

Ampio Pharmaceuticals, Inc.
 Form 424B5
 December 21, 2011
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Filed Pursuant to Rule 424(b)(5)

Registration No. 333-177116

PROSPECTUS SUPPLEMENT

(To Prospectus dated October 28, 2011)

2,220,255 Shares

Common Stock

Ampio Pharmaceuticals, Inc. is offering 2,220,255 shares of our common stock. Our common stock is listed on the NASDAQ Capital Market under the symbol **AMPE**. On December 20, 2011, the last reported sale price of our common stock on the NASDAQ Capital Market was \$5.31 per share.

We have retained Fordham Financial Management, Inc. and Summer Street Research Partners as co-lead placement agents, and Emerging Growth Equities, Ltd. to act as co-placement agent to use their reasonable best efforts to solicit offers to purchase our common stock in this offering. See **Plan of Distribution** beginning on page S-11 of this prospectus supplement for more information regarding these arrangements.

Investing in our common stock involves a high degree of risk. Please read Risk Factors beginning on page S-4 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 supplement or the accompanying prospectus are truthful or complete. Any representation to the contrary is a criminal offense.

| | PER SHARE | TOTAL |
|--------------------------------|----------------------|--------------|
| Public offering price | \$ 4.25 | \$ 9,436,084 |
| Placement agents' fees | \$ 0.34 | \$ 754,887 |
| Proceeds to us before expenses | \$ 3.91 | \$ 8,681,197 |

We estimate the total expenses of this offering, excluding the placement agents' fees, will be approximately \$145,000. The placement agents are not purchasing or selling any shares of our common stock pursuant to this prospectus supplement or the accompanying prospectus, nor are we requiring any minimum purchase or sale of any specific number of shares of common stock. Because there is no minimum offering amount required as a condition to the closing of this offering, the actual public offering amount, placement agents' fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth above. We expect delivery of our shares of common stock being offered pursuant to this prospectus supplement will be made by us and the placement agents on or about December 27, 2011.

Lead Placement Agents

Fordham Financial Management, Inc. **Summer Street Research Partners**
Co-Placement Agent

Emerging Growth Equities, Ltd.

Prospectus Supplement dated December 20, 2011.

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You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We have not, and the placement agents have not, authorized anyone to provide you with different or inconsistent information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the placement agents are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the section of this prospectus supplement entitled Incorporation of Certain Information by Reference and the sections of the accompanying prospectus entitled Incorporation of Certain Information by Reference and Where You Can Find Additional Information.

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About This Prospectus Supplement

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a shelf registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about this offering. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer only to the prospectus, we are referring to both parts combined. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent that any statement we make in this prospectus supplement is inconsistent with statements made in the accompanying prospectus or any documents incorporated by reference herein or therein, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus and such documents incorporated by reference herein and therein.

Unless the context otherwise requires, we use the terms Ampio Pharmaceuticals, Ampio, we, us, the Company and our in this prospectus supplement to refer to Ampio Pharmaceuticals, Inc. and its subsidiaries on a consolidated basis. References to BioSciences in this prospectus supplement mean DMI BioSciences, Inc., now a wholly-owned subsidiary of ours. References to Life Sciences in this prospectus supplement mean DMI Life Sciences, Inc., which is our predecessor for accounting purposes and a wholly-owned subsidiary of ours. Life Sciences was formed in December 2008 and commenced operations when it acquired certain assets of BioSciences in April 2009. In March 2010, Life Sciences merged with a subsidiary of Chay Enterprises, Inc., a publicly traded Colorado corporation, which we refer to in this prospectus supplement as Chay Enterprises. Immediately after the merger, Chay Enterprises changed its name to Ampio Pharmaceuticals, Inc., and reincorporated in Delaware. We acquired BioSciences, now a wholly-owned subsidiary of ours, in March 2011.

All references in this prospectus supplement to our consolidated financial statements include, unless the context indicates otherwise, the related notes.

This prospectus supplement and the information incorporated herein by reference includes trademarks, such as Optina, Zertane, and Ampion, which are protected under applicable intellectual property laws and are our property or the property of our subsidiaries. This prospectus supplement may also contain trademarks, service marks, copyrights and trade names of other companies which are the property of their respective owners. Solely for convenience, our trademarks and tradenames referred to in this prospectus may appear without the ® or symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights to these trademarks and tradenames.

The industry and market data and other statistical information contained in the documents we incorporate by reference are based on management's own estimates, independent publications, government publications, reports by market research firms or other published independent sources, and, in each case, are believed by management to be reasonable estimates. Although we believe these sources are reliable, we have not independently verified the information.

Cautionary Statement About Forward-Looking Information

This prospectus and the documents incorporated by reference into it contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words believe, expect, may, will, anticipate, intend, estimate, project, plan, assume or other similar expressions, although not all forward-looking statements contain these identifying words. All statements contained in this prospectus supplement regarding our future strategy, plans and expectations regarding clinical trials, future regulatory approvals, our plans for the commercialization of our products, future operations, projected financial position, potential future revenues, projected costs, future prospects, and results that might be obtained by pursuing management's current plans and objectives are forward-looking statements. Forward-looking statements include, but are not necessarily limited to, those relating to:

our expectations related to the use of proceeds, if any, from this offering;

the results and timing of our clinical trials, particularly the results of our Optina and Ampion trials;

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the regulatory review process and any regulatory approvals that are issued or denied by the FDA, the EMEA, or other regulatory agencies;

our need to secure collaborators to license, manufacture, market and sell any products for which we receive regulatory approval in the future;

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the benefits we expect to obtain from the BioSciences acquisition;

the results of our internal research and development efforts;

the commercial success and market acceptance of any of our product candidates that are approved for marketing in the United States or other countries;

the safety and efficacy of medicines or treatments introduced by competitors that are targeted to indications which our product candidates have been developed to treat;

acceptance and approval of regulatory filings;

our need for, and ability to raise, additional capital;

our collaborators' compliance or non-compliance with their obligations under our agreements with them, or decisions by our collaborators to discontinue clinical trials and return product candidates to us;

our plans to develop other product candidates; and

other factors discussed elsewhere in this prospectus or any prospectus supplement.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond our control. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus. New risks and uncertainties arise from time to time, and it is impossible for us to predict these matters or how they may affect us. Over time, our actual results, performance or achievements will likely differ from the anticipated results, performance or achievements that are expressed or implied by our forward-looking statements, and such differences might be significant and materially adverse to our investors. We have no duty to, and do not intend to, update or revise the forward-looking statements in this prospectus after the date of this prospectus except to the extent required by the federal securities laws. You should consider all risks and uncertainties disclosed in our filings with the Securities and Exchange Commission, or the SEC, described below under the heading "Where You Can Find Additional Information," all of which are accessible on the SEC's website at www.sec.gov.

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PROSPECTUS SUMMARY

*The following summary of our business highlights some of the information contained elsewhere in or incorporated by reference into this prospectus supplement. Because this is only a summary, however, it does not contain all of the information that may be important to you. You should carefully read this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference, which are described under *Incorporation of Certain Information by Reference* in this prospectus supplement and under *Incorporation of Certain Information by Reference* and *Where You Can Find Additional Information* in the accompanying prospectus. You should also carefully consider the matters discussed in the section in this prospectus supplement entitled *Risk Factors* and in the accompanying prospectus and in other periodic reports incorporated herein by reference.*

About Ampio Pharmaceuticals

We are a development stage company engaged in developing innovative, proprietary pharmaceutical drugs and diagnostic products to identify, treat and prevent a broad range of human diseases including metabolic disorders, eye disease, kidney disease, acute and chronic inflammation diseases and male sexual dysfunction. We intend to develop proprietary pharmaceutical drugs and diagnostic products which capitalize on our intellectual property that includes assigned patents, pending patent applications, and trade secrets and know-how, some of which may be the subject of future patent applications. Our intellectual property is strategically focused on three primary areas: (i) new uses for FDA-approved drugs, referred to as repositioned drugs, (ii) new molecular entities, or NMEs, and (iii) rapid point-of-care tests for diagnosis, monitoring and screening.

Our Product Pipeline

Zertane for Premature Ejaculation in Men

Zertane is a new use for tramadol hydrochloride, which was approved for marketing as a noncontrolled analgesic in 1995. Based on the results of our Phase III clinical trial, which were announced in June 2011, we believe Zertane can be an effective oral medication to treat premature ejaculation, or PE, in men. Premature ejaculation is the most common form of male sexual dysfunction and has a major impact on the quality of life for many men and their partners. The market opportunity is large, with an estimated 23% of males suffering from premature ejaculation. According to Australia's Keogh Institute of Medical Research, PE is the most common sexual complaint in males. At present no drug has been approved by the FDA for the treatment of premature ejaculation. Priligy, an orally-administered anti-depressant in the SSRI class, has been approved for the treatment of PE in a number of European countries, where it is marketed by Janssen-Cilag, a unit of Johnson & Johnson, and several Asian countries. Behavioral therapy is the current standard of care for treatment of PE. Our Phase III clinical trial was a randomized, double-blind, placebo-controlled, multi-center study to evaluate the efficacy and safety of two doses of Zertane for the treatment of PE. The study was conducted in 61 sites in 11 countries in Eastern and Western Europe and included 604 intent-to-treat patients. The clinical study demonstrated the efficacy and safety for Zertane in treating PE. We are aggressively pursuing licensing and distribution opportunities for Zertane in a number of international markets. For example, in September 2011, we entered into a license, development and commercialization agreement with a major Korean pharmaceutical company, which agreement grants the pharmaceutical company exclusive rights to market Zertane in South Korea for the treatment of PE and for a combination drug to be developed, utilizing Zertane and an erectile dysfunction drug. We are in discussions with other parties about other potential licensing and distribution opportunities.

Optina for Diabetic Macular Edema

Optina is an orally-administered repositioned compound based on a low-dose formulation of approved drug danazol. Developed initially to treat endometriosis, danazol was first approved by the FDA in the early 1970's and is a derivative of the synthetic steroid ethisterone. Dr. David Bar-Or, our chief scientific officer, has determined that danazol in low doses has the capability to control the permeability of tissues, thus reducing vascular leakage. Optina is designed to treat diabetic macular edema, or DME, which is a swelling of the retina in diabetic patients due to the leaking of fluid from blood vessels within the macula. If untreated, diabetic macular edema leads to moderate vision loss for one out of four diabetics over a period of three years and can lead to blindness over a period of seven years. We contracted with a Canadian hospital to conduct Phase II clinical trials of Optina. Patient enrollment commenced in January 2011 and is expected to be completed in the fourth quarter of 2011 with the results available in the second quarter of 2012. Approximately 10% of people with diabetes have DME. Existing therapies for DME include focal and grid laser therapy, which is the current standard of care, as well as intra-ocular injection of Lucentis. Avastin is currently approved only for cancer treatment, but it is being used off-label by ophthalmologists to treat DME. There are currently no oral medications available for treatment of DME. We believe Optina has the potential to effectively treat DME without costly laser therapy and without requiring ongoing injections of pharmaceuticals in the eye. Additionally, a proof of concept trial for allergic rhinitis utilizing a low dose of danazol, the active compound in Optina, was completed and shown to support the mechanism of action.

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Ampion for Inflammation

Ampion is a non-steroidal biologic, aspartyl-alanyl diketopiperazine, referred to as DA-DKP. This compound is comprised of two amino acids derived from human blood, and is designed to treat chronic inflammatory and autoimmune diseases. Because it is a naturally occurring human molecule, DA-DKP is present in the body. Dr. Bar-Or has published a number of studies and articles on the anti-inflammatory immune response of DA-DKP. In October 2011, we announced the completion of the treatment phase of our 60 patient Ampion-In-Knee (AIK) clinical trial for patients with moderate to severe osteoarthritis of the knee. Also in October 2011, we released a preliminary summary analysis of the results. Based on these results, Australian reviewers have approved Ampion to be tested as a stand-alone therapy and Ampio will expand the trial to include two additional arms of Ampion alone versus saline alone.

Corporate Information

Our predecessor, DMI Life Sciences, Inc., or Life Sciences, was incorporated in Delaware in December 2008 and did not conduct any business activity until April 16, 2009, at which time Life Sciences purchased certain assigned intellectual property (including 107 patents and pending patent applications), business products and tangible property from BioSciences. Life Sciences issued 3,500,000 shares of its common stock to BioSciences, and assumed certain liabilities, as consideration for the assets purchased from BioSciences. The assets Life Sciences acquired from BioSciences had a carrying value of zero, as BioSciences had expensed all of the research and development costs it incurred with respect to the intellectual property purchased by Life Sciences.

In March 2010, Life Sciences was merged with a subsidiary of Chay Enterprises, Inc., a publicly-traded company then traded on the OTC Bulletin Board. Chay Enterprises had minimal operations prior to the time of this merger, and like similar entities, was referred to as a public shell. As a result of this merger, Life Sciences stockholders became the controlling stockholders of Chay Enterprises and the former sole officer and director of Chay Enterprises appointed a majority of our current management team to their present positions.

We were reincorporated in Delaware at that time as Ampio Pharmaceuticals, Inc. and commenced trading on the OTC Bulletin Board as Ampio Pharmaceuticals, Inc. in late March 2010.

On March 23, 2011, Ampio acquired all of the outstanding stock of BioSciences. Its principal asset consisted of the worldwide rights to Zertane, as to which BioSciences held 32 issued patents and 31 pending patent applications. Zertane is a repurposed drug to treat male sexual dysfunction pertaining to premature ejaculation (PE) in men.

In May 2011, our common stock commenced trading on the NASDAQ Capital Market under the symbol `AMPE`, at which time our common stock ceased trading on the OTC Bulletin Board.

Our principal executive offices are located at 5445 DTC Parkway, Suite 925, Greenwood Village, Colorado 80111, and our telephone number is (720) 437-6500. Additional information about us is available on our website at www.ampio-pharma.com. The information contained on or that may be obtained from our website is not, and shall not be deemed to be, a part of this prospectus.

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The Offering

| | |
|----------------------------------------------------|-------------------|
| Common stock offered by us | 2,220,255 shares |
| Common stock to be outstanding after this offering | 31,081,434 shares |

Use of Proceeds

We intend to use the net proceeds from this offering for general corporate purposes and working capital, including without limitation to pursue completion of the Ampion and Optina clinical trials and regulatory approval of Zertane. See Use of Proceeds.

Risk Factors

This investment involves a high degree of risk. See the information contained in or incorporated by reference under Risk Factors beginning on page S-4 of this prospectus supplement, page 4 of the accompanying prospectus and in the documents incorporated by reference into this prospectus supplement.

NASDAQ Capital Market Symbol

Our common stock is listed on the NASDAQ Capital Market under the symbol AMPE .

The number of shares of common stock to be outstanding after this offering is based on 28,861,179 shares outstanding on December 19, 2011 and excludes as of that date:

options representing the right to purchase a total of 3,832,874 shares of common stock at a weighted average exercise price of \$1.78 per share; and

warrants representing the right to purchase a total of 677,008 shares of common stock at a weighted-average exercise price of \$2.78 per share.

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Risk Factors

An investment in our common stock involves a high degree of risk. You should consider carefully the risks described below, and in the section entitled Risk Factors contained in our Annual Report on Form 10-K for the year ended December 31, 2010 filed with the Securities and Exchange Commission, or the SEC, on February 16, 2011, which is incorporated herein by reference in its entirety, together with other information in this prospectus supplement, the accompanying prospectus and the other information incorporated by reference herein and therein. If any of the events contemplated by these discussions of risks should occur, our business, results of operations and financial condition could suffer significantly. As a result, the market price of our common stock could decline, and you may lose all or part of the money you paid to buy our common stock.

Risks Related to Our Common Stock and this Offering

Our management will have broad discretion over the use of the net proceeds from this offering and may not apply those proceeds in ways that increase the value of your investment.

Our management has broad discretion over the application of the net proceeds from this offering. We intend to use the net proceeds for general corporate purposes and working capital, including without limitation to pursue completion of the Ampion and Optina clinical trials and regulatory approval of Zertane. We may fail to use these funds effectively to yield a significant return, or any return, on any investment of these proceeds and we cannot assure you the proceeds will be used in a manner which you would approve.

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on an assumed public offering price of \$4.25 per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$3.81 per share in the net tangible book value of the common stock. See Dilution on page S-7 for a more detailed discussion of the dilution you will incur in this offering.

Future sales of shares by existing stockholders could cause our stock price to decline.

As of September 30, 2011, we had 28,778,751 shares of our common stock outstanding. Of these shares, 8,667,905 shares of common stock were issued to former BioSciences shareholders in connection with the acquisition of BioSciences in March 2011. Subsequently, 194,116 of these shares were cancelled as a result of a settlement with three shareholders, resulting in 8,473,789 net shares outstanding. The net shares issued are free-trading, subject to the provisions of lock-up agreements under which such shareholders are prohibited from selling, pledging or hypothecating our common stock until December 31, 2011. On October 5, 2011, the board of directors of Ampio approved the commencement of a program under which certain of such former BioSciences shareholders voluntarily agreed to a six-month extension, from December 31, 2011 to June 30, 2012, of these existing lock-up restrictions. In consideration for agreeing to such extension, the former BioSciences shareholders who signed modified lock-up agreements are permitted to sell up to 5% of their shares per month beginning September 15, 2011 and, effective immediately upon their establishing trading accounts that are approved by Ampio in order to permit administration and enforcement of the modified lock-up restrictions. The holders of approximately 55% of the net shares of Ampio common stock issued to former BioSciences shareholders have signed modified lock-up agreements, plus another former BioSciences shareholder, holding the largest number of shares of Ampio common stock of all former BioSciences shareholders (approximately 18% of the 8,473,789 shares), has confirmed in writing to Ampio that such holder will agree to the modified lock-up restrictions and will sign a modified lock-up agreement upon the expiration of the current lock-up restrictions on December 31, 2011. This holder has also indicated to us that it may pledge the shares of stock controlled by it to serve as collateral for a loan and that the lender may request the right to recover the collateral and sell a portion of the shares in the event that our stock price changes. There can be no assurance that this holder will sign a modified lock-up agreement, but assuming that the holder does sign then approximately 72% of the 8,473,789 shares of Ampio common stock issued to former BioSciences shareholders will be subject to such modified lock-up agreements, and the remaining 28% of the 8,473,789 shares (approximately 2,372,661 shares) will be released from lock-up restrictions on December 31, 2011 and will be freely tradeable.

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Executive and non-executive officers of BioSciences who received stock as a result of the BioSciences acquisition, and executive and non-executive officers and employees of Ampio at the time of the acquisition, have signed lock-up agreements covering the shares of our common stock owned by such persons for a period through February 29, 2012. Of these individuals, each holder who currently owns more than 75,000 shares of Ampio common stock has agreed to extend these lock-up restrictions to July 15, 2012, subject to certain exceptions.

Sales of a substantial number of shares of our common stock in the public market by existing stockholders, whether upon the expiration of the above described lock-up agreements or otherwise, could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase shares.

Use of Proceeds

We estimate that the net proceeds we will receive from this offering will be approximately \$8.5 million after deducting estimated placement agents' fees and estimated offering expenses that we must pay and assuming we sell the maximum number of shares offered hereby.

We intend to use the net proceeds from this offering for general corporate purposes and working capital, including without limitation to pursue completion of the Ampion and Optina clinical trials and regulatory approval of Zertane. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies. Although we have no specific agreements, commitments or understandings with respect to any acquisition, we evaluate acquisition opportunities and engage in related discussions with other companies from time to time.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, we will retain broad discretion over the use of such proceeds.

Pending use of the proceeds as described above or otherwise, we intend to invest the net proceeds in money market funds and/or short-term interest-bearing, investment-grade securities.

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The following table sets forth our capitalization as of September 30, 2011:

on an actual basis; and

on an as-adjusted basis to give effect to the sale of 2,220,255 shares of common stock offered by us in this offering at a price of \$4.25 per share, after deducting the placement agents' fees and estimated offering expenses that we must pay.

You should read the following table in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and related notes incorporated by reference in this prospectus and the accompanying prospectus.

| | As of September 30, 2011 | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------|
| | Actual | As Adjusted |
| | (unaudited) | |
| Cash and cash equivalents | \$ 6,993,836 | \$ 15,530,033 |
| Common stock, \$0.0001 par value, 100,000,000 shares authorized; 28,778,751 shares issued and outstanding at September 30, 2011 actual; 30,999,006 shares issued and outstanding at September 30, 2011 as adjusted | 2,878 | 3,100 |
| Preferred stock, \$0.0001 par value, 10,000,000 shares authorized; 0 shares issued and outstanding at September 30, 2011 actual and as adjusted | | |
| Additional paid-in capital | 37,186,359 | 45,722,334 |
| Advances to stockholders | (127,523) | (127,523) |
| Deficit accumulated in the development stage | (23,991,613) | (23,991,613) |
| Total stockholders' equity | 13,070,101 | 21,606,298 |
| Total capitalization | \$ 13,070,101 | \$ 21,606,298 |

Table of Contents**Dilution**

Our net tangible book value as of September 30, 2011 was \$5,092,813, or \$0.18 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of September 30, 2011. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of 2,220,255 shares of our common stock in this offering at a price of \$4.25 per share and after deducting the placement agents' fees and estimated offering expenses we must pay, our as adjusted net tangible book value as of September 30, 2011 would have been \$13,629,010 or \$0.44 per share. This represents an immediate increase in net tangible book value of \$0.26 per share to existing stockholders and immediate dilution in net tangible book value of \$3.81 per share to new investors purchasing our common stock in this offering. The following table illustrates this dilution on a per share basis:

| | |
|-------------------------------------------------------------------|---------|
| Public offering price per share | \$ 4.25 |
| Net tangible book value per share as of September 30, 2011 | \$ 0.18 |
| Increase per share attributable to new investors | \$ 0.26 |
| As adjusted net tangible book value per share after this offering | \$ 0.44 |
| Dilution per share to new investors | \$ 3.81 |

The number of shares of common stock to be outstanding after this offering is based on 28,861,179 shares outstanding on December 19, 2011 and excludes as of that date:

options representing the right to purchase a total of 3,832,874 shares of common stock at a weighted average exercise price of \$1.78 per share; and

warrants representing the right to purchase a total of 677,008 shares of common stock at a weighted-average exercise price of \$2.78 per share.

To the extent that outstanding options or warrants are exercised, investors purchasing our common stock in this offering will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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Certain U.S. Federal Income Tax Considerations for Non-U.S. Holders of Common Stock

The following is a discussion of certain U.S. federal income tax considerations to non-U.S. holders with respect to their ownership and disposition of our common stock issued pursuant to this offering. In general, a non-U.S. holder is any beneficial owner of our common stock that is a non-resident alien individual or foreign corporation for U.S. federal income tax purposes.

Generally, an individual may be treated as a resident of the United States (and not as a non-resident alien) in any calendar year for U.S. federal income tax purposes by, among other ways, being present in the United States for at least 31 days in that calendar year and for an aggregate of at least 183 days during a three-year period ending in the current calendar year. For purposes of this calculation, such individual would count all of the days in which the individual was present in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year. Residents are taxed for U.S. federal income tax purposes as if they were citizens of the United States.

This discussion is based on current provisions of the Internal Revenue Code, U.S. Treasury Regulations promulgated under the Internal Revenue Code, judicial opinions, published positions of the Internal Revenue Service, or IRS, and all other applicable authorities, all of which are subject to change, possibly with retroactive effect. No ruling has been or will be sought from the IRS with respect to the matters discussed below, and there can be no assurance that the IRS will not take a contrary position or that any such contrary position would not be sustained by a court. This discussion assumes that the non-U.S. holder will hold our common stock as a capital asset (generally property held for investment).

This discussion does not address all aspects of U.S. federal income taxation or any aspects of alternative minimum, estate, state, local, or non-U.S. taxation. It also does not consider any specific facts or circumstances that may apply to particular non-U.S. holders that may be subject to special treatment under the U.S. federal income tax laws, including, but not limited to:

insurance companies;

tax-exempt organizations;

financial institutions;

regulated investment companies;

tax-qualified retirement plans;

brokers or dealers in securities;

investors that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;

controlled foreign corporations;

passive foreign investment companies; and

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U.S. expatriates.

If a partnership or any other entity or arrangement taxed as a partnership for U.S. federal income tax purposes is a beneficial owner of our common stock, the treatment of a partner in the partnership will generally depend upon the status of the equity owner of such partnership and the activities of the partnership. Accordingly, partnerships (and entities and arrangements taxed as partnerships) that hold our common stock and owners in such partnerships (or other entities or arrangements taxed as partnerships) are urged to consult their tax advisors regarding the specific U.S. federal income tax consequences to them of acquiring, owning or disposing of our common stock.

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PROSPECTIVE INVESTORS ARE URGED TO CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF SHARES OF OUR COMMON STOCK, AS WELL AS THE U.S. FEDERAL, STATE, LOCAL AND NON-U.S. INCOME AND OTHER TAX CONSIDERATIONS OF ACQUIRING, OWNING AND DISPOSING OF SHARES OF COMMON STOCK.

Dividends

We do not anticipate declaring or paying any cash dividends on our common stock in the foreseeable future. However, if we do make distributions on our common stock, those payments will constitute dividends for U.S. tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed our current and accumulated earnings and profits, they will constitute a return of capital and will first reduce the recipient's adjusted tax basis in our common stock, but not below zero, and then will be treated as gain from the sale of stock as described below under the heading Gain on Sale or Other Disposition of Common Stock.

Dividends paid to a non-U.S. holder will be subject to U.S. federal withholding tax at a rate equal to 30 percent of the gross amount of the dividend, or a lower rate prescribed by an applicable income tax treaty, unless the dividends are effectively connected with a trade or business carried on by the non-U.S. holder within the United States (and, if required by an applicable income tax treaty, are attributable to a U.S. permanent establishment maintained by the non-U.S. holder). Under applicable Treasury Regulations, a non-U.S. holder will be required to satisfy certain certification requirements, generally on IRS Form W-8BEN (or applicable successor form), directly or through an intermediary, in order to claim a reduced rate of withholding under an applicable income tax treaty. If tax is withheld in an amount in excess of the amount prescribed by an applicable income tax treaty, a refund of the excess amount may be obtained by the non-U.S. holder by timely filing an appropriate claim for refund with the IRS.

Dividends that are effectively connected with such a U.S. trade or business (and, if required by an applicable income tax treaty, are attributable to a U.S. permanent establishment maintained by the recipient) will not be subject to U.S. withholding tax if the non-U.S. holder files the required forms, generally an IRS Form W-8ECI (or applicable successor form), with the payor of the dividend, but instead will be subject to U.S. federal income tax on a net income basis in the same manner as if the non-U.S. holder were a resident of the United States. A foreign corporation that receives dividends constituting effectively connected income may, under certain circumstances, be subject to an additional branch profits tax at a rate of 30 percent, or a lower rate prescribed by an applicable income tax treaty, with respect to such effectively connected income.

Gain on Sale or Other Disposition of Common Stock

A non-U.S. holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of the non-U.S. holder's shares of common stock unless:

the gain is effectively connected with a trade or business carried on by the non-U.S. holder within the United States (and, if required by an applicable tax treaty, is attributable to a U.S. permanent establishment or a fixed base maintained by the non-U.S. holder), in which case the non-U.S. holder generally will be required to pay tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates and, if the non-U.S. holder is a corporation, the branch profits tax may apply, at a 30 percent rate or such lower rate as may be specified by an applicable income tax treaty;

the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of disposition (and is not otherwise treated as a U.S. resident alien for U.S. federal income tax purposes) and certain other conditions are met, in which case the non-U.S. holder will be required to pay a flat 30 percent tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such non-U.S. holder's country of residence) on the net gain derived from the disposition, which tax may be offset by U.S. source capital losses, if any, provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or

our common stock constitutes a U.S. real property interest by reason of our status as a United States real property holding corporation, or USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the non-U.S. holder's holding period for our common stock.

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We believe that we are not currently and will not become a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our

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common stock is regularly traded on an established securities market, such common stock will be treated as U.S. real property interests only if the non-U.S. holder actually or constructively held more than five percent of our common stock at any time during the shorter of the five-year period preceding the disposition or the non-U.S. holder's holding period for our common stock.

Information Reporting and Backup Withholding

We must report annually to the IRS and to each non-U.S. holder the amount of dividends on our common stock, the name and address of the recipient and the amount, if any, of tax withheld. These information reporting requirements apply even if withholding was not required because the dividends were effectively connected dividends or withholding was reduced by an applicable income tax treaty. Under tax treaties or other agreements, the IRS may make its reports available to tax authorities in the country in which the non-U.S. holder resides or is established.

Dividend payments made to a non-U.S. holder that is not an exempt recipient generally will be subject to backup withholding at the then applicable rate (currently 28 percent) unless the non-U.S. holder certifies as to its foreign status, which certification may be made by providing the Company with an IRS Form W-8BEN or IRS Form W-8ECI, as applicable, and certain other requirements are met. Notwithstanding the foregoing, backup withholding may apply if either we or our paying agent has actual knowledge, or reason to know, that the holder is a U.S. person that is not an exempt recipient.

Backup withholding is not an additional tax. Rather, the amount of tax withheld is applied to the U.S. federal income tax liability of persons subject to backup withholding. If backup withholding results in an overpayment of U.S. federal income taxes, a refund may be obtained, provided the required documents are timely filed with the IRS.

Legislation Relating to Foreign Accounts

The Internal Revenue Code will impose a U.S. federal withholding tax of 30 percent on dividends and the gross proceeds of a disposition of our common stock paid after December 31, 2012 to a foreign financial institution (as specifically defined for this purpose) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). The legislation also will generally impose a U.S. federal withholding tax of 30 percent on dividends and the gross proceeds of a disposition of our common stock paid after December 31, 2012 to a non-financial foreign entity unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding direct and indirect U.S. owners of the entity. The amount and extent of such information to be provided by foreign financial institutions and non-financial foreign entities with respect to this legislation will not be clear until additional guidance is issued. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. Holders are encouraged to consult with their own tax advisors regarding the possible implications of the legislation on their investment in our common stock.

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Plan of Distribution

Pursuant to a placement agency agreement dated December 20, 2011, we have engaged Fordham Financial Management, Inc. (Fordham) and Summer Street Research Partners to act as lead placement agents (Summer Street, and together with Fordham, the lead placement agents) and Emerging Growth Equities, Ltd. to act as co-placement agent (the co-placement agent and, together with the lead placement agents, the placement agents) in connection with an offering of our shares of common stock under a registration statement on Form S-3, of which this prospectus supplement is a part. Under the terms of the placement agency agreement, the placement agents have agreed to be our exclusive placement agents, on a best efforts basis, in connection with the issuance and sale by us of our shares of common stock in a proposed takedown from our registration statement. The terms of any such offering will be subject to market conditions and negotiations between us, the placement agents, and prospective purchasers. The placement agency agreement provides that the obligations of the placement agents are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of certain certificates, opinions and letters from us, our counsel and our auditors. The placement agency agreement does not give rise to any commitment by the placement agents to purchase any of our shares of common stock, and the placement agents will have no authority to bind us by virtue of the placement agency agreement. Further, the placement agents do not guarantee that they will be able to raise new capital in any prospective offering. There can be no assurance that we will sell the entire amount of shares of our common stock offered pursuant to this prospectus supplement.

We will enter into purchase agreements directly with investors in connection with this offering, and we will only sell to investors who have entered into purchase agreements. A form of purchase agreement will be included as an exhibit to a Current Report on Form 8-K that we will file with the SEC and that will be incorporated by reference into the registration statement of which this prospectus supplement forms a part.

Unless purchasers instruct us otherwise, we will deliver the shares of common stock being issued to the purchasers electronically upon receipt of purchaser funds for the purchase of the shares of our common stock offered pursuant to this prospectus supplement. We expect to deliver the shares of our common stock being offered pursuant to this prospectus on or about December 27, 2011.

We have agreed to pay the placement agents a total placement fee equal to 7.0% of the gross proceeds of this offering, plus a non-accountable expense allowance equal to 1.0% of the gross proceeds of this offering. The maximum aggregate gross proceeds of this offering is \$9,436,084.

The following table sets forth the per share of common stock and total placement agents fees we will pay to the placement agents in connection with the sales of shares of our common stock pursuant to this prospectus supplement, assuming the purchase of all shares of our common stock offered hereby.

| | |
|-------------------------------------------------|------------|
| Per share of common stock placement agents fees | \$ 0.34 |
| Maximum offering total placement agents fees | \$ 754,887 |

The placement agents have informed us that they will not engage in over-allotment, stabilizing transactions or syndicate covering transactions in connection with this offering.

We have agreed to indemnify the placement agents against certain liabilities, including liabilities under the Securities Act and the Exchange Act. We may also be required to contribute to payments that the placement agents may be liable to make in respect of those liabilities.

We are offering pursuant to this prospectus supplement up to 2,220,255 shares of our common stock, but there can be no assurance that the offering will be fully subscribed. Accordingly, we may sell substantially less than the 2,220,255 shares of our common stock, in which case our net proceeds would be substantially reduced and the total placement agents fees may be substantially less than the maximum total set forth above.

We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agents fees and expenses, will be approximately \$145,000, which includes our registration, legal, accounting, printing costs and other various fees.

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The foregoing does not purport to be a complete statement of the terms and conditions of the placement agency agreement with the placement agents. The placement agency agreement with Fordham Financial Management, Inc., Summer Street Research Partners and Emerging Growth Equities, Ltd. will be included as an exhibit to a Current Report on Form 8-K that we will file with the SEC and that will be incorporated by reference into the registration statement of which this prospectus supplement forms a part.

The placement agents or their respective affiliates may in the future provide investment banking, commercial banking and/or other services to us from time to time, for which they may in the future receive customary fees and expenses.

Placement Agent Regulatory Matters

Fordham has various regulatory matters that are currently under review and investigation by the Financial Industry Regulatory Authority (FINRA). Additional information on these matters will be provided to subscribers on written request to Fordham. Any of these matters, if resolved adversely to Fordham could result in fines and/or suspensions of the principals of Fordham. We are not a party to such proceedings and can therefore provide no assurances that these regulatory matters will not result in adverse consequences to the principals of Fordham and/or Fordham.

Legal Matters

The validity of the shares of common stock offered hereby will be passed upon for us by Goodwin Procter LLP, New York, New York. Sichenzia Ross Friedman Ference LLP, New York, New York has acted as counsel for the placement agents.

Experts

The consolidated financial statements of Ampio Pharmaceuticals, Inc. and subsidiaries as of December 31, 2010 and 2009, and for each of the years in the two-year period ended December 31, 2010, have been incorporated by reference herein from our Annual Report on Form 10-K for the year ended December 31, 2010, in reliance upon the report of Ehrhardt Keefe Steiner & Hottman PC, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

Incorporation of Certain Information by Reference

The SEC allows us to incorporate by reference into this prospectus supplement the information contained in other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded, for purposes of this prospectus supplement, to the extent that a statement contained in or omitted from this prospectus supplement, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement. We incorporate by reference the documents listed below which have been filed by us:

1. Our Annual Report on Form 10-K for the year ended December 31, 2010, filed on February 16, 2011;
2. Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2011, June 30, 2011 and September 30, 2011, filed on May 13, 2011, August 12, 2011 and November 1, 2011, respectively;
3. Our Definitive Proxy Statement on Schedule 14A filed with the SEC on October 21, 2011;
4. Our Current Reports on Form 8-K or Form 8-K/A (other than portions thereof 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) filed with the SEC on January 7, 2011, February 15, 2011, March 16, 2011, March 25, 2011, April 4, 2011, April 12, 2011, April 19, 2011, May 20, 2011, June 8, 2011, June 21, 2011, July 7, 2011, August 22, 2011, September 13, 2011, October 5, 2011, October 6, 2011, December 7, 2011 and December 8, 2011; and

5. The description of our common stock contained or incorporated by reference in our registration statement on Form 8-A (File No. 001-35182) filed with the SEC on May 17, 2011, including any amendment or reports filed for the purpose of updating such description.

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We will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered, upon such person's written or oral request, a copy of any and all of the information incorporated by reference in this prospectus supplement, other than exhibits to such documents, unless such exhibits are specifically incorporated by reference into the information that this prospectus supplement incorporates. Requests should be directed to the Corporate Secretary, Ampio Pharmaceuticals, Inc., 5445 DTC Parkway, Suite 925, Greenwood Village, Colorado 80111; telephone: (720) 437-6500. We have authorized no one to provide you with any information that differs from that contained in this prospectus supplement. Accordingly, you should not rely on any information that is not contained in this prospectus supplement. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date of the front cover of this prospectus supplement.

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PROSPECTUS

\$80,000,000

Common Stock

Warrants

Units

1,000,000 Shares of Common Stock

Offered by the Selling Stockholders

From time to time, we may offer up to \$80,000,000 of any combination of the securities described in this prospectus, either individually or in units. The warrants may be exercisable or exchangeable for common stock. In addition, the selling stockholders may offer and sell, from time to time, up to an aggregate of 1,000,000 shares of common stock under this prospectus. We will not receive any of the proceeds from the sale of shares of our common stock by the selling stockholders.

Each time we or the selling stockholders offer securities, we will provide the specific terms of the securities offered in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

The securities offered by this prospectus may be sold directly by us or the selling stockholders to investors, through agents designated from time to time or to or through underwriters or dealers. We will set forth the names of any underwriters or agents and any applicable fees, commissions, discounts and over-allotments in an accompanying prospectus supplement. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is traded on the NASDAQ Capital Market under the symbol "AMPE". On October 12, 2011, the last reported sale price of our common stock on the NASDAQ Capital Market was \$8.10. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Capital Market or any securities market or other exchange of the securities covered by the applicable prospectus supplement.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES REFERENCED UNDER THE HEADING "RISK FACTORS" ON PAGE 4 OF THIS PROSPECTUS AS WELL AS THOSE CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

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 October 28, 2011.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. Under this shelf registration process, we may offer shares of our common stock and/or warrants to purchase our common stock, either individually or in units, in one or more offerings, up to a total dollar amount of \$80,000,000. The selling stockholders may, from time to time, use this prospectus to sell in one or more offerings an aggregate of up to 1,000,000 shares of our common stock. We will not receive any proceeds from the sale of securities by the selling stockholders. This prospectus provides you with a general description of the securities we or the selling stockholders may offer. Each time we or the selling stockholders offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the specific terms of the 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. Each such prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) may also add, update or change information contained in this prospectus or in documents incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings *Where You Can Find Additional Information* and *Incorporation of Certain Information by Reference* before buying any of the securities being offered. **THIS PROSPECTUS MAY NOT BE USED TO OFFER OR SELL SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

You should rely only on the information contained or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus. Neither we nor the selling stockholders have authorized anyone to provide you with different information in addition to or different from that contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information 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, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading *Where You Can Find Additional Information*.

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SUMMARY

This summary highlights selected information from this prospectus or incorporated by reference in this prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities contained in the applicable prospectus supplement and any related free writing prospectus, and in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Unless otherwise mentioned or unless the context requires otherwise, throughout this prospectus, any applicable prospectus supplement and any related free writing prospectus, the words Ampio, we, us, our, the company or similar references refer to Ampio Pharmaceuticals, Inc. and its subsidiaries on a consolidated basis. References to BioSciences in this prospectus mean DMI BioSciences, Inc., now a wholly-owned subsidiary of ours. References to Life Sciences in this prospectus mean DMI Life Sciences, Inc., which is our predecessor for accounting purposes and a wholly-owned subsidiary of ours. The term securities refers collectively to our common stock, warrants to purchase common stock, or units or any combination of the foregoing securities; the term selling stockholders refers to certain of our stockholders who may sell their securities under this prospectus and who are named in this prospectus.

This prospectus and the information incorporated herein by reference includes trademarks, such as Optina, Vasaloc, Zertane, and Ampion, which are protected under applicable intellectual property laws and are our property or the property of our subsidiaries. This prospectus may also contain trademarks, service marks, copyrights and trade names of other companies which are the property of their respective owners. Solely for convenience, our trademarks and tradenames referred to in this prospectus may appear without the ® or symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights to these trademarks and tradenames.

Overview

We are a development stage company engaged in developing innovative, proprietary pharmaceutical drugs and diagnostic products to identify, treat and prevent a broad range of human diseases including metabolic disorders, eye disease, kidney disease, acute and chronic inflammation diseases and male sexual dysfunction. We intend to develop proprietary pharmaceutical drugs and diagnostic products which capitalize on our intellectual property that includes assigned patents, pending patent applications, and trade secrets and know-how, some of which may be the subject of future patent applications. Our intellectual property is strategically focused on three primary areas: new uses for FDA-approved drugs, referred to as repositioned drugs, new molecular entities, or NMEs, and rapid point-of-care tests for diagnosis, monitoring and screening.

Corporate Background

Our predecessor, DMI Life Sciences, Inc., or Life Sciences, was incorporated in Delaware in December 2008 and did not conduct any business activity until April 16, 2009, at which time Life Sciences purchased certain assigned intellectual property (including 107 patents and pending patent applications), business products and tangible property from BioSciences. Life Sciences issued 3,500,000 shares of its common stock to BioSciences, and assumed certain liabilities, as consideration for the assets purchased from BioSciences. The assets Life Sciences acquired from BioSciences had a carrying value of zero, as BioSciences had expensed all of the research and development costs it incurred with respect to the intellectual property purchased by Life Sciences.

In March 2010, Life Sciences was merged with a subsidiary of Chay Enterprises, Inc., a publicly-traded company then traded on the OTC Bulletin Board. Chay Enterprises had minimal operations prior to the time of this merger, and like similar entities, was referred to as a public shell. As a result of this merger, Life Sciences stockholders became the controlling stockholders of Chay Enterprises and the former sole officer and director of Chay Enterprises appointed a majority of our current management team to their present positions.

We were reincorporated in Delaware at that time as Ampio Pharmaceuticals, Inc. and commenced trading on the OTC Bulletin Board as Ampio Pharmaceuticals, Inc. in late March 2010.

On March 23, 2011, Ampio acquired all of the outstanding stock of BioSciences. Its principal asset consisted of the worldwide rights to Zertane, as to which BioSciences held 32 issued patents and 31 pending patent applications. Zertane is a repurposed drug to treat male sexual dysfunction pertaining to premature ejaculation (PE) in men.

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In May 2011, our common stock commenced trading on the NASDAQ Capital Market under the symbol AMPE, at which time our common stock ceased trading on the OTC Bulletin Board.

Corporate Information

Our principal executive offices are located at 5445 DTC Parkway, Suite 925, Greenwood Village, Colorado 80111, and our telephone number is (720) 437-6500. Additional information about us is available on our website at www.ampiopharma.com. The information contained on or that may be obtained from our website is not, and shall not be deemed to be, a part of this prospectus. You can review filings we make with the SEC at its website (www.sec.gov), including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports electronically filed or furnished pursuant to Section 15(d) of the Exchange Act.

The Securities We May Offer

We may offer shares of our common stock and/or warrants to purchase our common stock, either individually or in units, with a total value of up to \$80,000,000 from time to time under this prospectus at prices and on terms to be determined at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate offering price;

maturity, if applicable;

redemption, conversion, exercise, or exchange terms, if any;

restrictive covenants, if any; and

voting or other rights, if any.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

This prospectus may not be used to offer or sell securities unless it is accompanied by a prospectus supplement.

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

the names of those agents or underwriters;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options, if any; and

the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. Holders of shares of our common stock are entitled to one vote for each share held of record on all matters to be voted on by stockholders and do not have cumulative voting rights. Subject to the preferences that may be applicable to any then outstanding preferred stock, the holders of our outstanding shares of common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

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Warrants. 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 our common stock. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and/or warrant certificates that contain the terms of the warrants. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the forms of warrant agreement and/or warrant certificates that describe the terms of the series of warrants we are offering before the issuance of the related series of warrants.

We will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

Units. We may issue, in one or more series, units consisting of common stock and/or warrants for the purchase of common stock in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of units being offered, as well as the complete unit agreement, if any, that contains the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, any form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

RISK FACTORS

Investing in our securities involves risks. You should carefully consider the risk factors contained in the applicable prospectus supplement and any related free writing prospectus for a specific offering of securities, as well as those incorporated by reference in this prospectus, before making an investment decision. You should also carefully consider other information contained and incorporated by reference in this prospectus and any applicable prospectus supplement, including our financial statements and the related notes thereto incorporated by reference in this prospectus. The risks and uncertainties described in the applicable prospectus supplement and our other filings with the SEC incorporated by reference herein are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also adversely affect us. If any of the described risks occur, our business, financial condition or results of operations could be materially harmed. In such case, the value of our securities could decline and you may lose all or part of your investment.

Table of Contents**SELLING STOCKHOLDERS**

We are registering the possible resale of 1,000,000 shares of our common stock by the selling stockholders, which includes (i) 676,200 shares of common stock issued in connection with our acquisition of DMI BioSciences, Inc. in April 2009; (ii) 52,800 shares of common stock issued in connection with our reverse merger with a subsidiary of Chay Enterprises, Inc. in March 2010; (iii) 181,000 shares of common stock issued in connection with a private placement transaction in April 2009; (iv) 52,144 shares of common stock issued in connection with a private placement transaction in February 2010; (v) 7,856 shares acquired in connection with a private purchase in April 2010; and (vi) 30,000 shares of common stock issued in connection with the exercise of stock options granted in August 2010. The selling stockholders may offer the shares for resale from time to time.

The following table sets forth the number and percentage of our shares of common stock owned by the selling stockholders, the amount available to be offered, and the number and percentage of our shares of common stock that will be owned assuming the sale of all the shares offered hereby.

| Name of Selling Stockholder(1) | Number of | Percentage | Number of | Number of | Percentage of |
|--------------------------------|--------------|--------------|--------------|--------------|---------------|
| | Shares of | of Common | Shares of | Common Stock | Common Stock |
| | Common Stock | Stock | Common Stock | Beneficially | Beneficially |
| | Beneficially | Beneficially | Common Stock | Owned After | Owned |
| | Owned | Owned(2) | to be Sold | Offering | After |
| | | | | | Offering(2) |
| David Bar-Or (3) | 3,166,667 | 9.9% | 248,400 | 2,918,267 | 9.2% |
| Raphael Bar-Or (4) | 1,025,000 | 3.4% | 94,300 | 930,700 | 3.1% |
| Bruce G. Miller (5) | 1,500,000 | 5.0% | 138,000 | 1,362,000 | 4.5% |
| Kristin Clift (6) | 575,000 | 2.0% | 52,800 | 522,200 | 1.8% |
| Wannell Crook (7) | 1,100,000 | 3.7% | 101,200 | 998,800 | 3.4% |
| James Winkler (8) | 1,025,000 | 3.4% | 94,300 | 930,700 | 3.1% |
| Michael Macaluso (9) | 2,618,484 | 8.3% | 181,000 | 2,437,484 | 7.8% |
| Richard B. Giles (10) | 621,758 | 2.1% | 60,000 | 561,758 | 1.9% |
| Philip H. Coelho (11) | 379,545 | 1.3% | 30,000 | 349,545 | 1.2% |
| Total | 12,011,454 | 39.1% | 1,000,000 | 11,011,454 | 36.1% |

(1) The address of each selling stockholder listed in the table above is c/o Ampio Pharmaceuticals, Inc., 5445 DTC Parkway, Suite 925, Greenwood Village, Colorado 80111.

(2) Calculated on the basis of 28,778,751 shares of common stock, which is the number of shares of our common stock outstanding on September 30, 2011. For purposes of calculating each person's percentage ownership, stock options, debentures and warrants exercisable within 60 days after September 30, 2011 are included for that person but not the stock options, debentures, or warrants of any other person.

(3) Includes 466,667 shares of common stock which Dr. Bar-Or has the right to acquire through the exercise of stock options. Dr. Bar-Or acquired the shares of common stock to be sold by him through our acquisition of DMI BioSciences, Inc. in April 2009. Dr. Bar-Or is our Chief Scientific Officer and a member of our Board of Directors.

(4) Mr. Bar-Or acquired the shares of common stock to be sold by him through our acquisition of DMI BioSciences, Inc. in April 2009.

(5) Mr. Miller acquired the shares of common stock to be sold by him through our acquisition of DMI BioSciences, Inc. in April 2009. Mr. Miller is our former Chief Financial Officer.

(6) Mrs. Clift acquired the shares of common stock to be sold by her through a transfer from her husband, Vaughan Clift, in March 2010. Dr. Clift, our Chief Regulatory Affairs Officer, originally acquired these shares through our reverse merger with a subsidiary of Chay Enterprises, Inc. in March 2010. Excludes 243,333 shares of common stock that Dr. Clift has the right to acquire through the exercise of stock options, as to which Mrs. Clift disclaims beneficial ownership.

(7) Ms. Crook acquired the shares of common stock to be sold by her through our acquisition of DMI BioSciences, Inc. in April 2009.

(8) Dr. Winkler acquired the shares of common stock to be sold by him through our acquisition of DMI BioSciences, Inc. in April 2009.

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- (9) Includes (i) 550,000 shares of common stock which Mr. Macaluso has the right to acquire through the exercise of stock options, and (ii) 27,379 shares of common stock Mr. Macaluso has the right to acquire through the exercise of warrants. Mr. Macaluso acquired the shares of common stock to be sold by him through a private placement transaction in April 2009. Mr. Macaluso is the chairman of our board of directors.
- (10) Includes (i) 440,000 shares of common stock which Mr. Giles has the right to acquire through the exercise of stock options, and (ii) 11,918 shares of common stock Mr. Giles has the right to acquire through the exercise of warrants. The total common stock beneficially owned by Mr. Giles includes (i) 1,821 shares held by his adult son who resides with him and (ii) 40,000 shares of common stock which can be exercised through stock options belonging to his wife, Barbara Giles, who is our controller. Mr. Giles acquired the shares of common stock to be sold by him through (i) a private placement transaction in February 2010 (with respect to 52,144 shares) and (ii) a private purchase in April 2010 (with respect to 7,856 shares). Mr. Giles is a member of our board of directors.
- (11) Includes 375,000 shares of common stock which Mr. Coelho has the right to acquire through the exercise of stock options. Mr. Coelho acquired the shares of common stock to be sold by him through the exercise of stock options granted to him in August 2010. Mr. Coelho is a member of our board of directors.

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FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words believe, expect, may, will, anticipate, intend, estimate, project, plan, assume or other similar expressions, although not all forward-looking statements contain these identifying words. All statements contained in this prospectus regarding our future strategy, plans and expectations regarding clinical trials, future regulatory approvals, our plans for the commercialization of our products, future operations, projected financial position, potential future revenues, projected costs, future prospects, and results that might be obtained by pursuing management's current plans and objectives are forward-looking statements. Forward-looking statements include, but are not necessarily limited to, those relating to:

the results and timing of our clinical trials, particularly the results of our Optina, Vasaloc, Ampion and Oxidation Reduction Potential (ORP) Diagnostic Device trials;

the regulatory review process and any regulatory approvals that are issued or denied by the FDA, the EMEA, or other regulatory agencies;

our need to secure collaborators to license, manufacture, market and sell any products for which we receive regulatory approval in the future;

the benefits we expect to obtain from the BioSciences acquisition, including our objective to license Zertane;

the results of our internal research and development efforts;

the commercial success and market acceptance of any of our product candidates that are approved for marketing in the United States or other countries;

the safety and efficacy of medicines or treatments introduced by competitors that are targeted to indications which our product candidates have been developed to treat;

acceptance and approval of regulatory filings;

our need for, and ability to raise, additional capital;

our collaborators' compliance or non-compliance with their obligations under our agreements with them, or decisions by our collaborators to discontinue clinical trials and return product candidates to us; and

our plans to develop other product candidates.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond our control. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus. New risks and uncertainties arise from time to

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time, and it is impossible for us to predict these matters or how they may affect us. Over time, our actual results, performance or achievements will likely differ from the anticipated results, performance or achievements that are expressed or implied by our forward-looking statements, and such differences might be significant and materially adverse to our investors. We have no duty to, and do not intend to, update or revise the forward-looking statements in this prospectus after the date of this prospectus except to the extent required by the federal securities laws. You should consider all risks and uncertainties disclosed in our filings with the SEC, described below under the heading "Where You Can Find Additional Information," all of which are accessible on the SEC's website at www.sec.gov.

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USE OF PROCEEDS

Except as described in any prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you, the net proceeds received by us from our sale of the securities described in this prospectus will be added to our general funds and will be used for our general corporate purposes. We will not receive any of the proceeds from the sale of shares by any selling stockholders. From time to time, we may engage in additional public or private financings of a character and amount which we may deem appropriate.

PLAN OF DISTRIBUTION

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

Each time we or the selling stockholders offer and sell securities, we will provide a prospectus supplement that will set forth the terms of the offering of the securities, including:

the name or names of the underwriters, if any;

the purchase price of the securities and the proceeds we or the selling stockholders will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities;

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 will 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

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purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We or the selling stockholders 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 will 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 and the selling stockholders may use underwriters with whom we or they have a material relationship. The prospectus supplement, naming the underwriter, will describe the nature of any such relationship.

We and the selling stockholders may sell securities directly or through agents we or they designate from time to time. The prospectus supplement will name any agent involved in the offering and sale of securities and any commissions we and the selling stockholders will pay to them. Unless the prospectus supplement states otherwise, any agent will be acting on a best-efforts basis for the period of its appointment.

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We and the selling stockholders may authorize agents or underwriters to solicit offers by certain purchasers to purchase securities from us or them 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. The prospectus supplement will set forth the conditions to these contracts and any commissions we or the selling stockholders must pay for solicitation of these contracts.

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

Any warrants we may offer will be new issues of securities with no established trading market. 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 that are qualified market makers on the NASDAQ Capital Market may engage in passive market making transactions in the common stock on the NASDAQ Capital Market 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.

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DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.0001 per share, of which 28,778,751 shares are issued and outstanding as of September 30, 2011, and 10,000,000 shares of undesignated preferred stock, \$0.0001 par value, of which no shares are issued or outstanding.

The following summary description of our capital stock is based on the provisions of our certificate of incorporation and bylaws and the applicable provisions of the Delaware General Corporation Law. This information is qualified entirely by reference to the applicable provisions of our certificate of incorporation, bylaws and the Delaware General Corporation Law. For information on how to obtain copies of our certificate of incorporation and bylaws, please see [Where You Can Find Additional Information](#) and [Incorporation of Certain Information by Reference](#).

Common Stock

As of September 30, 2011, there were 28,778,751 shares of our common stock outstanding held by approximately 1,400 stockholders of record. Holders of common stock will have voting rights for the election of our directors and all other matters requiring stockholder action, except with respect to amendments to our certificate of incorporation that alter or change the powers, preferences, rights or other terms of any outstanding preferred stock if the holders of such affected series of preferred stock are entitled to vote on such an amendment. There is no cumulative voting with respect to the election of directors, with the result that the holders of more than 50% of the shares voted for the election of directors can elect all of the directors. Holders of common stock will be entitled to one vote per share on matters to be voted on by stockholders and also will be entitled to receive such dividends, if any, as may be declared from time to time by our board of directors in its discretion out of funds legally available therefor. The payment of dividends, if ever, on the common stock will be subject to the prior payment of dividends on any outstanding preferred stock, of which there is currently none. Upon our liquidation or dissolution, the holders of common stock will be entitled to receive *pro rata* all assets remaining available for distribution to stockholders after payment of all liabilities and provision for the liquidation of any shares of preferred stock at the time outstanding. Our stockholders have no conversion, preemptive or other subscription rights and there are no sinking fund or redemption provisions applicable to the common stock.

Preferred Stock

Our certificate of incorporation provides that shares of preferred stock may be issued from time to time in one or more series. Our board of directors is authorized to fix the voting rights, if any, designations, powers, preferences, the relative, participating, optional or other special rights and any qualifications, limitations and restrictions thereof, applicable to the shares of each series. Our board of directors will be able to, without stockholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of the common stock and could have anti-takeover effects. The ability of our board of directors to issue preferred stock without stockholder approval could have the effect of delaying, deferring or preventing a change of control of us or the removal of existing management. We have no preferred stock outstanding at the date hereof. Although we do not currently intend to issue any shares of preferred stock, we cannot assure you that we will not do so in the future.

Delaware Anti-Takeover Law and Provisions of our Certificate of Incorporation and Bylaws

Delaware Anti-Takeover Law.

As a Delaware corporation, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally has an anti-takeover effect for transactions not approved in advance by our board of directors. This may discourage takeover attempts that might result in payment of a premium over the market price for the shares of common stock held by stockholders. 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 such 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.

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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; or

upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, shares owned by:

- o persons who are directors and also officers; and
- o employee stock plans, in some instances; or

o 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.

Staggered board of directors

Our Delaware certificate of incorporation provides that our board of directors will be classified into three classes of directors of approximately equal size at a date selected by the board. As a result, in most circumstances, a person can gain control of our board only by successfully engaging in a proxy contest at two or more annual meetings.

Advance notice requirements for stockholder proposals and director nominations

Our Delaware bylaws provide that stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders, must provide timely notice of their intent in writing. To be timely, a stockholder's notice needs to be delivered to our principal executive offices not later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's annual meeting of stockholders. Our bylaws also specify certain requirements as to the form and content of a stockholders' meeting. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders.

Authorized but unissued shares

Our authorized but unissued shares of common stock and preferred stock are available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Limitation on liability and indemnification of directors and officers

Our Delaware certificate of incorporation and bylaws provide that our directors and officers will be indemnified by us to the fullest extent authorized by Delaware law as it now exists or may in the future be amended, against all expenses and liabilities reasonably incurred in connection with their service for or on our behalf. Our bylaws permit us to secure insurance on behalf of any officer, director or employee for any liability arising out of his or her actions, regardless of whether Delaware law would permit indemnification.

These provisions may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent we

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pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. We believe that these provisions, insurance and the indemnity agreements are necessary to attract and retain talented and experienced directors and officers.

There is no pending litigation or proceeding involving any of our directors or officers where indemnification by us would be required or permitted. We are not aware of any threatened litigation or proceeding that might result in a claim for such indemnification. Insofar as indemnification for liabilities arising under the Securities Act of 1933, or the Act, may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

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Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Corporate Stock Transfer, Inc., 3200 Cherry Creek Drive South, Suite 430, Denver, Colorado 80209.

DESCRIPTION OF WARRANTS

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 these securities. 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. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

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

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

the currency for which the warrants may be purchased;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities 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 effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

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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 securities 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 agreements and warrants may be modified;

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a discussion of any material or special United States federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities 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, if any

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities 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 specified time 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 the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each 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 UNITS

We may issue, in one or more series, units consisting of common stock and/or warrants for the purchase of common stock in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The units may be issued under unit agreements to be entered into between us and a unit agent, as detailed in the prospectus supplement relating to the units being offered. The prospectus supplement will describe:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances the securities comprising the units may be held or transferred separately;

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a description of the terms of any unit agreement governing the units;

a description of the provisions for the payment, settlement, transfer or exchange of the units; and

whether the units if issued as a separate security will be issued in fully registered or global form.

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While the terms summarized above will apply generally to any units that we may offer, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described above. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, any form of unit agreement, including any related agreements or certificates, that describes the terms of the particular series of units we are offering before the issuance of the related series of units. The material provisions of the units and any unit agreements are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and related agreements and certificates applicable to the particular series of units that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete unit agreements and related agreements and certificates that contain the terms of the units.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon by Goodwin Procter LLP, New York, New York.

EXPERTS

The consolidated financial statements of Ampio Pharmaceuticals, Inc. and subsidiaries as of December 31, 2010 and 2009, and for each of the years in the two-year period ended December 31, 2010, have been incorporated by reference herein from our Annual Report on Form 10-K for the year ended December 31, 2010, in reliance upon the report of Ehrhardt Keefe Steiner & Hottman PC, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

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WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of a registration statement that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the SEC. We are a public company and file proxy statements, annual, quarterly and special reports and other information with the SEC. The registration statement, such reports and other information can be inspected and copied at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington D.C. 20549. Copies of such materials, including copies of all or any portion of the registration statement, can be obtained from the Public Reference Room of the SEC at prescribed rates. You can call the SEC at 1-800-SEC-0330 to obtain information on the operation of the Public Reference Room. Such materials may also be accessed electronically by means of the SEC's home page on the Internet (*www.sec.gov*).

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below that we have filed with the SEC:

our Annual Report on Form 10-K for the year ended December 31, 2010, filed on February 15, 2011;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2011 and June 30, 2011, filed on May 12, 2011 and August 12, 2011, respectively;

our Current Reports on Form 8-K or Form 8-K/A (other than portions thereof 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) filed on January 7, 2011, February 15, 2011, March 16, 2011, March 25, 2011, April 4, 2011, April 12, 2011, April 19, 2011, June 8, 2011, June 21, 2011, July 7, 2011, September 13, 2011, October 5, 2011 and October 6, 2011; and

the description of our common stock contained or incorporated by reference in our Registration Statement on Form 8-A, filed on May 17, 2011, including any amendment or reports filed for the purpose of updating this description.

We also incorporate by reference into this prospectus all documents (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) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of the registration statement, or (ii) after the date of this prospectus until we, together with all selling stockholders, sell all of the shares covered by this prospectus or the sale of shares by us and the selling stockholders pursuant to this prospectus is terminated.

You may access our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to any of these reports, free of charge on the SEC's website. You may also access the documents incorporated by reference on our website at *www.ampio-pharma.com*. Other than the foregoing documents incorporated by reference, the information contained in, or that can be accessed through, our website is not part of this prospectus.

In addition, we will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, on written or oral request of such person, a copy of any or all of the documents incorporated by reference in this prospectus (not including exhibits to such documents, unless such exhibits are specifically incorporated by reference in this prospectus or into such documents). Such requests may be directed to Ampio Pharmaceuticals, Inc., 5445 DTC Parkway, Suite 925, Greenwood Village, Colorado 80111 or call (720) 437-6500.

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2,220,255 Shares

Common Stock

Prospectus Supplement

Lead Placement Agents

Fordham Financial Management, Inc.

Summer Street Research Partners

Co-Placement Agent

Emerging Growth Equities, Ltd.

December 20, 2011