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

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FORM S-3

REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**Ekso Bionics Holdings, Inc.**

(Exact name of registrant as specified in its charter)

**Nevada**

(State or other jurisdiction of  
incorporation or organization)

**99-0367049**

(I.R.S. Employer  
Identification No.)

**1414 Harbour Way South, Suite 1201  
Richmond, California 94804  
(510) 984-1761**

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

**Thomas Looby  
Chief Executive Officer  
Ekso Bionics Holdings, Inc.  
1414 Harbour Way South, Suite 1201  
Richmond, California 94804  
(510) 984-1761**

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

**Copies to:**

**Erin M. Anderman, Esq.**  
Nutter, McClennen & Fish, LLP  
155 Seaport Blvd.  
Boston, Massachusetts 02210  
(510) 984-1761

**Approximate date of commencement of proposed sale to the public:  
From time to time after the effective date of this registration statement as determined by the registrant.**

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

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If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer   
 Non-accelerated filer  (Do not check if a smaller reporting company) Smaller reporting company   
 Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

#### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee (1)
Common Stock, \$0.001 par value	(2)	(3)	(3)	—
Preferred Stock, \$0.001 par value	(2)	(3)	(3)	—
Warrants	(2)	(3)	(3)	—
Rights	(2)	(3)	(3)	—
Units	(2)	(3)	(3)	—
Total			\$ 75,000,000	\$ 7,995.57

- Calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended, based on the proposed maximum aggregate offering price. The Registrant previously paid registration fees of \$8,715 pursuant to Registration Statement on Form S-3 (File No. 333-205168), originally filed with the Securities and Exchange Commission on June 23, 2015 (the “Prior Registration Statement”). \$5,997,710.86 of the Registrant’s securities registered pursuant to the Prior Registration Statement remain unsold, resulting in \$696.93 in registration fees paid at the time of the filing of the Prior Registration Statement remaining unused. Pursuant to Rule 457(p) of the Securities Act, the Registrant hereby applies these unused registration fees from the Prior Registration Statement to offset the registration fees associated with this Registration Statement, resulting in net registration fees of \$7,995.57.
- There are being registered hereunder such indeterminate number of shares of common stock and preferred stock, such indeterminate number of warrants and rights to purchase common stock or preferred stock, and such indeterminate number of units, as shall have an aggregate initial offering price not to exceed \$75,000,000. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The proposed maximum initial offering price per unit will be determined, from time to time, by the registrant in connection with the issuance by the registrant of the securities registered hereunder. The securities registered also include such indeterminate number of shares of common stock and preferred stock as may be issued upon conversion of or exchange for preferred stock that provide for conversion or exchange, upon exercise of warrants or rights or pursuant to the anti-dilution provisions of any such securities. In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended, the shares being registered hereunder include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- The proposed maximum aggregate offering price per class of security will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act of 1933, as amended.

**THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.**

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED JUNE 6, 2017

## 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 4 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           , 2017.

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## 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 Annual Report on Form 10-K for the year ended December 31, 2016, as described under the caption “Incorporation of Documents by Reference” on page 15 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](http://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 opportunity for exoskeleton technology in general and 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 preferred 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 exercised on a cashless 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 so offered will be described in the applicable 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's assets to finance the acquisition or otherwise to benefit its own interests rather than the interests of 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 stockholder actions that are favored by the holders of a majority of our outstanding voting securities. In addition, our by-laws require that stockholder actions must be effected at a duly called stockholders meeting and prohibit actions by our stockholders by 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 Annual Report on Form 10-K for the year ended December 31, 2016, 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](http://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](http://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.

## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an itemization of the various expenses, all of which we will pay, in connection with the issuance and distribution of the securities being registered. All of the amounts shown are estimated except the SEC Registration Fee.

SEC Registration Fee	\$ 7,995.57
Printing and Engraving Expenses	(1)
Legal Fees and Expenses	(1)
Accounting Fees and Expenses	(1)
Transfer Agent and Registrar Fees	(1)
Miscellaneous	(1)
Total	(1)

- (1) These fees are calculated based on the securities offered and the number of issuances, and accordingly cannot be estimated at this time.

#### Item 15. Indemnification of Directors and Officers

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.

#### **Item 16. Exhibits**

The exhibits to this registration statement are listed in the Exhibit Index to this registration statement, which Exhibit Index is hereby incorporated by reference.

#### **Item 17. Undertakings**

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however*, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

- (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
  - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- (d) The undersigned registrant hereby undertakes that:
- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.



## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Richmond, California, on June 6, 2017.

### EKSO BIONICS HOLDINGS, INC.

By /s/ Thomas Looby  
Thomas Looby  
Chief Executive Officer

### SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Ekso Bionics Holdings, Inc., hereby severally constitute and appoint Thomas Looby, Maximilian Scheder-Bieschin and Erin M. Anderman, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for her or him and in her or his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as she or he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or her or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
By: <u>/s/ Thomas Looby</u> Thomas Looby	President and Chief Executive Officer (principal executive officer) and Director	June 6, 2017
By: <u>/s/ Maximilian Scheder-Bieschin</u> Maximilian Scheder-Bieschin	Chief Financial Officer (principal financial officer and principal accounting officer)	June 6, 2017
By: <u>/s/ Steven Sherman</u> Steven Sherman	Director and Chairman of the Board	June 6, 2017
By: <u>/s/ Dan Boren</u> Dan Boren	Director	June 6, 2017
By: <u>/s/ Marilyn Hamilton</u> Marilyn Hamilton	Director	June 6, 2017
By: <u>/s/ Howard Palefsky</u> Howard Palefsky	Director	June 6, 2017
By: <u>/s/ Jack Peurach</u> Jack Peurach	Director	June 6, 2017
By: <u>/s/ Stanley Stern</u> Stanley Stern	Director	June 6, 2017
By: <u>/s/ Amy Wendell</u> Amy Wendell	Director	June 6, 2017

## EXHIBIT INDEX

<b>Exhibit Number</b>	<b>Description</b>
1.1*	Form of Underwriting Agreement
2.1	Agreement and Plan of Merger and Reorganization, dated as of January 15, 2014, by and among the Registrant, Acquisition Sub and Ekso Bionics, Inc. <i>(incorporated by reference from Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on January 23, 2014)</i>
4.1	Articles of Incorporation of the Registrant <i>(incorporated by reference from Exhibit 3.1 to the Registrant's Annual Report on Form 10-K filed March 19, 2015)</i>
4.2	Certificate of Merger of Ekso Bionics, Inc., with and into Acquisition Sub, filed January 15, 2014 <i>(incorporated by reference from Exhibit 3.3 to the Registrant's Current Report on Form 8-K filed on January 23, 2014)</i>
4.3	By-Laws of the Registrant <i>(incorporated by reference from Exhibit 3.4 to the Registrant's Current Report on Form 8-K filed on January 23, 2014)</i>
4.4	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock, filed on December 23, 2015 <i>(incorporated by reference from Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on December 24, 2015)</i>
4.5	Certificate of Amendment to Certificate of Designation of Series A Convertible Preferred Stock, filed on April 4, 2016 <i>(incorporated by reference from Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on April 7, 2016)</i>
4.6	Certificate of Change of Ekso Bionics Holdings, Inc. effective May 4, 2016 <i>(incorporated by reference from Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on May 5, 2016)</i>
4.7	Form of specimen certificate <i>(incorporated by reference from Exhibit 4.4 to the Registrant's Registration Statement on Form S-3 filed on June 23, 2015)</i>
4.8	Registration Rights Agreement <i>(incorporated by reference from Exhibit 10.10 of the Registrant's Current Report on Form 8-K filed on January 23, 2014)</i>
4.9*	Form of Certificate of Amendment or Designation with respect to Preferred Stock
4.10*	Form of Warrant Agreement and Warrant Certificate
4.11*	Form of Rights Agreement and Right Certificate
4.12*	Form of Unit Agreement and Unit
5.1	Opinion of Nutter, McClennen and Fish, LLP with respect to the legality of the securities being registered
23.1	Consent of OUM & Co. LLP
23.2	Consent of Nutter, McClennen and Fish, LLP (included in the opinion filed as Exhibit 5.1)
24.1	Powers of Attorney (included on the signature page of this registration statement)
*	To be subsequently filed, if applicable, by an amendment to this registration statement or by a current report on Form 8-K.



**Erin M. Anderman**  
Direct Line: (617) 439-2446  
Fax: (617) 310-9446  
E-mail: eanderman@nutter.com

June 6, 2017  
114211-4

Ekso Bionics Holdings, Inc.  
1414 Harbour Way South  
Suite 1201  
Richmond, California 94804

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Ekso Bionics Holdings, Inc., a Nevada corporation (the "Company"), in connection with a Registration Statement on Form S-3 (as the same may be amended, the "Registration Statement"), filed by the Company as of the date hereof with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement includes a base prospectus (the "Prospectus"), which provides that it will be supplemented in the future by one or more supplements to the Prospectus (each a "Prospectus Supplement"). The Prospectus provides for the offering of the following securities (collectively, the "Securities"):

- (a) shares of the Company's common stock, par value \$0.001 per share ("Common Stock"),
- (b) shares of the Company's preferred stock, par value \$0.001 per share ("Preferred Stock"), which may be issued as part of a series established pursuant to a certificate of designation filed in the office of the Secretary of State of Nevada in accordance with the applicable provisions of the Nevada Revised Statutes (a "Certificate of Designation"),
- (c) warrants representing rights to purchase Common Stock or Preferred Stock ("Warrants"),
- (d) rights to purchase Common Stock, Preferred Stock, or any other securities described in the Prospectus or the applicable Prospectus Supplement ("Rights"), and
- (e) units consisting of Common Stock, Preferred Stock, Warrants, or Rights, or any combination thereof ("Units").

The Securities may be offered and sold from time to time pursuant to Rule 415 promulgated under the Securities Act, in amounts, at prices and on terms to be determined at the time of the offering thereof, at an aggregate initial offering price not to exceed \$75,000,000.

We have examined such documents and made such other investigation as we have deemed appropriate to render the opinions set forth below. As to matters of fact material to our opinions, we have relied, without independent verification, on certificates and other inquiries of officers of the Company. We have also relied on certificates of public officials.

In such examination, we have assumed: (i) the authenticity of original documents and the genuineness of all signatures; (ii) the conformity to the originals of all documents submitted to us as copies; and (iii) the truth, accuracy and completeness of the information, representations and warranties contained in the instruments, documents, certificates and records we have reviewed.

In expressing our opinions below, we have also assumed, with your consent that:

- (a) the Registration Statement (including any and all post-effective amendments), will have become effective under the Securities Act and will comply with all applicable laws;
- (b) the Registration Statement (including any and all required post-effective amendments thereto) will be effective under the Securities Act and will comply with all applicable laws at the time any of the Securities are offered or sold as contemplated by the Registration Statement (including any and all required post-effective amendments thereto), the Prospectus and the applicable Prospectus Supplement(s);
- (c) a Prospectus Supplement describing the Securities offered thereby and the offering thereof and complying with all applicable laws will have been filed with the Commission;
- (d) no stop order suspending the effectiveness of the Registration Statement (including any and all required post-effective amendments thereto) will have been issued and remain in effect at the time any of the Securities are offered or sold as contemplated by the Registration Statement (including any and all required post-effective amendments thereto), the Prospectus and the applicable Prospectus Supplement(s);
- (e) the Securities will be offered and sold in the form and with the terms set forth in the Registration Statement (including any and all required post-effective amendments thereto), the Prospectus and the applicable Prospectus Supplement(s) and the organizational documents of the Company;
- (f) the Securities will be offered and sold in compliance with applicable U.S. federal and state securities laws and in the manner stated in the Registration Statement, the Prospectus and the applicable Prospectus Supplement(s);
- (g) the Securities offered and sold do not and will not violate any applicable law or the organizational documents of the Company or result in a default under or breach of any agreement or instrument binding upon the Company;
- (h) the Company will have obtained any and all legally required consents, approvals, authorizations and other orders of the Commission and any and all other regulatory authorities and other third parties necessary to offer and sell the Securities being offered;
- (i) the Securities offered and sold comply with all requirements and restrictions, if any, applicable to the Company, whether imposed by any court or governmental or regulatory body having jurisdiction over the Company;
- (j) a definitive purchase, underwriting or similar agreement (each a "Purchase Agreement") with respect to any Securities offered and sold will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; and



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- (k) any Securities or other securities issuable upon conversion, exchange or exercise of any Securities being offered and sold will be duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exchange or exercise.

We have also assumed that: (i) the Warrants and any related Warrant Agreement (as defined below), the Rights and any related Rights Agreement (as defined below) and the Units and any related Unit Agreement (collectively, the “Documents”) will be governed by the internal laws of the Commonwealth of Massachusetts; (ii) each of the Documents will constitute legally valid and binding obligations of the parties thereto other than the Company, enforceable against each of them in accordance with their respective terms; and (iii) the status of each of the Documents as legally valid and binding obligations of the parties thereto will not be affected by one or more (a) breaches of, or defaults under, any agreements or instruments, (b) violations of any statutes, rules, regulations or court or governmental orders, or (c) failures to obtain required consents, approvals or authorizations from, or to make required registrations, declarations or filings with, any governmental authorities or other third parties.

Our opinions expressed below are subject to the qualifications that we express no opinion as to the applicability of, compliance with or effect of: (i) any bankruptcy, insolvency, reorganization, preference, fraudulent conveyance, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights and remedies of creditors generally; (ii) general principles of equity, whether considered in a proceeding in equity or at law (including the possible unavailability of specific performance or injunctive relief), concepts of materiality, reasonableness, good faith and fair dealing, and the discretion of the court before which a proceeding is brought; or (iii) public policy considerations that may limit the rights of parties to obtain certain remedies.

We express no opinion as to (i) any provision to the extent it requires any party to indemnify any other person against loss in obtaining the currency due following a court judgment rendered in another currency, (ii) any provision providing for the indemnification of or contribution to a party with respect to a liability where such indemnification or contribution is contrary to public policy, (iii) any provision for liquidated damages, late charges, monetary penalties or other economic remedies to the extent such provisions are deemed to constitute a penalty, (iv) consents to, or restrictions upon, governing law, jurisdiction, venue, arbitration, remedies or judicial relief, (v) any provision requiring the payment of attorneys’ fees, where such payment is contrary to law or public policy, (vi) advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitation, trial by jury or at law, or other procedural rights, (vii) waivers of broadly or vaguely stated rights, (viii) provisions for exclusivity, election or cumulation of rights or remedies, (ix) provisions authorizing or validating conclusive or discretionary determinations, (x) proxies, powers and trusts, (xi) provisions prohibiting, restricting, or requiring consent to assignment or transfer of any right or property, (xii) any provision to the extent it requires that a claim with respect to a security denominated in other than U.S. dollars (or a judgment in respect of such a claim) be converted into U.S. dollars at a rate of exchange at a particular date, to the extent applicable law otherwise provides, (xiii) the severability, if invalid, of provisions to the foregoing effect, (xiv) the securities or “Blue Sky” laws of any state with respect to the offer or sale of the Securities, and (xv) the antifraud provisions of the securities or other laws of any jurisdiction.



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Though the Securities may be offered and sold from time to time on a delayed or continuous basis, this opinion is based upon currently existing statutes, rules, regulations and judicial interpretations, and we disclaim any obligation to advise you of any change in any of those sources of law or any other subsequent legal or factual development which might affect any opinion set forth herein.

Based upon the foregoing examination and in reliance thereon, and subject to the assumptions stated herein and in reliance on statements of fact contained in the documents that we have examined, we are of the opinion that:

1. With respect to the Common Stock, when the shares of Common Stock have been issued and delivered in accordance with the applicable Purchase Agreement against the receipt of requisite consideration therefor provided for therein, such shares of Common Stock will be validly issued, fully paid and non-assessable.
2. With respect to Preferred Stock, when (a) the applicable Certificate of Designation for the Preferred Stock to be issued has been duly filed with the Office of the Secretary of State of Nevada and (b) the shares of Preferred Stock have been issued and delivered in accordance with the applicable Purchase Agreement against the receipt of requisite consideration therefor provided for therein, the shares of Preferred Stock will be validly issued, fully paid and non-assessable.
3. With respect to Common Stock or Preferred Stock to be issued upon conversion or exercise, as applicable, of the Preferred Stock, Warrants or Rights, when (a) if applicable, the Certificate of Designation for the Preferred Stock to be issued has been duly filed with the Office of the Secretary of State of Nevada and (b) such Common Stock or Preferred Stock, as the case may be, has been issued and delivered in accordance with the terms of the applicable Preferred Stock, Warrants or Rights, as the case may be, such shares of Common Stock or Preferred Stock will be validly issued, fully paid and non-assessable.
4. With respect to the Warrants, when (a) a warrant agreement relating to the Warrants (each a "Warrant Agreement") has been duly authorized and validly executed and delivered by the Company and each party thereto, (b) the terms of the Warrants have been established in accordance with the Warrant Agreement and (c) the Warrants have been issued and delivered in accordance with the related Warrant Agreement and the applicable Purchase Agreement against the receipt of requisite consideration therefor provided therein, the Warrants will be legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
5. With respect to the Rights, when (a) a rights agreement relating to the Rights (each a "Rights Agreement") has been duly authorized and validly executed and delivered by the Company and each party thereto, (b) the terms of the Rights have been established in accordance with the Rights Agreement, (c) the Rights have been issued and delivered in accordance with the related Rights Agreement and the applicable Purchase Agreement against the receipt of requisite consideration therefor provided therein, the Rights will be legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.



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6. With respect to the Units, when (a) a unit agreement relating to the Units (each a “Unit Agreement”) has been duly authorized and validly executed and delivered by the Company and each party thereto, (b) the terms of the Units have been established in accordance with the Unit Agreement, (c) the Units (including any Securities underlying the Units) have been issued and delivered in accordance with the related Unit Agreement and the applicable Purchase Agreement against the receipt of requisite consideration therefor provided therein, the Units and any Securities underlying the Units will be legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

We express no opinion as to the laws of any other jurisdiction, other than the Federal laws of the United States of America, the internal laws of the Commonwealth of Massachusetts, and the general corporate law of the State of Nevada as set forth in Chapter 78 of the Nevada Revised Statutes.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related Prospectus under the caption “Legal Matters.” In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

/s/ Nutter, McClennen & Fish, LLP

NUTTER, McCLENNEN & FISH, LLP

EMA/JED/MKK

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement on Form S-3 of our reports dated March 14, 2017 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting of Ekso Bionics Holdings, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ OUM & CO. LLP

San Francisco, California  
June 6, 2017

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