PROSPECTUS SUPPLEMENT (To Prospectus dated June 16, 2017)



11,111,116 Shares of Common Stock Warrants to Purchase Up to 8,333,337 Shares of Common Stock Placement Agent Warrants to Purchase Up to 777,778 Shares of Common Stock

We are offering up to 11,111,116 shares of our Common Stock, par value \$0.001 per share ("Common Stock"), warrants to purchase up to 8,333,337 shares of our Common Stock ("Investor Warrants"), and the shares of Common Stock that are issuable from time to time upon exercise of the Investor Warrants pursuant to this prospectus supplement and the accompanying prospectus. The Common Stock and Investor Warrants will be sold in combination, with an Investor Warrant to purchase 0.75 shares of Common Stock for each share of Common Stock sold. The combined purchase price to investors for each share of Common Stock and accompanying warrant is \$0.45. Each Investor Warrant will have an exercise price of \$0.5402 per share of our Common Stock, will be exercisable commencing six months and one day from the date of issuance and will expire five years from the date the warrants become exercisable. Notwithstanding the foregoing, the holder will be prohibited from exercising each warrant if, as a result of such exercise, the holder, together with its affiliates, would beneficially own more than 4.99% of the total number of shares of our Common Stock then issued and outstanding, provided that this limitation may be increased to 9.99% upon written notice to us. The shares of our Common Stock and the Investor Warrants are immediately separable and will be issued separately, but must be purchased together in this offering. Pursuant to this prospectus supplement and the accompanying prospectus, we will also issue warrants to purchase up to 777,778 shares of Common Stock (the "Placement Agent Warrants" and together with the Investor Warrants, the "Warrants", and the shares of Common Stock issuable upon the exercise of the Placement Agent Warrants to H.C. Wainwright & Co., LLC (or its designees) as our placement agent as part of the compensation payable to it for acting as our exclusive placement agent in connection with this offering. The Placement Agent Warrants will be substantially on the same terms as the Investor Warrants, except that the Placement Agent Warrants will have an exercise price of \$0.5625 per share, and will be exercisable commencing six months and one day from the date of issuance with a term of five years from the effective date of this offering. We refer to the shares of our Common Stock issued in this offering and the Warrants to purchase shares of our Common Stock issued in this offering, collectively, as our securities. See "Description of the Securities We Are Offering" in this prospectus supplement for additional information.

Our Common Stock is listed on the Nasdaq Capital Market under the symbol "EKSO." The last reported sale price of our Common Stock on the Nasdaq Capital Market on December 18, 2019 was \$0.5401 per share.

There is no established public trading market for the Warrants and we do not expect a market to develop. In addition, we do not intend to list the Warrants on the Nasdaq Capital Market, any other national securities exchange or any other nationally recognized trading system.

Investing in our securities involves a high degree of risk. Please read "Risk Factors" beginning on page <u>S-5</u> of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share and	
	Accompanying	
	Investor Warrant	Total
Offering price	\$ 0.45	\$5,000,002.20
Placement agent fees ⁽¹⁾	\$ 0.036	\$ 400,000.17
Proceeds, before expenses, to us ⁽²⁾	\$ 0.414	\$4,600,002.03

(1) Includes a commission of 7.0% of the gross proceeds of this offering and management fee of 1.0% of the gross proceeds of this offering. In addition, we have agreed to pay the placement agent for certain expenses and to issue to the placement agent the Placement Agent Warrants. See "Plan of Distribution" for a description of the compensation payable to the placement agent.

(2) The amount of the offering proceeds to us presented in this table does not give effect to the exercise, if any, of the Warrants.

H.C. Wainwright & Co., LLC has agreed to act as our exclusive placement agent in this offering. The placement agent may engage one or more sub-agents or selected dealers in connection with this offering. The placement agent is not purchasing any of the securities offered by us in this offering, and is not required to sell any specific number or dollar amount of securities, but will use its reasonable best efforts to sell the Common Stock and Investor Warrants offered. We have agreed to pay the placement agent a placement fee equal to 8.0% of the aggregate gross proceeds to us from the sale of the Common Stock in the offering, to pay the placement agent for certain expenses and to issue to the placement agent the Placement Agent Warrants. We estimate total expenses of this offering payable by us, excluding placement agent fees, will be approximately \$190,000.00.

Delivery of the shares of Common Stock and Warrants is expected to be made on or about December 20, 2019, subject to customary closing conditions.

H.C. Wainwright & Co.

The date of this prospectus supplement is December 18, 2019.

TABLE OF CONTENTS

Prospectus Supplement

ABOUT THIS PROSPECTUS SUPPLEMENT	<u>S-ii</u>
FORWARD-LOOKING STATEMENTS	<u>S-iv</u>
PROSPECTUS SUPPLEMENT SUMMARY	<u>S-1</u>
THE OFFERING	<u>S-3</u>
RISK FACTORS	<u>S-5</u>
USE OF PROCEEDS	<u>S-10</u>
CAPITALIZATION	<u>S-11</u>
DILUTION	<u>S-12</u>
DIVIDEND POLICY	<u>S-13</u>
DESCRIPTION OF THE SECURITIES WE ARE OFFERING	<u>S-14</u>
PLAN OF DISTRIBUTION	<u>S-17</u>
LEGAL MATTERS	<u>S-19</u>
<u>EXPERTS</u>	<u>S-19</u>
WHERE YOU CAN FIND MORE INFORMATION	<u>S-19</u>
INCORPORATION OF DOCUMENTS BY REFERENCE	<u>S-19</u>

Prospectus

ABOUT THIS PROSPECTUS	<u>ii</u>
PROSPECTUS SUMMARY	<u>1</u>
RISK FACTORS	<u>3</u>
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	<u>3</u>
ABOUT EKSO BIONICS	<u>4</u>
USE OF PROCEEDS	<u>4</u>
PLAN OF DISTRIBUTION	<u>5</u>
DESCRIPTION OF COMMON STOCK	<u>8</u>
DESCRIPTION OF PREFERRED STOCK	<u>8</u>
DESCRIPTION OF WARRANTS	<u>10</u>
DESCRIPTION OF RIGHTS	<u>12</u>
DESCRIPTION OF UNITS	<u>13</u>
CERTAIN PROVISIONS OF NEVADA LAW AND OF THE COMPANY'S ARTICLES OF	
ORGANIZATION AND BYLAWS	<u>14</u>
LEGAL MATTERS	<u>16</u>
EXPERTS	<u>16</u>
WHERE YOU CAN FIND MORE INFORMATION	<u>16</u>
INCORPORATION OF DOCUMENTS BY REFERENCE	<u>16</u>

S-i

ABOUT THIS PROSPECTUS SUPPLEMENT

We provide information to you about this offering of shares of our Common Stock and the warrants in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying base prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this "prospectus," we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying base prospectus, you should rely on information in this prospectus supplement. However, if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in this prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained in, or incorporated by reference into, this prospectus and in any free writing prospectus that we may authorize for use in connection with this offering. We have not, and the placement agent has not, authorized any other person to provide you with any information or to make any representation in respect of this offering, other than those contained or incorporated by reference in this prospectus supplement or in any free writing prospectus we have prepared. We take no responsibility for, and provide no assurance as to the reliability of, any other information that others may give you. You should assume that the information appearing in this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference into this prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying base prospectus, the documents incorporated by reference into this prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement entitled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference."

We are offering to sell, and seeking offers to buy, shares of our Common Stock and Warrants only in jurisdictions where offers and sales are permitted. Neither we nor the placement agent are making an offer to sell or soliciting an offer to buy our securities in any jurisdiction where an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. The distribution of this prospectus supplement and the accompanying base prospectus and the offering of our Common Stock and the warrants in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying base prospectus must inform themselves about, and observe any restrictions relating to, the offering of our Common Stock and the warrants in prospectus supplement and the accompanying base prospectus outside the United States. This prospectus supplement and the accompanying base prospectus outside the United States. This prospectus supplement and the accompanying base prospectus outside the united States. This prospectus supplement and the accompanying base prospectus outside the united States. This prospectus supplement and the accompanying base prospectus outside the united States. This prospectus supplement and the accompanying base prospectus outside the united States. This prospectus supplement and the accompanying base prospectus outside the united States. This prospectus supplement and the accompanying base prospectus offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and accompanying base prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

When we refer to "we," "our," "us," "Ekso Bionics," and the "Company" in this prospectus, we mean Ekso Bionics Holdings, Inc., unless otherwise specified or the context otherwise requires. When we refer to "you," we mean the potential holders of our Common Stock and Warrants.

S-ii

This prospectus and the information incorporated by reference herein contain references to our trademarks and to trademarks belonging to other entities, which are protected under applicable intellectual property laws. Solely for convenience, our trademarks and tradenames referred to in this prospectus supplement appear without the [®] and [™] symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and tradenames. All trademarks, service marks and trade names included or incorporated by reference into this prospectus are the property of their respective owners.

S-iii

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying base prospectus, the documents incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements, other than statements of historical facts, included or incorporated in this prospectus regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "could," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "potential," "positioned," "seek," "should," "target," "will," "would" and other similar expressions that are predictions or indicate future events and future trends, or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these identifying words.

Forward-looking statements included or incorporated by reference in this prospectus include, for example, statements about:

- our ability to obtain adequate financing to fund operations and to develop or enhance our technology;
- our ability to obtain or maintain regulatory approval to market our devices;
- the anticipated timing, cost and progress of the development and commercialization of new products or services, and improvements to our existing products, and related impacts on our profitability and cash position;
- the accelerating commercial opportunity for exoskeleton technology adoption;
- our ability to effectively market and sell our products and expand our business, both in unit sales and product diversification;
- our ability to achieve broad customer adoption of our products and services;
- our ability to establish, manage, achieve anticipated synergies and benefits of, and maintain our current and future collaborations, joint ventures or partnerships;
- our ability to complete clinical trials on a timely basis and that completed clinical trials will be sufficient to support commercialization of our products;
- existing or increased competition;
- · rapid changes in technological solutions available to our markets;
- volatility with our business, including long and variable sales cycles, which could have a negative impact
 on our results of operations for any given quarter or fiscal year;
- · our ability to obtain or maintain patent protection for our intellectual property;
- the scope, validity and enforceability of our and third party intellectual property rights;
- significant government regulation of medical devices and the healthcare industry;
- · our customers' ability to get third party reimbursement for our products and services associated with them;
- our ability to receive regulatory clearance from certain government authorities, such as the Committee on Foreign Investment in the United States, including any conditions, limitations or restrictions placed on such approvals;
- our failure to implement our business plan or strategies;
- our early termination of leases, difficulty filling vacancies or negotiating improved lease terms;
- our ability to retain or attract key employees;

S-iv

- stock volatility or illiquidity;
- our ability to meet the listing requirements of the Nasdaq Capital Market ("Nasdaq");
- · our ability to maintain adequate internal controls over financial reporting;
- our dividend policy;
- the use of proceeds from, the timing of, and our ability to successfully complete this offering; and
- overall economic and market conditions.

These statements are based on current expectations, assumptions, assessments, estimates, forecasts and projections about our business and the industry in which we operate made by our management in light of its experience and its perception of historical trends, current conditions, expected future developments and other factors our management believes to be appropriate. These forward-looking statements are subject to a number of known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this prospectus may turn out to be inaccurate. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk Factors" and elsewhere in this prospectus. Potential investors are urged to consider these factors carefully in evaluating the forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. Given these risks and uncertainties, you are cautioned not to rely on such forward-looking statements as predictions of future events. You should, however, review the factors and risks we describe in the reports we will file from time to to time with the Securities and Exchange Commission (the "SEC") after the date of this prospectus. See "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference."

PROSPECTUS SUPPLEMENT SUMMARY

The following summary provides a general overview of selected information contained elsewhere in this prospectus supplement, the accompanying base prospectus, any free writing prospectus that we have been authorized to use and the documents incorporated by reference herein and in the accompanying base prospectus. This summary does not contain all of the information you should consider before buying our Common Stock and the warrants. Therefore, you should read the entire prospectus supplement, accompanying base prospectus and any free writing prospectus that we have authorized for use in connection with this offering carefully, including the information incorporated by reference, before deciding to invest in our Common Stock and the warrants. Investors should carefully consider the information set forth under "Risk Factors" beginning on page S-5 and other risk factors incorporated by reference to our <u>Annual Report on Form 10-K for the year ended December 31, 2018</u> and Ouarterly Report on our Form 10-O for the quarter ended September 30, 2019.

Overview

We design, develop and sell exoskeleton technology to augment human strength, endurance and mobility. Our exoskeleton technology serves multiple markets and can be used both by able-bodied persons as well as by persons with physical disabilities. We have sold or leased devices that (i) enable individuals with neurological conditions affecting gait (stroke and spinal cord injury) to rehabilitate, and in some cases, to walk again, (ii) assist individuals with a broad range of upper extremity impairments, and (iii) allow industrial workers to perform difficult repetitive work for extended periods.

In August 2019, we introduced our next generation lower extremity rehabilitation exoskeleton, EksoNR, which succeeds our EksoRT. Our EksoNR, is used as a rehabilitation tool to allow physicians and therapists to rehabilitate patients who have suffered a stroke or spinal cord injury. With its unique features designed specifically for hospitals and its proprietary SmartAssist software, EksoNR allows for the early mobilization of patients, enabling increased endurance during rehabilitation sessions through higher step counts and for longer periods. The intent is to allow the patient's central nervous system to take advantage of a person's neuroplasticity to maximize a patient's recovery.

In July 2019, we announced the expansion of our medical exoskeleton portfolio with an upper extremity rehabilitation device called EksoUE. EksoUE's wearable upper body exoskeleton assists patients with a broad range of upper extremity impairments and aims to provide them with a wider active range of motion and increased endurance for rehabilitation sessions of higher intensity.

For able-bodied industrial workers, we introduced a second commercial product for industrial applications in 2017, the EksoVest, an upper body exoskeleton that elevates and supports a worker's arms to assist them with tasks ranging from chest height to overhead. It is lightweight and low profile, making it comfortable to wear in all conditions while enabling freedom of motion. The goal is for workplaces with the EksoVest to experience fewer on-site injuries while tasks are completed faster and with higher quality results, for workers to stay healthier and experience increased stamina, and for companies to gain greater productivity in factories and on construction sites. In 2019, we have focused on increasing sales of the EksoVest and the support arm, EksoZeroG, by pursuing alternative channels, such as rental agreements with construction equipment and heavy tool providers and working with automotive and related manufacturers to roll out our product(s) globally within their assembly operations. In addition, we believe there is additional mid-to-long-term potential in the industrial markets, and accordingly, we will continue our development efforts to expand our EksoWorks product offerings.

We believe the commercial opportunity for exoskeleton technology adoption is accelerating as a result of recent advancements in material technologies, electronic and electrical engineering, control technologies, and sensor and software development. Taken individually, many of these advancements have become ubiquitous in peoples' everyday lives. We believe that we have learned how to integrate these existing technologies and wrap the result around a human being efficiently, elegantly and safely, supported by an industry leading intellectual property portfolio. We further believe that we can do so across a broad spectrum of applications, from persons with lower limb paralysis to able-bodied users.

Additional details of these programs and related strategic agreements are contained in our Annual Report on Form 10-K for the year ended December 31, 2018 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2019.

Corporate Information

Our corporate headquarters are located at 1414 Harbour Way South, Suite 1201, Richmond, California. Our telephone number is (510) 984-1761, and our website address is www.eksobionics.com. Our official Twitter account is @EksoBionics. The information on or accessible through our website or our Twitter account does not constitute part of this prospectus supplement or the accompanying prospectus and should not be relied upon in connection with making any investment in our securities.

Our Common Stock is listed on Nasdaq under the symbol "EKSO."

-	below solely for convenience. For a more complete description of the ton entitled "Description of Common Stock" in the accompanying
Issuer	Ekso Bionics Holdings, Inc.
Common Stock Offered by Us	11,111,116 shares of Common Stock.
Warrants Offered By Us	We are offering Investor Warrants to purchase up to 8,333,337 shares of our Common Stock (and the shares of Common Stock issuable upon the exercise of the Investor Warrants). Each Investo Warrant have an exercise price of \$0.5402 per share of Common Stock, subject to adjustment, will be exercisable commencing six months and one day after the date of issuance, and will have a term of five years from the day the warrants become exercisable. Notwithstanding the foregoing, the holder will be prohibited from exercising each warrant if, as a result of such exercise, the holder, together with its affiliates, would beneficially own more than 4.99% of the total number of shares of our Common Stock then issued and outstanding, provided that this limitation may be increased to 9.99% upon written notice to us. The shares of Common Stock and the Investor Warrants will be sold in combination, with one Investor Warrants to purchase 0.75 shares of our Common Stock accompanying each share of Common Stock sold, except as may be otherwise elected by the purchasers thereof Subject to applicable laws, the warrants are separately tradeable immediately after issuance at the option of the holder thereof and may be transferred at the option of such holder. However, the warrants can only be purchased together with our Common Stock in this offering.
	We will also issue Placement Agent Warrants to purchase up to 777,778 shares of our Common Stock (and the shares of Common Stock issuable upon the exercise of the Placement Agent Warrants to our placement agent (or its designees) as part of the compensation payable to our placement agent in connection with this offering. The Placement Agent Warrants will be substantially on the same terms as the Investor Warrants, except that the Placement Agent Warrants will have an exercise price of \$0.5625 per share of Common Stock, subject to adjustment, and a term of five years from the effective date of this offering.
	For more information, see the section entitled "Description of the Securities We are Offering" on page S- $\underline{14}$ of this prospectus supplement.
Public offering price per share of Common Stock and accompanying Investor Warrant	\$0.45 per share of our Common Stock and accompanying Investor Warrant.
Common Stock to Be Outstanding Immediately after this Offering ⁽¹⁾	86,063,663 shares of Common Stock (assuming none of the Warrants issued in this offering are exercised).

Use of Pro	oceeds	We intend to use the net proceeds from this offering, if any, from the sale of the shares of Common Stock and Warrants in this offering for general corporate purposes, which may include acquisitions, research and development activities, capital expenditures, selling, general and administrative costs, facilities expansion, and to meet working capital needs. See "Use of Proceeds" on page S- <u>10</u> of this prospectus supplement.
Dividend p	policy	We do not anticipate paying any cash dividends on our Common Stock in the foreseeable future.
Risk Facto	ors	Investing in our Common Stock involves a high degree of risk. See "Risk Factors" beginning on page $S-\underline{5}$ of this prospectus supplement and other information included or incorporated by reference in this prospectus supplement and the accompanying base prospectus for a discussion of factors that you should consider carefully before deciding to invest in our Common Stock.
Market foi	r the warrants	There is no established public trading market for the Warrants, and a market may never develop. We do not intend to list the Warrants on Nasdaq, any other national securities or other nationally recognized trading system.
	apital Markets Symbol	EKSO
(1) The nu of our such d • 7 a a	umber of shares of our Common S Common Stock outstanding as of date: 7,484,035 shares of Common Stoc average exercise price of \$3.00 pe and settlement of restricted stock u	EKSO Stock to be outstanding after this offering is based on 74,952,547 shares f September 30, 2019, and excludes the following, in each case as of k issuable upon the exercise of stock options outstanding at a weighted r share, 1,327,556 shares of Common Stock issuable upon the vesting mits outstanding, and 2,133,649 shares of our Common Stock available nd Restated 2014 Equity Incentive Plan ("2014 Incentive Plan");
 The model of our such d 7 a a fi 5 	umber of shares of our Common S Common Stock outstanding as of date: 7,484,035 shares of Common Stoc average exercise price of \$3.00 pe and settlement of restricted stock u for issuance under our Amended a	Stock to be outstanding after this offering is based on 74,952,547 shares f September 30, 2019, and excludes the following, in each case as of ek issuable upon the exercise of stock options outstanding at a weighted er share, 1,327,556 shares of Common Stock issuable upon the vesting inits outstanding, and 2,133,649 shares of our Common Stock available
 The model of our such d 7 a a fi 5 P 6 V 0 d 	umber of shares of our Common S Common Stock outstanding as of date: 7,484,035 shares of Common Stoc average exercise price of \$3.00 pe and settlement of restricted stock u for issuance under our Amended a 500,000 shares of our Common St Plan ("ESPP"); 5,666,667 shares of Common Stoc Warrants") at a weighted exercise dilution adjustment of such warran	Stock to be outstanding after this offering is based on 74,952,547 shares f September 30, 2019, and excludes the following, in each case as of ek issuable upon the exercise of stock options outstanding at a weighted er share, 1,327,556 shares of Common Stock issuable upon the vesting units outstanding, and 2,133,649 shares of our Common Stock available nd Restated 2014 Equity Incentive Plan ("2014 Incentive Plan");
 (1) The mu of our such d 7 a a fi 5 F 6 V d W d 2 	umber of shares of our Common S Common Stock outstanding as of date: 7,484,035 shares of Common Stoc average exercise price of \$3.00 pe and settlement of restricted stock u for issuance under our Amended a 500,000 shares of our Common Sto Plan ("ESPP"); 5,666,667 shares of Common Stoc Warrants") at a weighted exercise dilution adjustment of such warrant 'Description of Securities We Are	Stock to be outstanding after this offering is based on 74,952,547 shares f September 30, 2019, and excludes the following, in each case as of ek issuable upon the exercise of stock options outstanding at a weighted or share, 1,327,556 shares of Common Stock issuable upon the vesting units outstanding, and 2,133,649 shares of our Common Stock available nd Restated 2014 Equity Incentive Plan ("2014 Incentive Plan"); ock available for issuance under our 2017 Employee Stock Purchase ek issuable upon the exercise of warrants outstanding (the "May 2019 price of \$2.00 per share prior to giving effect to the price-based anti- tts as a result of this offering, as more fully described under
 (1) The mu of our such d 7 a a ff 5 P 6 W d 6 W d 7 2 e 1 	umber of shares of our Common S Common Stock outstanding as of date: 7,484,035 shares of Common Stoc average exercise price of \$3.00 pe and settlement of restricted stock u for issuance under our Amended a 500,000 shares of our Common Stoc Plan ("ESPP"); 5,666,667 shares of Common Stoc Warrants") at a weighted exercise dilution adjustment of such warrar 'Description of Securities We Are 200,000 shares of Common Stock exercise price of \$1.50 per share;	Stock to be outstanding after this offering is based on 74,952,547 shares f September 30, 2019, and excludes the following, in each case as of ek issuable upon the exercise of stock options outstanding at a weighted or share, 1,327,556 shares of Common Stock issuable upon the vesting units outstanding, and 2,133,649 shares of our Common Stock available nd Restated 2014 Equity Incentive Plan ("2014 Incentive Plan"); ock available for issuance under our 2017 Employee Stock Purchase ek issuable upon the exercise of warrants outstanding (the "May 2019 price of \$2.00 per share prior to giving effect to the price-based anti- tts as a result of this offering, as more fully described under offering — Warrants — General"; issuable upon the exercise of warrants outstanding at a weighed ek issuable upon the exercise of warrants outstanding at a weighed
 (1) The mu of our such d 7 a a ff 5 F 6 6 V 4 d 2 e 1 e 8 8 	umber of shares of our Common S Common Stock outstanding as of late: 7,484,035 shares of Common Stoc average exercise price of \$3.00 pe and settlement of restricted stock u for issuance under our Amended a 500,000 shares of our Common St Plan ("ESPP"); 5,666,667 shares of Common Stoc Warrants") at a weighted exercise dilution adjustment of such warrant 'Description of Securities We Are 200,000 shares of Common Stock exercise price of \$1.50 per share; 1,603,442 shares of Common Stoc exercise price of \$2.75 per share; a	Stock to be outstanding after this offering is based on 74,952,547 shares f September 30, 2019, and excludes the following, in each case as of ek issuable upon the exercise of stock options outstanding at a weighted or share, 1,327,556 shares of Common Stock issuable upon the vesting units outstanding, and 2,133,649 shares of our Common Stock available nd Restated 2014 Equity Incentive Plan ("2014 Incentive Plan"); ock available for issuance under our 2017 Employee Stock Purchase ek issuable upon the exercise of warrants outstanding (the "May 2019 price of \$2.00 per share prior to giving effect to the price-based anti- tts as a result of this offering, as more fully described under offering — Warrants — General"; issuable upon the exercise of warrants outstanding at a weighed ek issuable upon the exercise of warrants outstanding at a weighed

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the specific risks described below and discussed under the section captioned "Risk Factors" contained in our <u>Annual Report on</u> Form 10-K for the year ended December 31, 2018 and our <u>Quarterly Report on Form 10-Q</u> for the quarter ended <u>September 30, 2019</u>, each as updated by our subsequent filings under the Exchange Act, each of which is incorporated by reference in this prospectus in their entirety, together with other information in this prospectus, and the information and documents incorporated by reference in this prospectus on with this offering before you make a decision to invest in our securities. See the sections of this prospectus entitled "Where You Can Find More Information" and "Incorporated herein by reference in this prospectus could materially and adversely affect our business, financial condition or operating results. The market price of our Common Stock could decline if one or more of these risks and uncertainties develop into actual events. You could lose all or part of your investment. The risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business operations.

Risks Related to This Offering

Management will have broad discretion as to the use of proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not increase the value of your investment.

Our management will have broad discretion over the use of proceeds from this offering, including for any of the purposes described in the section of this prospectus entitled "Use of Proceeds," and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our Common Stock. Accordingly, you will be relying on the judgment of our management with regard to the use of net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. You may not agree with our decisions, and our use of the proceeds may not yield any return on your investment. Our failure to apply the net proceeds from this offering effectively could have a material adverse effect on our business, delay the development of our products, compromise our ability to pursue our business strategy, and cause the price of our Common Stock to decline, and we might not be able to yield a significant return, if any, on our investment of these net proceeds. In additional resources to progress our product candidates to the stage we expect. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

You could lose all of your investment.

An investment in our Common Stock is speculative and involves a high degree of risk. Potential investors should be aware that the value of an investment in us may go down as well as up. In addition, there can be no certainty that the market value of an investment in us will fully reflect its underlying value. You could lose your entire investment.

There is no public market for the Warrants to purchase shares of Common Stock being offered in this offering.

There is no established public trading market for the Warrants, and we do not expect a market to develop. In addition, we do not intend to apply to list the Warrants on any national securities exchange or other nationally recognized trading system, including Nasdaq. Without an active market, the liquidity of the Warrants will be limited.

The Warrants are a risky investment. You may not be able to recover your investment in the Warrants, and the Warrants may expire worthless.

Whether the Warrants will have any value will depend on, among other things, the commercial success of our products, the development of our clinical product candidates, our business development efforts and market conditions generally, which conditions will depend on factors related and unrelated to the success of our products, our product candidates and our business development efforts, and cannot be predicted at this time.



If our Common Stock price does not increase to an amount sufficiently above the exercise price of the Warrants during the period the Warrants are exercisable, you will be unable to recover any of your investment in the Warrants. There can be no assurance that any of the factors that could impact the trading price of our Common Stock will result in the trading price increasing to an amount that will exceed the exercise price or the price required for you to achieve a positive return on your investment in the Warrants.

Holders of the Warrants will have no voting rights as Common Stockholders until they acquire our Common Stock.

Until you acquire shares of our Common Stock upon exercise of the Warrants, you will have no voting rights with respect to our Common Stock issuable upon exercise of the Warrants. Upon exercise of your Warrants, you will be entitled to exercise all the voting rights of a Common Stockholder only as to matters for which the record date occurs after the exercise date.

If you purchase shares of our Common Stock and Warrants in this offering, you will experience immediate and substantial dilution in the net tangible book value of your shares and the shares underlying the Warrants.

If you purchase shares of our Common Stock in this offering, or if you obtain shares upon exercise of the Warrants, you will experience immediate and substantial dilution, as the public offering price of our Common Stock and the Investor Warrants, and the exercise price of the Warrants, will be substantially greater than the net tangible book value per share of our Common Stock and accompanying Investor Warrant. Based on the public offering price of \$0.45 per share of our Common Stock and accompanying Investor Warrant and attributing no value to the Investor Warrants for purposes of such calculations, if you purchase our Common Stock and accompanying Investor Warrant and attributing no value to the Investor Warrant in this offering, you will suffer immediate and substantial dilution of approximately \$0.33 per share. In addition, if the holders of the Investor Warrants sold in this offering exercise such Investor Warrants, or if outstanding options and warrants to purchase our Common Stock are exercised, or if the outstanding restricted stock units are settled for shares of our Common Stock, you will experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section entitled "Dilution."

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our Common Stock or other securities convertible into or exchangeable for our Common Stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share and Warrant paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders and Warrant holders. The price per share at which we sell additional shares of our Common Stock or other securities convertible into or exchangeable for Common Stock in future transactions may be higher or lower than the price per share and Warrant in this offering. A significant portion of our total outstanding shares are eligible to be sold into the market, which could cause the market price of our Common Stock to drop significantly, even if our business is doing well.

The May 2019 Warrants contain anti-dilution provisions, which may affect our ability to secure future equity financing or reduce the proceeds of any equity financings that would otherwise be available to us.

The May 2019 Warrants contain anti-dilution provisions, which provide that, with certain exceptions, any new issuances of Common Stock or securities convertible into Common Stock at a price, exercise price or conversion price below the exercise price of the warrants in effect at such time will result in the exercise price of the warrants being reduced to the purchase price, exercise price or conversion price, as applicable, of such newly issued securities. These anti-dilution provisions may affect our ability to secure future equity financing or reduce the proceeds of any equity financings that would otherwise be available to us.

Significant holders or beneficial holders of our Common Stock may not be permitted to exercise Warrants that they hold.

The warrant agreements governing the Warrants will prohibit a holder from exercising its Warrants, if doing so would result in such holder (together with such holder's affiliates and any other persons acting as a group together with such holder or any of such holder's affiliates) beneficially owning more than 4.99% of

our Common Stock outstanding immediately after giving effect to the exercise, provided that, at the election of a holder and notice to us, such beneficial ownership limitation may be increased or decreased to a percentage not to exceed 9.99% of our Common Stock outstanding immediately after giving effect to the exercise. As a result, if you hold a significant amount of our securities, you may not be able to exercise your Warrants for shares of our Common Stock, in whole or in part, at a time when it would be financially beneficial for you to do so.

Sales of a substantial number of shares of our Common Stock, including by us or our directors, officers and certain existing investors following expiration or early release of the 45-day lock-up, in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of our Common Stock intend to sell shares, could cause the market price of our Common Stock to decline significantly.

Sales of substantial amounts of our Common Stock in the public market, or the availability of such shares for sale, by us or others, including the issuance of Common Stock upon exercise of outstanding options or warrants, could adversely affect the price of our Common Stock. Upon completion of this offering, based on 74,952,547 shares of our Common Stock outstanding as of September 30, 2019 and the public offering price of \$0.45 per share and accompanying Investor Warrant, we will have outstanding a total of approximately 86,063,663 shares of Common Stock (assuming no exercise of the Warrants sold in this offering). In connection with this offering, we have agreed not to sell new securities, other than excluded issuances, for a period of 45 days following this offering. In addition, other than any shares held by our directors, officers and certain existing investors, all shares of our Common Stock are currently freely tradable, and the shares to be sold in this offering, plus any shares issued upon exercise of the Warrants sold in this offering, without restriction, in the public market immediately following this offering.

As of September 30, 2019, we had an aggregate of approximately: (i) 7,484,035 shares of Common Stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$3.00 per share, 1,327,556 shares of Common Stock issuable upon the vesting and settlement of restricted stock units outstanding, and 2,133,649 shares of our Common Stock available for issuance under our 2014 Incentive Plan; (ii) 500,000 shares of our Common Stock available for issuance under our ESPP; (iii) 6,666,667 shares of Common Stock issuable upon the exercise price of \$2.00 per share; (iv) 200,000 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighted exercise price of \$1.50 per share; (v) 1,603,442 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise of warrants outstanding at a weighed exercise of \$2.75 per share; and (vi) 88,368 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise of warrants outstanding at a weighed exercise of \$2.75 per share; and (vi) 88,368 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise of warrants outstanding at a weighed exercise of \$2.75 per share; and (vi) 88,368 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise of \$2.75 per share; and (vi) 88,368 shares of Common Stock issuable upon the exercise of \$2.75 per share; and (vi) 88,368 shares of Common Stock issuable upon the exercise of \$2.75 per share; and (vi) 88,368 shares of Common Stock issuable upon the exercise of \$2.75 per share; and (vi) 88,368 shares of Common Stock issuable upon the exercise of \$2.75 per share; and (vi) \$2.75 per share.

We may not have sufficient resources to repurchase the Warrants.

Under certain circumstances, if a "Fundamental Transaction" (as defined in the warrant agreements) occurs, holders of the Warrants may require us or our successor entity in such transaction to repurchase the remaining unexercised portion of such Warrants for an amount of cash equal to the value of the Warrant as determined in accordance with the Black Scholes option pricing model and the terms of the Warrants. Our or such successor entity's ability to repurchase the Warrants upon such an event will depend on our or such successor entity's available cash resources at such time, which will also be subject to general economic, financial, competitive, legislative and regulatory factors and other factors that are beyond our control. We cannot assure you that we will maintain sufficient cash reserves or that our business will generate cash flow from operations at levels sufficient to permit us to repurchase the Warrants.

Our outstanding warrants may have an adverse effect on the market price of our Common Stock and make it more difficult to effect a business combination.

To the extent we issue shares of Common Stock to effect a future business combination, the potential for the issuance of a substantial number of additional shares upon exercise of the warrants could make us a less attractive acquisition vehicle in the eyes of a target business. Such securities, when exercised, will increase the number of issued and outstanding shares of our Common Stock and reduce the value of the shares issued to complete the business combination. Accordingly, the Warrants may make it more difficult

to effectuate a business combination or increase the cost of acquiring a target business. Additionally, the sale, or even the possibility of sale, of the shares of our Common Stock underlying the Warrants could have an adverse effect on the market price for our securities or on our ability to obtain future financing. If and to the extent the Warrants are exercised, you may experience dilution to your holdings.

Sales of a significant number of shares of our Common Stock in the public markets, or the perception that such sales could occur, could depress the market price of our Common Stock.

The operation of our business and our growth efforts will require significant cash outlays and advance capital equipment expenditures and commitments. We have been largely dependent on capital raised through the sale of equity securities in various public and private offerings, and going forward will be largely dependent on capital raised in any future offerings, to implement our business plan and support our operations. We cannot predict the size of any future equity offerings or the effect, if any, that future sales and issuances of shares of our Common Stock will have on the market price of our Common Stock. Sales of substantial amounts of our Common Stock (including shares issued upon the exercise of stock options and warrants), or the perception that such sales could occur, may adversely affect prevailing market prices for our Common Stock. In addition, these sales may be dilutive to existing stockholders.

The market price of our Common Stock has been, and may continue to be, highly volatile, and such volatility could cause the market price of our Common Stock to decrease and could cause you to lose some or all of your investment in our Common Stock.

During the period from our initial listing on Nasdaq on August 9, 2016 through September 30, 2019, the closing price of our Common Stock fluctuated from a high of \$7.12 per share to a low of \$0.51 per share, and our stock price continues to fluctuate. The market price of our Common Stock may continue to fluctuate significantly in response to numerous factors, some of which are beyond our control, such as:

- our ability to grow our revenue and customer base;
- the announcement of new products or product enhancements by us or our competitors;
- · developments concerning regulatory oversight and approvals;
- variations in our and our competitors' results of operations;
- changes in earnings estimates or recommendations by securities analysts, if our Common Stock is covered by analysts;
- · successes or challenges in our collaborative arrangements or alternative funding sources;
- developments in the rehabilitation and industrial robotics markets;
- the results of product liability or intellectual property lawsuits;
- future issuances of Common Stock or other securities;
- the addition or departure of key personnel;
- · announcements by us or our competitors of acquisitions, investments or strategic alliances; and
- general market conditions and other factors, including factors unrelated to our operating performance.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change" (generally defined as a greater than 50 percentage point change (by value) in the ownership of its equity by certain significant stockholders over a rolling three-year period), the corporation's ability to use its pre-change net operating loss carryforwards and certain other pre-change tax attributes to offset its post-change income or tax liability may be limited. We have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of this



offering and/or subsequent shifts in our stock ownership, some of which may be outside our control. Because our ability to use our net operating loss carryforwards and other tax attributes is limited by ownership changes, we may be unable to utilize a material portion of our net operating losses and other tax attributes.

The risks above do not necessarily comprise all of those associated with an investment in us. This prospectus contains forward-looking statements that involve unknown risks, uncertainties and other factors that may cause our actual results, financial condition, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Factors that might cause such a difference include, but are not limited to, those set out above.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of 11,111,116 shares of our Common Stock and the Warrants in this offering will be approximately \$4,410,002.03, after deducting the placement agent fees and estimated offering expenses payable by us. The above does not give effect to any exercise of the Warrants sold in this offering or the receipt of proceeds from such exercises.

We currently intend to use the net proceeds, if any, from this offering for general corporate purposes, which may include acquisitions, research and development activities, capital expenditures, selling, general and administrative costs, facilities expansion, and to meet working capital needs. We expect from time to time to evaluate the acquisition of businesses, products and technologies for which a portion of the net proceeds may be used.

The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the amount and timing of the proceeds from this offering and progress with the achievement of our corporate goals. Expenditures will also depend upon the establishment and maintenance of manufacturing and supply chains, the availability of additional financing and other factors. We, therefore, cannot estimate with certainty the amount of net proceeds to be used for the purposes described above. We may find it necessary or advisable to use the net proceeds from this offering for other purposes, and we will have broad discretion in the application of the net proceeds. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of shares of our Common Stock.

Pending the use of the net proceeds from this offering as described above, we may invest the net proceeds in a variety of capital preservation investments, including short- and intermediate-term, interest-bearing obligations, investment-grade instruments or U.S. government securities.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of September 30, 2019:

- on an actual basis; and
- on an adjusted basis to give effect to the issuance and sale by us of 11,111,116 shares of our Common Stock and up to 9,111,115 Warrants (but assuming no exercise of such Warrants) in this offering at a public offering price of \$0.45 per share and accompanying Investor Warrant, and after deducting the placement agent fees and estimated offering expenses payable by us.

You should read this information together with our financial statements and related notes incorporated by reference in this prospectus. For more details on how you can obtain our SEC reports and other information, you should read the sections of this prospectus supplement entitled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference."

		As of Septe	mber	30, 2019
(In thousands, except per share information)			adjusted his offering	
Cash and cash equivalents	\$	8,058	\$	12,468
Long-term debt, net	\$	3,305	\$	3,305
Stockholders' equity				
Convertible preferred stock, \$0.001 par value; 10,000 shares authorized; none issued and outstanding		_		_
Common Stock, \$0.001 par value; 141,429 shares authorized; 74,953 shares issued and outstanding, actual, 86,064 shares issued and outstanding, as adjusted		75		86
Additional paid-in capital	(186,629)		(191,028)
Accumulated other comprehensive income (loss)		(274)		(274)
Accumulated deficit	(180,557)		(180,557)
Total stockholders' equity		6,421		10,831
Total capitalization	\$	9,726	\$	14,136

The number of shares of our Common Stock to be outstanding after this offering is based on 74,952,547 shares of our Common Stock outstanding as of September 30, 2019, and excludes the following, in each case as of such date:

- 7,484,035 shares of Common Stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$3.00 per share, 1,327,556 shares of Common Stock issuable upon the vesting and settlement of restricted stock units outstanding, and 2,133,649 shares of our Common Stock available for issuance under our 2014 Incentive Plan;
- 500,000 shares of our Common Stock available for issuance under our ESPP;
- 6,666,667 shares of Common Stock issuable upon the exercise of the May 2019 Warrants at a weighted
 exercise price of \$2.00 per share prior to giving effect to the price-based anti-dilution adjustment of such
 warrants as a result of this offering, as more fully described under "Description of Securities We Are
 Offering Warrants General";
- 200,000 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise price of \$1.50 per share;
- 1,603,442 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise price of \$2.75 per share; and
- 88,368 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise price of \$9.66 per share.



DILUTION

If you invest in our Common Stock and the Warrants in this offering, your interest will be immediately diluted to the extent of the difference between the public offering price per share of our Common Stock and accompanying Investor Warrant in this offering and the net tangible book value per share of our Common Stock after this offering. As of September 30, 2019, we had a historical net tangible book value of \$6.2 million, or \$0.08 per share of Common Stock. Our net tangible book value represents our total assets, excluding intangible assets, less our total liabilities, divided by the number of shares of Common Stock outstanding on September 30, 2019.

After giving effect to the issuance and sale of shares of Common Stock and the Investor Warrants in this offering at the public offering price of \$0.45 per share of our Common Stock and accompanying Investor Warrant and attributing no value to the Warrants for purposes of such calculations (and excluding shares of our Common Stock to be issued upon exercise of the Warrants and any proceeds to us in respect of such issuances), and after deducting the placement agent fees and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2019 would have been approximately \$10.7 million, or \$0.12 per share. This represents an immediate increase in as adjusted net tangible book value of \$0.04 per share to existing stockholders and an immediate dilution in net tangible book value of \$0.33 per share to new investors purchasing our Common Stock and the Investor Warrants in this offering. The following table illustrates this dilution on a per share basis:

Offering price per share and accompanying warrant ⁽¹⁾		\$0.45
Historical net tangible book value per share as of September 30, 2019	\$0.08	
Increase per share attributable to new investors	\$0.04	
As adjusted net tangible book value per share as of September 30, 2019, after giving effect to this		
offering		\$0.12
Dilution per share to new investors purchasing our Common Stock and warrants in this offering		\$0.33

(1) No value is attributed to the warrants for purposes of these calculations.

To the extent that outstanding options or warrants are exercised or outstanding restricted stock units are settled for shares of our Common Stock, investors purchasing our Common Stock in this offering will experience further dilution. In addition, 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 stockholders.

The number of shares of our Common Stock to be outstanding after this offering is based on 74,952,547 shares of our Common Stock outstanding as of September 30, 2019, and excludes the following, in each case as of such date:

- 7,484,035 shares of Common Stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of \$3.00 per share, 1,327,556 shares of Common Stock issuable upon the vesting and settlement of restricted stock units outstanding, and 2,133,649 shares of our Common Stock available for issuance under our 2014 Incentive Plan;
- 500,000 shares of our Common Stock available for issuance under our ESPP;
- 6,666,667 shares of Common Stock issuable upon the exercise of the May 2019 Warrants at a weighted
 exercise price of \$2.00 per share prior to giving effect to the price-based anti-dilution adjustment of such
 warrants as a result of this offering, as more fully described under "Description of Securities We Are
 Offering Warrants General";
- 200,000 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise price of \$1.50 per share;
- 1,603,442 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise price of \$2.75 per share; and
- 88,368 shares of Common Stock issuable upon the exercise of warrants outstanding at a weighed exercise price of \$9.66 per share.



DIVIDEND POLICY

We have never declared or paid cash dividends on our Common Stock and do not intend to pay cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, restrictions imposed by financing arrangements, if any, legal and regulatory restrictions on the payment of dividends, current and anticipated cash needs and other factors the board of directors deems relevant.

Our loan and security agreement with Western Alliance Bank contains a restrictive covenant that prohibits us and our subsidiaries, subject to certain exceptions, from paying dividends or making any other distribution or payment with respect to our capital stock.

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

Common Stock

We are authorized to issue 141,428,571 shares of common stock, par value \$0.001 per share. On September 30, 2019, 2019, we had 74,952,547 shares of common stock outstanding. The following summary of certain provisions of our common stock does not purport to be complete. You should refer to our articles of incorporation and our bylaws, both of which are included as exhibits to the registration statement of which this prospectus is a part. This summary is also qualified by provisions of applicable law.

General. The holders of outstanding shares of common stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends of such times and in such amounts as the board from time to time may determine. Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. There is no cumulative voting of the election of directors then standing for election. The common stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of our company, the assets legally available for distribution to stockholders are distributable ratably among the holders of the common stock after payment of liquidation preferences, if any, on any outstanding payment of other claims of creditors. Each outstanding share of common stock are described under the heading "Description of Common Stock" starting on page 8 of the accompanying base prospectus.

Transfer Agent and Registrar. The transfer agent and registrar for our Common Stock is VStock Transfer, LLC. The transfer agent's address is 18 Lafayette Place, Woodmere, New York 11598 and its telephone number is (212) 828-8436.

Listing. Our Common Stock is listed on Nasdaq under the symbol "EKSO."

Warrants

The following is a brief summary of certain terms and conditions of the Warrants and certain other outstanding warrants and is subject in all respects to the provisions contained in the applicable Warrants. You should review a copy of the form of Investor Warrant or Placement Agent Warrant, as applicable, for a complete description of the terms and conditions applicable to such Warrants.

Investor Warrants

The material terms and provisions of the Investor Warrants to purchase 8,333,337 shares of Common Stock being offered pursuant to this prospectus supplement and the accompanying base prospectus are summarized below. This summary is subject to and qualified in its entirety by the form of Investor Warrant, which will be provided to each investor in this offering and will be filed with the SEC on a current report on Form 8-K in connection with this offering.

Exercise Price. The exercise price per whole share of Common Stock purchasable upon exercise of the Investor Warrants is \$0.5402. The exercise price of the Investor Warrants is subject to adjustment in the event of, among other things, certain stock dividends and distributions, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our Common Stock and also upon any distribution of assets, including cash, stock or other property, to our stockholders.

Exercisability. The Investor Warrants will be exercisable commencing six months and one day after the date of issuance and will expire on the date that is five years from the date when the Investor Warrants become first exercisable. The Investor Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and payment in full of the exercise price by the Warrant Share Delivery Date (as defined in the Investor Warrant). If a registration statement registering the issuance of the shares of Common Stock underlying the Investor Warrants under the Securities Act is not effective or available, the holder may, in its sole discretion, elect to exercise the Investor Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of

Common Stock determined according to the formula set forth in the Investor Warrants. No fractional shares of Common Stock will be issued in connection with the exercise of an Investor Warrant and the Company shall round up to the next whole share, if applicable.

Exercise Limitation. A holder will not have the right to exercise any portion of the Investor Warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our Common Stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Investor Warrants. However, a holder may increase or decrease such percentage to any other percentage not in excess of 9.99% upon notice to us, provided that any increase in the beneficial ownership limitation shall not be effective until 61 days following notice to us.

<u>Cashless Exercise</u>. If, at the time a holder exercises its Investor Warrants, a registration statement registering the issuance of the shares of Common Stock underlying the Investor Warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect to instead receive upon such exercise (either in whole or in part) the net number of Shares of Common Stock determined according to a formula set forth in the Investor Warrant. The Investor Warrants will be automatically exercised on a cashless basis on the expiration date of such Investor Warrant.

<u>Transferability</u>. Subject to applicable laws, the Investor Warrants, in whole or in part, may be offered for sale, sold, transferred or assigned without our consent. The Investor Warrants will be issued separately from the Common Stock pursuant to this offering and may be transferred separately immediately thereafter.

Exchange Listing. We do not plan on applying to list the Investor Warrants on Nasdaq or any other national securities exchange or any other nationally recognized trading system.

<u>Fundamental Transactions</u>. In the event of a fundamental transaction, as described in the Investor Warrants and generally including any (i) merger or consolidation with or into another person, (ii) the sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of our assets, (iii) the completion of a purchase, tender or exchange offer pursuant to which holders of our Common Stock are permitted to sell, transfer or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of our outstanding Common Stock, (iv) the reclassification, reorganization, or recapitalization of Common Stock, or the (v) the entry into a share purchase agreement or other business combination, including a reorganization, recapitalization, spin-off, merger or scheme of arrangement, with any person or group whereby such person or group acquires more than 50% of the outstanding shares of Common Stock , the holders of the Investor Warrants will be entitled to receive upon exercise of the Investor Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Investor Warrants immediately prior to such fundamental transaction. Alternatively, in the event of a fundamental transaction, at the holder's election, the Company will purchase the Investor Warrant from the holder for an amount in cash equal to the Black Scholes value of such Investor Warrant.

<u>Rights as a Stockholder</u>. Except as otherwise provided in the Investor Warrants or by virtue of such holder's ownership of shares of our Common Stock, the holder of an Investor Warrant does not have the rights or privileges of a holder of our Common Stock, including any voting rights, until the holder exercises the Investor Warrant.

<u>Amendments</u>. The Investor Warrants may be modified or amended with the written consent of the Company and either (i) the holder or (ii) the holders of Investor Warrants issued pursuant to the purchase agreement representing 80% of the shares subject to the Investor Warrants.

Placement Agent Warrants

We have also agreed to issue to the placement agent in the offering the Placement Agent Warrants to purchase up to 777,778 shares of Common Stock, which represent 7.0% of the aggregate number of shares of Common Stock sold in this offering. The summary of material terms and provisions of the Placement Agent Warrants is subject to and qualified in its entirety by the form of Placement Agent Warrant, which will be filed with the SEC on a current report on Form 8-K in connection with this offering.

The Placement Agent Warrants will have substantially the same terms as the Investor Warrants described above, except that the Placement Agent Warrants will have (i) an exercise price of \$0.5625 per share, which represents 125% of the offering price per share and accompanying Investor Warrant in this offering, (ii) will have a term of five years from the effective date of this offering, (iii) will not be transferable for 180 days from the date of effectiveness or commencement of sales of this offering, pursuant to FINRA Rule 5110(g)(1), except in certain circumstances described in the Placement Agent Warrants, and (iv) may be modified or amended with the written consent of the Company and either (A) the holder or the (B) holders of Placement Agent Warrants. Please refer to "Plan of Distribution" for additional information with respect to the Placement Agent Warrants.

General

As of September 30, 2019, warrants to purchase an aggregate of 8,558,477 shares of our Common Stock are issued and outstanding, of which (i) warrants to purchase 6,666,667 shares of Common Stock, or May 2019 Warrants, have an exercise price of \$2.00 per share and expire on May 24, 2024, (ii) warrants to purchase 200,000 shares of Common Stock have an exercise price of \$1.50 per share and expire on September 13, 2020, (iii) warrants to purchase 1,603,442 shares of Common Stock have an exercise price of \$2.75 per share and expire on December 23, 2020, and (iv) warrants to purchase 88,368 shares of Common Stock have an exercise price of \$9.66 per share and expire on May 20, 2020. The May 2019 Warrants include a price-based anti-dilution adjustment provision. Accordingly, as a result of this offering, the exercise price of the May 2019 Warrants will be decreased to a price per share that is equal to the lower of (x) the consideration paid for the securities issued in this offering, or \$0.45 per share, and (y) the lowest one-day volume-weighted average price of our Common Stock on Nasdaq as measured each day during the five (5) trading day period starting on December 19, 2019.

Certain of the warrants may, at the option of the holders, be exercised on a cashless exercise basis, which means that in lieu of paying the aggregate exercise price for the shares being purchased upon exercise of the warrants for cash, the holder will forfeit a number of shares underlying the warrants with a fair market value (as defined in the applicable warrant) equal to such aggregate exercise price. We will not receive additional proceeds to the extent warrants are exercised on a cashless exercise basis.

PLAN OF DISTRIBUTION

Pursuant to an engagement letter agreement, dated as of December 18, 2019 ("engagement letter agreement"), we have engaged H. C. Wainwright & Co., LLC, or the placement agent, to act as our exclusive placement agent in connection with this offering of our shares of Common Stock and Investor Warrants to purchase shares of Common Stock pursuant to this prospectus supplement and accompanying prospectus. Under the terms of the engagement letter agreement, the placement agent has agreed to be our exclusive placement agent, on a reasonable best efforts basis, in connection with the issuance and sale by us of our shares of Common Stock and Investor Warrants in this takedown from our shelf registration statement. The terms of this offering were subject to market conditions and negotiations between us and prospective investors. The engagement letter agreement does not give rise to any commitment by the placement agent to purchase any of our shares of Common Stock or the Investor Warrants, and the placement agent will have no authority to bind us by virtue of the engagement letter agreement. Further, the placement agent does not guarantee that we will be able to raise new capital in any prospective offering.

We have entered into a securities purchase agreement directly with the investors in connection with this offering, and we will only sell to investors who have entered into the securities purchase agreement.

We will deliver the shares of Common Stock being issued to the investors electronically upon receipt of investor funds for the purchase of the shares of our Common Stock and Investor Warrants offered pursuant to this prospectus supplement and we will deliver the Investor Warrants in certificated form to the investors. We expect to deliver the shares of our Common Stock and Warrants being offered pursuant to this prospectus supplement on or about December 20, 2019.

Fees and Expenses

We have agreed to pay the placement agent a total cash fee equal to 8.0% of the gross proceeds of this offering, which represents a 7.0% commission and 1% management fee. We have also agreed to pay the placement agent \$85,000 for non-accountable expenses and \$10,000 for clearing fees. We estimate the total fees and expenses payable by us for this offering will be \$590,000.17.

Placement Agent Warrants

We have also agreed to issue to the placement agent (or its designees) in the offering the Placement Agent Warrants to purchase up to 777,778 shares of Common Stock, which represent 7.0% of the aggregate number of shares of Common Stock sold in this offering. The Placement Agent Warrants will have substantially the same terms as the Investor Warrants, except that the Placement Agent Warrants will have an exercise price equal to \$0.5625, or 125% of the offering price per share of Common Stock and accompanying 0.75 Investor Warrant and will be exercisable for five years from the effective date of this offering, commencing six months and one day from the effective date of this offering. Pursuant to FINRA Rule 5110(g), the Placement Agent Warrants and any shares issued upon exercise of the Placement Agent Warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering, except the transfer of any security: (i) by operation of law or by reason of our reorganization; (ii) to any FINRA member firm participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the placement agent or related persons do not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period.

See "Description of the Securities We Are Offering — Warrants — Placement Agent Warrants" for additional information regarding the terms of the Placement Agent Warrants.

Indemnification

We have agreed to indemnify the placement agent and specified other persons against some civil liabilities, including liabilities under the Securities Act and the Exchange Act, and to contribute to payments that the placement agent may be required to make in respect of such liabilities.

Lock-up Agreement

In connection with this offering, we have agreed in the securities purchase agreement, subject to certain exceptions (including any financing contemplated by the Company's Equity Joint Venture Contract dated January 30, 2019, as amended), to certain restrictions on the issuance and sale of our securities for 45 days following the closing of this offering. Additionally, until the first anniversary of the closing date of this offering, we have agreed not to effect or agree to (i) any issuance involving variable rate transactions, including those involving securities with a conversion, exercise or exchange price that varies based upon or with the trading price of our Common Stock or that may be reset based upon the occurrence of any future event directly or indirectly related to our business or the market for our Common Stock or (ii) transactions, including an equity line of credit or at-the-market offering, whereby we may issue securities at a future determined price, except that, (X) after 45 days from the closing, we may draw down on an at-the-market facility and (Y) we may enter into any financing contemplated by the Equity Joint Venture Contract, dated January 30, 2019, as amended.

Right of First Refusal

We have granted the placement agent, until December 31, 2020, a right of first refusal to act as sole bookrunning manager, sole underwriter or sole placement agent, as applicable, for any future public or private equity or debt offering by us or any of our successors or subsidiaries, subject to certain exceptions. We have also agreed to a tail fee equal to the cash and warrant compensation in this offering if any investor to which the placement agent introduced us with respect to this offering during the term of its engagement provides us with further capital in a public or private offering or capital raising transaction, with certain exceptions.

Other Relationships

The placement agent and its respective affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. The placement agent has received, or may in the future receive, customary fees and commissions for these transactions.

Regulation M

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of our securities by the placement agent acting as principal. Under these rules and regulations, the placement agent:

- · may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Our Common Stock is listed on Nasdaq under the symbol "EKSO." The closing price of our Common Stock on December 18, 2019, as reported by Nasdaq, was \$0.5401 per share.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon by Snell & Wilmer L.L.P., Las Vegas, Nevada. The enforceability of the Warrants being offered by this prospectus will be passed upon by Morrison & Foerster LLP, San Francisco, California.

EXPERTS

OUM & Co. LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our <u>Annual Report on Form 10-K for the year ended December 31, 2018</u>as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on OUM & Co. LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's web site at http://www.sec.gov.

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above.

The registration statement and the documents referred to below under "Incorporation by Reference" are also available on our Internet website www.eksobionics.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed orFebruary 28, 2019
- the portions of our definitive proxy statement on Schedule 14A filed on April 30, 2019 that are deemed "filed" with the SEC under the Exchange Act;
- our Quarterly Report on Form 10-Q for quarterly period ended September 30, 2019, filed onOctober 30, 2019;
- our Current Reports on Form 8-K filed on January 8, 2019 (as amended by Amendment No. 1 thereto filed on January 18, 2019), January 30, 2019, March 11, 2019, May 6, 2019, May 24, 2019, June 26, 2019, September 20, 2019, October 28, 2019, and November 12, 2019;
- the description of our Common Stock contained in our Registration Statement on Form 8-A, filed on May 6, 2015 and August 8, 2016, pursuant to Section 12(b) of the Exchange Act, which incorporates by reference the description of the shares of our common stock contained in our



Registration Statement on Form S-1 (File No. 333-195783) filed on May 7, 2014 and declared effective by the SEC on June 20, 2014, and any amendment or report filed with the SEC for purposes of updating such description including any amendment or report filed with the SEC for purposes of updating such description; and

 all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus supplement and prior to the termination or completion of the offering of securities under this prospectus supplement shall be deemed to be incorporated by reference in this prospectus supplement and to be a part hereof from the date of filing such reports and other documents.

We also incorporate by reference into this prospectus supplement and the accompanying base prospectus additional documents and information that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, excluding, in each case, information deemed furnished and not filed, until we sell all of the securities we are offering. Any statements contained in a previously filed document incorporated by reference into this prospectus supplement and the accompanying base prospectus is deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying base prospectus to the extent that a statement contained in this prospectus supplement or the accompanying base prospectus, or in a subsequently filed document also incorporated by reference herein or therein, modifies or supersedes that statement

We will provide to you at no cost a copy of any and all of the information incorporated by reference into the registration statement of which this prospectus is a part. You may make a request for copies of this information in writing or by telephone. Requests should be directed to:

Ekso Bionics Holdings, Inc. Attention: Investor Relations 1414 Harbour Way South, Suite 1201 Richmond, CA 94804 Phone: (510) 984-1761

PROSPECTUS

Ekso Bionics Holdings, Inc.

\$75,000,000 COMMON STOCK PREFERRED STOCK WARRANTS RIGHTS UNITS

Ekso Bionics Holdings, Inc., a Nevada corporation ("Ekso Bionics"), may offer and sell from time to time, pursuant to this prospectus, in one or more series or issuances and on terms that Ekso Bionics will determine at the time of the offering, any of the securities described in this prospectus, and any combination of those securities, up to an aggregate amount of \$75,000,000.

This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide you with the specific terms of any offering in one or more supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any prospectus supplement, as well as any documents incorporated by reference into this prospectus or any prospectus supplement, carefully before you invest.

We may offer and sell these securities directly to you, through agents designated from time to time, or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. If any underwriters or agents are involved in the sale of our securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable fees, commissions or discounts and over-allotment options will be set forth in the applicable prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market under the symbol "EKSO." On June 2, 2017, the last reported sale price of our common stock was \$1.37 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the Nasdaq Capital Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. Prospective purchasers of our securities are urged to obtain current information as to the market prices of our securities, where applicable.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. BEFORE DECIDING WHETHER TO INVEST IN OUR SECURITIES, YOU SHOULD CONSIDER CAREFULLY THE RISKS THAT WE HAVE DESCRIBED ON PAGE <u>3</u> OF THIS PROSPECTUS UNDER THE CAPTION "RISK FACTORS." WE MAY INCLUDE SPECIFIC RISK FACTORS IN SUPPLEMENTS TO THIS PROSPECTUS UNDER THE CAPTION "RISK FACTORS." THIS PROSPECTUS MAY NOT BE USED TO SELL OUR SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is June 16, 2017.

TABLE OF CONTENTS

	Page
About This Prospectus	<u>ii</u>
Prospectus Summary	<u>1</u>
Risk Factors	<u>3</u>
Special Note Regarding Forward-Looking Statements	<u>3</u>
About Ekso Bionics	<u>4</u>
Use of Proceeds	<u>4</u>
Plan of Distribution	<u>5</u>
Description of Common Stock	<u>8</u>
Description of Preferred Stock	<u>8</u>
Description of Warrants	<u>10</u>
Description of Rights	<u>12</u>
Description of Units	<u>13</u>
Certain Provisions of Nevada Law and of the Company's Articles of Incorporation and Bylaws	<u>14</u>
Legal Matters	<u>16</u>
Experts	<u>16</u>
Where You Can Find More Information	<u>16</u>
Incorporation of Documents by Reference	<u>16</u>

i

EXPLANATORY NOTE - STOCK SPLIT

Effective May 4, 2016, the Company effected a one-for-seven reverse split of its common stock. As a result of the reverse stock split, every seven shares of issued and outstanding common stock were converted into one share of issued and outstanding common stock. All references in this prospectus supplement to shares and net tangible book value per share have been retroactively restated to reflect the reverse stock split.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration process. Under this shelf registration process, we may offer and sell, from time to time, shares of our common stock and preferred stock, various series of warrants or rights to purchase any of such securities, either individually or in units, in one or more offerings, with a total value of up to \$75,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The prospectus supplement may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to the offering of securities under this prospectus. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated herein by reference and the additional information under the heading "Where You Can Find More Information" before making an investment decision.

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated herein by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

Unless the context otherwise requires, "Ekso Bionics," "the Company," "we," "us," "our" and similar terms refer to Ekso Bionics Holdings, Inc. and our subsidiaries.



PROSPECTUS SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC or included in any applicable prospectus supplement. Investing in our securities involves risks. Therefore, you should carefully consider the risk factors set forth in any prospectus supplements and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and any prospectus supplements and the documents incorporated by reference herein or therein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

Overview

Ekso Bionics designs, develops and sells exoskeletons that augment human strength, endurance, and mobility. Our exoskeleton technology serves multiple markets and can be used both by able-bodied users as well as by persons with physical disabilities. We have sold, rented or leased devices that (a) enable individuals with neurological conditions affecting gait (stroke and spinal cord injury) to rehabilitate and to walk again and (b) allow industrial workers to perform heavy duty work for extended periods.

Additional Information

For additional information related to our business and operations, please refer to the reports incorporated herein by reference, including our <u>Annual Report on Form 10-K for the year ended December 31, 2016</u>, as described under the caption "Incorporation of Documents by Reference" on page <u>16</u> of this prospectus.

Corporate Information

We were incorporated under the laws of the State of Nevada in January 2012 under the name PN Med Group, Inc. and changed our name to Ekso Bionics Holdings, Inc. in December 2013. Ekso Bionics, Inc. was incorporated under the laws of the State of Delaware in January 19, 2005 and in January 2014 completed a reverse merger transaction with and became a wholly-owned subsidiary of Ekso Bionics Holdings, Inc. In connection with the reverse merger transaction and pursuant to a split-off agreement and general release, we transferred our pre-merger assets and liabilities to our pre-merger majority stockholders, in exchange for the surrender by them and cancellation of 2,497,586 shares of our common stock. As a result of the merger and split-off, we discontinued our pre-merger business and acquired the business of Ekso Bionics, and have continued the existing business operations of Ekso Bionics as a publicly-traded company under the name Ekso Bionics Holdings, Inc.

Our principal executive offices are located at 1414 Harbour Way South, Suite 1201, Richmond, California 94804 and our telephone number is (510) 984-1761.

We make available free of charge on or through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Our internet address is *www.eksobionics.com*. This website address is intended to be an inactive, textual reference only; none of the material on this website is part of this prospectus supplement. Copies of our annual reports on Form 10-K will be furnished without charge to any person who submits a written request directed to the attention of our Secretary, at our offices located at 1414 Harbour Way South, Suite 1201, Richmond, California, 94804. The SEC maintains an internet site (http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

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" as defined in the Jumpstart Our Business Startups, or JOBS, Act enacted in April 2012. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

 not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes Oxley Act of 2002;

- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions for up to five years after the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "Securities Act"). However, if certain events occur prior to the end of such five year period, including if we become a "large accelerated filer," our annual gross revenues exceed \$1 billion or we issue more than \$1 billion of non-convertible debt in any three year period, we would cease to be an emerging growth company prior to the end of such five year period. We will cease being an emerging growth company as of December 31, 2017.

We may choose to take advantage of some but not all of these reduced burdens. We have taken advantage of certain of the reduced disclosure obligations regarding executive compensation in this registration statement and may elect to take advantage of other reduced burdens in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. However, we have irrevocably elected not to avail ourselves of this extended transition period for complying with new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Offerings Under This Prospectus

Under this prospectus, we may offer shares of our common stock and preferred stock, various series of warrants or rights to purchase any of such securities, either individually or in units, with a total value of up to \$75,000,000, from time to time at prices and on terms to be determined by market conditions at the time of the offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents, underwriters or dealers, reserve the right to accept or reject all or part of any proposed purchase of securities. If we offer securities through agents, underwriters or dealers, we will include in the applicable prospectus supplement:

- the names of those agents, underwriters or dealers;
- applicable fees, discounts and commissions to be paid to them;
- · details regarding over-allotment options, if any; and
- the net proceeds to us.

This prospectus may not be used to consummate a sale of any securities unless it is accompanied by a prospectus supplement.

RISK FACTORS

Investing in our securities involves significant risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in Ekso Bionics. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading "Risk Factors" included in our most recent annual report on Form 10-K, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K on file with the SEC, all of which are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This prospectus and the documents we have filed with the SEC that are incorporated herein by reference contain such "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995.

Such statements in connection with any discussion of future operations or financial performance are identified by the use of words such as "may," "anticipate," "estimate," "expect," "project," "intend," "plan," "believe," and other words and terms of similar meaning. Forward-looking statements include, but are not limited to, statements regarding: (i) the plans and objectives of management for future operations, including plans or objectives relating to the design, development and commercialization of human exoskeletons, (ii) a projection of income (including income/loss), earnings (including earnings/loss) per share, capital expenditures, dividends, capital structure or other financial items, (iii) our future financial performance, including any such statement contained in a discussion and analysis of financial condition by management or in the results of operations included pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"), (iv) our beliefs regarding the potential for commercial and other health benefits of our exoskeleton products in particular, (v) our beliefs regarding potential clinical and other health benefits of our medical devices, and (vi) the assumptions underlying or relating to any statement described in points (i), (ii), (iii), (iv) or (v) above.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important cautionary statements in this Registration Statement, particularly in the "Risk Factors" section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. For a summary of such factors, please refer to the section entitled "Risk Factors" in this prospectus, as updated and supplemented by the discussion of risks and uncertainties under "Risk Factors" contained in any supplements to this prospectus and in our most recent annual report on Form 10-K, as revised or supplemented by our subsequent quarterly reports on Form 10-Q or our current reports on Form 8-K, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference. The information contained in this document is believed to be current as of the date of this document. We do not intend to update any of the forward-looking statements after the date of this document to conform these statements to actual results or to changes in our expectations, except as required by law.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus or in any document incorporated herein by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus or the date of the document incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to

update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

ABOUT EKSO BIONICS

Ekso Bionics designs, develops and sells exoskeleton technology to augment human strength, endurance and mobility. Our exoskeleton technology serves multiple markets and can be used both by able-bodied users as well as by persons with physical disabilities. We have sold, rented or leased devices that (a) enable individuals with neurological conditions affecting gait (stroke and spinal cord injury) to rehabilitate and to walk again and (b) allow industrial workers to perform heavy duty work for extended periods.

Today, our medical exoskeleton, Ekso GT, is used as a rehabilitation tool to allow physicians and therapists to rehabilitate patients who have suffered a stroke or spinal cord injury. With its unique features designed specifically for hospitals and its proprietary SmartAssist software, Ekso GT allows for the early mobilization of patients, with high step count and high dosage treatments. The intent is to allow the patient's central nervous system to take advantage of a person's neuroplasticity to maximize a patient's recovery.

For able-bodied industrial workers, last year we introduced a new product innovation for aerial work platforms (AWP) and scaffolding, the EksoZeroG, which is intended to significantly improve workforce productivity while dramatically reducing workplace related injuries in order to keep workers healthy, strong, and safe. EksoZeroG is a mobile arm mount that makes heavy tools feel weightless and enables workers to be more productive and safer. In 2017, we are focusing on increasing sales of the EksoZeroG by pursuing alternative channels such as rental agreements with construction equipment and heavy tool providers. In addition, we are exploring potential strategic alternatives to accelerate product and market adoption of our industrial products, on our own and/or in collaboration with others.

Ekso Bionics believes the commercial opportunity for exoskeleton technology adoption is accelerating as a result of recent advancements in material technologies, electronic and electrical engineering, control technologies, and sensor and software development. Taken individually, many of these advancements have become ubiquitous in peoples' everyday lives. We believe we have learned how to integrate these existing technologies and wrap the result around a human being efficiently, elegantly and safely, supported by an industry leading intellectual property portfolio. We further believe that we can do so across a broad spectrum of applications, from persons with lower limb paralysis to able-bodied users.

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities which may be offered pursuant to this prospectus. Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of securities under this prospectus for our operations and to increase our investments (i) in our clinical, sales and marketing initiatives to accelerate adoption of the Ekso in the rehabilitation market, (ii) in our research, development and commercialization activities with respect to an Ekso robotic exoskeleton for home use, and/or (iii) in the development and commercialization of able-bodied exoskeletons for industrial use, and for other general corporate purposes, including, but not limited to, working capital, intellectual property protection and enforcement, capital expenditures, investments, acquisitions and collaborations. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds, if any, we receive in connection with securities offered pursuant to this prospectus for any purpose. Pending application of the net proceeds as described above, we may initially invest the net proceeds in short-term, investment-grade, or interest-bearing securities.

PLAN OF DISTRIBUTION

General Plan of Distribution

We may offer securities under this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, "at the market" sales, block trades or a combination of these methods. We may sell the securities:

- to or through underwriters or dealers;
- · through agents;
- directly to one or more purchasers;
- · through a combination of such methods; or
- through any other method described in a prospectus supplement.

The distribution of securities may be effected, from time to time, in one or more transactions, including:

- block transactions (which may involve crosses) and transactions on the Nasdaq Capital Market or any
 other organized market where the securities may be traded;
- purchases by a dealer as principal and resale by the dealer for its own account pursuant to a prospectus supplement;
- · ordinary brokerage transactions and transactions in which a dealer solicits purchasers;
- sales "at the market" to or through a market maker or into an existing trading market, on an exchange or otherwise; and
- sales in other ways not involving market makers or established trading markets, including direct sales to purchasers.

We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed from time to time;
- market prices prevailing at the time of sale;
- · prices related to the prevailing market prices; or
- negotiated prices.

We may directly solicit offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time. The prospectus supplement relating to a series of the offered securities will name any underwriters, dealers or agents involved in the offer or sale of the securities.

If we utilize a dealer in the sale of the securities being offered by this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If we utilize an underwriter in the sale of the securities being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale, and we will provide the name of any underwriter in the prospectus supplement which the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of the securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions.

With respect to underwritten public offerings, negotiated transactions and block trades, we will provide in the applicable prospectus supplement information regarding any compensation we pay to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents



participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

If so indicated in the applicable prospectus supplement, we will authorize underwriters, dealers or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in each applicable prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in each applicable prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the
 underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and
 other persons acting as our agents will not have any responsibility in respect of the validity or performance
 of delayed delivery contracts.

One or more firms, referred to as "remarketing firms," may also offer or sell the securities, if a prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as our agents. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. Each prospectus supplement will identify and describe any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm's compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket. Remarketing firms may be entitled under agreements that may be entered into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale. Any underwriters involved in the sale of the securities may qualify as "underwriters" within the meaning of Section 2(a) (11) of the Securities Act. In addition, the underwriters' commissions, discounts or concessions may qualify as underwriters' compensation under the Securities Act and the rules of the Financial Industry Regulatory Authority, Inc., or FINRA.

Shares of our common stock sold pursuant to the registration statement of which this prospectus is a part will be listed on the Nasdaq Capital Market. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the Nasdaq Capital Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. Underwriters may make a market in our common stock, but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the liquidity of or the existence, development or maintenance of trading markets for any of the securities.

In order to facilitate the offering of the securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing the applicable security in the open market or by imposing penalty bids, whereby



selling concessions allowed to dealers participating in the offering may be reclaimed if the securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business.

DESCRIPTION OF COMMON STOCK

We are authorized to issue 71,428,571 shares of common stock, par value \$0.001 per share. On May 25, 2017, we had 25,723,854 shares of common stock outstanding and approximately 255 stockholders of record.

The following summary of certain provisions of our common stock does not purport to be complete. You should refer to our articles of incorporation and our bylaws, both of which are included as exhibits to the registration statement of which this prospectus is a part. The summary below is also qualified by provisions of applicable law.

General

The holders of outstanding shares of common stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends of such times and in such amounts as the board from time to time may determine. Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. There is no cumulative voting of the election of directors then standing for election. The common stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of our company, the assets legally available for distribution to stockholders are distributable ratably among the holders of the common stock after payment of liquidation preferences, if any, on any outstanding payment of other claims of creditors. Each outstanding share of common stock is duly and validly issued, fully paid and non-assessable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is VStock Transfer, LLC. The transfer agent's address is 18 Lafayette Place, Woodmere, New York 11598 and its telephone number is (212) 828-8436.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "EKSO."

DESCRIPTION OF PREFERRED STOCK

We are authorized to issue 10,000,000 shares of preferred stock, par value \$0.001 per share, of which 15,000 shares were designated as Series A Convertible Preferred Stock. As of May 25, 2017, no shares of our preferred stock were outstanding. The following summary of certain provisions of our preferred stock does not purport to be complete. You should refer to our articles of incorporation and our bylaws, both of which are included as exhibits to the registration statement of which this prospectus is a part. The summary below is also qualified by provisions of applicable law.

General

Our board of directors may, without further action by our stockholders, from time to time, direct the issuance of shares of preferred stock in one or more series and may, at the time of issuance, determine the rights, preferences and limitations of each series, including voting rights, dividend rights and redemption and liquidation preferences. Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of any liquidation, dissolution or winding-up of our company before any payment is made to the holders of shares of our common stock. In some circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. Upon the affirmative vote of our board of directors, without stockholder approval, we may issue shares of preferred stock with voting and conversion rights which could adversely affect the holders of shares of our common stock.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference, if any, per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange
 price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of the Company; and
- any material limitations on issuance of any class or series of preferred stock ranking pari passu with or senior to the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the Company.

Series A Preferred Stock

In December 2014, our board of directors created out of the authorized and unissued shares of our preferred stock a series of preferred stock designated as the Series A Convertible Preferred Stock (the "Series A preferred stock"), comprising up to 15,000 shares of preferred stock. The material terms of the Series A preferred stock are described below.

Conversion; Beneficial Ownership Limitation. Subject to certain ownership limitations as described below, a holder of shares of Series A preferred stock may convert the Series A preferred stock into shares of our common stock at any time after the initial issuance date at a conversion ratio determined by dividing the stated value of the Series A preferred stock (or \$1,000) by the "Conversion Price." The Conversion Price initially was \$1.01 per share, subject to adjustment as described below. On and after the close of business on the date of any such conversion, the holder converting such Series A preferred stock would be deemed to be the holder of record of the common stock issuable upon such conversion, such Series A preferred stock would cease to be outstanding, and all rights whatsoever with respect to such shares (except the right to receive the common stock) would terminate.

Subject to limited exceptions, a holder of shares of Series A preferred stock does not have the right to convert any portion of its Series A preferred stock if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to its conversion (the "Beneficial Ownership Limitation"); provided, however, that upon 61 days' prior notice to us, the holder may increase or decrease the Beneficial Ownership Limitation, provided that in no event shall the Beneficial Ownership Limitation exceed 9.99%.



Adjustments to Conversion Price. The conversion price is subject to adjustment in the case of stock splits, stock dividends, combinations of shares and similar recapitalization transactions. In addition, if we sell or grant any right to purchase or sell any common stock or common stock equivalents entitling any person to acquire shares of common stock (subject to exceptions for certain exempt issuances, including issuances pursuant to equity compensation plans, certain issuances to consultants, issuances in connection with exercise or exchange of common stock equivalents already outstanding and issuances pursuant to strategic transactions or to strategic investors) at an effective price per share that is lower than the then Conversion Price of the Series A preferred stock, then the Conversion Price would be further reduced to equal the effective price per share applicable to such sale. As a result of the one-for-seven reverse stock split completed on May 4, 2016 and the sale of common stock in an underwritten offering on August 9, 2016 at a price per share less than the Conversion Price then in effect, the conversion price of the Series A prefered stock is \$3.74 per share.

Voting Rights. Except as required by law, holders of the Series A preferred stock do not have rights to vote on any matters, questions or proceedings, including the election of directors. However, if any shares of Series A preferred stock are outstanding, we cannot, without the affirmative vote of the holders of 75% or more of the then outstanding shares of the Series A preferred stock, (1) alter or change adversely the powers, preferences or rights given to the Series A preferred stock or alter or amend the certificate of designation, (2) amend our articles of incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series A preferred stock, (3) increase the number of authorized shares of Series A preferred stock, or (4) enter into any agreement with respect to any of the foregoing.

Dividends. Shares of Series A preferred stock are not be entitled to receive any dividends, unless and until specifically declared by our board of directors. The holders of the Series A preferred stock participate, on an as-if-converted-to-common stock basis, in any dividends to the holders of common stock.

Liquidation. In the event of either a voluntary or involuntary liquidation, dissolution or winding up of us, the assets of which constitute all or substantially all of the assets of our business, in a single transaction or series of transactions, the holders of Series A preferred stock would be entitled to participate, on an as-if-converted-to-common stock basis, in any distributions to the holders of common stock.

Exchange Listing. We do not plan on making an application to list the Series A preferred stock on any national securities exchange or other nationally recognized trading system.

Transfer Agent and Registrar

The transfer agent and registrar for our preferred stock will be set forth in the applicable prospectus supplement.

DESCRIPTION OF WARRANTS

General

As of May 25, 2017, warrants to purchase an aggregate of 5,091,910 shares of our common stock are issued and outstanding, of which warrants to purchase 88,368 shares of common stock have an exercise price of \$9.66 per share and expire on May 20, 2020 (the "Pre-Merger Warrants"), warrants to purchase 425,906 shares of common stock have an exercise price of \$7.00 per share and expire on January 15, 2019, warrants to purchase 1,077,816 shares of common stock have an exercise price of \$14.00 per share and expire on January 15, 2019, warrants to purchase 1,633,642 shares have an exercise price of \$3.74 and expire on December 28, 2020, and warrants to purchase 1,866,178 shares have an exercise price of \$4.10 and expire on October 6, 2022. The Pre-Merger Warrants may, at the option of the holders, be exercised on a cashless exercise basis, which means that in lieu of paying the aggregate exercise price for the shares being purchased upon exercise of the warrants for cash, the holder will forfeit a number of shares underlying the warrants with a fair market value (as defined in the warrant) equal to such aggregate exercise price. We will not receive additional proceeds to the extent these warrants are exercise basis.

We may issue warrants to purchase shares of our common stock and/or preferred stock in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement relating to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- · the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire
 or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on
 which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock and/or preferred stock will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- · whether the warrants may be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF RIGHTS

General

We may issue rights to our stockholders to purchase shares of our common stock, preferred stock or the other securities described in this prospectus. We may offer rights separately or together with one or more additional rights, preferred stock, common stock, or warrants, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. Each series of rights will be issued under a separate rights agreement to be entered into between us and a bank or trust company, as rights agent. The rights agent will act solely as our agent in connection with the certificates relating to the rights of the series of certificates and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights. The following description sets forth certain general terms and provisions of the rights to which any prospectus supplement may relate. The particular terms of the rights to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the rights of fights, rights agreement or rights certificates described in a prospectus supplement. To the extent that any particular terms of the rights, rights agreement or rights certificates described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable rights agreement and rights certificate for additional information before you decide whether to purchase any of our rights.

We will provide in a prospectus supplement the following terms of the rights being issued:

- the date of determining the stockholders entitled to the rights distribution;
- the aggregate number of shares of common stock, preferred stock or other securities purchasable upon exercise of the rights;
- the exercise price;
- the aggregate number of rights issued;
- whether the rights are transferrable and the date, if any, on and after which the rights may be separately transferred;
- the date on which the right to exercise the rights will commence, and the date on which the right to
 exercise the rights will expire;
- the method by which holders of rights will be entitled to exercise;
- the conditions to the completion of the offering, if any;
- the withdrawal, termination and cancellation rights, if any;
- whether there are any backstop or standby purchaser or purchasers and the terms of their commitment, if any;
- whether stockholders are entitled to oversubscription rights, if any;
- · any applicable material U.S. federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights, as applicable.

Each right will entitle the holder of rights to purchase for cash the principal amount of shares of common stock, preferred stock or other securities at the exercise price provided in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the shares of common stock, preferred stock or other securities, as applicable, purchasable upon



exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements, as described in the applicable prospectus supplement.

Rights Agent

The rights agent for any rights we offer will be set forth in the applicable prospectus supplement.

DESCRIPTION OF UNITS

The following description, together with the additional information that we include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

General

We may issue units consisting of common stock, preferred stock, one or more warrants or rights for the purchase of common stock or preferred stock in one or more series, in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each security included in the unit. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those set forth in any prospectus supplement or as described under "Description of Common Stock," "Description of Preferred Stock," "Description of Warrants," and "Description of Rights" will apply to each unit, as applicable, and to any common stock, preferred stock, warrant, or right included in each unit, as applicable.

Unit Agent

The name and address of the unit agent for any units we offer will be set forth in the applicable prospectus supplement.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.



CERTAIN PROVISIONS OF NEVADA LAW AND OF THE COMPANY'S ARTICLES OF INCORPORATION AND BYLAWS

Anti-Takeover Provisions

Nevada Law

We may in the future become subject to Nevada's control share laws. A corporation is subject to Nevada's control share law if it has more than 200 stockholders of record, at least 100 of whom are residents of Nevada, and if the corporation does business in Nevada, including through an affiliated corporation. This control share law may have the effect of discouraging corporate takeovers. The Company currently has fewer than 100 stockholders of record who are residents of Nevada.

The control share law focuses on the acquisition of a "controlling interest," which means the ownership of outstanding voting shares that would be sufficient, but for the operation of the control share law, to enable the acquiring person to exercise the following proportions of the voting power of the corporation in the election of directors: (1) one-fifth or more but less than one-third; (2) one-third or more but less than a majority; or (3) a majority or more. The ability to exercise this voting power may be direct or indirect, as well as individual or in association with others.

The effect of the control share law is that an acquiring person, and those acting in association with that person, will obtain only such voting rights in the control shares as are conferred by a resolution of the stockholders of the corporation, approved at a special or annual meeting of stockholders. The control share law contemplates that voting rights will be considered only once by the other stockholders. Thus, there is no authority to take away voting rights from the control shares of an acquiring person once those rights have been approved. If the stockholders do not grant voting rights to the control shares acquired by an acquiring person, those shares do not become permanent non-voting shares. The acquiring person is free to sell the shares to others. If the buyer or buyers of those shares themselves do not acquire a controlling interest, the shares are not governed by the control share law any longer.

If control shares are accorded full voting rights and the acquiring person has acquired control shares with a majority or more of the voting power, a stockholder of record, other than the acquiring person, who did not vote in favor of approval of voting rights for the control shares, is entitled to demand fair value for such stockholder's shares.

In addition to the control share law, Nevada has a business combination law, which prohibits certain business combinations between Nevada corporations and "interested stockholders" for two years after the interested stockholder first becomes an interested stockholder, unless (a) the corporation's board of directors approves the combination in advance or (b) the corporation's board of directors and at least 60% of the corporation's disinterested stockholders approve the combination at an annual or special meeting. For purposes of Nevada law, an interested stockholder is any person who is: (a) the beneficial owner, directly or indirectly, of 10% or more of the voting power of the outstanding voting shares of the corporation, or (b) an affiliate or associate of the corporation and at any time within the previous two years was the beneficial owner, directly or indirectly, of 10% or more of the voting power of the then-outstanding shares of the corporation. The definition of "business combination" contained in the statute is sufficiently broad to cover virtually any kind of transaction that would allow a potential acquirer to use the corporation and its other stockholders.

The effect of Nevada's business combination law is to potentially discourage a party interested in taking control of the Company from doing so if it cannot obtain the approval of our board of directors.

Authorized but Unissued Shares

The authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval, subject to any limitations imposed by the listing standards of any exchange on which our shares are listed. These additional shares may be used for a variety of corporate

finance transactions, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could make more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Special Meeting of Stockholders; Advance Notice Requirements; Stockholder Action

Our by-laws provide that, except as otherwise required by law or the articles of incorporation, special meetings of the stockholders can only be called by our board of directors, by the chairman of our board of directors or by certain of our officers. In addition, our by-laws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to our board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of the meeting or brought before the meeting by or at the direction of our board of directors, or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting and dition, our by-laws require that stockholder actions must be effected at a duly called stockholders meeting and prohibit actions by our stockholder sby written consent.

Limitation of Liability and Indemnification

Nevada Revised Statutes (NRS) Sections 78.7502 and 78.751 provide us with the power to indemnify any of our directors, officers, employees and agents. The person entitled to indemnification must have conducted himself in good faith, and must reasonably believe that his conduct was in, or not opposed to, our best interests. In a criminal action, the director, officer, employee or agent must not have had reasonable cause to believe that his conduct was unlawful.

Under NRS Section 78.751, advances for expenses may be made by agreement if the director or officer affirms in writing that he has met the standards for indemnification and will personally repay the expenses if it is determined that such officer or director did not meet those standards.

Our by-laws state that we shall indemnify every (i) present or former director, officer, employee or agent of us and (ii) any person who served at our request as a director, officer, member, manager, partner, trustee, fiduciary, employee or agent of another corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise (each an "Indemnitee").

Our by-laws provide that we shall indemnify an Indemnitee against expenses, including attorneys' fees and disbursements, and costs (and in connection with a proceeding other than a proceeding by or in the right of the Company, judgments, fines and amounts paid in settlement) actually and reasonably incurred by such person in connection with any proceeding in which such Indemnitee was, is or is threatened to be named as defendant or respondent, or in which he was or is a witness without being named a defendant or respondent, by reason, in whole or in part, of his serving or having served, or having been nominated or designated to serve, if it is determined that the Indemnitee (a) conducted himself in good faith and in a manner which such Indemnitee reasonably believed to be in or not opposed to our best interests, or with respect to any criminal proceeding, had no reasonable cause to believe that his conduct was unlawful or (b) is not liable pursuant to NRS Section 78.138; provided, however, that in the event that an Indemnitee is found liable to us, we will have no obligation to indemnify such Indemnitee unless, and only to the extent that the court in which such action or suit was brought or other court of competent jurisdiction determines that, in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses and costs as a court of competent jurisdiction or such other court shall deem proper.

The termination of any proceeding by judgment, order, settlement or conviction, or on a plea of nolo contendere or its equivalent, is not of itself determinative that the Indemnitee did not meet the requirements set forth in clauses (a) or (b) above. An Indemnitee shall be deemed to have been found liable in respect of any claim, issue or matter only after the Indemnitee shall have been so adjudged by a court of competent jurisdiction after exhaustion of all appeals therefrom.

In addition to our by-laws, have entered into an Indemnification Agreement with each of our directors and executive officers pursuant to which we are required to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law and our governing documents. We believe that entering into these agreements helps us to attract and retain highly competent and qualified persons to serve the Company.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons, we have been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

LEGAL MATTERS

Nutter, McClennen and Fish, LLP, Boston, Massachusetts, will pass upon the validity of the issuance of the securities to be offered by this prospectus.

EXPERTS

OUM & Co. LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our <u>Annual Report on Form 10-K for the year ended December 31, 2016</u> as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on OUM & Co. LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's web site at http://www.sec.gov.

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above.

The registration statement and the documents referred to below under "Incorporation by Reference" are also available on our Internet website www.eksobionics.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed on March 15, 2017;
- the portions of our definitive proxy statement on Schedule 14A filed on April 28, 2017 that are deemed "filed" with the SEC under the Exchange Act;



- our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2017, filed on May 9, 2017;
- our Current Reports on Form 8-K filed on January 6, 2017, March 23, 2017, April 5, 2017, April 26, 2017, and May 23, 2017; and
- the description of our common stock contained in our Registration Statement on Form 8-A, filed on May 6, 2015 pursuant to Section 12(b) of the Exchange Act, which incorporates by reference the description of the shares of our common stock contained in our Registration Statement on Form S-1 (File No. 333-195783) filed on May 7, 2014 and declared effective by the SEC on June 20, 2014, and any amendment or report filed with the SEC for purposes of updating such description; and
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination or completion of the offering of securities under this prospectus shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing such reports and other documents.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any or all of the information that is incorporated by reference in this prospectus. Requests for such documents should be directed to: Investor Relations, Ekso Bionics Holdings, Inc., 1414 Harbour Way South, Suite 1201, Richmond, California 94804, (510) 984-1761.

You may also access the documents incorporated by reference in this prospectus through our website at www.eksobionics.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

This prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus. You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

11,111,116 Shares of Common Stock Warrants to Purchase Up to 8,333,337 Shares of Common Stock Placement Agent Warrants to Purchase Up to 777,778 Shares of Common Stock



PROSPECTUS SUPPLEMENT

H.C. Wainwright & Co.

December 18, 2019