Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-217645

PROSPECTUS SUPPLEMENT

(To prospectus dated May 15, 2017)

$30,000,000

Common Stock

We have entered into an at-the-market equity offering sales agreement, dated November 8, 2017, with Stifel, Nicolaus & Company, Incorporated ("Stifel" or the "sales agent") for the offer and sale of up to $30,000,000 of our shares of common stock, par value $0.00000002 per share (the "Shares"), offered by this prospectus supplement and the accompanying prospectus.

In accordance with the terms of the at-the-market equity offering sales agreement, we may offer and sell the Shares from time to time through the sales agent. Sales of the Shares, if any, under this prospectus may be made in sales deemed to be "at the market offerings" as defined in Rule 415 under the Securities Act of 1933, as amended, or the Securities Act, including by means of ordinary brokers' transactions on the Nasdaq Capital Market at market prices, in block transactions, or as otherwise agreed upon by the sales agent and us. The sales agent will act as sales agent using commercially reasonable efforts to sell on our behalf all of the Shares requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between the sales agent and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Under the terms of the sales agreement, we also may sell our Shares to Stifel, as principal for its own account at a price agreed upon at the time of sale. If we sell shares to Stifel as principal, we will enter into a separate terms agreement setting forth the terms of such transaction, and we will describe the agreement in a separate prospectus supplement or pricing supplement.

Our common stock is listed on the Nasdaq Capital Market under the symbol "MEIP." The last reported sale price of our common stock on the Nasdaq Capital Market on November 7, 2017 was $2.57 per share.

The sales agent will receive from us a commission of up to 3% of the gross sales price per Share sold through the sales agent under the at-the-market equity offering sales agreement. The sales agent is not required to sell any specific number or dollar amount of our Shares, but, subject to the terms and conditions of the at-the-market equity offering sales agreement, the sales agent will use their commercially reasonable efforts to sell on our behalf any Shares to be offered by us under the at-the-market equity offering sales agreement. See "Plan of Distribution" in this prospectus supplement.

An investment in our common stock involves significant risks. You should carefully consider the Risk Factors beginning on page 11 of our Annual Report on Form 10-K filed with the Securities and Exchange Commission on September 5, 2017 and beginning on page 18 of our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2017 filed with the Securities Exchange Commission on November 8, 2017, and on page S-3 of this prospectus supplement before investing in our common stock.

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

Stifel

The date of this prospectus supplement is November 8, 2017.

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Prospectus Supplement

Prospectus

You should rely only on the information contained in or incorporated by reference into this prospectus supplement and the accompanying base prospectus and any free writing prospectuses prepared by us or on our behalf. We have not authorized any person to provide any information or make any statement that differs from what is contained in this prospectus supplement, the accompanying base prospectus and any free writing prospectuses prepared by us or on our behalf. If any person does make a statement that differs from what is in this prospectus supplement, the accompanying base prospectus or any free writing prospectuses, you should not rely on it. This prospectus supplement is not an offer to sell, nor is it a solicitation of an offer to buy, these securities in any jurisdiction in which the offer or sale is not permitted. You should assume that the information contained in this prospectus supplement, the accompanying base prospectus, any free writing prospectus and the documents incorporated by reference is accurate only as of its respective date, regardless of the time of delivery of this prospectus supplement, the accompanying base prospectus, any free writing prospectus or of any sale of shares of our common stock in this offering. Our business, financial condition, results of operations and prospects may have subsequently changed.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus are part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration statement. Under the shelf registration statement, we may offer and sell any combination of securities described in the accompanying base prospectus in one or more offerings. The accompanying base prospectus provides you with a general description of the securities we may offer. Each time we use the accompanying base prospectus to offer securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in the accompanying base prospectus.

This prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein include important information about us, our common stock and other information you should know before investing. This prospectus supplement describes the specific details regarding this offering, including the price, the amount of common stock being offered and the risks of investing in our common stock. The accompanying base prospectus provides general information about us, some of which may not apply to this offering.

To the extent that any statement that we make in this prospectus supplement is inconsistent with statements made in the accompanying base prospectus, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying base prospectus. You should read both this prospectus supplement and the accompanying base prospectus together with additional information described under the heading, "Where You Can Find More Information."

CAUTIONARY STATEMENT ABOUT FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference herein include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical facts contained in this prospectus supplement and in the documents incorporated by reference herein, including statements regarding the future financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," and similar expressions, as they relate to us, are intended to identify forward-looking statements. We have based these forward-looking statements largely on current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, without limitation, those described in "Risk Factors" in this prospectus supplement and in our Annual Report on Form 10-K for the fiscal year ended June 30, 2017 and in our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2017, including, among other things:

- our inability to obtain required additional financing or financing available to us on acceptable terms, or at all, which may cause us to delay, scale-back or eliminate plans related to development of our drug candidates;
- Helsinn or other parties with which we have entered into collaboration, license, development and/or commercialization agreements may not satisfy their obligations under the agreements which could impact future revenues;
- we are in early stage clinical studies for our product candidates on which our development plans are based; clinical studies by their nature typically have a high level of risk and may not produce successful results;
- the results of pre-clinical studies and completed clinical trials are not necessarily predictive of future results, and our current drug candidates may not have favorable results in later studies or trials;
- our inability to maintain or enter into, and the risks resulting from our dependence upon, contractual arrangements necessary for the clinical development, manufacture, commercialization, marketing, sales and distribution of our product candidates;
- costs and delays in our clinical development programs and/or receipt of U.S. Food and Drug Administration ("FDA") or other required foreign and domestic governmental or regulatory approvals, or the failure to obtain such approvals, for our product candidates;
- the FDA's interpretation and our interpretation of data from preclinical and clinical studies may differ significantly;
- our failure to successfully commercialize our product candidates;
- pricing regulations, third-party reimbursement practices and healthcare reform initiatives;
- the failure of any products to gain market acceptance;
- our reliance on third parties to conduct our clinical trials and manufacture our products;
- our inability to control the costs of manufacturing our products;
- our reliance on acquisitions or licenses from third parties to expand our pipeline of drug candidates;
- competition and competitive factors;
- our inability to protect our patents or proprietary rights and obtain necessary rights to third party patents and intellectual property to operate our business;
- our inability to operate our business without infringing the patents and proprietary rights of others;

- costs stemming from our defense against third party intellectual property infringement claims;
- general economic conditions;
- our ability to attract and retain key employees;
- technological changes;
- cybersecurity;
- government regulation generally;
- changes in industry practice; and
- one-time events.

These risks are not exhaustive. Other sections of this prospectus supplement and the documents incorporated by reference herein include additional factors which could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for us to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

You should not rely upon forward looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

SUMMARY

This summary highlights selected information appearing elsewhere or incorporated by reference in this prospectus supplement and accompanying prospectus and may not contain all of the information that is important to you. This prospectus supplement and the accompanying prospectus include or incorporate by reference information about the shares we are offering as well as information regarding our business, risks and detailed financial data. You should read this prospectus supplement and the accompanying prospectus in their entirety, including the information incorporated by reference.

The Company

We are an oncology company focused on the clinical development of novel therapies for cancer. Our common stock is listed on the NASDAQ Capital Market under the symbol “MEIP”.

Our business purpose is the development of drugs for the treatment of cancer. Our portfolio of clinical drug candidates includes pracinostat, an oral histone deacetylase (“HDAC”) inhibitor that is being developed in combination with azacitidine for the treatment of adults with newly diagnosed acute myeloid leukemia (“AML”) who are unfit for intensive chemotherapy, and patients with high or very high-risk myelodysplastic syndrome (“MDS”). In August 2016, we entered into an exclusive worldwide license, development and commercialization agreement with Helsinn Healthcare SA, a Swiss pharmaceutical corporation (“Helsinn”), for pracinostat in AML, MDS and other potential indications. Our clinical development portfolio also includes ME-401, an oral inhibitor of phosphatidylinositide 3-kinase delta being developed for B-cell malignancies, and voruciclib, an oral and selective cyclin-dependent kinase (CDK) inhibitor. In September 2017, we entered into an exclusive worldwide license, development, manufacturing and commercialization agreement with Presage Biosciences, Inc. for voruciclib. We are also developing ME-344, a mitochondrial inhibitor that has shown evidence of clinical activity in refractory solid tumors. We own exclusive worldwide rights to ME-401, voruciclib and ME-344.

As of September 30, 2017, we had $47.0 million in cash, cash equivalents and short-term investments. In order to continue the development of our lead drug candidates, at some point in the future we may pursue one or more additional capital raising transactions, whether through the sale of equity securities or the entry into strategic partnerships.

Corporate Information

Our principal executive offices are located at 3611 Valley Centre Drive, Suite 500, San Diego, CA 92130, and our phone number is (858) 369-7100. Our website is located at www.meipharma.com. Information on or accessible through our website is not part of, or incorporated by reference into, this prospectus supplement, other than documents filed with the SEC that we incorporate by reference.

THE OFFERING

Common stock offered by us pursuant to this prospectus supplement	up to $30,000,000 of shares of common stock
Use of proceeds	We intend to use a portion of the net proceeds from the sale of Shares offered by this prospectus, together with other available funds, to progress our clinical development programs and for other general corporate purposes. See “Use of Proceeds” on page S-4.
Nasdaq Capital Market symbol	“MEIP”
Risk factors	This investment involves a high degree of risk. See “Risk Factors” beginning on page S-3 of this prospectus supplement, the risk factors beginning on page 11 of our Annual Report on Form 10-K as filed with the Securities and Exchange Commission on September 5, 2017 and beginning on page 18 of our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2017, as filed with the Securities and Exchange Commission on November 8, 2017, as well as the other information included in or incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of risks you should consider carefully before making an investment decision.

RISK FACTORS

Any investment in our common stock involves a high degree of risk. In addition to the other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus, you should carefully consider the important factors set forth under the heading "Risk Factors" starting on page 11 of our Annual Report on Form 10-K for the fiscal year ended June 30, 2017 and under the heading "Risk Factors" starting on page 18 of our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2017, in each case incorporated herein by reference, before investing in our common stock. For further details, see the sections entitled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" in this prospectus supplement.

Any of the risk factors set forth below or referred to above could significantly and negatively affect our business, results of operations or financial condition, which may lower the trading price of our common stock. The risks referred to above are not the only ones that may exist. Additional risks not currently known by us or that we deem immaterial may also impair our business operations. You may lose all or a part of your investment.

Risks Related to Securities Markets and Investment in our Stock

Investors in our Shares may experience significant dilution as a result of this and any future offerings.

Because the sales of our Shares offered hereby will be made directly into the market or in negotiated transactions, the prices at which we sell these Shares will vary and these variations may be significant. Purchasers of such Shares may suffer significant dilution if the price they pay is higher than the price paid by other purchasers of shares of our common stock.

We will have broad discretion over the use of the net proceeds from this offering.

We will have broad discretion to use the net proceeds from the sale of Shares in this offering, and investors in our common stock will be relying on the judgment of our board of directors and management regarding the application of these proceeds. Although we expect to use a substantial portion of the net proceeds from this offering for general corporate purposes and the progression of our clinical trial programs, we have not allocated these net proceeds for specific purposes.

USE OF PROCEEDS

We intend to use a portion of the net proceeds from the sale of Shares offered by this prospectus, together with other available funds, to progress our clinical development programs and for other general corporate purposes.

We have not specifically identified the precise amounts we will spend on particular areas or the timing of these expenditures. The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including the amount and timing of the proceeds from the sale of Shares offered by this prospectus, the progress of our clinical trials and other product development activities. In addition, expenditures may also depend on the establishment of new collaborative arrangements with other partners, the availability of other financing and other factors.

We anticipate that we will be required to raise substantial additional capital to continue to fund the clinical development of our drug candidates. We expect to seek to raise additional capital through additional public or private financings, principally through equity issuances.

MARKET PRICE AND DIVIDEND INFORMATION

Our common stock is currently listed on the Nasdaq Capital Market under the symbol “MEIP.” As of November 6, 2017, we had 37,014,947 shares of our common stock outstanding, held by approximately 1,130 holders of record.

The following table sets forth the quarterly high and low sales prices of our common stock on the Nasdaq Capital Market, for the periods indicated.

	Share Prices	
	High	Low
Year Ending June 30, 2018		
First Quarter	$3.26	$2.34
Second Quarter (through November 7, 2017)	$2.90	$2.25
Year Ended June 30, 2017		
First Quarter	$2.28	$1.32
Second Quarter	$1.89	$1.34
Third Quarter	$1.88	$1.40
Fourth Quarter	$2.50	$1.48
Year Ended June 30, 2016		
First Quarter	$2.08	$1.47
Second Quarter	$2.12	$1.52
Third Quarter	$1.67	$0.87
Fourth Quarter	$1.80	$1.23

We have never paid or declared any cash dividends on our common stock, and we intend to retain any future earnings to finance the development and expansion of our business. We do not anticipate paying any cash dividends on our common stock in the foreseeable future.

PLAN OF DISTRIBUTION

We have entered into an at-the-market equity offering sales agreement, or "sales agreement" with Stifel, under which we may issue and sell from time to time up to $30,000,000 of our shares of common stock through the sales agent. Sales of our Shares, if any, under this prospectus may be made in sales deemed to be "at the market offerings" as defined in Rule 415 under the Securities Act of 1933, as amended, or the Securities Act, including by means of ordinary brokers' transactions on the Nasdaq Capital Market at market prices, in block transactions, or as otherwise agreed upon by the sales agent and us. The sales agent will use commercially reasonable efforts to sell on our behalf all of the Shares requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between the sales agent and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement. The sales agent will not engage in any transactions that stabilize our Shares.

The sales agent will offer the Shares subject to the terms and conditions of the sales agreement on any trading day or as otherwise agreed upon by us and the sales agent. We will designate the maximum amount and minimum price of Shares to be sold through the sales agent on a daily basis or otherwise determine such amounts together with the sales agent. Subject to the terms and conditions of the sales agreement, the sales agent will use its commercially reasonable efforts to sell on our behalf the Shares. We may instruct the sales agent not to sell Shares if the sales cannot be effected at or above the price designated by us in any such instruction. We or the sales agent may suspend the offering of Shares being made through the sales agent under the sales agreement upon proper notice to the other party.

The sales agent will receive from us a commission of up to 3% of the gross sales price per share for any Shares sold through it under the sales agreement. The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such Shares.

The sales agent will provide written confirmation to us following the close of trading on the Nasdaq Capital Market each day in which Shares are sold by the sales agent for us under the sales agreement. Each confirmation will include the number of Shares sold on that day, the gross sales price per Share, the net proceeds to us, and the compensation payable by us to the sales agent.

Settlement for sales of Shares will occur, unless the parties agree otherwise, on the second business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us.

Under the terms of the sales agreement, we also may sell our Shares to the sales agent as principal for its own account at a price agreed upon at the time of sale. If we sell our Shares to the sales agent as principal, we will enter into a separate agreement setting forth the terms of such transaction, and we will describe this agreement in a separate prospectus supplement or pricing supplement.

In connection with the sale of the Shares on our behalf, the sales agent may be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation paid to the sales agent may be deemed to be underwriting commissions or discounts. We have agreed in the sales agreement to provide indemnification and contribution to the sales agent against certain civil liabilities, including liabilities under the Securities Act.

We estimate that the total expenses of the offering payable by us, excluding discounts and commissions payable to the sales agent under the sales agreement, will be approximately $200,000, which amount includes up to $50,000 that we have agreed to reimburse Stifel for the fees and expenses of their counsel.

The offering of Shares pursuant to the sales agreement will terminate upon the earlier of (1) the sale of all of the Shares subject to the sales agreement and (2) the termination of the sales agreement by the sales agent or us. The sales agent has from time to time provided, and in the future may provide, certain commercial banking, investment banking and financial advisory services to us and our affiliates, for which it has received, and in the future will receive, customary fees.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Morgan, Lewis & Bockius LLP, New York, New York. Goodwin Procter LLP, New York, New York, is acting as counsel for the sales agent.

EXPERTS

The financial statements as of June 30, 2017 and 2016, and for each of the three years in the period ended June 30, 2017 and management's assessment of the effectiveness of internal control over financial reporting as of June 30, 2017, incorporated by reference into this prospectus supplement have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

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 http://www.sec.gov. The SEC's website contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC. You may also read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus supplement the information we have filed with the SEC. The information we incorporate by reference into this prospectus supplement is an important part of this prospectus supplement. Any statement in a document we incorporate by reference into this prospectus supplement or the accompanying prospectus will be considered to be modified or superseded to the extent a statement contained in this prospectus supplement or any other subsequently filed document that is incorporated by reference into this prospectus supplement modifies or supersedes that statement. The modified or superseded statement will not be considered to be a part of this prospectus supplement or accompanying prospectus, as applicable, except as modified or superseded.

We incorporate by reference into this prospectus supplement the information contained in the documents listed below, which is considered to be a part of this prospectus supplement:

- our Annual Report on Form 10-K for the fiscal year ended June 30, 2017, filed with the SEC on September 5, 2017;
- our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2017, filed with SEC on November 8, 2017;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended June 30, 2017 from our definitive proxy statement on Schedule 14A (other than information furnished rather than filed), which was filed with the SEC on October 16, 2017;
- our Current Report on Form 8-K filed with the SEC on September 6, 2017; and
- the description of our common stock contained in the Registration Statement on Form 8-A filed on November 26, 2003 and any further amendment or report filed thereafter for the purpose of updating such description.

We also incorporate by reference all documents filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement and prior to the termination of this offering; provided, however, that we are not incorporating any information furnished under Item 2.02 or Item 7.01 of any current report on Form 8-K we may subsequently file.

Statements made in this prospectus supplement or the accompanying prospectus or in any document incorporated by reference in this prospectus supplement or the accompanying prospectus as to the contents of any contract or other document referred to herein or therein are not necessarily complete, and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the documents incorporated by reference, each such statement being qualified in all material respects by such reference.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

MEI Pharma, Inc.
3611 Valley Centre Drive, Suite 500
San Diego, CA 92130
Tel: (858) 369-7100
Attn: Investor Relations

Copies of these filings are also available, without charge, through the “Investors” section of our website (www.meipharma.com) as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not a part of this prospectus supplement.

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PROSPECTUS

$150,000,000

MEI PHARMA, INC.

Common Stock
Preferred Stock
Warrants

We may offer up to $150,000,000 aggregate dollar amount of our common stock, preferred stock and warrants to purchase our common stock or preferred stock from time to time in one or more offerings. This prospectus provides you with a general description of the securities.

We may offer these securities at prices and on terms to be set forth in one or more supplements to this prospectus. These securities may be offered directly, through agents on our behalf or through underwriters or dealers.

Our common stock is traded on the Nasdaq Capital Market under the symbol "MEIP." On May 2, 2017, the closing price of our common stock on the Nasdaq Capital Market was $1.61 per share. The aggregate market value of the outstanding shares of our common stock held by non-affiliates was $59,155,000, based on 36,772,428 shares of common stock outstanding, of which 30,254 are held by affiliates, and a closing sale price on the NASDAQ Capital Market of $1.61 on May 2, 2017. Pursuant to General Section I.B.6. of Form S-3, in no event will we sell securities in a public primary offering with a value exceeding more than one-third of our "public float" (the market value of our common stock held by our non-affiliates) in any 12-month period so long as our public float remains below $75,000,000. We have not sold any shares of our common stock or other securities pursuant to General Instruction I.B.6. of Form S-3 during the twelve calendar months prior to and including the date of this prospectus.

An investment in our securities involves significant risks. See "Risk Factors" on page 5 of this prospectus and in any applicable prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of factors you should carefully consider before deciding to purchase our securities.

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

The date of this prospectus is May 15, 2017.

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ABOUT THIS PROSPECTUS

Unless we have indicated otherwise, references in this prospectus to “MEI Pharma,” “we,” “us” and “our” or similar terms are to MEI Pharma, Inc., a Delaware corporation. References in this prospectus to “FDA” refer to the United States Food and Drug Administration.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration statement. This prospectus provides you with a general description of the securities we may offer. We will describe the specific terms of those securities, as necessary, in supplements that we attach to this prospectus for each offering. Each supplement will also contain specific information about the terms of the offering it describes. The supplements may also add to, update or change information contained in this prospectus. In addition, as we describe in the sections entitled “Incorporation of Certain Information by Reference” and “Where You Can Find More Information,” we have filed and plan to continue to file other documents with the SEC that contain information about us. Before you decide whether to invest in our securities, you should read this prospectus, the supplement that further describes the offering of those securities and the information we otherwise file with the SEC.

The registration statement that contains this prospectus, including the exhibits to the registration statement, contains additional information about us and the securities being offered under this prospectus. You should read the registration statement and the accompanying exhibits for further information. The registration statement and exhibits can be read and are available to the public over the Internet at the SEC’s website at http: //www.sec.gov.

You should rely only on the information contained or incorporated by reference in this prospectus and in any prospectus supplement. We have not authorized any person to provide any information or make any statement that differs from what is contained in this prospectus. If any person does make a statement that differs from what is in this prospectus, you should not rely on it. This prospectus is not an offer to sell, nor is it a solicitation of an offer to buy, these securities in any state in which the offer or sale is not permitted. The information in this prospectus is accurate as of its date, but the information may change after that date. You should not assume that the information in this prospectus is accurate as of any date after its date.

SUMMARY

The Company

We are an oncology company focused on the clinical development of novel therapies for cancer. Our common stock is listed on the Nasdaq Capital Market under the symbol “MEIP”.

Our business purpose is the development of drugs for the treatment of cancer. Our portfolio of clinical drug candidates includes Pracinostat, an oral histone deacetylase (“HDAC”) inhibitor being developed in combination with azacitidine for the treatment of patients with newly diagnosed acute myeloid leukemia (“AML”) who are unfit for intensive chemotherapy, and patients with high or very high-risk myelodysplastic syndrome (“MDS”). In August 2016, we entered into an exclusive worldwide license, development and commercialization agreement with Helsinn Healthcare SA (“Helsinn”) for Pracinostat in AML, MDS and other potential indications. Our clinical development portfolio also includes ME-401, an oral inhibitor of phosphatidylinositide 3-kinase (“PI3K”) delta currently in a Phase Ib study in patients with relapsed/refractory chronic lymphocytic leukemia (“CLL”) or follicular lymphoma, and ME-344, a mitochondrial inhibitor currently in an investigator-sponsored study in combination with bevacizumab for the treatment of human epidermal growth factor receptor 2 (“HER2”)-negative breast cancer. We own exclusive worldwide rights to ME-401 and ME-344.

Clinical Development Programs

HDAC Inhibitor Drug Candidate: Pracinostat

In August 2016, we announced that the U.S. Food and Drug Administration (“FDA”) granted Breakthrough Therapy Designation for Pracinostat in combination with azacitidine for the treatment of patients with newly diagnosed AML who are unfit for intensive chemotherapy. In addition, agreement has been reached with the FDA on the proposed Phase III study design. According to the FDA, Breakthrough Therapy Designation is intended to expedite the development and review of drugs for serious or life-threatening conditions. The criteria for Breakthrough Therapy Designation require preliminary clinical evidence that demonstrates the drug may have substantial improvement on at least one clinically significant endpoint over available therapy.

The Breakthrough Therapy Designation is supported by data from a Phase II study of Pracinostat plus azacitidine in elderly patients with newly diagnosed AML who are not candidates for induction chemotherapy. The study showed a median overall survival of 19.1 months and a complete response (CR) rate of 42% (21 of 50 patients). These data compare favorably to a recent international Phase III study of azacitidine (AZA-001; Dombret et al. *Blood*. 2015 May 18), which showed a median overall survival of 10.4 months with azacitidine alone and a CR rate of 19.5% in a similar patient population. The combination of Pracinostat and azacitidine was generally well tolerated, with no unexpected toxicities. The most common grade 3/4 treatment-emergent adverse events included febrile neutropenia, thrombocytopenia, anemia and fatigue.

In August 2016, we entered into an exclusive license, development and commercialization agreement with Helsinn, a Swiss pharmaceutical corporation, for Pracinostat in AML, MDS and other potential indications (“Helsinn License Agreement”). Under the terms of the agreement, Helsinn is granted a worldwide exclusive license to develop, manufacture and commercialize Pracinostat, and is primarily responsible for funding its global development and commercialization. As compensation for such grant of rights, we received payments of $20.0 million, including a $15.0 million upfront payment in August 2016 and a $5.0 million payment in March 2017. In addition, we will be eligible to receive up to $444 million in potential regulatory and sales-based milestones, along with royalty payments on the net sales of Pracinostat which, in the U.S., are tiered and begin in the mid-teens.

As part of the Helsinn License Agreement, we will work with Helsinn to determine an optimal dosing regimen of Pracinostat in combination with azacitidine for the treatment of high and very high-risk MDS. The cost of this study will be shared by Helsinn and us and enrollment is anticipated to commence in the second quarter of calendar year 2017.

PI3-Kinase Delta Drug Candidate: ME-401

In September 2013, we acquired exclusive worldwide rights to ME-401 from Pathway Therapeutics, Inc. for an undisclosed upfront cash payment with no future milestone or royalty obligations. Data from pre-clinical studies show ME-401 to be a potent and selective oral inhibitor of PI3K delta, a molecular target that plays a critical role in the proliferation and survival of certain hematologic cancer cells. PI3K delta is a class of drugs that has shown promise in the treatment of B-cell malignancies, but with particular toxicities. We believe this provides an opportunity for development of a next-generation oral drug that can produce therapeutic responses at a safe, effective dose. ME-401 has a distinct chemical structure from certain other PI3K delta inhibitors, including idelalisib (marketed as Zydelig®). Data presented at the ASH Annual Meeting in December 2012 demonstrated that ME-401 has superior pre-clinical activity compared to idelalisib.

Results from a first-in-human, single ascending dose clinical study of ME-401 in healthy volunteers were presented at the American Association for Cancer Research Annual Meeting in April 2016. The data demonstrated on-target activity at very low plasma concentrations. In addition, the results from the study suggest that ME-401 has the potential for a superior pharmacokinetic and pharmacodynamic profile and an improved therapeutic window compared to idelalisib, with a half-life that supports once-daily dosing. In March 2016, the FDA approved our Investigational New Drug application for ME-401 in B-cell malignancies. A Phase Ib dose-escalation study of ME-401 in patients with relapsed/refractory CLL or follicular lymphoma opened for enrollment in September 2016. The goal of the study is to demonstrate an improved therapeutic window with repeated dosing in cancer patients. This study is now actively dosing patients and interim data are expected in June 2017.

Mitochondrial Inhibitor Drug Candidate: ME-344

ME-344 is our isoflavone-derived mitochondrial inhibitor drug candidate. In preclinical studies, ME-344 has been shown to cause cell death in multiple human tumor cell lines, including ovarian cancer stem cells, by interfering with mitochondrial energy generation.

Results from our first-in-human, single-agent Phase I clinical trial of ME-344 in patients with refractory solid tumors were published in the April 1, 2015 issue of Cancer. The results indicated that eight of 21 evaluable patients (38%) treated with ME-344 achieved stable disease or better, including five who experienced progression-free survival that was at least twice the duration of their last prior treatment before entry into the study. In addition, one of these patients, a heavily pre-treated patient with small cell lung cancer, achieved a confirmed partial response and remained on study for two years. ME-344 was generally well tolerated at doses equal to or less than 10 mg/kg delivered on a weekly schedule for extended durations. Treatment-related adverse events included nausea, dizziness and fatigue. Dose limiting toxicities were observed at both the 15 mg/kg and 20 mg/kg dose levels, consisting primarily of Grade 3 peripheral neuropathy.

In May 2015, we announced new pre-clinical data from a collaboration with the Spanish National Cancer Research Centre in Madrid showing mitochondria-specific effects of ME-344 in cancer cells, including substantially enhanced anti-tumor activity when combined with agents that inhibit the activity of vascular endothelial growth factor (“VEGF”). These new data demonstrate that the anti-cancer effects when combining ME-344 with a VEGF inhibitor are due to an inhibition of both mitochondrial and glycolytic metabolism. An investigator-sponsored study of ME-344 in combination with the VEGF inhibitor bevacizumab (marketed as

Avastin®) in HER2-negative breast cancer opened for enrollment in August 2016. This study is now actively dosing patients and interim data are expected in December 2017.

Corporate Information

Our principal executive offices are located at 11975 El Camino Real, Suite 101, San Diego, California, 92130, and our phone number is (858) 792-6300.

RISK FACTORS

Any investment in our securities involves a high degree of risk. In addition to the other information included or incorporated by reference in this prospectus and any accompanying prospectus supplement, you should carefully consider the important factors set forth under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended June 30, 2016, and in our subsequent annual reports on Form 10-K and in other reports we file with the SEC from time to time, which are incorporated herein by reference, before investing in our securities. Any of the risk factors referred to above could significantly and negatively affect our business, results of operations or financial condition, which may lower the trading price of our common stock. The risks referred to above are not the only ones that may exist. Additional risks not currently known by us or that we deem immaterial may also impair our business operations. You may lose all or a part of your investment. For further details, see the sections entitled “Where You Can Find More Information” and “Incorporation of Certain Information by Reference.”

CAUTIONARY STATEMENT ABOUT FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical facts contained in this prospectus and in the documents incorporated by reference herein, including statements regarding the future financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," and similar expressions, as they relate to us, are intended to identify forward-looking statements. We have based these forward-looking statements largely on current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, without limitation, those described in "Risk Factors" and elsewhere in this prospectus and the documents incorporated by reference herein, including, among other things:

- our inability to obtain required additional financing or financing available to us on acceptable terms, or at all, which may cause us to delay, scale-back or eliminate plans related to development of our drug candidates;
- Helsinn or other parties with which we have entered into collaboration, license, development and/or commercialization agreements may not satisfy their obligations under the agreements which could impact future revenues;
- we are in an early stage of clinical studies for our product candidates on which our development plans are based; clinical studies by their nature typically have a high level of risk and may not produce successful results;
- the results of pre-clinical studies and completed clinical trials are not necessarily predictive of future results, and our current drug candidates may not have favorable results in later studies or trials;
- our inability to maintain or enter into, and the risks resulting from our dependence upon, contractual arrangements necessary for the clinical development, manufacture, commercialization, marketing, sales and distribution of our product candidates;
- costs and delays in our clinical development programs and/or receipt of FDA or other required governmental or regulatory approvals, or the failure to obtain such approvals, for our product candidates;
- the FDA's interpretation and our interpretation of data from pre-clinical and clinical studies may differ significantly;
- our failure to successfully commercialize our product candidates;
- the failure of any products to gain market acceptance;
- our inability to control the costs of manufacturing our products;
- our reliance on acquisitions or licenses from third parties to expand our pipeline of drug candidates;
- competition and competitive factors;
- our inability to protect our patents or proprietary rights and obtain necessary rights to third party patents and intellectual property to operate our business;
- our inability to operate our business without infringing the patents and proprietary rights of others;
- costs stemming from our defense against third party intellectual property infringement claims;
- general economic conditions;
- technological changes;

- government regulation generally;
- changes in industry practice; and
- one-time events.

These risks are not exhaustive. Other sections of this prospectus and the documents incorporated by reference herein include additional factors which could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for us to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

You should not rely upon forward looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

SECURITIES OFFERED BY THIS PROSPECTUS

Using this prospectus, we may offer from time to time, in one or more series, together or separately, at prices and terms to be determined at the time of offering:

- shares of common stock, $0.00000002 par value;
- shares of preferred stock, $0.01 par value; and
- warrants to purchase shares of common stock or preferred stock.

The shares of preferred stock may be convertible into or exchangeable for shares of our common stock or preferred stock issued by us.

See “Description of Securities” for a description of the terms of the common stock, preferred stock and warrants.

USE OF PROCEEDS

Although we expect to use a substantial portion of the net proceeds from the sale of securities under this prospectus for general corporate purposes, including to progress our clinical trial programs, we have not allocated these net proceeds for specific purposes. If, as of the date of any prospectus supplement, we have identified any additional use for the net proceeds, we will describe them in the prospectus supplement. The amount of securities offered from time to time pursuant to this prospectus and any prospectus supplement, and the precise amount of the net proceeds we will receive from the sale of such securities, as well as the timing of receipt of those proceeds, will depend upon our funding requirements. If we elect at the time of an issuance of securities to make different or more specific uses of the proceeds than as set forth herein, we will describe those uses in the applicable prospectus supplement.

RATIOS OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

We incurred net losses for each of the fiscal years ended June 30, 2016, 2015, 2014, 2013 and 2012. We had net income of approximately $7.0 million for the nine months ended March 31, 2017. We did not have any fixed charges for the nine months ended March 31, 2017 or the fiscal years ended June 30, 2016, 2015, 2014, 2013 and 2012, other than insignificant charges related to a premises rental agreement. We did not have any shares of preferred stock outstanding during the nine months ended March 31, 2017 or the fiscal years ended June 30, 2016, 2015, 2014, 2013, and 2012. Accordingly, we are unable to present a ratio of earnings to combined fixed charges and preference share dividends.

PLAN OF DISTRIBUTION

We may sell the securities included in this prospectus (i) through agents, (ii) through underwriters, (iii) through dealers, (iv) directly to a limited number of purchasers or to a single purchaser, or (v) through a combination of any such methods of sale.

The distribution of the securities may be effected from time to time in one or more transactions, including block transactions and transactions on the Nasdaq Capital Market or any other organized market where the securities may be traded:

- at a fixed price or at final 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.

Offers to purchase securities may be solicited directly by us, or by agents designated by us, from time to time. Any such agent, which may be deemed to be an underwriter as that term is defined in the Securities Act, as amended, involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable by us to such agent will be set forth, in the applicable prospectus supplement.

If an underwriter is, or underwriters are, utilized in the offer and sale of securities in respect of which this prospectus and the applicable prospectus supplement are delivered, we will execute an underwriting agreement with such underwriter(s) for the sale to it or them and the name(s) of the underwriter(s) and the terms of the transaction, including any underwriting discounts and other items constituting compensation of the underwriters and dealers, if any, will be set forth in such prospectus supplement, which will be used by the underwriter(s) to make resales of the securities in respect of which this prospectus and such prospectus supplement are delivered to the public. The securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale. The name of the dealer and the terms of the transaction will be identified in the applicable prospectus supplement.

If an agent is used in an offering of securities being offered by this prospectus, the agent will be named, and the terms of the agency will be described, in the applicable prospectus supplement relating to the offering. Unless otherwise indicated in the prospectus supplement, an agent will act on a best efforts basis for the period of its appointment.

If indicated in the applicable prospectus supplement, we will authorize underwriters or their other agents to solicit offers by certain institutional investors to purchase securities from us pursuant to contracts providing for payment and delivery at a future date. Institutional investors with which these contracts may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others. In all cases, these purchasers must be approved by us. The obligations of any purchaser under any of these contracts will not be subject to any conditions except that (a) the purchase of the securities must not at the time of delivery be prohibited under the laws of any jurisdiction to which that purchaser is subject, and (b) if the securities are also being sold to underwriters, we must have sold to these underwriters the securities not subject to delayed delivery. Underwriters and other agents will not have any responsibility in respect of the validity or performance of these contracts.

Certain of the underwriters, dealers or agents utilized by us in any offering hereby may be customers of, including borrowers from, engage in transactions with, and perform services for us or one or more of our affiliates in the ordinary course of business. Underwriters, dealers, agents and other persons may be entitled, under agreements which may be entered into with us, to indemnification against certain civil liabilities, including liabilities under the Securities Act.

Until the distribution of the securities is completed, rules of the SEC may limit the ability of the underwriters and certain selling group members, if any, to bid for and purchase the securities. As an exception to these rules, the representatives of the underwriters, if any, are permitted to engage in certain transactions that stabilize the price of the securities. Such transactions may consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of the securities.

If underwriters create a short position in the securities in connection with the offering thereof (in other words, if they sell more securities than are set forth on the cover page of the applicable prospectus supplement), the representatives of such underwriters may reduce that short position by purchasing securities in the open market. Any such representatives also may elect to reduce any short position by exercising all or part of any over-allotment option described in the applicable prospectus supplement.

Any such representatives also may impose a penalty bid on certain underwriters and selling group members. This means that if the representatives purchase securities in the open market to reduce the underwriters' short position or to stabilize the price of the securities, they may reclaim the amount of the selling concession from the underwriters and selling group members who sold those shares as part of the offering thereof.

In general, purchases of a security for the purpose of stabilization or to reduce a syndicate short position could cause the price of the security to be higher than it might otherwise be in the absence of such purchases. The imposition of a penalty bid might have an effect on the price of a security to the extent that it was to discourage resales of the security by purchasers in the offering.

Neither we nor any of the underwriters, if any, makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the securities. In addition, neither we nor any of the underwriters, if any, makes any representation that the representatives of the underwriters, if any, will engage in such transactions or that such transactions, once commenced, will not be discontinued without notice.

The anticipated date of delivery of the securities offered by this prospectus will be described in the applicable prospectus supplement relating to the offering. The securities offered by this prospectus may or may not be listed on a national securities exchange or a foreign securities exchange. We cannot give any assurances that there will be a market for any of the securities offered by this prospectus and any prospectus supplement.

We will bear costs relating to all of the securities being registered under this prospectus, other than underwriters' discounts and commissions. In compliance with the guidelines of the Financial Services Regulatory Authority, Inc., or FINRA, the maximum compensation to be received by a FINRA member or independent broker-dealer may not exceed 8% of the offering proceeds. It is anticipated that the maximum compensation to be received in any particular offering of securities will be less than this amount.

DESCRIPTION OF SECURITIES

Securities We May Offer Under this Prospectus

Common Stock

For a description of our common stock, please see our Registration Statement on Form 8-A filed with the SEC on November 26, 2003, and any further amendment or report filed thereafter for the purpose of updating such description.

Preferred Stock

The material terms of any series of preferred stock that we offer through a prospectus supplement will be described in that prospectus supplement. Our board of directors is authorized to provide for the issuance of blank check preferred stock in one or more series with designations as may be stated in the resolution or resolutions providing for the issue of such preferred shares. At the time that any series of our preferred stock is authorized, our board of directors will fix the dividend rights, any conversion rights, any voting rights, redemption provisions, liquidation preferences and any other rights, preferences, privileges and restrictions of that series, as well as the number of shares constituting that series and their designation. Our board of directors could, without stockholder approval, cause us to issue preferred stock which has voting, conversion and other rights that could adversely affect the holders of our common stock or make it more difficult to effect a change in control. Our preferred stock could be used to dilute the share ownership of persons seeking to obtain control of us and thereby hinder a possible takeover attempt which, if our stockholders were offered a premium over the market value of their shares, might be viewed as being beneficial to our stockholders. In addition, our preferred stock could be issued with voting, conversion and other rights and preferences which would adversely affect the voting power and other rights of holders of our common stock.

Warrants

We may issue warrants to purchase our common stock or preferred stock. Warrants may be issued independently or together with any other securities and may be attached to, or separate from, such securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a warrant agent. The terms of any warrants to be issued and a description of the material provisions of the applicable warrant agreement will be set forth in the applicable prospectus supplement.

The applicable prospectus supplement will describe the following terms of any warrants in respect of which this prospectus is being delivered:

- the title of such warrants;
- the aggregate number of such warrants;
- the price or prices at which such warrants will be issued;
- the currency or currencies, in which the price of such warrants will be payable;
- the securities purchasable upon exercise of such warrants;
- the price at which and the currency or currencies in which the securities or other rights purchasable upon exercise of such warrants may be purchased;
- the date on which the right to exercise such warrants shall commence and the date on which such right shall expire;
- if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;
- if applicable, the designation and terms of the securities with which such warrants are issued and the number of such warrants issued with each such security;

- if applicable, the date on and after which such warrants and the related securities will be separately transferable;
- information with respect to book-entry procedures, if any;
- if applicable, a discussion of any material United States federal income tax considerations; and
- any other terms of such warrants, including terms, procedures and limitations relating to the exchange and exercise of such warrants.

Description of Share Capital

We are authorized to issue 113,000,000 shares of common stock, par value $0.00000002 per share, and 100,000 shares of preferred stock, par value $0.01 per share. As of May 2, 2017, we had 36,772,428 shares of common stock outstanding and no shares of preferred stock outstanding. Also as of May 2, 2017, we had outstanding (i) 4,258,792 shares of our common stock subject to outstanding options, with exercise prices ranging from $1.21 to $10.00 per share, (ii) 745,891 restricted stock units, each representing the contingent right to receive one share of our common stock, (iii) 3,545,686 shares of our common stock subject to outstanding warrants, with exercise prices ranging from $3.12 to $7.14 per share, (iv) based on an assumed price per share of $1.61, which was the last reported sale price of our common stock on the Nasdaq Capital Market on May 2, 2017, up to 310,559 shares of common stock that may be issuable upon our achievement of certain clinical and regulatory milestones pursuant to the terms of the August 2012 Asset Purchase Agreement between the Company and S*Bio, and (v) 5,094,844 shares of our common stock available for awards under our Amended and Restated 2008 Stock Omnibus Equity Compensation Plan.

LEGAL MATTERS

The validity of the securities described herein will be passed upon for us by Morgan, Lewis & Bockius LLP.

EXPERTS

The financial statements as of June 30, 2016 and 2015, and for each of the three years in the period ended June 30, 2016, and management's assessment of the effectiveness of internal control over financial reporting as of June 30, 2016, incorporated by reference in this Prospectus, have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus and any accompanying prospectus supplement the information we have filed with the SEC. The information we incorporate by reference into this prospectus is an important part of this prospectus. Any statement in a document we incorporate by reference into this prospectus will be considered to be modified or superseded to the extent a statement contained in this prospectus, any accompanying prospectus supplement or any other subsequently filed document that is incorporated by reference into this prospectus or any accompanying prospectus supplement modifies or supersedes that statement. The modified or superseded statement will not be considered to be a part of this prospectus or any accompanying prospectus supplement, as applicable, except as modified or superseded.

We incorporate by reference into this prospectus the information contained in the documents listed below, which are considered to be a part of this prospectus:

- our Annual Report on Form 10-K for the fiscal year ended June 30, 2016;
- our Quarterly Reports on Form 10-Q for the quarters ended September 30, 2016, December 31, 2016, as amended by the Form 10-Q/A filed on February 16, 2017, and March 31, 2017;
- our Current Reports on Form 8-K filed with the SEC on August 9, 2016, August 17, 2016, September 2, 2016, December 2, 2016 and April 3, 2017; and
- the description of our common stock contained in the Registration Statement on Form 8-A filed on November 26, 2003 and any further amendment or report filed thereafter for the purpose of updating such description.

We also incorporate by reference all documents filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after (i) the date of the initial registration statement and prior to the effectiveness of the registration statement and (ii) the date of this prospectus and prior to the termination of the offering of the securities under this registration statement (except in each case for the information contained in such documents that is deemed to be "furnished" and not "filed").

Statements made in this prospectus or any accompanying prospectus supplement or in any document incorporated by reference in this prospectus or any accompanying prospectus supplement as to the contents of any contract or other document referred to herein or therein are not necessarily complete, and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the documents incorporated by reference, each such statement being qualified in all material respects by such reference.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

MEI Pharma, Inc.
11975 El Camino Real, Suite 101
San Diego, California 92130
Tel: (858) 792-6300
Attn: Investor Relations

Copies of these filings are also available, without charge, through the “Investors” section of our website (www.meipharma.com) as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not a part of this prospectus.

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 http://www.sec.gov. The SEC’s website contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC. You may also read and copy any document we file with the SEC at the SEC’s Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room.

$30,000,000
Common Stock

PROSPECTUS SUPPLEMENT

Stifel

November 8, 2017