standard 60 centimeter sigmoidoscope. FSIG is typically performed without sedation and with a more limited bowel preparation than a standard optical colonoscopy. An optical colonoscopy and sigmoidoscopy can perform both diagnostic and limited treatment functions, by allowing for the removal of polyps and adenomas during the course of the procedure. However, both of these procedures carry some risks of bowel perforations and bleeding and related limitations as they require prior cleansing of the bowel, insufflation and sedation, involve potential complications and may cause patient anxiety, discomfort and, in some cases, pain. In addition, a patient's normal daily routine is disrupted for one or two days.

CTC, or virtual colonoscopy, is an imaging procedure that results in cross-sectional, two- or three-dimensional views of the entire colon with the use of a special X-ray machine linked to a computer. Here, as well, a flexible tube is inserted into the rectum in order to allow air or carbon dioxide to open the colon. The patient then passes through the CT scanner, which creates multiple images of the colon interior. This method does not allow for treatment and the subject is exposed to a high dose of radiation. A full bowel cleansing is currently necessary for a successful examination by CTC.

FOBT is based on an analysis of stool samples and is currently the most widely used non-invasive screening test. It has a lower sensitivity in detecting polyps (measured by the percentage of polyps being found). According to the CDC, in 2012, only approximately 10.6% of men and 10.2% of women in the United States underwent the procedure due to its inconvenience and unreliable performance. FOBT is being replaced by a more sensitive blood stool technology FIT, but it is also not designed to detect the majority of non-bleeding polyps.

In 2009, optical capsule endoscopy became commercially available in Europe for CRC screening. In early 2014, the FDA granted approval for optical capsule endoscopy procedure to be used for CRC screening for use in patients who have had an incomplete optical colonoscopy. However, this technology requires bowel cleansing to a greater degree than is required for a regular optical colonoscopy, which can result in dehydration and in turn can lead to cancellation of the procedure in certain cases. Moreover, because this procedure must be completed within several hours in order to maintain a clean colon and to accommodate the capsule's limited battery life, patients are required to drink large amounts of liquid so that the capsule can flow through the gastrointestinal tract during the time allotted. Furthermore, camera-based optical capsule endoscopy procedures generate a large number of images, often requiring more physician time to analyze the images than to conduct an optical colonoscopy.

Several companies are developing technologies based on molecular diagnostics (from blood and other bodily fluids), or MDx, tests that investigate the link between genes and the function of metabolic pathways, drug metabolism and disease development with a primary focus on the study of DNA, RNA and proteins. Genetic markers can be traced within stool samples in minute quantities. For example, a special collecting kit for stool samples and an analyzer to diagnose CRC based on these stool-based markers has been developed and recently approved by the FDA. While the method of screening for CRC using stool DNA testing has been endorsed by several societies, this test does not generate structural information on the colon and therefore, does not detect most pre-cancerous polyps.

Our Solution

We believe that our imaging capsule could represent a potential breakthrough in CRC screening by providing a structural exam without the pain, discomfort and embarrassment experienced by some patients undergoing a traditional optical colonoscopy and other currently available screening methods by offering the following benefits:

- eliminating the need for fasting and prior bowel cleansing, which would differentiate our imaging capsule from every other currently available structural screening exam;
- providing patients with a procedure that requires them to swallow our capsule and small amounts of a contrast agent, thereby minimizing any disruption to their normal activities;
- eliminating the need to sedate patients;
- obviating the requirement for the insufflation (the forcing of air into the gastrointestinal tract) of patients;
- administering our technology on an outpatient basis;
- providing digital reporting, storage and remote consulting capabilities; and

- enabling a physician to analyze the results in approximately 10 minutes, which would be less time than is required to conduct an optical colonoscopy.

Although our imaging capsule utilizes radiation that is considered low dose, we believe that the risks associated with such radiation exposure are low compared to risks associated with other procedures such as perforation, bleeding or sedation related effects (optical colonoscopy and sigmoidoscopy) and dehydration and damage to kidneys (optical capsules). Unlike FOBTs, FITs and stool DNA tests, our capsule-based imaging modality generates structural information on the colon, which could assist in the detection of pre-cancerous polyps. We therefore do not believe that the low dose radiation in our imaging capsule will make our imaging capsule less attractive to physicians and patients than other less effective products that do not employ any radiation.

We believe that gastroenterologists will embrace our technology and encourage the use of our imaging capsule. This may increase the number of people undergoing CRC screening and may cause more people with polyps to obtain polypectomy – a therapeutic procedure during which polyps are removed and which currently receives different reimbursement coverage.

Our imaging capsule and CPS are intended to be prescribed to patients by physicians. Just prior to swallowing our capsule, a patient will begin drinking small amounts of a radio opaque contrast agent (such as barium sulfate or iodine) with his or her meals, which enhances the contrast of the colon surface. The capsule is propelled by natural motility through the gastrointestinal tract. As it makes its way through the gastrointestinal tract, information is transmitted to a receiving device worn by the patient that stores the information for offline analysis. After our imaging capsule is expelled from a patient's body, the CPS data will be transferred to physicians, who will then utilize our data viewer software application to analyze the data collected by our imaging capsule. Our proprietary software is being designed to process the data and produce a two- and three-dimensional visualization of the colon. A physician will then analyze the visualization to determine whether any anatomical anomalies are present on the surface of the colon.

Our imaging capsule consists of an X-ray source and several X-ray detectors. The X-ray source is contained in a rotating radiation shield, enabling the generation of 360-degree angular scans. The collection of successive angular scans enables the virtual reconstruction of a portion of the colon. During movement of our imaging capsule longitudinally through the colon, successive images of portions of the colon are collected to enable the three-dimensional reconstruction of the colon. Our imaging capsule is also intended to enable identification of polyps, which protrude inward into the colon, through the detection of irregularities in the topography of the colon.

Image for illustration purpose only

Our Strategy

Our goal is to become a leading supplier of CRC screening technology and, subject to the successful completion of the development of our technology and the receipt of the requisite regulatory approvals, to establish our technology as a leading CRC screening method. Key elements of our strategy include:

- obtaining CE marking for the marketing and sale of our imaging capsule in the European Union, followed by obtaining regulatory approvals for the use of our imaging capsule initially in the United States and Japan. In Europe and Japan, we intend to offer our imaging capsule as an imaging and screening tool for the general population. In the United States, we may first seek to obtain regulatory approvals for our imaging capsule as an adjunct tool to FOBTs and FITs, and after we have conducted more extensive clinical studies, we anticipate applying to the FDA for the use of our imaging capsule as an initial screening tool;
- obtaining third-party reimbursement for our technology;
- enhancing our existing technology portfolio and developing new technologies; and
- successfully marketing our product to establish a large customer base.

Our Challenges

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

- our technology has been tested on a limited basis and therefore we cannot assure the product's clinical value;
- we need to CE mark the devices in the European Union and obtain the requisite regulatory approvals in the United States, Japan and other markets where we plan to focus our commercialization efforts;
- we need to raise an amount of capital sufficient to complete the development of our technology, obtain the requisite regulatory approvals and commercialize our current and future products;
- we need to obtain reimbursement coverage from third-party payors for procedures using our imaging capsule;
- we need to increase our manufacturing capabilities; and
- we need to establish and expand our customer base while competing against other sellers of capsule endoscopes as well as other current and future CRC screening technologies and methods.

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

Implications of Being an Emerging Growth Company

As a company with less than $1.0 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" pursuant to the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth

company may take advantage of certain exemptions from specified disclosure and other requirements that are otherwise generally applicable to public companies. These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- not being required to comply with the auditor attestation requirements for the assessment of our internal control over financial reporting provided by Section 404 of the Sarbanes-Oxley Act of 2002;
- not being required to comply with any requirements adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation or a supplement to the auditor's report in which the auditor would be required to provide additional information about the audit and our financial statements;
- reduced disclosure obligations regarding executive compensation; and
- not being required to hold a nonbinding advisory vote on executive compensation or seek shareholder approval of any golden parachute payments not previously approved.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. However, we have elected to "opt out" of this provision and, as a result, we will comply with new or revised accounting standards as required when they are adopted for public companies. This decision to opt out of the extended transition period under the JOBS Act is irrevocable.

We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which our total annual gross revenues exceed $1.0 billion; (ii) the last day of the fiscal year in which the fifth anniversary of the date of the first sale of securities under this registration statement occurs; (iii) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt; or (iv) the date on which we are deemed to be a "large accelerated filer" under the Securities Exchange Act of 1934, as amended, or the Exchange Act. When we are no longer deemed to be an emerging growth company, we will not be entitled to rely on the exemptions provided in the JOBS Act discussed above. We may choose to take advantage of some, but not all, of the exemptions available to emerging growth companies. We have taken advantage of some of the reduced reporting exemptions in this prospectus. Accordingly, the information contained herein and in future filings with the U.S. Securities and Exchange Commission may be different from the information provided by other public companies in similar filings.

Concurrent Private Placement

Concurrent with this offering, we expect to complete a Private Placement utilizing the $12.0 million in proceeds from the credit line agreement, dated August 20, 2014, described below, of approximately 1,714,286 units at a purchase price per unit equal to the public offering price in accordance with Regulation S under the Securities Act or Regulation D under the Securities Act, to certain investors including certain of our affiliates. Each unit sold in the Private Placement will be issued with one and one-half non-transferrable Long Term Incentive Warrants. The issuance and sale of such units and Long Term Incentive Warrants will not be registered under the Securities Act. We expect to receive $12.0 million in gross proceeds from the Private Placement. The closing of the Private Placement is conditioned upon the completion of the offering to which this prospectus relates. However, the completion of the offering to which this prospectus relates is not conditioned upon the closing of the Private Placement.

Corporate Information

We were incorporated as a limited liability private company under the laws of the State of Israel on April 5, 2009, and on May 31, 2009, we acquired all of the business operations and substantially all of the assets of Check-Cap LLC, a Delaware limited liability company formed in December 2004. Our principal executive offices are located at Check-Cap Building, Abba Hushi Avenue, P.O. Box 1271, Isfiya, 30090, Mount Carmel, Israel. Our telephone number is +972-4-8303400. Our website address is www.check-cap.com. Information contained on, or accessible through, our website does not constitute part of this prospectus and is not incorporated by reference herein.

Throughout this prospectus we refer to the trademark "CHECK-CAP" that we use in our business. Furthermore, we received a notice of allowance for the "CHECK-CAP" mark and design logo in the United States and hold a registered trademark for the "CHECK-CAP" design logo in Europe. Other trademarks and service marks appearing in this prospectus are the property of their respective holders.

Recent Developments

Credit Line Agreement; Private Placement

On August 20, 2014, we entered into a certain credit line agreement, pursuant to which we obtained a credit line in an aggregate principal amount of $12 million from certain lenders and existing shareholders, or the Lenders. The credit line amount was deposited in an escrow account at the closing, which was consummated on October 14, 2014.

We issued to each Lender at closing a warrant, collectively referred to as the Credit Line Warrants, to purchase a number of our ordinary shares constituting 2% of our share capital on a fully diluted basis (assuming conversion of all of our convertible securities into ordinary shares at a 1:1 conversion rate) as of the closing for each $1 million (or portion thereof) extended by such Lender. We issued Credit Line Warrants to purchase in the aggregate 2,658,463 of our ordinary shares. The Credit Line Warrants are exercisable for a period of ten years at an exercise price of NIS 0.20 per share, and may be exercised on a net issuance basis.

Under the terms of the agreement, if we intend to consummate (as defined in the credit line agreement) an initial public offering of our securities, or an IPO, on or prior to February 18, 2015, or if we consummate (as defined in the credit line agreement) an IPO on or prior to February 18, 2015, we will be entitled to direct that all or any portion of the credit line amount be invested in securities in a private placement transaction that is exempt from the registration requirements of the Securities Act at a price equal to the public offering price in the IPO. The agreement provides that in the event that we direct that less than the full credit line amount be invested in the Private Placement, the amount to be invested by each Lender in the Private Placement will be equal to its pro rata share of the total credit line amount. We intend to direct that the full credit line amount be invested in the Private Placement. If we consummate (as defined in the credit line agreement) an IPO on or prior to February 18, 2015, any part of the credit line amount not so invested in the Private Placement will be released to the Lenders. The consummation of any of the transactions contemplated by the credit line agreement, including, without limitation, the Private Placement, is not a condition to our obligation or the obligation of the underwriters to consummate the transactions contemplated by the underwriting agreement.

If we do not consummate (as defined in the credit line agreement) an IPO on or prior to February 18, 2015, we may "call" the credit line amount (i.e., direct that such funds be released from the escrow account to us) at any time thereafter until April 14, 2016, subject to certain conditions. Any part of the credit line amount not so called by us on or prior to such date will be released to the Lenders. If we call the credit line amount from the escrow account on or prior to April 14, 2016, the amount called will bear interest at the annual rate of 7%; provided that the aggregate interest rate will not be less than 5%. The called credit line amount (and, at our option, the interest accrued thereon) will automatically convert into shares of our company upon the earlier of a qualified financing round (which includes a public offering, including an IPO), an M&A Event (i.e., as defined in the credit line agreement as an acquisition with or into another entity, the sale or license of all or substantially all of our assets or intellectual property or all or substantially all of our issued and outstanding share capital, or any other transaction having the same effect of any of the foregoing) and April 14, 2016, and the Lenders may elect to convert the entire called credit line amount (and, at our option, the interest accrued thereon) upon a non-qualified financing round, all under the terms and conditions set forth in the credit line agreement. In the event that the qualified financing round is an IPO, in lieu of automatic conversion, we are entitled, to the extent permitted by law, to deposit in trust an amount equal to 133% of the called credit line amount (and, at our option, the interest accrued thereon) and irrevocably instruct the trustee to submit an offer, on behalf of each Lender, for the purchase of the IPO shares at the IPO price determined by the lead underwriters.

Israel-United States Binational Industrial Research and Development Foundation Grant

On July 13, 2014, we entered into a Cooperation and Project Funding Agreement with the Israel-United States Binational Industrial Research and Development Foundation, or the BIRD Foundation, and Synergy Research Inc., or Synergy, pursuant to which the BIRD Foundation has agreed to award a grant in the maximum amount of the lesser of (i) $900,000; and (ii) 50% of the actual expenditures for the funding of a project entitled "Collection & Analysis of Gastrointestinal Images for Diagnostic Adenomatic Polyps and Colorectal Cancer." The development work is expected to be performed over a 24 month period by Synergy (or a subcontractor on its behalf) and us. Of the total

grant amount, we are expected to receive an aggregate of $567,000 to fund our expenditures for the project, in five installments. We received our first advance payment from the BIRD Foundation of $68,000 in July 2014. Our research and development expenses, net is presented net of the differences between the fair value of the liability and the grant amount received from the BIRD Foundation.

We are required to repay the total sum granted to us and Synergy by the BIRD Foundation, linked to the U.S. Consumer Price Index from date of receipt of each payment, up to 100%, 113%, 125%, 138% and 150% of the linked sum granted by the BIRD Foundation if repaid within one year, two years, three years, four years and five or more years, respectively, of the original project completion date in accordance with the project proposal. Repayments are made at the rate of 5% of gross revenues derived from the product funded by the project. Under the terms of the agreement, if any portion of the product funded by the project is sold outright to a third party prior to full repayment of the grant to the BIRD Foundation, one-half of the sale proceeds will be applied to the repayment of the grant. If the funded product is licensed to a third party, 30% of all payments received under the respective license agreement must be paid to the BIRD Foundation in repayment of the grant.

Bank Leumi Credit Facility

On January 4, 2015, we entered into a credit line agreement with Bank Leumi le-Israel B.M., or Bank Leumi, pursuant to which we may obtain a credit line in the principal amount of up to $1,000,000, or the Bank Leumi Credit Facility. The Bank Leumi Credit Facility is to be repaid in full by us no later than April 1, 2015 and Bank Leumi's consent is required for early repayment. The drawn portion of the Bank Leumi Credit Facility bears interest at an annual rate of LIBOR plus 5.25% on the basis of a 365-day year, until repayment in full. The undrawn portion of the Bank Leumi Credit Facility shall bear interest at an annual rate of 1.0% on the basis of a 365-day year, until repaid in full. We have drawn the entire $1,000,000 Bank Leumi Credit Facility. We paid Bank Leumi a facility fee of $20,000. Under the terms of the agreement, we are required to maintain a cash balance of not less than $400,000 in our account at Bank Leumi so long as the Bank Leumi Credit Facility has not been repaid in full. The Bank Leumi Credit Facility would become due and payable upon certain events, including (among others) upon a change of control, other than in the event of a public offering of our securities. Pursuant to the agreement, a merger would require the prior written consent of Bank Leumi.

To secure the repayment of the Bank Leumi Credit Facility, we granted Bank Leumi (i) a first ranking fixed charge over our goodwill; and (ii) a first ranking floating charge over all of the assets and rights of any type whatsoever, which we now have or may acquire in the future, subject to the rights of the Office of the Chief Scientist of the Ministry of Economy (formerly named the Ministry of Industry, Trade and Labor), or the OCS, and the BIRD Foundation and the rights under existing and future liens in favor of the First Intentional Bank of Israel Ltd. securing debt or indentures of up to an aggregate amount of $100,000. Under the terms of the Bank Leumi Credit Facility, we undertook to instruct the underwriters in this offering to transfer to our bank account at Bank Leumi any proceeds from this offering to be transferred to us. In addition, we have irrevocably instructed the escrow agent for the credit line agreement dated August 20, 2014, to transfer to our bank account at Bank Leumi any funds that should be transferred to us pursuant to the escrow agreement. We intend to repay all amounts outstanding under the Bank Leumi Credit Facility with the proceeds of this offering and the concurrent Private Placement. The Company intends to repay all amounts outstanding under the Bank Leumi Credit Facility with the proceeds of this offering.

Reverse Stock Split

On January 15, 2015, our shareholders approved the adoption of our Amended and Restated Articles of Association which reflect a 1-for-20 reverse stock split of our ordinary shares subject to and effective immediately prior to the consummation of this offering. Unless otherwise indicated in this prospectus, all numbers are reflected on a post-split basis.

Conversion of Preferred Shares

On January 15, 2015, our shareholders approved the conversion on a 1:1 basis, of each and every class and series of our authorized and outstanding preferred shares into our pre-split ordinary shares and the conversion on a 1:1 basis of all outstanding preferred share warrants into pre-split ordinary share warrants, in each case, subject to and effective immediately prior to the consummation of this offering.

Election of Directors

On January 15, 2015, our shareholders approved the continued service of Tomer Kariv, Alon Dumanis, Yoav Kimchy, Guy Neev, Walter Robb and Richard Stone as directors of our company following the consummation of this

offering. In addition, subject to the consummation of this offering, our shareholders approved the election of Steven Hanley as a director of our company effective as of the consummation of this offering and the election of Yuval Yanai as an external director (within the meaning of the Israeli Companies Law, 5759-1999, or the Israeli Companies Law) for an initial three-year term commencing on March 15, 2015, subject to the ratification of his election by our shareholders within three months following the consummation of this offering.

On February 12, 2015, our shareholders approved the election of XiangQian (XQ) Lin as a director of the Company subject to and effective as of the consummation of this offering.

The Offering

Issuer	Check-Cap Ltd.
Securities offered by us in this offering	2,000,000 units, each consisting of one ordinary share and one-half of a Series A Warrant to purchase one ordinary share. Each unit will be issued with one and one-half non-transferrable Long Term Incentive Warrants to purchase ordinary shares, for a total of 3,000,000 Long Term Incentive Warrants.
Over-allotment option	The underwriters have an option for a period of 45 days to purchase up to 300,000 additional units (together with an accompanying 450,000 Long Term Incentive Warrants) to cover over-allotments, if any.
Ordinary shares outstanding immediately prior to the offering	6,137,580 ordinary shares
Securities to be issued in the concurrent Private Placement	1,714,286 units, each consisting of one ordinary share and one-half of a Series A Warrant to purchase one ordinary share. Each unit will be issued with one and one-half Long Term Incentive Warrants for a total of 2,571,429 Long Term Incentive Warrants.
Ordinary shares to be outstanding immediately after the offering and the concurrent Private Placement(1)	9,851,866 ordinary shares (or 10,151,866 ordinary shares if the underwriters exercise in full their option to purchase additional units (together with the accompanying Long Term Incentive Warrants))
Terms of the Series A Warrants	Exercise price: $8.75 per ordinary share, which is equal to 125% of the offering estimated price of the units in this offering. Exercisability: Each whole Series A Warrant is exercisable for one ordinary share, subject to adjustment as described herein. Series A Warrants will not be rounded up to the next whole Series A Warrant and only whole Series A Warrants will be exercisable for full ordinary shares. Exercise period: Each Series A Warrant will be exercisable 45 days after the date of this prospectus and will expire on , 2020; provided in each case that we have an effective registration statement under the Securities Act covering the

ordinary shares issuable upon exercise of the Series A Warrants and a current prospectus in respect thereof is available, and such shares are registered, qualified or exempt from registration under the securities laws of the state of residence of the holder. We have agreed to use our reasonable best efforts to maintain the effectiveness of the registration statement and current prospectus relating to ordinary shares issuable upon exercise of the Series A Warrants at any time that the Series A Warrants are exercisable. During any period that we fail to have maintained an effective registration statement covering the ordinary shares underlying the Series A Warrants, the holder may exercise the Series A Warrants on a cashless basis.

See “Description of Share Capital and Securities Offered Hereby” for more information.

Terms of the Long Term Incentive Warrants	Exercise price: $8.05 per ordinary share, which is equal to 115% of the estimated price of the units in this offering Exercisability: Upon vesting, each whole Long Term Incentive Warrant will entitle the holder to purchase one ordinary share, subject to adjustment as described herein. Long Term Incentive Warrants will not be rounded up to the next whole Long Term Incentive Warrant and only whole Long Term Incentive Warrants will be exercisable for full ordinary shares. One-third of the Long Term Incentive Warrants held by each holder who has held the ordinary shares underlying the units purchased by such holder in this offering for a period of one year following the closing date of this offering will vest and become exercisable on the first anniversary of the closing date of this offering. The remaining two-thirds of the Long Term Incentive Warrants held by each holder who has held the ordinary shares underlying the units purchased by such holder in this offering for a period of two years following the closing date of this offering will vest and become exercisable on the second anniversary of the closing date of this offering. The Long Term Incentive Warrants will not be transferrable and will expire on , 2022. Any transfer of the Long Term Incentive Warrants will be null and void. In addition to the vesting conditions described above, for a holder of Long Term Incentive Warrants to be able to exercise its Long Term Incentive Warrants, such holder must, within 120 days of the closing of the offering, register the ordinary shares underlying the units purchased by such holder in the offering in its name and not in "street name." If the Long Term Incentive Warrant holder fails to timely register the ordinary shares underlying the units purchased by such holder in the offering, the Long Term Incentive Warrants held by such holder will automatically expire. In addition, if the Long Term Incentive Warrant holder transfers all or any portion of the ordinary shares underlying the units purchased by such holder in the offering during the one and two year vesting periods described above (other than by way of a "permitted transfer" (defined elsewhere in this prospectus)), the holder will forfeit a pro rata portion of the Long Term Incentive Warrants held by such holder. By way of example, if the Long Term Incentive Warrant holder purchases 100 units in the offering and transfers 50 ordinary shares in an unpermitted transfer or series of transfers during the first two years following the offering, such holder will forfeit one-half of its unvested Long Term Incentive Warrants. Exercise period: Each Long Term Incentive Warrant will be exercisable upon vesting, provided in each case that we have an effective registration statement under the Securities Act covering the ordinary shares issuable upon exercise of the Long Term Incentive

Warrants and a current prospectus in respect thereof is available, and such shares are registered, qualified or exempt from registration under the securities laws of the state of residence of the holder, and will expire on , 2022. We have agreed to use our reasonable best efforts to maintain the effectiveness of the registration statement and current prospectus relating to ordinary shares issuable upon exercise of the Long Term Incentive Warrants at any time that the Long Term Incentive Warrants are exercisable. During any period that we fail to have maintained an effective registration statement covering the ordinary shares underlying the Long Term Incentive Warrants, the holder may exercise the Long Term Incentive Warrants on a cashless basis.

Transferability: The Long Term Incentive Warrants are not transferrable.

See “Description of Share Capital and Securities Offered Hereby” for additional information.

Separation of ordinary shares and Series A Warrants issued as part of the units	The units will begin trading on, or promptly after, the date of this prospectus. The units will automatically separate and each of the ordinary shares and Series A Warrants underlying the units will begin trading separately on the 45th day after the date of this prospectus, unless Chardan Capital Markets, LLC, as representative of the underwriters, determines that an earlier date is acceptable (based upon, among other things, its assessment of the relative strengths of the securities markets and small capitalization companies in general, and the trading pattern of, and demand for, our securities in particular). If Chardan Capital Markets, LLC permits separate trading of the ordinary shares and Series A Warrants prior to , 2015, we will issue a press release and file a Current Report on Form 6-K with the Securities and Exchange Commission announcing when such separate trading will begin.
Use of Proceeds	We estimate that the net proceeds from our issuance and sale of 2,000,000 units in this offering will be approximately $11.7 million, based on the offering price of $7.00 per unit, and after deducting underwriting discounts and commissions and offering expenses payable by us. If the representative of the underwriters exercises the over-allotment option in full, we estimate that the net proceeds from this offering will be approximately $13.6 million, based on the offering price of $7.00 per unit, and after deducting underwriting discounts and commissions and offering expenses payable by us. We will also expect to receive net proceeds of approximately $10.9 million from the sale of 1,714,286 units in the concurrent Private Placement after deducting commissions and estimated expenses payable by us. We currently expect to use the net proceeds from this offering and the concurrent Private Placement as follows: · approximately $5.3 million on research and development; · approximately $4.0 million on regulatory submissions for approvals of our product, including approximately $3.5 million on clinical trials in Europe and the United States; · approximately $0.6 million to build our manufacturing capabilities for the clinical phase; · approximately $1.1 million for the repayment of indebtedness incurred under the Bank Leumi Credit Facility; and · the balance, if any, for other general corporate purposes.

	See "Use of Proceeds" beginning on page 52 of this prospectus.
Private Placement	Concurrent with this offering, we expect to complete a Private Placement of 1,714,286 units at a purchase price per unit equal to the public offering price in accordance with Regulation S under the Securities Act or Regulation D under the Securities Act, to certain investors including certain of our affiliates. Each unit sold in the Private Placement will be issued with one and one-half non-transferrable Long Term Incentive Warrants. The issuance and sale of such units and Long Term Incentive Warrants will not be registered under the Securities Act. We expect to receive $10.9 million in aggregate net proceeds from the Private Placement. The closing of the Private Placement is conditioned upon the completion of the offering to which this prospectus relates. However, the completion of the offering to which this prospectus relates is not conditioned upon the closing of the Private Placement. See "Summary—Recent Developments—Credit Line Agreement; Private Placement."
Underwriter Warrants	We will issue to Chardan Capital Markets, LLC as representative of the underwriters, upon closing of this offering, warrants entitling the underwriter to purchase 5% of the aggregate number of ordinary shares included in the units issued in this offering, but not including the over-allotment option. The underwriter warrants may be exercised commencing on a date which is one year after the effective date of this Registration Statement and expire four years following the date of effectiveness of the Registration Statement on Form F-1 of which this prospectus forms a part.

Dividend Policy	We do not anticipate declaring or paying any cash dividends on our ordinary shares following this offering.
Transfer Agent and the Registrar	American Stock Transfer & Trust Company LLC
Risk Factors	Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 17 of this prospectus and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our securities.
Proposed Symbols and Listing	We have applied for the listing our ordinary shares on the NASDAQ Capital Market under the symbol "CHEK." We intend to apply for the listing of our units and warrants on the NASDAQ Capital Market under the symbols "CHEKU" and "CHEKW," respectively.

(1) The number of ordinary shares to be outstanding after our initial public offering and the concurrent Private Placement is based on 6,137,580 ordinary shares outstanding as of February 17, 2015, and excludes:

- 948,000 ordinary shares issuable upon the exercise of outstanding warrants to purchase preferred shares (comprised of (i) warrants to purchase 41,822 Series C-1 preferred shares; (ii) warrants to purchase 50,399 Series C-2 preferred shares; (iii) warrants to purchase 25,196 Series D-1 preferred shares; and (iv) warrants to purchase 830,583 Series D-2 preferred shares, following their conversion into warrants to purchase ordinary shares immediately prior to the closing of this offering) with a weighted average exercise price of $8.97 per ordinary share;

- 203,489 ordinary shares issuable upon the exercise of outstanding warrants, which will become exercisable in full, for no consideration, upon the exercise by Mr. Guy Neev of his options to purchase 99,774 ordinary shares, or the Neev Options, immediately prior to the closing of this offering;

- 10,587 ordinary shares issuable upon the exercise of outstanding warrants, which will be automatically exercised, for no consideration, following the exercise by Mr. Guy Neev of the Neev Options immediately prior to the closing of this offering in proportion to the number of warrants held by the optionee with respect to which such warrants were granted that are exercised by the optionee from time to time;

- 2,712,740 ordinary shares issuable upon the exercise of outstanding warrants, of which (i) warrants to purchase 2,491,201 ordinary shares have an exercise price of NIS 0.20 per ordinary share and are fully vested; (ii) warrants to purchase 110,770 ordinary shares have an exercise price of NIS 0.20 per ordinary share and will become fully vested upon the closing of this offering; and (iii) warrants to purchase 110,769 ordinary shares have an exercise price per share equal to the effective price per share of the ordinary shares underlying the units sold to the public in this offering, which will become fully vested upon the closing of this offering;

- 616,198 ordinary shares issuable upon the exercise of outstanding options with a weighted average exercise price of $3.30 per ordinary share, granted under our 2006 Unit Option Plan;
- 373,849 ordinary shares issuable upon the exercise of outstanding options granted under our 2006 Unit Option Plan, which will become fully vested upon the closing of this offering, of which (i) 83,078 options have an exercise price of NIS 0.20 per ordinary share; and (ii) 290,771 options will be exercisable at the effective price per share of the ordinary shares underlying the units sold to the public in this offering;
- 38,473 ordinary shares issuable upon the exercise of options with an exercise price of $4.96 per ordinary share, under our 2006 Unit Option Plan, which we have agreed that certain executive officers will be entitled to upon completion of an equity financing, which includes this offering;
- a number of ordinary shares constituting 4% of our fully-diluted share capital (including the option pool) immediately following the consummation of this offering that will be available for future option grants under our 2006 Unit Option Plan;
- the ordinary shares issuable upon the exercise of warrants to be issued to certain finders in connection with the credit line agreement if either (i) the credit line amount extended to us is invested in units in a private placement on or prior to February 18, 2015; or (ii) if we do not consummate an IPO on or prior to February 18, 2015 and we call the credit line amount, upon conversion of the credit line amount into ordinary shares in accordance with the terms of the credit line agreement;
- 15,000 ordinary shares issuable upon the exercise of warrants with an exercise price per ordinary shares equal to the effective price per share of the ordinary shares underlying the units sold to the public in this offering to be issued to our U.S. legal counsel as partial compensation for services rendered in connection with the offering;
- the ordinary shares issuable upon the exercise of the Series A Warrants included in the units offered hereby;
- the ordinary shares issuable upon the exercise of the Long Term Incentive Warrants; and
- 100,000 ordinary shares issuable upon exercise of the underwriter warrants to be issued in connection with this offering.

Except as otherwise indicated, information in this prospectus reflects or assumes:

- the adoption of our amended and restated articles of association immediately prior to the closing of this offering, which will replace our articles of

association currently in effect;.

- a 1-for- 20 reverse split of our ordinary shares, which will occur immediately prior to the closing of this offering;
- 1,152,138 ordinary shares outstanding as of the date hereof;
- the conversion of all outstanding preferred shares on a 1:1 basis into an aggregate of 4,338,998 ordinary shares immediately prior to the closing of this offering;
- the issuance of 99,774 ordinary shares to Mr. Guy Neev upon the exercise immediately prior to the closing of this offering of the Neev Options;
- the issuance of 171,715 ordinary shares under warrants that will be automatically exercised, for no consideration, upon the exercise by Mr. Guy Neev of the Neev Options immediately prior to the closing of this offering;
- the issuance of an aggregate of 167,262 ordinary shares to certain lenders under the credit line agreement dated August 20, 2014 upon the exercise, immediately prior to the closing of this offering, of warrants granted to them at the closing of the credit line agreement;
- the issuance of an aggregate of 207,693 ordinary shares to certain of our executive officers upon the exercise of options immediately prior to the closing of this offering;
- the issuance of 1,714,286 units in the Private Placement at the initial public offering price per unit;
- an initial public offering price of $7.00, which is the mid-point of the range set forth of the front cover of this prospectus; and
- that the underwriters do not exercise their over-allotment option.

Summary Financial Data

You should read the following summary financial information in conjunction with our financial statements and related notes, "Selected Financial Information" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

The following tables set forth our summary financial data. You should read the following summary financial data in conjunction with, and it is qualified in its entirety by reference to, our historical financial information and other information provided in this prospectus, including "Selected Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes appearing elsewhere in this prospectus.

The summary statements of comprehensive loss data for the years ended December 31, 2012 and 2013, and the statements of financial position data as of December 31, 2013 are derived from our audited financial statements appearing elsewhere in this prospectus. The summary statements of comprehensive loss data for the six-month periods ended June 30, 2013 and 2014, and the statements of financial position data as of June 30, 2014 are derived from our unaudited financial statements appearing elsewhere in this prospectus. The unaudited financial statements have been prepared on the same basis as the audited financial statements and, in the opinion of management, reflect all adjustments necessary to present fairly our financial position as of June 30, 2014 and our results of operations for the six months ended June 30, 2013 and 2014. The historical results set forth below are not necessarily indicative of the results to be expected in future periods. Our financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board.

Statements of Comprehensive Loss Data

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2012	2014	2013
	(US$ in thousands, except per share data)			
			(Unaudited)	
Research and development expenses, net(1)	$ 2,662	$ 2,692	$ 1,640	$ 1,364
General and administrative expenses	1,090	1,203	564	520
Other expenses (income)	(10)	13	--	--
Operating loss	3,742	3,908	2,204	1,884
Finance income	(63)	(416)	(60)	(45)
Finance expenses	316	229	85	230
Finance expenses (income), net	253	(187)	25	185
Loss and total comprehensive loss for the period	3,995	3,721	2,229	2,069
Loss per ordinary share of NIS 0.20 par value, basic and diluted(2)	3.66	3.49	1.97	1.87
Weighted average number of ordinary shares outstanding – basic and diluted (in thousands)(2)	1,627	1,627	1,627	1,627
Pro forma loss per ordinary share of NIS 0.20 par value(3)				
Basic and diluted (unaudited)(2)	$ 0.67	$ 0.62	$ 0.37	$ 0.35
Pro forma weighted average number of	5,966	5,966	5,966	5,966

ordinary shares outstanding - basic and diluted (in thousands) (unaudited)(2)	

Statements of Financial Position Data	As of December 31, 2013	As of June 30, 2014		
		Actual	Pro forma(3)	Pro forma as adjusted(4)
		(US$ in thousands) Unaudited		
Cash and cash equivalents	$ 4,975	$ 2,794	$ 2,822	$ 25,392
Working capital(5)	4,131	1,990	2,018	24,588
Total assets	5,375	3,276	3,304	25,874
Capital stock	23,676	23,716	23,744	46,314
Total shareholders' equity (deficit)	$ 1,191	$ (998)	$ (970)	$ 21,600

(1) Research and development expenses, net is presented net of the differences between the amount of grants received from the OCS and the fair value of their financial liability. The effect of the participation by the OCS totaled $0.4 million and $0.2 million for the years ended December 31, 2013 and 2012, respectively. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Operations Overview—Research and Development, Expenses, Net" for more information.

(2) Basic and diluted loss per ordinary share is computed based on the basic and diluted weighted average number of ordinary shares outstanding during each period. For purposes of these calculations, the following ordinary shares are deemed to be outstanding: (i) the 99,774 ordinary shares issuable to Mr. Guy Neev upon exercise of the Neev Options; and (ii) the 375,204 ordinary shares issuable under warrants that will be automatically exercised, for no consideration (unless the holder thereof objects to such exercise), upon the exercise by Mr. Guy Neev of the Neev Options, of which 171,715 options will be exercised immediately prior to the closing of this offering upon the exercise by Mr. Guy Neev of the Neev Options. For additional information, see Note 17 to our financial statements for the year ended December 31, 2013 included elsewhere in this prospectus.

(3) On a pro forma basis to give effect to the conversion immediately prior to the completion of this offering of all of our outstanding preferred shares into 4,338,998 ordinary shares and to the increase in shareholders capital due to the exercise of the Neev Options and certain other options and warrants and the receipt by us of the aggregate proceeds of $28,000 upon such exercise.

(4) On a pro forma as adjusted basis to give further effect to (i) the issuance and sale of units by us in this offering at an assumed initial public offering price of $7.00 per unit, the midpoint of the estimated initial public offering price range set forth on the cover of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, together with the accompanying Long Term Incentive Warrants; and (ii) the issuance and sale of units by us in the concurrent Private Placement at an assumed price of $7.00 per unit, the estimated public offering price, after deducting commissions and estimated expenses payable by us in connection with the concurrent Private Placement, together with the accompanying Long Term Incentive Warrants.

(5) Working capital is defined as total current assets minus total current liabilities.

16

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in this prospectus, including the financial statements and the related notes appearing at the end of this prospectus, before purchasing our securities. If any of the following risks actually occur, they may materially harm our business and our financial condition and results of operations. In any such event, the market price of our securities could decline and you could lose all or part of your investment

Risks Related to Our Business

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

We are a clinical and development-stage medical diagnostics company with a limited operating history. We have incurred net losses in each fiscal year since we commenced operations in 2009. We incurred net losses of $3.7 million in 2012, $4.0 million in 2013 and $2.2 million in the six months ended June 30, 2014. As of June 30, 2014, our accumulated deficit was $24.7 million. 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 imaging capsule, increase our marketing and selling expenses, and incur additional costs as a result of being a public 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.

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

Since commencing our operations, we have focused on the research and development and limited clinical trials of our imaging capsule. Our product is not approved for commercialization and has never generated any revenues. Our ability to generate revenues and achieve profitability depends on our ability to successfully complete the development of our product, 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 have no experience in commercializing our imaging capsule and face a number of challenges with respect to our commercialization efforts, including, among others, that:

- we may not have adequate financial or other resources to complete the development of our product;
- 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 establish adequate sales, marketing and distribution channels;
- healthcare professionals and patients may not accept our imaging capsule;
- we may not be aware of possible complications from the continued use of our imaging capsule since we have limited clinical experience with respect to the actual use of our imaging capsule;
- technological breakthroughs in CRC screening, treatment and prevention may reduce the demand for our imaging capsule;
-

changes in the market for CRC screening, 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 imaging capsule, which may adversely affect patients' willingness to purchase our imaging capsule;

- uncertainty as to market demand may result in inefficient pricing of our imaging capsule;

- we may face third-party claims of intellectual property infringement;

- we may fail to obtain or maintain regulatory approvals for our imaging capsule in our target markets or may face adverse regulatory or legal actions relating to our imaging capsule even if regulatory approval is obtained; and

- we are dependent upon the results of ongoing clinical studies relating to our imaging capsule and the products of our competitors.

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

Our early clinical experience to date may not have revealed certain potential limitations of the technology and potential complications from our imaging capsule.

To date, we have performed clinical studies with a prior version of our imaging capsule and with several versions of non-imaging capsules. The clinical trial that was conducted using the prior version of our imaging capsule was conducted under a different protocol and used a different group of patients. Therefore, we will have a limited ability to identify potential problems and/or inefficiencies concerning our imaging capsule in advance of its use in patients and we cannot assure you that its actual clinical performances will be satisfactory, or that its use will not result in unanticipated complications. Furthermore, the results from our first clinical studies and the previous pre-clinical studies may not be indicative of the clinical results obtained when we examine our final imaging capsule on real screening population. If our imaging capsule does not function as expected over time, we could be subject to liability claims, our reputation may be harmed and our imaging capsule would not be widely adopted.

We expect to derive most of our revenues from sales of one product or product line. Our inability to successfully commercialize this product, or any subsequent decline in demand for this product, could severely harm our ability to generate revenues.

We are currently dependent on the successful commercialization of our imaging capsule to generate revenues. As a result, factors adversely affecting our ability to successfully commercialize, or the pricing of or demand for, this product could have a material adverse effect on our financial condition and results of operations. If we are unable to successfully commercialize or create market demand for our imaging capsule, we will have limited ability to generate revenues.