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AEVI GENOMIC MEDICINE, INC.



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**Up to \$20,000,000  
Common Stock**

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We have entered into an Equity Distribution Agreement with JMP Securities LLC, or JMP Securities, relating to shares of our common stock offered by this prospectus. In accordance with the terms of the agreement, we may offer and sell shares of our common stock, par value \$0.0001 per share, having an aggregate offering price of up to \$20,000,000 from time to time through JMP Securities, acting as agent.

Our common stock is listed on the Nasdaq Global Market under the symbol "GNMX." The last sale price of our common stock on May 10, 2018, as reported by the Nasdaq Global Market, was \$1.50 per share.

Sales of our common stock, if any, under this prospectus may be made in sales deemed to be "at the market offerings" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act, including sales made directly on or through the Nasdaq Global Market or any other existing trading market for our common stock. JMP Securities will use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between JMP Securities and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

JMP Securities will be entitled to compensation at a commission rate of up to 3.0% of the aggregate gross sales. In connection with its sale of common stock on our behalf, JMP Securities will be deemed to be an underwriter within the meaning of the Securities Act, and the compensation of JMP Securities will be deemed to be underwriting commissions or discounts.

**Investing in our common stock involves a high degree of risk. Please read Risk Factors beginning on page S-5 of this prospectus supplement, and in the documents incorporated by reference into this 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.**

**JMP Securities**

**The date of this prospectus is May 15, 2018.**

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## ABOUT THIS PROSPECTUS

This prospectus supplement relates to the offering of shares of our common stock. Before buying any shares of common stock offered hereby, we urge you to carefully read this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering, together with the information incorporated herein by reference as described under the headings “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.” These documents contain important information that you should consider when making your investment decision. This prospectus supplement contains information about the common stock offered hereby.

You should rely only on the information that we have provided or incorporated by reference in this prospectus supplement or the accompanying prospectus. We have not, and JMP Securities has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated April 1, 2016, including the documents incorporated by reference therein, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

We are not making offers to sell or solicitations to buy our common stock in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information in this prospectus supplement, the accompanying prospectus or any related free writing prospectus is accurate only as of the date on the front of the document and that any information that we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement or any related free writing 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 herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such 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.

Unless the context provides otherwise, all references in this prospectus to the “Company,” “Aevi Genomic Medicine,” “we,” “us” and “our” refer to Aevi Genomic Medicine, Inc., a Delaware corporation organized on January 27, 2000, and its wholly-owned subsidiaries, Medgenics Medical (Israel) Ltd. and neuroFix, LLC.

We use the Aevi Genomic Medicine logo as a trademark in the United States and elsewhere. All other trademarks or trade names referred to in this document are the property of their respective owners.

## PROSPECTUS SUMMARY

*This summary highlights selected information about us, this offering and information appearing elsewhere in this prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all the information you should consider before investing in our common stock pursuant to this prospectus. Before making an investment decision, to fully understand this offering and its consequences to you, you should carefully read this entire prospectus, including "Risk Factors" beginning on page S-5 of this prospectus and the financial statements and related notes and other information that we incorporated by reference herein, including our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q that we file with the SEC from time to time.*

### Our Business

#### Overview

We are a clinical stage biopharmaceutical company with an emphasis on identifying the genetic drivers of disease and applying this understanding to the pursuit of differentiated novel therapies for pediatric onset, life-altering diseases, including rare and orphan diseases. We look to find treatments for genetically defined diseases for which there are limited therapeutic options currently available, with a primary focus on pediatric patients. This strategy begins with identifying and genetically validating a therapeutic target and using genomics to guide product development. The strategy also involves identifying and acquiring otherwise abandoned or overlooked drug candidates and matching targets and mechanisms of action to novel genetic discoveries.

We have partnered with the Center for Applied Genomics ("CAG"), at The Children's Hospital of Philadelphia ("CHOP"), to implement a genomic medicine driven approach to drug development. CAG's assets include a fully automated biorepository containing specimens from more than 75,000 pediatric patients and 150,000 relatives of those patients. The sample is highly enriched for rare and orphan diseases and the large majority of patients have been genotyped. Their phenotypes are recorded in a modern electronic health record that is linked to the genomics database and biorepository. The patients in the database have consented to anonymized use of their data for research and follow up contact if needed.

CAG continues to discover important and novel genetic biomarkers by both genome-wide association studies and exome sequencing and analysis of affected individuals and their family members. Such markers not only identify patients with the disease but frequently point to the potential cause of the disease and suggest targets and feasible intervention strategies that include protein or peptide therapy, monoclonal antibodies, drugs or gene therapy. By working initially in pediatric populations of specific diseases, we can try to minimize the confounding environmental factors seen in older patients. In addition, the availability of robust genetic biomarkers allows us to design trials that focus on a highly-enriched patient population that we believe is more likely to respond to targeted therapies and further enhance the likelihood of clinical and regulatory success. We believe this will allow us to implement clinical development programs that will lead to medicines that can address critical needs in patients suffering from rare and orphan diseases.

#### Corporate Information

We were incorporated under the laws of the State of Delaware in January 2000 as Medgenics, Inc and changed our name to Aevi Genomic Medicine, Inc. on December 15, 2016. Our principal executive offices are located at 435 Devon Park Drive, Suite 715, Wayne, PA 19087 and our telephone number is (610) 254-4201. Our website address is [www.aevigenomics.com](http://www.aevigenomics.com). We make available free of charge on our website our annual, quarterly and current reports, including amendments to such reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the SEC. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website as part of this prospectus.

## THE OFFERING

Common stock offered by us:	Shares of common stock having an aggregate offering price of up to \$20,000,000.
Common stock to be outstanding after this offering:	Up to 72,670,598 shares (as more fully described in the notes following this table), assuming sales of 13,333,333 shares of our common stock in this offering at an offering price of \$1.50 per share, which was the last reported sale price of our common stock on the Nasdaq Global Market on May 10, 2018. The actual number of shares issued will vary depending on the sales price under this offering.
Manner of offering:	“At the market offering” made from time to time through our sales agent, JMP Securities LLC. See “Plan of Distribution” beginning on page S-12 of this prospectus supplement.
Use of proceeds:	We intend to use the net proceeds received from the sale of our common stock for general corporate purposes, including clinical trial expenses, research and development expenses and general and administrative and manufacturing expenses. See “Use of Proceeds” on page S-8.
Risk factors:	An investment in our common stock involves a high degree of risk. See the information contained in or incorporated by reference under “Risk Factors” beginning on page S-5 of this prospectus supplement, as well as the other information included in or incorporated by reference in this prospectus supplement or the accompanying prospectus, for a discussion of risks you should carefully consider before investing in our securities.
Nasdaq Global Market symbol	“GNMX”

The number of shares of common stock shown above to be outstanding after this offering is based on 59,337,265 shares of common stock outstanding as of March 31, 2018 and excludes:

- 6,518,255 shares of our common stock issuable upon the exercise of stock options outstanding under our Stock Incentive Plan as of March 31, 2018, at a weighted-average exercise price of \$4.34 per share, 3,245,864 of which were exercisable as of that date;
- 2,833,333 shares of our common stock issuable upon the exercise of stock options granted to our senior management and employees outside of our Stock Incentive Plan as of March 31, 2018, at a weighted-average exercise price of \$4.28 per share, 2,666,666 of which were exercisable as of that date;
- 1,637,168 shares of our common stock reserved for issuance of new awards under our Stock Incentive Plan as of March 31, 2018; and
- 4,078,904 shares of our common stock issuable upon the exercise of outstanding warrants as of March 31, 2018, at a weighted-average exercise price of \$2.88 per share, all of which were exercisable as of that date.

## RISK FACTORS

*Investing in our securities involves a high degree of risk. Before you make a decision to invest in our securities, you should carefully consider the risks described below, together with the risks described in the section entitled "Risk Factors" contained in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q filed with the SEC, as well as any amendment or update thereto reflected in subsequent filings with the SEC or in any Current Report on Form 8-K we may file. If any of these risks actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our securities to decline and you may lose part or all of your investment. Moreover, the risks described are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business, operating results, prospects or financial condition.*

### Risks Related to This Offering

***We have broad discretion in the use of the net proceeds of this offering and, despite our efforts, we may use the proceeds in a manner that does not improve our operating results or increase the value of your investment.***

We currently anticipate that the net proceeds from the sale of our common stock will be used primarily for general corporate purposes, including regulatory, clinical trial, research and development, pre-commercial, general and administrative and manufacturing expenses. However, we have not determined the specific allocation of the net proceeds among these potential uses. Our management will have broad discretion over the use and investment of the net proceeds of this offering, and, accordingly, investors in this offering will need to rely upon the judgment of our management with respect to the use of proceeds, with only limited information concerning our specific intentions. These proceeds could be applied in ways that do not improve our operating results or increase the value of your investment. Please see the section entitled "Use of Proceeds" on page S-8 for further information.

***If you purchase the common stock sold in this offering, you will experience immediate dilution as a result of this offering and future equity issuances. Our existing stockholders may also experience dilution as a result of future issuances of common stock or other equity securities.***

Because the price per share of our common stock being offered may be higher than the book value per share of our common stock, you may suffer immediate substantial dilution in the net tangible book value of the common stock you purchase in this offering. See the section entitled "Dilution" below for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

The issuance of additional shares of our common stock could be dilutive to stockholders if they do not invest in future offerings. Moreover, to the extent that we issue options or warrants to purchase, or securities convertible into or exchangeable for, shares of our common stock in the future and those options, warrants or other securities are exercised, converted or exchanged, stockholders may experience further dilution.

In order to raise additional capital or pursue strategic transactions, we may in the future offer, issue or sell additional shares of common stock or other securities convertible into or exchangeable for shares of our common stock. We cannot assure you that we will be able to sell shares or other securities in any other transaction at a price per share or that have an exercise price or conversion price per share that is equal to or greater than the price for the securities purchased by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell or issue additional shares of common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than such price.

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

Sales of a substantial number of shares of our common stock in the public markets could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock would have on the market price of our common stock.

***We do not intend to pay any cash dividends on our common stock in the foreseeable future and, therefore, any return on your investment in our common stock must come from increases in the fair market value and trading price of our common stock.***

We do not intend to pay any cash dividends on our common stock in the foreseeable future and, therefore, any return on your investment in our common stock must come from increases in the fair market value and trading price of our common stock.

## FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated or deemed to be incorporated by reference herein contain or incorporate by reference forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. In some cases, you can identify forward-looking statements by the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “objective,” “ongoing,” “plan,” “predict,” “project,” “potential,” “should,” “will,” or “would,” and or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus and the information incorporated or deemed to be incorporated by reference herein, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain.

These risks and uncertainties include, among other things:

- our ability to obtain additional funding to develop our product candidates;
- the need to obtain regulatory approval of our product candidates and companion products;
- the success of our clinical trials through all phases of clinical development;
- any delays in regulatory review and approval of product candidates in clinical development;
- our ability to commercialize our product candidates;
- market acceptance of our product candidates;
- competition from existing products or new products that may emerge;
- regulatory difficulties relating to products that have already received regulatory approval;
- potential product liability claims;
- our dependency on third-party manufacturers to supply or manufacture our products;
- our ability to establish or maintain collaborations, licensing or other arrangements;
- our ability and third parties’ abilities to protect intellectual property rights;
- compliance with obligations under intellectual property licenses with third parties;
- our ability to adequately support future growth; and
- our ability to attract and retain key personnel to manage our business effectively.

You should refer to Risk Factors beginning on page S-5 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

#### USE OF PROCEEDS

Except as described in any free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds of this offering for general corporate purposes, including regulatory, clinical trial, research and development, pre-commercial, general and administrative and manufacturing expenses. The amounts and timing of these expenditures will depend on a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering efforts, technological advances and the competitive environment for our product candidates. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Accordingly, our management will have broad discretion in the application of these proceeds. Pending these uses, we will invest the net proceeds in investment-grade, interest-bearing securities.

## DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share and our as adjusted net tangible book value per share after this offering. We calculate net tangible book value per share by dividing our net tangible book value, which is tangible assets less total liabilities, by the number of outstanding shares of our common stock.

Our net tangible book value as of March 31, 2018 was approximately \$22.7 million, or \$0.38 per share. After giving effect to the sale by us of an aggregate of \$20 million in shares of common stock in this offering at an assumed offering price of \$1.50 per share, which was the last reported sale price of our common stock on the Nasdaq Global Market on May 10, 2018, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2018 would have been approximately \$41.9 million, or \$0.58 per share of common stock. This represents an immediate increase in the net tangible book value of \$0.20 per share to our existing stockholders and an immediate dilution in the net tangible book value of \$0.92 per share of common stock to new investors purchasing common stock in this offering. The following table illustrates this calculation on a per share basis:

Assumed public offering price per share		\$	1.50
Net tangible book value per share as of March 31, 2018	\$	0.38	
Increase in net tangible book value per share after this offering	\$	0.20	
As adjusted net tangible book value per share as of March 31, 2018, after giving effect to this offering	\$	0.58	
Dilution per share to new investors in this offering	\$	0.92	

The table above assumes for illustrative purposes that an aggregate of 13,333,333 shares of our common stock are sold at a price of \$1.50 per share, which was the last reported sale price of our common stock on The Nasdaq Global Market on May 10, 2018. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$2.50 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$20 million is sold at that price, would increase our adjusted net tangible book value per share after the offering to \$0.62 per share and would increase the dilution in net tangible book value per share to new investors in this offering to \$1.88 per share, after deducting commissions and estimated offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$0.50 per share shown in the table above, assuming all of our common stock in the gross aggregate amount of \$20 million is sold at that price, would decrease our adjusted net tangible book value per share after the offering to \$0.42 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to \$0.08 per share, after deducting commissions and estimated offering expenses payable by us. This information is supplied for illustrative purposes only.

The number of shares of common stock shown above to be outstanding after this offering is based on 59,337,265 shares of common stock outstanding as of March 31, 2018 and excludes:

- 6,518,255 shares of our common stock issuable upon the exercise of stock options outstanding under our Stock Incentive Plan as of March 31, 2018, at a weighted-average exercise price of \$4.34 per share, 3,245,864 of which were exercisable as of that date;
- 2,833,333 shares of our common stock issuable upon the exercise of stock options granted to our senior management and employees outside of our Stock Incentive Plan as of March 31, 2018, at a weighted-average exercise price of \$4.28 per share, 2,666,666 of which were exercisable as of that date;
- 1,637,168 shares of our common stock reserved for issuance of new awards under our Stock Incentive Plan as of March 31, 2018; and
- 4,078,904 shares of our common stock issuable upon the exercise of outstanding warrants as of March 31, 2018, at a weighted-average exercise price of \$2.88 per share, all of which were exercisable as of that date.

To the extent outstanding warrants or options are exercised, there will be further dilution to new investors. In addition, to the extent we issue additional equity securities in connection with future capital raising activities, our then-existing stockholders may experience dilution.

## PRICE RANGE OF OUR COMMON STOCK

Our common stock issued in connection with our U.S. initial public offering in April 2011 was previously traded on the NYSE MKT under the symbol “MDGN”.

On October 10, 2016, we provided written notice to the NYSE MKT of our intention to voluntarily delist our common stock from the NYSE MKT and to list our common stock on the Nasdaq Global Market. The listing and trading of our common stock on the NYSE MKT ceased at market close on October 20, 2016, and trading of our common stock on the Nasdaq Global Market commenced on October 21, 2016. The common stock was approved for listing on the Nasdaq Global Market and continuing to trade under the symbol “MDGN” until December 15, 2016. Effective December 16, 2016, in connection with our corporate name change to Aevi Genomic Medicine, Inc., our common stock ceased trading under the ticker symbol “MDGN” and commenced trading under the new ticker symbol “GNMX”.

The following table sets forth, for the periods indicated, the high and low sale prices for our common stock as reported by the NYSE MKT or the Nasdaq Global Market, as applicable:

	<b>High</b>	<b>Low</b>
<b>2016</b>		
First Quarter (January 1, 2016 to March 31, 2016)	\$ 6.18	\$ 3.09
Second Quarter (April 1, 2016 to June 30, 2016)	6.60	4.34
Third Quarter (July 1, 2016 to September 30, 2016)	6.32	4.74
Fourth Quarter (October 1, 2016 to December 31, 2016)	6.89	4.00
<b>2017</b>		
First Quarter (January 1, 2017 to March 31, 2017)	\$ 6.18	\$ 1.50
Second Quarter (April 1, 2017 to June 30, 2017)	1.92	0.98
Third Quarter (July 1, 2017 to September 30, 2017)	1.47	1.12
Fourth Quarter (October 1, 2017 to December 31, 2017)	1.91	1.01
<b>2018</b>		
First Quarter (January 1, 2018 to March 31, 2018)	\$ 2.65	\$ 1.20
Second Quarter (April 1, 2018 to May 10, 2018)	2.05	1.41

On May 10, 2018, the closing price of our common stock as reported by the Nasdaq Global Market was \$1.50 per share. As of May 10, 2018, there were approximately 253 stockholders of record of our common stock. This does not include the number of persons whose stock is held in nominee or street name accounts through brokers.

## DIVIDEND POLICY

We have never declared dividends on our equity securities, and currently do not plan to declare dividends on shares of our common stock in the foreseeable future. We expect to retain our future earnings, if any, for use in the operation and expansion of our business. Subject to the foregoing, the payment of cash dividends in the future, if any, will be at the discretion of our Board of Directors and will depend upon such factors as earnings levels, capital requirements, our overall financial condition and any other factors deemed relevant by our Board of Directors.

## PLAN OF DISTRIBUTION

We have entered into an Equity Distribution Agreement with JMP Securities LLC, or JMP Securities, under which we may issue and sell from time to time shares of our common stock having an aggregate offering price of up to \$20,000,000 through JMP Securities as our sales agent. The form of Equity Distribution Agreement will be filed as an exhibit to a current report on Form 8-K and incorporated by reference in this prospectus. Sales of our common stock, if any, under this prospectus may be made in transactions that are deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act, including sales made directly on or through the NASDAQ Global Market or any other existing trading market for our common stock.

Each time we wish to issue and sell common stock under the Equity Distribution Agreement, we will notify JMP Securities of the number of shares to be issued, the dates on which such sales are anticipated to be made, any minimum price below which sales may not be made and other sales parameters as we deem appropriate. Once we have so instructed JMP Securities, unless JMP Securities declines to accept the terms of the notice, JMP Securities has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares of common stock up to the amount specified on such terms. The obligations of JMP Securities under the Equity Distribution Agreement to sell our common stock is subject to a number of conditions that we must meet.

JMP Securities will provide written confirmation to us no later than the opening of the trading day on Nasdaq following the trading day in which our common stock is sold under the Equity Distribution Agreement. Each confirmation will include the number of shares of common stock sold on the preceding day, the net proceeds to us and the compensation payable by us to JMP Securities in connection with the sales.

We will pay JMP Securities commissions for their services in acting as agents in the sale of our shares. JMP Securities will be entitled to compensation at a commission rate of 3.0% of the gross sales price per share of common stock sold under the Equity Distribution Agreement. Because there is no minimum offering amount required as a condition to closing this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse JMP Securities for certain specified expenses, including the fees and disbursements of their legal counsel in an amount not to exceed \$50,000.

We estimate that the total expenses for the offering, excluding compensation and reimbursements payable to JMP Securities under the terms of the Equity Distribution Agreement, will be approximately \$100,000.

Settlement for sales of common stock will occur on the second trading day following the date on which any sales are made, or on some other date that is agreed upon by us and JMP Securities in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our shares of common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and JMP Securities agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sale of common stock on our behalf, JMP Securities will be deemed to be an “underwriter” within the meaning of the Securities Act, and the compensation of JMP Securities will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to JMP Securities against certain civil liabilities, including liabilities under the Securities Act.

The offering pursuant to the Equity Distribution Agreement will terminate upon the termination of the Equity Distribution Agreement as permitted therein.

JMP Securities and its affiliates may in the future provide various investment banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, JMP Securities will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus.

## LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Pepper Hamilton LLP, Philadelphia, Pennsylvania. JMP Securities LLC is being represented in connection with this offering by Cooley LLP, New York, New York.

## EXPERTS

The consolidated financial statements of Aevi Genomic Medicine, Inc. at December 31, 2017 and 2016, and for each of the two years in the period ended December 31, 2017, incorporated by reference in this Prospectus and Registration Statement, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 3 to the consolidated financial statements) incorporated elsewhere herein by reference and are incorporated herein in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Aevi Genomic Medicine, Inc. for the year ended December 31, 2015, incorporated by reference in this Prospectus and Registration Statement, have been audited by Kost Forer Gabbay & Kasierer, independent registered public accounting firm (a member of Ernst & Young Global), as set forth in their report thereon incorporated elsewhere herein by reference and are incorporated herein in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the internet at the SEC's website at [www.sec.gov](http://www.sec.gov). Copies of certain information filed by us with the SEC are also available on our website at [www.aevigenomicmedicine.com](http://www.aevigenomicmedicine.com). Our website is not a part of this prospectus and is not incorporated by reference into this prospectus. You may also read and copy any document we file at the SEC's Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

This prospectus omits some information contained in our registration statement in accordance with the SEC's rules and regulations. You should review the information contained in any exhibits filed to the registration statement for further information on us and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to those filings. You should review the complete document to evaluate these statements.

## INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference into this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 001-35112) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on March 13, 2018;
- Definitive Proxy Statement on Schedule 14A (only to the extent incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2017) filed with the SEC on April 27, 2018, as amended and supplemented by the Definitive Additional Materials on Schedule 14A filed with the SEC on May 1, 2018 and May 15, 2018;
- Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2018, filed with the SEC on May 15, 2018;
- Current Reports on Form 8-K filed with the SEC on March 6, 2018 and March 21, 2018 (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary); and
- the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on March 24, 2011.

In addition, all reports and documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this registration statement.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act and until we file a post-effective amendment that indicates the termination of the offering of the securities covered by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You may obtain a copy of any or all of the documents referred to above which may have been or may be incorporated by reference into this prospectus, except for exhibits to those documents (unless the exhibits are specifically incorporated by reference into those documents) at no cost to you by writing or telephoning us at the following address: Aevi Genomic Medicine, Inc., 435 Devon Park Drive, Suite 715, Wayne, PA 19087, telephone number (610) 254-4201.

Prospectus



**\$100,000,000**

**MEDGENICS, INC.**

**Common Stock  
Warrants  
Debt Securities  
Units  
Rights**

This prospectus relates to common stock, warrants, debt securities, rights and units that we may sell from time to time in one or more offerings up to a total public offering price of \$100,000,000 on terms to be determined at the time of sale. We will provide specific terms of these securities in supplements to this prospectus. You should read this prospectus and any supplement carefully before you invest. This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement for those securities.

These securities may be sold directly by us, through dealers or agents designated from time to time, to or through underwriters or through a combination of these methods. See "Plan of Distribution" in this prospectus. We may also describe the plan of distribution for any particular offering of these securities in any applicable prospectus supplement. If any dealers, agents or underwriters are involved in the sale of any securities in respect of which this prospectus is being delivered, we will disclose their names and the nature of our arrangements with them in a prospectus supplement. The net proceeds we expect to receive from any such sale will also be included in a prospectus supplement.

Our common stock is listed on the NYSE MKT (formerly the NYSE Amex) under the symbol "MDGN." The applicable prospectus supplement will contain information as to other listings, if any, on the NYSE MKT or other securities exchange of the securities covered by the applicable prospectus supplement. We also currently have a series of warrants listed on the NYSE MKT under the symbol "MDGN.WS," although any warrants offered by this prospectus may or may not be listed on the NYSE MKT or other securities exchange.

**Investing in our securities involves a high degree of risk. See "Risk Factors" on page 2 of this prospectus before you make any investment in our securities.**

**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 April 1, 2016

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You should rely only on the information contained in, or incorporated by reference into, this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this prospectus in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer or solicitation of an offer in such jurisdiction. You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate as of any date other than the date on the front of the document, and you should not assume that the information contained in any document incorporated by reference in this prospectus is accurate as of any date other than the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since those dates.

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. Under this shelf registration process, we may, from time to time, offer and sell any combination of the securities described in this prospectus in one or more offerings. The aggregate initial offering price of all the securities sold under this prospectus will not exceed \$100,000,000. This prospectus provides you with a general description of the securities we may offer.

Each time we offer securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to read carefully this prospectus, any applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the heading “Incorporation of Certain Documents by Reference,” before buying any of the securities being offered.

Unless the context provides otherwise, all references in this prospectus to “Medgenics,” “we,” “us,” “our,” or similar terms, refer to Medgenics, Inc. and its wholly owned subsidiary, Medgenics Medical (Israel) Limited.

We use TARGT<sup>TM</sup>, TARGT<sub>EPO</sub><sup>TM</sup>, DermaVac<sup>TM</sup>, GeneRide<sup>TM</sup> and the Medgenics logo as trademarks in the United States and elsewhere. All other trademarks or trade names referred to in this prospectus are the property of their respective owners.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference in this prospectus, includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including, but not limited to, statements regarding business strategy, expectations and plans, our objectives for future operations, including product development, and our future financial position. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “could,” “would,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “projects,” “predicts,” “potential,” or the negative of those terms, and similar expressions and comparable terminology intended to identify forward-looking statements.

We base these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to risks and uncertainties that could cause our actual results to differ materially from those reflected in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those described under “Risk Factors” in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on February 26, 2016, which is incorporated by reference in this prospectus, as may be supplemented or updated by any applicable prospectus supplement, and those described in other reports and documents we file with the SEC.

Any forward-looking statement speaks only as of the date on which it is made and, except as required by law, we do not intend to update any forward-looking statements publicly to reflect events or circumstances after the date on which such statement is made or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future. You should not place undue reliance on any forward-looking statement.

## OUR COMPANY

### Overview

We are a clinical stage biopharmaceutical company with an emphasis on Genomic Medicine. The National Human Genome Research Institute of the National Institute of Health defines “Genomic Medicine” as “*an emerging medical discipline that involves using genomic information about an individual as part of their clinical care (e.g., for diagnostic or therapeutic decision-making) and the health outcomes and policy implications of that clinical use.*” Genomic medicine is currently making an impact in the fields of oncology, pharmacology, rare and undiagnosed diseases, and infectious disease.

Medgenics has partnered with the Center for Applied Genomics, or CAG, at The Children’s Hospital of Philadelphia, or CHOP, to implement a genomics-medicine driven approach to drug development. CAG’s assets include a fully automated biorepository containing specimens from more than 60,000 pediatric patients and 150,000 relatives. The sample is highly enriched for rare and orphan diseases and the large majority of patients have been genotyped. Their phenotypes are recorded in a modern electronic health record. The patients have been consented for anonymized use of their data for research and follow up contact if needed.

CAG continues to discover important and novel genetic biomarkers by both genome-wide association studies and exome sequencing and analysis of affected individuals and their family members. Such markers not only identify patients with the disease but frequently point to the cause of the disease and suggest targets and feasible intervention strategies that include protein or peptide therapy, monoclonal antibodies, drugs or gene therapy. By working initially in a pediatric population, confounding environmental factors seen in older patients are minimized.

Medgenics’ therapeutic strategy is to work closely with our collaborators at CAG to identify populations of need with well-characterized, novel, genetically-defined targets. We then designate an actionable approach based upon the target, the biology and human pathophysiology, and the clinical and regulatory pathways. The collaboration affords us unique and proprietary insight into these diseases and allows us to better select therapeutic approaches. This, in turn, allows us to rapidly identify appropriate approaches and molecules that have been in the clinic but not advanced due to lack of efficacy in a different patient population or for strategic reasons. We are patient rather than technology focused and thus willing and able to explore many therapeutic modalities including small molecules, peptides, biologics as well as Medgenics’ proprietary TARGT™ (Transduced Autologous Restorative Gene Therapy) gene therapy technology as appropriate.

Hundreds of molecules and biologics are currently listed in proprietary databases. Many of these have remaining composition of matter patent life and many would be eligible for regulatory exclusivity based on first registration (up to 12 years for biologics), as well as orphan drug and additional pediatric exclusivity. When such molecules are available, the time to file an Investigational New Drug Application/Investigational Medicinal Product Dossier and initiate clinical trials, cost and risk may be substantially reduced. In some cases it may be possible to advance from discovery to the clinic in less than 2 years, and to achieve proof of concept in as little as 3 years.

The availability of robust genetic biomarker(s) allows trial designs to focus on highly enriched patient populations that are more likely to respond to targeted therapies. This can allow us to conduct smaller, more focused and less expensive clinical trials. Likewise, highly targeted drugs that are less likely to exhibit off target effects can be used, when available. This further enhances the likelihood of clinical trial and regulatory success and potentially allows us to conduct smaller, easier-to-enroll clinical trials. Furthermore, such highly targeted therapies in specifically targeted diseases should allow for the creation of higher value medicines that can address critical needs in patients suffering from rare and orphan diseases. The solid genetic foundation underlying these disease targets, along with highly targeted therapies, may also allow rapid label expansion into adjacent populations.

Our initial program arising out of our Genomics Medicine strategy is our development candidate, NFC-1. Through our acquisition of neuroFix, LLC, or neuroFix, we acquired the rights to develop NFC-1 as well as the rights to certain data derived from a clinical trial and other studies of NFC-1. NFC-1 is a first-in-class, non-stimulant metabotropic glutamate receptor, or mGluR, neuromodulator that is Phase 2/3 ready for the treatment of mGluR network mutation positive Attention Deficit Hyperactivity Disorder, or ADHD, as well as neuropsychiatric symptoms resulting from a related rare genetic disorder, 22q11.2 Deletion Syndrome, or 22q11.2 DS. We intend to develop NFC-1 for the treatment of mGluR network mutation positive ADHD, or mGluR+ ADHD, and certain other neurological and neuropsychological indications. A Phase 1b clinical trial of NFC-1 in adolescents with ADHD and disruptions in the mGluR gene network was recently completed showing the safety of NFC-1 as well as signaling potential efficacy in the adolescents treated.

We are also actively developing our TARGT gene therapy platform as described in more detail in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

### **Company Information**

We were organized as a Delaware corporation on January 27, 2000. Our principal executive offices are located at 435 Devon Park Drive, Building 700, Wayne, Pennsylvania. We conduct our research and development activities primarily from our Israeli location in Misgav Business Park, Misgav. Our telephone number is (610) 254-4201 in the United States and +972-4-902-8900 in Israel. Our website address is [www.medgenics.com](http://www.medgenics.com). The information on or accessible through our website is not part of this prospectus.

### **RISK FACTORS**

Investing in our securities involves risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. 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" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC on February 26, 2016, which is incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the Commission in the future. The risks and uncertainties we have described are not the only risks that we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

### **USE OF PROCEEDS**

Unless we otherwise indicate in the applicable prospectus supplement relating to a specific offering, we currently intend to use the net proceeds from the sale of the securities for research and product development activities, clinical trial activities, investment in capital equipment and for working capital and other general corporate purposes.

We may set forth additional information on the use of net proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific offering. Pending the application of the net proceeds, we may invest the net proceeds in bank deposits or short-term, interest-bearing investment grade securities.

### **RATIO OF EARNINGS TO FIXED CHARGES**

Our ratio of earnings to fixed charges for each of the five most recently completed fiscal years and any required interim periods will each be specified in a prospectus supplement or in a document that we file with the SEC and incorporate by reference pertaining to the issuance, if any, by us of debt securities in the future.

### **PLAN OF DISTRIBUTION**

We may sell the securities from time to time pursuant to underwritten public offerings, direct sales to the public, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

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

For each offering of securities under this prospectus, we will set forth in a prospectus supplement the terms of the offering, including, to the extent applicable:

- the name or names of the underwriters, if any;
- the purchase price of, or other consideration for, the securities, and the proceeds, if any, we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

If underwriters are used in the sale, they may acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters may be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Underwriters or agents could make sales deemed to be an "at-the-market" offering as defined in Rule 415 under the Securities Act, including sales made directly on the NYSE MKT, the existing trading market for our common stock, or sales made to or through a market maker other than on an exchange. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment. Any agent may, and if acting as agent in an at-the-market equity offering will, be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities.

We also may sell securities to a dealer as principal. If we sell securities to a dealer as a principal, the dealer may resell those securities to the public at varying prices to be determined by such dealer at the time of resale. Any dealer may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold. The name of the dealer and the terms of the transactions will be set forth in the applicable prospectus supplement.

If required under applicable state securities laws, we will sell the securities only through registered or licensed brokers or dealers. In addition, in some states, we may not sell securities unless they have been registered or qualified for sale in the applicable state or unless we have complied with an exemption from any registration or qualification requirements.

We may authorize underwriters, agents or dealers to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide underwriters, agents and dealers with indemnification against civil liabilities, including liabilities under the Securities Act or contribution with respect to payments that the underwriters, agents or dealers may make with respect to these liabilities. Underwriters, agents and dealers may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. These securities may or may not be listed on an exchange. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters or agents that are qualified market makers on the NYSE MKT may engage in passive market making transactions in the common stock on the NYSE MKT in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement. We will bear all costs, expenses and fees in connection with the registration of the securities, as well as the expense of all commissions and discounts, if any, attributable to sales of the securities by us.

#### **DESCRIPTION OF COMMON STOCK**

The following description of the material terms of our common stock includes a summary of specified provisions of our amended and restated certificate of incorporation and by-laws. This description also summarizes relevant provisions of the General Corporation Law of the State of Delaware, which we refer to as the DGCL. The terms of our amended and restated certificate of incorporation and by-laws and the terms of the DGCL are more detailed than the general information provided below. Therefore, please carefully consider the actual provisions of these documents, which have been filed with the SEC as exhibits to the registration statement of which this prospectus forms a part, and the DGCL.

##### **General**

Our authorized capital stock currently consists of 100,000,000 shares of common stock, par value \$0.0001 per share. We do not have any preferred stock outstanding or authorized. We may offer our common stock directly or upon the conversion of units and the exercise of warrants or rights.

As of February 19, 2016, there were 32,929,679 shares of common stock issued and 32,921,179 shares of common stock outstanding held of record by 270 stockholders.

Holders of common stock are entitled to one vote per share on matters on which our stockholders vote. There are no cumulative voting rights. Holders of common stock are entitled to receive dividends, if declared by our Board of Directors, out of funds that we may legally use to pay dividends. If we liquidate or dissolve, holders of common stock are entitled to share ratably in our assets once our debts are paid. Our amended and restated certificate of incorporation does not provide the common stock with any redemption, conversion or preemptive rights.

#### **Anti-Takeover Effects of Delaware Law**

We are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation’s voting stock. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, the Board of Directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or
- at or after the time the stockholder became interested, the business combination was approved by the Board of Directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Corporate Stock Transfer, Inc.

#### **Stock Exchange Information**

Our common stock is listed on the NYSE MKT under the symbol “MDGN.”

#### **DESCRIPTION OF WARRANTS**

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms we describe below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement.

As of February 19, 2016, we have outstanding warrants to purchase a total of 8,462,359 shares of common stock at a weighted average exercise price of \$6.43 per share. Of these, warrants to purchase a total of 2,763,730 shares of common stock, each having an exercise price of \$6.00 per share and expiring on April 12, 2016, are traded on the NYSE MKT under the symbol “MDGN.WS.” No other series of our warrants is listed on any exchange.

## General

We may issue warrants for the purchase of common stock in one or more series. We may issue warrants independently or together with common stock, and the warrants may be attached to or separate from the common stock.

We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement or by warrant agreements that we will enter into directly with the purchasers of the warrants. If we evidence warrants by warrant certificates, we will enter into a warrant agreement with a warrant agent. We will indicate the name and address of the warrant agent, if any, in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants. Those terms may include:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased or exercised;
- if applicable, the terms of the common stock with which the warrants are issued and the number of warrants issued with such common stock;
- if applicable, the date on and after which the warrants and the related common stock will be separately transferable;
- the number of shares of common stock purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the manner in which the warrants may be exercised, which may include by cashless exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of shares of common stock issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- the terms of the common stock issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

The prospectus supplement may also include, if applicable, a discussion of the material United States federal income tax consequences of holding or exercising the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the common stock purchasable upon such exercise, including the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights.

## Exercise of Warrants

Each warrant will entitle the holder to purchase the number of shares of common stock that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the close of business on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering to the warrant agent or us the warrant certificate or warrant agreement representing the warrants to be exercised together with specified information, and by paying the required amount to the warrant agent or us in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate or in the warrant agreement and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent or us in connection with such exercise.

Upon receipt of the required payment and the warrant certificate or the warrant agreement, as applicable, properly completed and duly executed at the corporate trust office of the warrant agent, if any, at our offices or at any other office indicated in the applicable prospectus supplement, we will issue and deliver the common stock purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate or warrant agreement are exercised, then we will issue a new warrant certificate or warrant agreement for the remaining amount of warrants.

#### **Enforceability of Rights by Holders of Warrants**

If we appoint a warrant agent, any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

#### **DESCRIPTION OF DEBT SECURITIES**

This section describes the general terms and provisions of the debt securities that we may offer under this prospectus, any of which may be issued as convertible or exchangeable debt securities. We will set forth the particular terms of the debt securities we offer in a prospectus supplement. The extent, if any, to which the following general provisions apply to particular debt securities will be described in the applicable prospectus supplement. The following description of general terms relating to the debt securities and the indenture under which the debt securities will be issued are summaries only and therefore are not complete. You should read the indenture and the prospectus supplement regarding any particular issuance of debt securities.

We will issue any debt under an indenture to be entered into between us and the trustee identified in the applicable prospectus supplement. The terms of the debt securities will include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as in effect on the date of the indenture. We have filed or will file a copy of the form of indenture as an exhibit to the registration statement in which this prospectus is included. The indenture will be subject to and governed by the terms of the Trust Indenture Act of 1939.

We may offer under this prospectus up to an aggregate principal amount of \$100,000,000 in debt securities, or if debt securities are issued at a discount, or in a foreign currency, foreign currency units or composite currency, the principal amount as may be sold for an aggregate initial public offering price of up to \$100,000,000. Unless otherwise specified in the applicable prospectus supplement, the debt securities will represent direct, unsecured obligations of the Company and will rank equally with all of our other unsecured indebtedness.

The following statements relating to the debt securities and the indenture are summaries, qualified in their entirety by reference to the detailed provisions of the indenture and the final form indenture as may be filed with a future prospectus supplement.

#### **General**

We may issue the debt securities in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will describe the particular terms of each series of debt securities in a prospectus supplement relating to that series, which we will file with the SEC.

The prospectus supplement will set forth, to the extent required, the following terms of the debt securities in respect of which the prospectus supplement is delivered:

- the title of the series;
- the aggregate principal amount;
- the issue price or prices, expressed as a percentage of the aggregate principal amount of the debt securities;
- any limit on the aggregate principal amount;
- the date or dates on which principal is payable;
- the interest rate or rates (which may be fixed or variable) or, if applicable, the method used to determine such rate or rates;
- the date or dates from which interest, if any, will be payable and any regular record date for the interest payable;
- the place or places where principal and, if applicable, premium and interest, is payable;
- the terms and conditions upon which we may, or the holders may require us to, redeem or repurchase the debt securities;
- the denominations in which such debt securities may be issuable, if other than denominations of \$1,000 or any integral multiple of that number;
- whether the debt securities are to be issuable in the form of certificated securities (as described below) or global securities (as described below);
- the portion of principal amount that will be payable upon declaration of acceleration of the maturity date if other than the principal amount of the debt securities;
- the currency of denomination;
- the designation of the currency, currencies or currency units in which payment of principal and, if applicable, premium and interest, will be made;
- if payments of principal and, if applicable, premium or interest, on the debt securities are to be made in one or more currencies or currency units other than the currency of denomination, the manner in which the exchange rate with respect to such payments will be determined;
- if amounts of principal and, if applicable, premium and interest may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index, then the manner in which such amounts will be determined;
- the provisions, if any, relating to any collateral provided for such debt securities;
- any addition to or change in the covenants and/or the acceleration provisions described in this prospectus or in the indenture;
- any events of default;
- the terms and conditions, if any, for conversion into or exchange for shares of our common stock or preferred stock;
- any depositories, interest rate calculation agents, exchange rate calculation agents or other agents; and
- the terms and conditions, if any, upon which the debt securities shall be subordinated in right of payment to other indebtedness of the Company.

We may issue discount debt securities that provide for an amount less than the stated principal amount to be due and payable upon acceleration of the maturity of such debt securities in accordance with the terms of the indenture. We may also issue debt securities in bearer form, with or without coupons. If we issue discount debt securities or debt securities in bearer form, we will describe material U.S. federal income tax considerations and other material special considerations which apply to these debt securities in the applicable prospectus supplement. We may issue debt securities denominated in or payable in a foreign currency or currencies or a foreign currency unit or units. If we do, we will describe the restrictions, elections, and general tax considerations relating to the debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

#### **Exchange and/or Conversion Rights**

We may issue debt securities which can be exchanged for or converted into shares of our common stock. If we do, we will describe the terms of exchange or conversion in the prospectus supplement relating to these debt securities.

#### **Transfer and Exchange**

We may issue debt securities that will be represented by either:

- “book-entry securities,” which means that there will be one or more global securities registered in the name of a depository or a nominee of a depository; or
- “certificated securities,” which means that they will be represented by a certificate issued in definitive registered form.

We will specify in the prospectus supplement applicable to a particular offering whether the debt securities offered will be book-entry or certificated securities.

#### **Certificated Debt Securities**

If you hold certificated debt securities issued under an indenture, you may transfer or exchange such debt securities in accordance with the terms of the indenture. You will not be charged a service charge for any transfer or exchange of certificated debt securities but may be required to pay an amount sufficient to cover any tax or other governmental charge payable in connection with such transfer or exchange.

#### **Global Securities**

The debt securities of a series may be issued in the form of one or more global securities that will be deposited with a depository or its nominees identified in the prospectus supplement relating to the debt securities. In such a case, one or more global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal amount of outstanding debt securities of the series to be represented by such global security or securities.

Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, a global security may not be registered for transfer or exchange except as a whole by the depository for such global security to a nominee of the depository and except in the circumstances described in the prospectus supplement relating to the debt securities. The specific terms of the depository arrangement with respect to a series of debt securities will be described in the prospectus supplement relating to such series.

#### **Protection in the Event of Change of Control**

Any provision in an indenture that governs our debt securities covered by this prospectus that includes any covenant or other provision providing for a put or increased interest or otherwise that would afford holders of our debt securities additional protection in the event of a recapitalization transaction, a change of control of the Company, or a highly leveraged transaction will be described in the applicable prospectus supplement.

#### **Covenants**

Unless otherwise indicated in this prospectus or the applicable prospectus supplement, our debt securities may not have the benefit of any covenant that limits or restricts our business or operations, the pledging of our assets or the incurrence by us of indebtedness. We will describe in the applicable prospectus supplement any material covenants in respect of a series of debt securities.

#### **Consolidation, Merger and Sale of Assets**

We may agree in any indenture that governs the debt securities of any series covered by this prospectus that we will not consolidate with or merge into any other person or convey, transfer, sell or lease our properties and assets substantially as an entirety to any person, unless such person and such proposed transaction meets various criteria, which we will describe in detail in the applicable prospectus supplement.

#### **Defaults and Notice**

The debt securities of any series will contain events of default to be specified in the applicable prospectus supplement, which may include, without limitation:

- failure to pay the principal of, or premium or make-whole amount, if any, on any debt security of such series when due and payable (whether at maturity, by call for redemption, through any mandatory sinking fund, by redemption at the option of the holder, by declaration or acceleration or otherwise);
- failure to make a payment of any interest on any debt security of such series when due;
- our failure to perform or observe any other covenants or agreements in the indenture with respect to the debt securities of such series;
- certain events relating to our bankruptcy, insolvency or reorganization; and
- certain cross defaults, if and as applicable.

If an event of default with respect to debt securities of any series shall occur and be continuing, we may agree that the trustee or the holders of at least 25% in aggregate principal amount of the then outstanding debt securities of such series may declare the principal amount (or, if the debt securities of such series are issued at an original issue discount, such portion of the principal amount as may be specified in the terms of the debt securities of such series) of all debt securities of such series or such other amount or amounts as the debt securities or supplemental indenture with respect to such series may provide, to be due and payable immediately. Any provisions pertaining to events of default and any remedies associated therewith will be described in the applicable prospectus supplement.

Any indenture that governs our debt securities covered by this prospectus may require that the trustee under such indenture shall, within 90 days after the occurrence of a default, give to holders of debt securities of any series notice of all uncured defaults with respect to such series known to it. However, in the case of a default that results from the failure to make any payment of the principal of, premium or make-whole amount, if any, or interest on the debt securities of any series, or in the payment of any mandatory sinking fund installment with respect to debt securities of such series, if any, the trustee may withhold such notice if it in good faith determines that the withholding of such notice is in the interest of the holders of debt securities of such series. Any terms and provisions relating to the foregoing types of provisions will be described in further detail in the applicable prospectus supplement.

Any indenture that governs our debt securities covered by this prospectus will contain a provision entitling the trustee to be indemnified by holders of debt securities before proceeding to exercise any trust or power under the indenture at the request of such holders. Any such indenture may provide that the holders of at least a majority in aggregate principal amount of the then outstanding debt securities of any series may direct the time, method and place of conducting any proceedings for any remedy available to the trustee, or of exercising any trust or power conferred upon the trustee with respect to the debt securities of such series. However, the trustee under any such indenture may decline to follow any such direction if, among other reasons, the trustee determines in good faith that the actions or proceedings as directed may not lawfully be taken, would involve the trustee in personal liability or would be unduly prejudicial to the holders of the debt securities of such series not joining in such direction.

Any indenture that governs our debt securities covered by this prospectus may endow the holders of such debt securities to institute a proceeding with respect to such indenture, subject to certain conditions, which will be specified in the applicable prospectus supplement and which may include, that the holders of at least a majority in aggregate principal amount of the debt securities of such series then outstanding make a written request upon the trustee to exercise its power under the indenture, indemnify the trustee and afford the trustee reasonable opportunity to act. Even so, such holders may have an absolute right to receipt of the principal of, premium or make-whole amount, if any, and interest when due, to require conversion or exchange of debt securities if such indenture provides for convertibility or exchangeability at the option of the holder and to institute suit for the enforcement of such rights. Any terms and provisions relating to the foregoing types of provisions will be described in further detail in the applicable prospectus supplement.

#### **Modification of the Indenture**

We and the trustee may modify any indenture that governs our debt securities of any series covered by this prospectus with or without the consent of the holders of such debt securities, under certain circumstances to be described in a prospectus supplement.

## **Defeasance; Satisfaction and Discharge**

The prospectus supplement will outline the conditions under which we may elect to have certain of our obligations under the indenture discharged and under which the indenture obligations will be deemed to be satisfied.

## **Regarding the Trustee**

We will identify the trustee and any relationship that we may have with such trustee, with respect to any series of debt securities, in the prospectus supplement relating to the applicable debt securities. You should note that if the trustee becomes a creditor of Medgenics, the indenture and the Trust Indenture Act of 1939 limit the rights of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim, as security or otherwise. The trustee and its affiliates may engage in, and will be permitted to continue to engage in, other transactions with us and our affiliates. If, however, the trustee acquires any “conflicting interest” within the meaning of the Trust Indenture Act of 1939, it must eliminate such conflict or resign.

## **Governing Law**

The law governing the indenture and the debt securities will be identified in the prospectus supplement relating to the applicable indenture and debt securities.

## **DESCRIPTION OF RIGHTS**

We may issue rights to purchase our common stock, warrants, debt securities or units. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the rights in such offering. In connection with any offering of such rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

Each series of rights will be issued under a separate rights agreement which we will enter into with a bank or trust company, as rights agent, all which will be set forth in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights.

The following description is a summary of selected provisions relating to rights that we may offer. The summary is not complete. When rights are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the rights as described in a prospectus supplement or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

The applicable prospectus supplement or free writing prospectus may describe:

- in the case of a distribution of rights to our stockholders, the date of determining the stockholders entitled to the rights distribution;
- in the case of a distribution of rights to our stockholders, the number of rights issued or to be issued to each stockholder;
- the exercise price payable for the underlying common stock or other securities upon the exercise of the rights;
- the number and terms of the underlying common stock or other securities which may be purchased per each right;
- the extent to which the rights are transferable;
- the date on which the holder’s ability to exercise the rights shall commence, and the date on which the rights shall expire; and
- the extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities.

The provisions described in this section, as well as those described under “Description of Common Stock,” “Description of Debt Securities” and “Description of Warrants” above, if applicable, will apply to any rights we offer.

The specific terms of any rights offered will be set forth in a rights agreement and the rights certificate, as applicable. We will file each of these documents, as applicable, with the SEC and they will be incorporated by reference to the registration statement of which this prospectus is a part on or before the time we issue a series of rights. See “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” elsewhere in this prospectus for information on how to obtain a copy of a document when it is filed.

#### **DESCRIPTION OF UNITS**

We may issue units composed of any combination of our common stock, warrants, debt securities and rights. We will issue each unit so that the holder of the unit is also the holder of each security included in the unit. As a result, the holder of a unit will have the rights and obligations of a holder of each included security. 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.

The following description is a summary of selected provisions relating to units that we may offer. The summary is not complete. When units are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the units as described in a prospectus supplement or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

The specific terms of any units offered will be set forth in a unit agreement, collateral arrangements and depositary arrangements, if applicable. We will file each of these documents, as applicable, with the SEC and they will be incorporated by reference to the registration statement of which this prospectus is a part on or before the time we issue a series of units. See “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” elsewhere in this prospectus for information on how to obtain a copy of a document when it is filed.

The applicable prospectus supplement or free writing prospectus may describe:

- 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 for the issuance, payment, settlement, transfer, conversion or exchange of the units or of the securities composing the units;
- whether the units will be issued in fully registered or global form; and
- any other terms of the units.

The provisions described in this section, as well as those described under “Description of Common Stock,” “Description of Warrants,” “Description of Debt Securities” and “Description of Rights” above, if applicable, will apply to each unit and to each security included in each unit, respectively.

#### **LEGAL MATTERS**

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus will be passed upon for us by Pepper Hamilton LLP. If legal matters in connection with offerings made pursuant to this prospectus are passed upon by counsel for underwriters, dealers or agents, if any, such counsel will be named in the prospectus supplement relating to such offerings.

## EXPERTS

Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, our independent registered public accounting firm, has audited our balance sheets as of December 31, 2014 and 2015, and the related statements of operations, changes in stockholders' deficiency and cash flows for the years ended December 31, 2013, 2014 and 2015, as set forth in their report, appearing in our Annual Report on Form 10-K for the year ended December 31, 2015. These financial statements are incorporated by reference in this prospectus and in the registration statement of which this prospectus forms a part in reliance on Kost Forer Gabbay & Kasierer's report given on their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3, including exhibits and schedules, under the Securities Act with respect to the securities to be sold in this offering. This prospectus does not contain all the information contained in the registration statement. For further information with respect to us and the securities to be sold in this offering, we refer you to the registration statement and the exhibits and schedules attached to the registration statement. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete. When we make such statements, we refer you to the copies of the contracts or documents that are filed as exhibits to the registration statement because those statements are qualified in all respects by reference to those exhibits.

We are subject to the informational requirements of the Exchange Act and we file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at [www.sec.gov](http://www.sec.gov). You may also read and copy any document we file with the SEC at its public reference facility at 100 F Street, N.E., Washington, D.C. 20549, on official business days during the hours of 10:00 a.m. to 3:00 p.m.

You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facility.

Our website address is [www.medgenics.com](http://www.medgenics.com). The information on, or accessible through, our website is not part of this prospectus.

## INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information in other documents that we file with it. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this prospectus. We incorporate by reference in this prospectus (i) the documents listed below, (ii) all documents that we file with the Commission under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial filing of the registration statement of which this prospectus is included and prior to the effectiveness of such registration statement, and (iii) and any future filings that we may make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of the offering under this prospectus; provided, however, that we are not incorporating, in each case, any documents or information deemed to have been furnished and not filed in accordance with SEC rules:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 (filed on February 26, 2016);
- our Current Report on Form 8-K filed with the SEC on February 3, 2016 (except item 7.01 and Exhibit 99.1); and
- the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on March 24, 2011.

You may obtain a copy of any or all of the documents referred to above which may have been or may be incorporated by reference into this prospectus, except for exhibits to those documents (unless the exhibits are specifically incorporated by reference into those documents) at no cost to you by writing or telephoning us at the following address: Medgenics, Inc., 435 Devon Park Drive, Building 700, Wayne, PA 19087, telephone number (610) 254-4201.



**Up to \$20,000,000  
Common Stock**

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**PROSPECTUS SUPPLEMENT**

**JMP Securities**

**May 15, 2018**

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