Registration No. 333-128055 Registration No. 333-129917

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 2 (Post-Effective) To Registration Statement No. 333-128055 Amendment No. 1 (Post-Effective) To Registration Statement No. 333-129917 in each case on

FORM S-3

REGISTRATION STATEMENT

Under

The Securities Act of 1933

MediciNova, Inc.

Delaware (State or Other Jurisdiction of Incorporation or Organization) (Exact Name of Registrant as Specified in Its Charter) 2834 (Primary Standard Industrial Classification Code Number) 4350 La Jolla Village Drive, Suite 950 San Diego, CA 92122 (858) 373-1500

33-0927979 (I.R.S. Employer Identification Number)

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Yuichi Iwaki, M.D., Ph.D. MediciNova, Inc.

Chief Executive Officer 4350 La Jolla Village Drive, Suite 950

San Diego, CA 92122

(858) 373-1500 (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

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Approximate date of commencement of proposed sale to the public:

As soon as practicable after the effective date of this registration statement.

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

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

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

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

registration statement for the same offering.

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

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said section 8(a), may determine.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Amount To Be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share	67,335,356(1)	\$1.77(2)	\$119,183,581(2)	\$14,027
Common Stock, \$0.001 par value per share	13,356,572	\$1.17(3)	\$ 15,627,189(3)	\$ 1,839(3)

Subsequent to the original filing of the Registration Statement No. 333-128055, an option with respect to 52,500 shares that originally were registered for resale in such Registration Statement has expired unexercised. As a result, only 67,282,856 shares are (or will be) issued and may be sold under this Registration Statement. Estimated based upon the average of the high and low sales prices of the Registrati's common stock on August 31, 2005, as reported by the Hercules Market of the Osaka Securities Exchange, solely for

(2) the purpose of calculating the registration fee pursuant to Rule 457(o) promulgated under the Securities Act of 1933. On August 31, 2005, the exchange rate for the Japanese Yen was 111 Yen per U.S. Dollar, as quoted on www.oanda.com. In connection with its initial filing on Form S-1 on September 1, 2005, the Registrant paid an aggregate filing fee of \$14,107 with respect to the registration of common stock with a proposed maximum offering price of \$119,090,656. Concurrent with the filing of Amendment No. 1 to Registration Statement No. 333-128055, the Registrant transmitted \$10 to the

SEC, representing the additional filing fee payable with respect to the \$92,925 increase in the proposed maximum aggregate offering price set forth herein. Estimated based upon the average of the high and low sales prices of the Registrant's common stock on November 21, 2005, as reported by the Hercules Market of the Osaka Securities Exchange, solely for the purpose of calculating the registration fee pursuant to Rule 457(o) promulgated under the Securities Act of 1933. On November 21, 2005, the exchange rate for the Japanese Yen was 119 Yen per U.S. Dollar, as quoted on www.oanda.com.

PROSPECTUS (Subject to Completion, dated February 16, 2006)

80,639,428 Shares MEDICINOVA, INC. Common Stock

This prospectus relates to an aggregate of up to 80,639,428 shares of our common stock which may be offered by the selling stockholders identified in this prospectus for their own account. The prices at which the selling stockholders may sell the shares will be determined by the prevailing market for the shares or in negotiated transactions. We will not receive any proceeds from the sale of shares offered by this prospectus.

Our common stock is quoted on the Hercules Market of the Osaka Securities Exchange under the symbol "4875." On February 15, 2006, the last reported sale price of our common stock was [132] Japanese Yen (or approximately [\$1.12]) per share (based on an exchange rate of [117.46] Yen per U.S. Dollar, as quoted on www.oanda.com).

The shares of common stock offered or sold under this prospectus involve a high degree of risk. You should carefully consider the <u>Risk Factors</u> beginning on page 4 of this prospectus before purchasing any of the shares of common stock offered by 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 February , 2006

EXPLANATORY NOTE

This amendment (the "**Amendment**") (i) constitutes Amendment No. 2 (Post-Effective) to Registration Statement No. 333-128055, originally filed on Form S-1 on September 1, 2005 and amended on September 19, 2005 and Post-Effective Amendment No. 1 amends (ii) constitutes Amendment No. 1 (Post-Effective) to Registration Statement No. 333-129917, originally filed on Form S-1 on November 23, 2005. The purpose of this Amendment is to convert each of the foregoing Registration Statements on Form S-1 to Form S-3. In addition, pursuant to SEC Rule 429, this Amendment contains a single prospectus that relates to each of the foregoing registration statements.

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PROSPECTUS SUMMARY

The information contained in this summary is qualified in its entirety by, and should be read in conjunction with, the detailed information and financial statements, including the notes thereto, appearing elsewhere in this prospectus. You should read the following summary together with the more detailed information, including "Risk Factors" and our financial statements and related notes, before making your investment decision.

Our Business

We are a specialty pharmaceutical company focused on acquiring, developing and commercializing innovative pharmaceutical products for a variety of diseases and conditions. Although we continue to identify and consider the acquisition of license rights to product candidates with extensive safety and efficacy data that are in late pre-clinical or early clinical development and that address large markets with significant opportunities for improved therapies, we are currently focused on the development of our existing programs and do not foresee material acquisitions of product candidates in the near term.

We believe that our business model approach allows us to move more quickly into the clinical development process in the United States. By acquiring product candidates with such safety and efficacy data, we believe we are able to commence the regulatory process at a more advanced stage than would be possible if we developed such candidates on our own, as we can utilize such data in our IND submissions. To date, we have acquired license rights to six compounds for the development of seven product candidates. Currently we have two Phase I clinical trials ongoing for one product candidate and intend to enter into a Phase I clinical trial with one other product candidate during the first half of 2006. We completed a Phase II clinical trial for one compound in the fourth quarter of 2005. Currently we have three Phase II clinical trials for three product candidates and intend to begin at least one Phase I/II clinical trial each with two other product candidates during the second half of 2006.

We intend to continue to build a strong product pipeline by establishing relationships with large and mid-sized North American, European and Japanese biotechnology and pharmaceutical companies. Since our inception, we have established relationships with a number of pharmaceutical companies, including Kissei Pharmaceutical, Kyorin Pharmaceutical and Mitsubishi Pharma Corporation in Japan and Angiogene Pharmaceuticals in the United Kingdom, pursuant to which we have obtained rights to develop and market compounds. We believe the establishment of these relationships in Japan and Europe provides us with a competitive advantage in identifying and acquiring compounds from Japanese and European pharmaceutical companies.

To date, we have acquired rights to commercialize product candidates in the North American and European markets. According to IMS Health Incorporated, or IMS, a market research organization, in 2004, the North American and European markets accounted for more than three-quarters of sales within the global pharmaceutical market with approximately \$248.0 billion and \$154.0 billion, respectively, while the Japanese market accounted for 11.0% of the market with \$58.0 billion of sales. Moreover, according to IMS, sales growth in 2004, in terms of constant dollars, approximately equaled 7.8% for North America, 6.1% for Europe and only 1.5% for Japan.

Our development programs consist of:

- MN-001 for the treatment of bronchial asthma, for which we completed a Phase II clinical trial (with positive results) in the fourth quarter of 2005 in the United States;
- MN-029 for the treatment of solid tumors, for which we currently have two Phase I clinical trials ongoing in the United States;

- MN-001 for the treatment of interstitial cystitis, for which we commenced a Phase II clinical trial in the second quarter of 2005 in the United States;
- MN-305 for the treatment of Generalized Anxiety Disorder, for which we commenced a Phase II clinical trial at the end of 2004 in the United States (in addition, our licensor of MN-305 has completed an early Phase II clinical trial for anxiety disorders in Japan);
- MN-166 for the treatment of multiple sclerosis, for which we commenced a Phase II clinical trial in the second half of 2005 in Eastern Europe;
- MN-221 for the treatment of preterm labor, for which we completed a Phase I clinical trial in the United States and our licensor of this candidate has completed an early Phase II clinical trial in the United Kingdom; and
- MN-246 for the treatment of urinary incontinence, for which we filed an IND application to permit commencement of a Phase I clinical trial during the first quarter of 2006.

We have assembled a management team with extensive experience in the pharmaceutical and biotechnology industry, including experience in pre-clinical research, drug substance and product preparation, regulatory affairs, clinical research, marketing and sales and corporate development. We believe that our management team has the expertise necessary for:

- assessing product opportunities;
- acquiring product candidates and compounds;
- advancing products through the clinical and regulatory processes; and
- building product development alliances and bringing products to market.

We have successfully utilized our expertise to generate revenues from development management contracts with Asahi Kasei Pharma Corporation and Argenes Inc., both Japanese pharmaceutical companies, for consulting services rendered. We intend to seek similar revenue opportunities to augment our product development approach and to provide us with additional in-license opportunities.

Our Strategy

Our goal is to become a leader in the development and commercialization of drugs for the treatment of diseases with unmet medical needs. Key elements of our strategy are to:

- execute our development approach;
- partner selectively with larger pharmaceutical companies to maximize the commercial potential of our product candidates;
- continue to strengthen our management team; and
- continue to expand our pipeline of promising product candidates over the long term.

Our History

We were founded in September 2000 by Yuichi Iwaki, M.D., Ph.D. and Takashi Kiyoizumi, M.D., Ph.D. as a majority-owned subsidiary of the Japanese pharmaceutical company, Tanabe Seiyaku Co., Ltd. Our operations are now completely independent of Tanabe Seiyaku, which, as of September 30, 2005, indirectly owned approximately 10% of our outstanding capital stock.

Our principal executive offices are located at 4350 La Jolla Village Drive, Suite 950, San Diego, California 92122, and our telephone number is (858) 373-1500. Our website address is www.medicinova.com. The information on our website is not incorporated into this prospectus.

On February 4, 2005, we completed an initial public offering, or IPO, of 30 million shares of common stock for proceeds of \$104.5 million, net of underwriting discounts and commissions and offering expenses. On February 8, 2005, our common stock was listed and began trading on the Hercules Market of the Osaka Securities Exchange.

On March 8, 2005, we completed the sale of 1,573,000 shares of our common stock for aggregate proceeds of \$5.6 million, net of underwriting discounts and commissions. The sale of these shares was the result of the underwriters' partial exercise of the over-allotment option we granted to them in connection with our IPO.

Risks Affecting Our Business and Strategy

Our business and the success of our strategy are subject to numerous risks, which are highlighted in the section entitled "Risk Factors" immediately following this Prospectus Summary, including, but not limited to, the following:

- we are a development stage specialty pharmaceutical company with a limited operating history and limited revenues derived from operations;
- we have consumed substantial amounts of capital since our inception; from our inception to December 31, 2005, we have an accumulated deficit of \$120.5 million, including \$34.7 million of non-cash stock-based compensation charges related to employee stock-based compensation and founders' warrants;
- we expect to incur substantial net losses for the next several years as we continue to develop our existing programs, over the long-term, expand our research and development programs and consider the acquisition of in-license products, technologies or businesses that are complementary to our own;
- we do not have any products that are approved for commercial sale and therefore do not expect to generate any revenues from product sales in the foreseeable future;
- we may be unsuccessful in developing and gaining regulatory approval for new product candidates, we may not be able to sustain our operations and we may never become profitable;
- we are dependent on our management team, particularly Yuichi Iwaki, M.D., Ph.D., and if we are unable to attract, retain and motivate Dr. Iwaki and other key management and scientific staff, our drug development programs may be delayed and we may be unable to develop successfully or commercialize our product candidates;
- if we fail to identify and license or acquire other product candidates, we will not be able to expand our business over the long term; and
- if we fail to obtain the capital necessary to fund our operations, we will be unable to develop and commercialize our product candidates.

The Offering

We currently have outstanding in-the-money warrants exercisable for 13,356,572 shares of common stock. Of this amount, 12,856,572 shares are subject to warrants held by our founders. We have filed the registration statement of which this prospectus forms a part voluntarily with respect to such shares, and the prices at which the selling stockholders may sell their shares will be determined by the prevailing market for the shares or in negotiated transactions.

Recent Events

On September 30, 2005, we announced that the Board of Directors and Takashi Kiyoizumi, M.D., Ph.D., agreed that Dr. Kiyoizumi would resign as President and Chief Executive Officer effective September 30, 2005. We also announced that Brian Anderson, Chief Business Officer, had left the company. Yuichi Iwaki, M.D., Ph.D., Executive Chairman, began serving as our Acting Chief Executive Officer and Chief Financial Officer concurrently with the resignation of Dr. Kiyoizumi.

On February 16, 2006, we filed our Annual Report on Form 10-K for our fiscal year ended December 31, 2005.

RISK FACTORS

We operate in a dynamic and rapidly changing environment that involves numerous risks and uncertainties. The following section describes some, but not all, of the risks and uncertainties that may have a material adverse effect on our business, financial condition, results of operations and the market price of our common stock and could cause our actual results to differ materially from those expressed or implied in our forward-looking statements.

Risks Related to Our Business

We expect our net losses to continue for at least several years and we are unable to predict the extent of our future losses.

We are a development stage specialty pharmaceutical company with a limited operating history. We have incurred significant net losses since our inception. For the year ended December 31, 2005, we had a net loss of \$25.7 million. For the year ended December 31, 2004, we had a net loss of \$48.3 million, including \$34.3 million of non-cash stock-based compensation charges. Our annual net losses may increase over the next several years as we expand and incur significant clinical development costs. These losses have reduced our stockholders' equity and, excluding the portion related to stock-based compensation, will continue to reduce our stockholders' equity and working capital.

We expect our development expenses to increase in connection with our planned clinical trials for our product candidates and any other development projects that we may initiate. In addition, we expect to incur increased general and administrative expenses as well as the increased costs to operate as a public company. Consequently, we expect to continue to incur significant and increasing operating losses for the foreseeable future.

We do not have any products that are approved for commercial sale and therefore do not expect to generate any revenues from product sales in the foreseeable future.

We have not received, and do not expect to receive for at least the next several years, any revenues from the commercialization of our product candidates. To date, we have not generated any product revenues and have funded our operations primarily from sales of our securities. Our only source of revenues since inception has been from development management services rendered to Asahi Kasei Pharma Corporation and Argenes Inc., both Japanese pharmaceutical companies, in connection with their clinical development of pharmaceutical product candidates. Our contract with Asahi Kasei Pharma has been completed and we do not expect to generate further revenues from that agreement. We anticipate that we will continue to receive modest revenues for rendering consulting services and that, prior to our commercialization of a product candidate, our consulting revenues, together with out-licensing upfront and milestone payments, will be our primary source of revenues. To obtain revenues from sales of our product candidates, we must succeed, either alone or with third parties, in developing, obtaining regulatory approval for, manufacturing and marketing drugs with market potential. We may never succeed in these activities, and may not generate sufficient revenues to continue our business operations or achieve profitability.

The loss of any rights to develop and market any of our product candidates could significantly harm our business.

We license the rights to develop and market our product candidates. Currently, we have licensed six compounds for the development of seven product candidates. They are:

- MN-001 for interstitial cystisis and asthma licensed from Kyorin Pharmaceutical;
- MN-029 for solid tumors licensed from Angiogene Pharmaceuticals;
- MN-305 for Generalized Anxiety Disorder licensed from Mitsubishi Pharma Corporation;

- MN-166 for multiple sclerosis licensed from Kyorin Pharmaceutical;
- MN-221 for preterm labor licensed from Kissei Pharmaceutical; and
- MN-246 for urinary incontinence licensed from Mitsubishi Pharma Corporation.

We are obligated to develop and commercialize these product candidates in accordance with mutually agreed upon terms and conditions. Our ability to satisfy some or all of the terms and conditions of our licensing arrangements is dependent on numerous factors, including some factors that are outside of our control. Our licensing arrangements may be terminated if we breach our obligations under the agreements materially and fail to cure a breach within a specified period of time.

If any of our license agreements is terminated, we would have no further rights to develop and commercialize the product candidate that is the subject of the license. The termination of any of our license agreements would significantly and adversely affect our business.

In order to commercialize a therapeutic drug successfully, a product candidate must undergo clinical trials, which are long, complex and costly, manifest a high risk of failure and can be delayed or suspended.

Six of our seven product candidates are in clinical development, the process that is required to receive regulatory approval for commercial sale. The regulatory approval process is long, complex and costly. It may take several years to complete the clinical development necessary to commercialize a drug, and delays or failure can occur at any stage, which may result in our inability to market and sell products derived from our product candidates and to generate product revenues. Of the large number of drugs in development, only a small percentage result in the submission of a New Drug Application, or NDA, to the Food and Drug Administration, or FDA, and even fewer are approved for commercialization. Interim results of clinical trials do not necessarily predict final results, and success in pre-clinical testing and early clinical trials does not ensure that later clinical trials will be successful. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials even after promising results in earlier trials.

In connection with clinical trials, we face risks that:

- a product candidate may not prove to be efficacious;
- patients may die or suffer other adverse effects for reasons that may or may not be related to the product candidate being tested;
- the results may not confirm the positive results of earlier trials; and
- the results may not be acceptable to the FDA or other regulatory agencies.

To date, we have regulatory approval to conduct clinical trials for six of our seven product development programs. We have submitted a U.S. IND application for the seventh product development program in the first quarter of 2006. Investigational New Drug, or IND, applications are approved and active for five of our seven product candidates. We have Clinical Trial Authorizations, or CTAs, applications, the equivalent of a U.S. IND, approved and active to conduct a Phase II study for MN-166 in patients with multiple sclerosis in seven countries in Eastern Europe. We cannot conduct human clinical trials in the United States or in Eastern Europe on our remaining product candidate until an IND or CTA application is approved and in effect and there can be no assurance that the regulatory authorities, including the FDA, will approve our applications.

The commencement of clinical trials can be delayed for a variety of other reasons, including delays in:

- demonstrating sufficient safety to persuade regulatory authorities to allow a clinical trial to begin;
- reaching agreement on acceptable terms with prospective contract research organizations and clinical trial sites;
- manufacturing sufficient quantities of a product candidate;

- obtaining institutional review board approval to conduct a clinical trial at a prospective site; and
- obtaining sufficient patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease and the eligibility criteria for the clinical trial.

Once a clinical trial has begun, it may be delayed, suspended or terminated due to a number of factors, including:

- ongoing discussions with regulatory authorities regarding the scope or design of our clinical trials or requests by them for supplemental information with respect to our clinical trial results;
- our failure or inability to conduct clinical trials in accordance with regulatory requirements;
- lower than anticipated retention rates of patients in clinical trials;
- serious adverse events or side effects experienced by participants; or
- insufficient supply or deficient quality of product candidates or other materials necessary for the conduct of our clinical trials.

Many of these factors described above may also ultimately lead to denial of regulatory approval of a current or potential product candidate. If we experience delays in our clinical trials, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenues will be delayed.

If we fail to identify and license or acquire other product candidates, we will not be able to expand our business over the long term.

Given that we have limited internal discovery capabilities, our business over the long term is substantially dependent on our ability to license or acquire clinical-stage product candidates and further develop them for commercialization. The success of this strategy depends upon our ability to identify, select and acquire the right product candidates. We have limited experience identifying, negotiating and implementing economically viable product candidate acquisitions or licenses, which is a lengthy and complex process. Also, the market for licensing and acquiring product candidates is intensely competitive and many of our competitors have greater resources than us. We may not have the requisite capital resources to consummate product candidate acquisitions or licenses that we identify to fulfill our strategy.

Moreover, product candidate acquisitions that we do complete involve numerous risks, including:

- difficulties in integrating the development program for the acquired product candidate into our existing operations;
- diversion of financial and management resources from existing operations;
- risks of entering new markets or technologies;
- · inability to generate sufficient revenues to offset acquisition costs; and
- delays that may result from us having to perform unanticipated pre-clinical trials or other tests on the product candidate.

For these and other reasons, we have determined to place less emphasis on efforts to identify and acquire additional product candidates in the near term. If we are not successful in identifying and licensing or acquiring other product candidates over the long term, we will not be able to grow our revenues with sales from new products beyond those revenues, if any, from our existing product candidates.

If we fail to obtain the capital necessary to fund our operations, we will be unable to develop and commercialize our product candidates.

We have consumed substantial amounts of capital since our inception. From our inception to December 31, 2005, we have an accumulated deficit of \$120.5 million, including \$34.7 million of non-cash stock-based

compensation charges related to employee stock-based compensation and founders' warrants. Although we believe our existing cash and investments will be sufficient to fund our anticipated cash requirements at least through December 31, 2006, we will require significant additional financing in the future to fund our operations thereafter. Our future capital requirements will depend on, and could increase significantly as a result of many factors including:

- progress in, and the costs of, our clinical trials;
- the costs of securing manufacturing arrangements for clinical or commercial production;
- the costs involved in filing, prosecuting, enforcing and defending patent claims and other intellectual property rights; and
- the costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory approval to market our product candidates.

Until we can generate significant continuing revenues, we expect to satisfy our future cash needs through strategic collaborations, private or public sales of our securities, debt financings or by licensing all or a portion of our product candidates, to the extent we are able to do so. We cannot be certain that additional sources of capital will be available to us on acceptable terms, or at all. If sources of capital are not available, we may not be in a position to pursue other business opportunities that require financial commitments and we may be required to:

- terminate or delay clinical trials for one or more of our product candidates;
- delay establishing sales and marketing capabilities;
- curtail our efforts to acquire new product candidates; or
- relinquish rights to our technologies or product candidates.

The terms under which we raise additional capital may harm our business and may significantly dilute stockholders' ownership interests.

If we raise additional funds through collaborations or licensing arrangements with third parties, we may need to relinquish some rights to our product candidates, including commercialization rights, that may harm our ability to grow our business. If we raise additional funds by issuing equity securities, stockholders may experience substantial dilution. Debt financing, if available, may involve restrictive covenants that may impede our ability to operate our business. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders.

We will depend on strategic collaborations with third parties to develop and commercialize selected product candidates and will not have control over a number of key elements relating to the development and commercialization of these product candidates.

A key aspect of our strategy is to enter into collaborations with third-party partners whereby we license selected product candidates to larger pharmaceutical companies that are willing to conduct later-stage clinical trials and further develop and commercialize those products. To date, we have not entered into any collaborative arrangements with any third-party partners.

By entering into these strategic collaborations, we may rely on our partners for financial resources and for development, commercialization and regulatory expertise. Our partners may fail to develop or effectively commercialize products using our product candidates because they:

- do not have sufficient resources or decide not to devote the necessary resources due to internal constraints such as limited cash or human resources;
- decide to pursue a competitive potential product that has been developed outside of the collaboration; or
- cannot obtain the necessary regulatory approvals.

We may not be able to enter into collaborations on acceptable terms, if at all. We also face competition in our search for partners with whom we may collaborate.

We rely on third parties to conduct our clinical trials and perform data collection and analysis, which may result in costs and delays that may hamper our ability to successfully develop and commercialize our product candidates.

Although we design and manage our current clinical trials, we do not have the ability to conduct clinical trials directly for our product candidates. We will rely on contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct our clinical trials and to perform data collection and analysis. In the course of clinical development, we have contracted and will continue to contract with a number of these research organizations, including, without limitation: Accelsiors CRO and Consultancy Services of Budapest, Hungary; Pharmaceutical Research Associates, Inc. of Lenexa, Kansas; Fulcrum Pharma Developments, Inc. of Durham, North Carolina; Paragon, Inc. of Irvine, California; Quintiles, Inc. of Morrisville, North Carolina and SFBC International of Princeton, New Jersey.

Our clinical trials may be delayed, suspended or terminated if:

- the third parties upon whom we rely do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines;
- such third parties need to be replaced; or
- the quality or accuracy of the data obtained by the third parties is compromised due to their failure to adhere to our clinical protocols or regulatory requirements or for other reasons.

Failure to perform by the third parties upon whom we rely may increase our development costs, delay our ability to obtain regulatory approval and prevent the commercialization of our product candidates. While we believe that there are numerous alternative sources to provide these services, if we were to seek such alternative sources, we might not be able to enter into replacement arrangements without delays or additional expenditures.

Our product candidates, if approved for sale, may not gain acceptance among physicians, patients and the medical community, thereby limiting our potential to generate revenues.

Even if our product candidates are approved for commercial sale by the FDA or other regulatory authorities, the degree of market acceptance of any approved product candidate by physicians, healthcare professionals and third-party payors, and our profitability and growth will depend on a number of factors, including:

- relative convenience and ease of administration;
- the prevalence and severity of any adverse side effects;
- availability of alternative treatments;
- pricing and cost effectiveness, which may be subject to regulatory control;
- effectiveness of our or any of our partners' sales and marketing strategy; and
- our ability to obtain sufficient third-party insurance coverage or reimbursement.

If any product candidate that we develop does not provide a treatment regimen that is as beneficial as the current standard of care or otherwise does not provide patient benefit, that product likely will not achieve market acceptance.

We are dependent on our management team, particularly Yuichi Iwaki, M.D., Ph.D., and if we are unable to attract, retain and motivate Dr. Iwaki and other key management and scientific staff, our drug development programs may be delayed and we may be unable to develop successfully or commercialize our product candidates.

We are dependent upon the continued services of our executive officers and other key personnel, particularly Yuichi Iwaki, M.D., Ph.D., one of our founders and the Executive Chairman of our Board of Directors and our Acting Chief Executive Officer and Chief Financial Officer, who has been instrumental in our ability to in-license product candidates from Japanese pharmaceutical companies and secure financing from Japanese institutions. The relationships that all of our key managers have cultivated with pharmaceutical companies from whom we license product candidates and to whom we expect to out-license product candidates make us particularly dependent upon their continued employment with us. We are also substantially dependent on the continued services of our existing project management personnel because of the highly technical nature of our product development programs.

If and when we acquire or license new product candidates, our success will depend on our ability to attract, retain and motivate highly qualified management and scientific personnel to manage the development of these new product candidates. In particular, our drug development programs depend on our ability to attract and retain highly experienced development and regulatory personnel. In addition, we will need to hire additional personnel as we continue to expand our clinical development and other development activities. We face competition for experienced scientists and other technical and professional personnel from numerous companies and academic and other research institutions. Competition for qualified personnel is particularly intense in the San Diego, California area, where our offices are located. Our short operating history and the uncertainties attendant to being a development-stage specialty pharmaceutical company with limited capital resources could impair our ability to attract and retain personnel and impede the achievement of our development and commercialization objectives.

Although we have employment agreements with key members of management, each of our employees, subject to applicable notice requirements, may terminate his or her employment at any time. We do not carry "key person" insurance covering members of senior management. If we lose any of our key management personnel, we may not be able to find suitable replacements and our business would be harmed as a result.

If we are unable to establish our sales and distribution capabilities, we will be unable to successfully commercialize our product candidates.

To date, we have not sold, marketed or distributed any pharmaceutical products. If we are successful in developing and obtaining regulatory approvals for the product candidates in our programs or acquire other products, we will need to establish sales, marketing and distribution capabilities. Developing an effective sales and marketing force will require a significant amount of our financial resources and time. We may be unable to establish and manage an effective sales force in a timely or cost-effective manner, if at all, and any sales force we do establish may not be capable of generating demand for our products. Although we intend to establish strategic collaborations to market the products in our programs outside the United States, if we are unable to establish such collaborations, we may be required to market our product candidates outside of the United States directly. In that event, we may need to build a corresponding international sales and marketing capability with technical expertise and with supporting distribution capabilities.

We will need to increase the size of our organization, and we may encounter difficulties managing our growth, which could adversely affect our results of operations.

We will need to expand and effectively manage our operations and facilities in order to advance our drug development programs, achieve milestones under our collaboration agreements, facilitate additional collaborations and pursue other development activities. For example, we intend to hire additional personnel in clinical development, regulatory affairs and corporate development to further strengthen our core competencies.



Similarly, we are likely to hire additional management and administrative personnel to manage our business and affairs as we continue to grow. In addition, we will have to develop sales, marketing and distribution capabilities for the product candidates in our programs. The scope and timing of these hires is highly uncertain and remains subject to the success of our current product candidate development programs.

To manage our growth, we will be required to continue to improve our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. Meeting our public reporting obligations and other regulatory requirements in the United States and Japan places additional demands on our limited resources. We may not successfully manage the expansion of our operations and, accordingly, may not achieve our development and commercialization goals.

We expect that our results of operations will fluctuate, which may make it difficult to predict our future performance from period to period.

Our quarterly operating results have fluctuated in the past and are likely to continue to do so in the future. Some of the factors that could cause our operating results to fluctuate from period to period include:

- the status of development of our product candidates and, particularly, the timing of any milestone payments to be paid or received by us under our licensing agreements;
- the incurrence of clinical expenses that could fluctuate significantly from period to period;
- the unpredictable effects of collaborations during these periods;
- the timing of our satisfaction of applicable regulatory requirements, if at all;
- the rate of expansion of our clinical development and other internal development efforts;
- the effect of competing technologies and products and market developments; and
- general and industry-specific economic conditions.

We believe that quarterly or yearly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Relying on third-party manufacturers may result in delays in our clinical trials and product introductions as well as increased costs.

We have no manufacturing facilities, and we do not intend to develop facilities for the manufacture of product candidates for clinical trials or commercial purposes in the foreseeable future. We are contracting with third-party manufacturers to produce, in collaboration with us, sufficient quantities of our product candidates for clinical trials. While we believe that there are competitive sources available to manufacture our product candidates, we may not be able to enter into arrangements without delays or additional expenditures. We cannot estimate these delays or costs with certainty. To date, these manufacturers have met the requirements of our programs; however, we have only required the manufacture of our product candidates in very limited volume because we do not have any commercialized product.

Our manufacturers will be obliged to operate in accordance with FDA-mandated or International Convention on Harmonization (ICH) current good manufacturing practices, or cGMPs. A failure of any of our contract manufacturers to establish and follow cGMPs and to document their adherence to such practices may lead to significant delays in clinical trials, or in obtaining regulatory approval of product candidates or the ultimate launch of our products into the market. In addition, changing contract manufacturers is difficult. For example, doing so requires re-validation of the manufacturing processes and procedures in accordance with cGMPs, which may be costly and time-consuming. Failure by our third-party manufacturers or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of the government to grant pre-market approval of drugs, delays, suspension or withdrawal of approvals, seizures or recalls of products, operating restrictions and criminal prosecutions.

We may not be able to manufacture our product candidates in commercial quantities, which would prevent us from commercializing our product candidates.

To date, our product candidates have been manufactured in small quantities for pre-clinical and clinical trials. If any of these product candidates are approved by the FDA or other regulatory agencies for commercial sale, we will need to manufacture them in larger quantities. We may not be able to increase successfully the manufacturing capacity, whether in collaboration with third-party manufacturers or on our own, for any of our product candidates in a timely or economic manner, or at all. Significant scale-up of manufacturing may require additional validation studies, which the FDA must review and approve. If we are unable to increase successfully the manufacturing capacity for a product candidate, the regulatory approval or commercial launch of that product candidate may be delayed or there may be a shortage in supply. Our product candidates will require precise, high quality manufacturing. Our failure to achieve and maintain these high manufacturing standards, including the incidence of manufacturing errors, could result in patient injury or death, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could harm our business, financial condition and results of operations.

Materials necessary to manufacture our products may not be available on commercially reasonable terms, or at all, which may delay the development and commercialization of our products.

We rely on the manufacturers for our products to purchase from third-party suppliers the materials necessary to produce the compounds for our clinical trials and for commercial distribution, if we obtain marketing approval for any of our products. Suppliers may not sell these materials to our manufacturers at the time we need them or on commercially reasonable terms. We do not have any control over the process or timing of the acquisition of these materials by our manufacturers. Moreover, we currently do not have any agreements for the production of these materials. If our manufacturers are unable to obtain these materials for our clinical trials, product testing and potential regulatory approval of our products would be delayed, significantly impacting our ability to develop the product candidate. If our manufacturers or we are unable to purchase these materials after regulatory approval has been obtained for our products, the commercial launch of our products would be delayed or there would be a shortage in supply of our products, which would harm our ability to generate revenues from the sale of our products.

Risks Related to Our Intellectual Property

Our ability to compete may decline if we do not adequately protect our proprietary rights.

To date, we have obtained licensed rights to ten issued U.S. patents and two U.S. patent applications. We also have obtained licensed rights to 64 issued and pending foreign patents corresponding to these U.S. patents. The patents to which we have licensed rights are set to expire between 2009 and 2020. In addition to these licensed rights, we hold three U.S. patent applications relating to MN-001 and its metabolite, MN-002, as well as one U.S. patent application relating to MN-029. These patents and pending patent applications contain claims directed to, among other things, compounds, compositions, methods of use and/or methods of manufacture.

The patent protection of our product candidates and technology involves complex legal and factual questions. In general, our license agreements give us a right, but not an obligation, to enforce our patent rights. We cannot be certain that any of the patents or patent applications owned by us or our licensors related to our product candidates and technology will provide adequate protection from competing products. Our success will depend, in part, on whether we or our licensors can:

- obtain and maintain patents to protect our product candidates;
- obtain and maintain any required or desirable licenses to use certain technologies of third parties, which may be protected by patents;
- protect our trade secrets and know-how;
- operate without infringing the intellectual property and proprietary rights of others;

- enforce the issued patents under which we hold rights; and
- develop additional proprietary technologies that are patentable.

The degree of future protection for our proprietary rights is uncertain. For example:

- we might not have been the first to make the inventions covered by each of our pending patent applications;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- it is possible that none of our pending patent applications will result in issued patents;
- any patents under which we hold rights may not provide us with a basis for commercially viable products, may not provide us with any competitive advantages or may be challenged by third parties as invalid, or unenforceable under U.S. or foreign laws;
- any of the issued patents under which we hold rights may not be valid or enforceable or may be circumvented successfully; or
- we may not develop additional proprietary technologies that are patentable.

Proprietary trade secrets and unpatented know-how may also prove to be very important to our future research and development activities. However, we cannot be certain that others will not develop the same or similar technologies on their own. We have taken steps, including entering into confidentiality agreements with all of our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors, to protect our trade secrets and unpatented know-how. We also typically obtain agreements from these parties which provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party illegally obtained and is using our trade secrets or know-how is difficult, expensive and time consuming and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets or know-how.

A dispute concerning the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be time consuming and costly, and an unfavorable outcome could harm our business.

There is significant litigation in our industry regarding patent and other intellectual property rights. While we are not currently subject to any pending litigation, and are not aware of any threatened litigation, we may be exposed to future litigation by third parties based on claims that our product candidates, technologies or activities infringe the intellectual property rights of others. There are many patents relating to chemical compounds and the uses thereof. If our compounds are found to infringe any such patents, we may have to pay significant damages. A patentee could prevent us from importing, making, using or selling the patented compounds. We may need to resort to litigation to determine the scope and validity of third-party proprietary rights. Similarly, we may be subject to claims that we have inappropriately used or disclosed trade secrets or other proprietary information of third parties. If we become involved in litigation, it could consume a substantial portion of our managerial and financial resources, regardless of whether we win or lose. We may not be able to afford the costs of litigation. Any legal action against us or our collaborators could lead to:

- payment of damages, potentially treble damages, if we are found to have willfully infringed a third party's patent rights;
- injunctive or other equitable relief that may effectively block our ability to further develop, commercialize and sell our products;

- we or our collaborators having to enter into license arrangements that may not be available on commercially acceptable terms; or
- significant cost and expenses, as well as distraction of our management from our business.
- As a result, we could be prevented from commercializing current or future products.

Risks Related to Our Industry

We are subject to stringent regulation of our product candidates, which could delay the development and commercialization of our products.

We, our collaborators, and our product candidates are subject to stringent regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. None of our product candidates can be marketed in the United States until approved by the FDA. None of our product candidates has been approved, and we may never receive FDA approval for any of our product candidates. Obtaining FDA approval typically takes many years and requires substantial resources. Even if regulatory approval is obtained, the FDA may impose significant restrictions on the indicated uses, conditions for use and labeling of such products. Additionally, the FDA may require post-approval studies, including additional research and development and clinical trials. These regulatory requirements may limit the size of the market for the product or result in the incurrence of additional costs. Any delay or failure in obtaining required approvals could have a material adverse effect on our ability to generate revenues from the particular product candidate.

In addition, both before and after regulatory approval, we, our partners, and our product candidates are subject to numerous FDA requirements covering, among other things, testing, manufacturing, quality control, labeling, advertising, promotion, distribution and export. The FDA's requirements may change and additional government regulations may be promulgated that could affect us, our partners, and our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad.

In order to market our products outside of the United States, we and our strategic partners and licensees must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks detailed above regarding FDA approval in the United States. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others. Our product candidate may not be approved for all indications that we request, which would limit the uses of our product and adversely impact our potential royalties and product sales. Such approval may be subject to limitations on the indicated uses for which the product may be marketed or require costly, post-marketing follow-up studies.

If we fail to comply with applicable regulatory requirements in the United States and other countries, among other things, we may be subject to fines and other civil penalties, delays in approving or failure to approve a product, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions, interruption of manufacturing or clinical trials, injunctions and criminal prosecution.

If our competitors develop and market products that are more effective than our product candidates, they may reduce or eliminate our commercial opportunities.

Competition in the pharmaceutical industry is intense and is expected to increase. We face competition from pharmaceutical and biotechnology companies, as well as numerous academic and research institutions and governmental agencies, both in the United States and abroad. Some of these competitors have products or are pursuing the development of drugs that target the same diseases and conditions that are the focus of our product development programs.

Our competitors could have products that are in advanced development and may succeed in developing drugs that are more effective, safer and more affordable or more easily administered than ours, or that achieve patent protection or commercialization sooner than our products. Our competitors may also develop alternative therapies that could further limit the market for any drugs that we may develop.

In many of our target disease areas, potential competitors are working to develop new compounds with different mechanisms, biologies and side effects. Many of our competitors have substantially greater capital and research and development resources, manufacturing, sales and marketing capabilities and production facilities than we do. Smaller companies also may prove to be significant competitors, particularly through proprietary research discoveries and collaboration arrangements with established pharmaceutical companies.

Rapid technological change could make our products obsolete.

Biopharmaceutical technologies have undergone rapid and significant change and we expect that they will continue to do so. As a result, there is significant risk that our current product candidates may be rendered obsolete or uneconomical by new discoveries before we recover any expenses incurred in connection with their development. If our product candidates are rendered obsolete by advancements in biopharmaceutical technologies, our future prospects will suffer.

Consumers may sue us for product liability, which could result in substantial liabilities that exceed our available resources and damage our reputation.

Developing and commercializing drug products entails significant product liability risks. Liability claims may arise from our and our partners' use of products in clinical trials and the commercial sale of those products.

Consumers may make product liability claims directly against us and/or our collaborators, and our collaborators or others selling these products may seek contribution from us if they incur any loss or expenses related to such claims. We currently have insurance that covers our clinical trials. We believe our current insurance coverage is reasonably adequate at this time. We will, however, need to increase and expand this coverage as we commence additional clinical trials, as well as larger scale trials, and if our product candidates are approved for commercial sale. This insurance may be prohibitively expensive or may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of products that we or one of our partners develop. Product liability claims could have a material adverse effect on our business and results of operations. Liability from such claims could exceed our total assets if we do not prevail in any lawsuit brought by a third party alleging that an injury was caused by one or more of our drug products.

Health care reform measures could adversely affect our business.

The business and financial condition of pharmaceutical and biotechnology companies are affected by the efforts of governmental and third-party payers to contain or reduce the costs of health care. In the United States and in foreign jurisdictions there have been, and we expect that there will continue to be, a number of legislative and regulatory proposals aimed at changing the health care system. For example, in some countries other than the United States, pricing of prescription drugs is subject to government control, and we expect proposals to implement similar controls in the United States to continue. Another example of proposed reform that could affect our business is the current discussion of drug reimportation into the United States. In 2000, Congress directed the FDA to adopt regulations allowing the reimportation of approved drugs originally manufactured in the United States back into the United States from other countries where the drugs were sold at lower prices. Although the Secretary of Health and Human Services has refused to implement this directive, in July 2003, the House of Representatives passed a similar bill that does not require the Secretary of Health and Human Services to act. The reimportation bills have not yet resulted in any new laws or regulations; however, these and other initiatives could decrease the price we or any potential collaborators receive for our product candidates once they are approved for sale, adversely affecting our future revenue growth and potential profitability. Moreover, the

pendency or approval of such proposals could result in a decrease in our stock price or our ability to raise capital or to obtain strategic partnerships or licenses.

Risks Related to the Market for our Common Stock

Our stock price may be volatile, and you may not be able to resell our shares at a profit or at all.

The trading price of our common stock could fluctuate due to the factors discussed in our Annual Report. For example, since the date of our initial public offering through January 31, 2006, our stock has traded as high as 440 Japanese Yen (or approximately \$4.19) and as low as 119 Japanese Yen (or approximately \$1.00) per share. The trading market for our common stock also may be influenced by the research and reports that industry or securities analysts publish about us or our industry. If one or more of the analysts who cover us or our industry were to publish an unfavorable research report or to downgrade our stock, our stock price likely would decline. If one or more of these analysts were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

If the holders of the shares offered by the registration statement dated September 19, 2005, or the registration statement dated November 23, 2005 were to determine to sell all or a significant portion of their shares at one time, there would be significant downward pressure on our stock price and it may be difficult to sell your shares.

On September 19, 2005, we filed a Registration Statement on Form S-1 to register 67,335,356 shares of common stock for resale from time to time, which registration statement was subsequently declared effective by the U.S. Securities and Exchange Commission, or SEC. The registered shares were beneficially owned by 47 holders. On November 23, 2005, we filed a Registration Statement on Form S-1 to register 13,356,572 shares issuable upon the exercise of warrants held by three individuals, of which warrants held by our two founders that relate to 12,856,572 shares are exercisable at \$0.10 per share and a warrant held by a separate investor that relates to 500,000 shares is exercisable at \$1.00 per share. The trading volume for our stock is low, with an average trading volume of approximately 610,526 shares per day during the month of January 2006. If the holders of the shares offered by these registration statements, to the extent such shares have not been sold already, were to attempt immediately to sell their shares, there would be significant downward pressure on our stock price and it may be difficult, or even impossible, to find a buyer for shares of our common stock. The warrants held by our founders expire in 2007 and the warrant held by the other party expires in 2009. If the foregoing warrants are exercised, our stockholders will experience immediate and substantial dilution.

Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us more complicated and the removal and replacement of our directors and management more difficult.

Our restated certificate of incorporation and amended and restated bylaws contain provisions that may delay or prevent a change in control, discourage bids at a premium over the market price of our common stock or adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. These provisions may also make it difficult for stockholders to remove and replace our board of directors and management. These provisions:

- establish that members of the board of directors may be removed only for cause upon the affirmative vote of stockholders owning at least a majority of our capital stock;
- authorize the issuance of "blank check" preferred stock that could be issued by our board of directors in a discriminatory fashion designed to increase the number of outstanding shares and prevent or delay a takeover attempt;
- limit who may call a special meeting of stockholders;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings;



- prohibit our stockholders from making certain changes to our restated certificate of incorporation or amended and restated bylaws except with 66²/3% stockholder approval; and
- provide for a classified board of directors with staggered terms.

We also may be subject to provisions of the Delaware corporation law that, in general, prohibit any business combination with a beneficial owner of 15% or more of our common stock for three years unless the holder's acquisition of our stock was approved in advance by our board of directors.

Although we believe these provisions collectively provide for an opportunity to receive higher bids by requiring potential acquirors to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders. In any event, these provisions may delay or prevent a third party from acquiring us. Any such delay or prevention could cause the market price of our common stock to decline.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our businesses. In addition, the terms of existing or any future debts may preclude us from paying these dividends. As a result, appreciation in the market value, if any, of our common stock will be our stockholders' sole source of gain for the foreseeable future. The market value for our common stock has decreased since the time of the initial public offering, may not increase, and in fact, the market value may decrease further.

Any increase in the market value of our common stock is uncertain and unpredictable. Stockholders should not invest in our stock if they are seeking dividend income.

FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements that are subject to risks and uncertainties, many of which are beyond our control. Our actual results will differ from those anticipated in these forward looking statements as a result of various factors, including those set forth above under the caption "Risk Factors" and the differences may be material. Forward-looking statements discuss matters that are not historical facts. Forward-looking statements include, but are not limited to, discussions regarding our operating strategy, growth strategy, acquisition strategy, cost savings initiatives, industry, economic conditions, financial condition, liquidity and capital resources and results of operations. In this prospectus, for example, we make forward-looking statements include, but are not limited to, statements preceded by, followed by or that otherwise include the words "believes," "expects," "anticipates," "intends," "estimates," "projects," "can," "could," "may," "will," "would" or similar expressions. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. You should not rely unduly on these forward-looking statements, which speak only as of the date on which they were made. We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.

USE OF PROCEEDS

The shares of common stock offered by this prospectus will be sold by the selling stockholders, and the selling stockholders will receive all of the proceeds from sales of those shares. Accordingly, we will not receive any of the proceeds from sales of the shares offered by this prospectus.

SELLING STOCKHOLDERS

The following table sets forth information as of January 31, 2006 with respect to the selling stockholders and the amount of shares beneficially owned by each selling stockholder that may be offered from time to time under this prospectus. This information is based on information provided by or on behalf of the selling stockholders.

The selling stockholders may offer all, some or none of their shares registered pursuant to this prospectus. In addition, the selling stockholders identified below may have sold, transferred or otherwise disposed of all or a portion of their shares in transactions exempt from the registration requirements of the Securities Act.

Information concerning the selling stockholders may change from time to time and any changed information will be set forth in supplements to this prospectus when and if necessary. In addition, shares subject to a warrant that is currently exercisable are deemed to be issued and outstanding and have been treated as outstanding in calculating the percentage ownership of those individuals possessing such interest, but not for any other individual.

Name of Selling Stockholder	Number of Shares of Common Stock Beneficially Owned as of January 31, 2006	Percent of Outstanding Shares of Common Stock	Number of Shares of Common Stock That May Be Sold Pursuant to This Prospectus
ABP No. 2 Investment Partnership ⁽¹⁾	308,642	5.93%	308,642
Adachi Co., Ltd. ⁽²⁾	617,283	2.26%	617,283
Saburo Adachi ⁽²⁾	1,617,283	2.26%	1,617,283
Aqua RIMCO Biotechnology No. 1 Investment Partnership ⁽¹⁾	300,000	5.93%	300,000
Aqua RIMCO Biotechnology No. 2 Investment Partnership ⁽¹⁾	5,246,914	5.93%	5,246,914
Bio21 Venture Capital Corporation	617,284	*	617,284
Biotech Healthcare No. 1 Investment Limited Partnership	2,000,000	2.02%	2,000,000
Bio Ven Advisory ⁽¹⁰⁾	500,000	*	500,000
Biovision Life Science Fund I	617,284	*	617,284
Cardinal Partners II LP ⁽³⁾	725,000	*	725,000
Cardinal Partners III LP ⁽³⁾	108,025	*	108,025
China Development Industrial Bank	1,851,852	1.87%	1,851,852
CSK-4 Investment Fund ⁽⁴⁾	250,000	1.52%	250,000
CSK-VC Life Science Investment Fund, LLP ⁽⁴⁾	500,000	1.52%	500,000
Daiwa Securities SMBC Principal Investments Co., Ltd.	1,235,000	1.25%	1,235,000
Di-1 Investment Fund	168,350	*	168,350
Dr. Ci:Labo Co., Ltd. ⁽⁵⁾	1,000,000	3.66%	1,000,000
Essex Woodlands Health Ventures Fund VI, L.P.	11,703,704	11.85%	11,703,704
Jesse R. Freeland, Trustee, The Freeland Family Trust Dated August 10, 1993 ⁽⁶⁾	750,000	1.07%	750,000
The Freeland Family Trust Dated August 10, 1993 ⁽⁶⁾	308,642	1.07%	308,642
Hitachi-CSK Internet Business Fund ⁽⁴⁾	750,000	1.52%	750,000
Investment Enterprise Partnership "NIF21-One(2-A)" ⁽⁷⁾	391,742	2.50%	391,742
Investment Enterprise Partnership "NIF21-One(2-B)" ⁽⁷⁾	391,742	2.50%	391,742
Tomomi Ishihara ⁽⁵⁾	617,283	3.66%	617,283
Yuichi Iwaki, M.D., Ph.D. ⁽⁸⁾	6,678,286	6.33%	6,678,286
J.F.E. Hottinger & Co.	462,963	*	462,963
JAFCO G-9 (A) Venture Capital Investment Limited Partnership ⁽⁹⁾	4,200,000	7.08%	4,200,000
JAFCO G-9 (B) Venture Capital Investment Limited Partnership ⁽⁹⁾	2,800,000	7.08%	2,800,000
Takashi Kiyoizumi, M.D., Ph.D. ⁽¹¹⁾	6,678,286	6.33%	6,678,286

Name of Selling Stockholder	Number of Shares of Common Stock Beneficially Owned as of January 31, 2006	Percent of Outstanding Shares of Common Stock	Number of Shares of Common Stock That May Be Sold Pursuant to This Prospectus
MIRAI M.V.P. Investment Fund	260,000	*	260,000
Mizuho Securities Co., Ltd.	617,284	*	617,284
Mori Trust Co., Ltd.	2,000,000	2.02%	2,000,000
New Business Investment Co., Ltd.	617,284	*	617,284
NIF Ventures Co., Ltd. ⁽⁷⁾	493,827	2.50%	493,827
NVCC No. 4 Venture Capital Investment Limited Partnership	925,000	*	925,000
POSCO BioVentures I, L.P.	1,734,568	1.76%	1,734,568
Rock Castle Ventures, L.P.	1,061,729	1.07%	1,061,729
Sansei No. 3 Investment Partnership	250,000	*	250,000
Yoshinori Shirono ⁽⁵⁾	2,000,000	3.66%	2,000,000
SMBC Capital No. 5 Investment Enterprise Partnership	2,469,136	2.50%	2,469,136
Robert Swift	80,000	*	80,000
Tanabe Holding America, Inc.	10,000,000	10.12%	10,000,000
The Diamond Capital Co., Ltd.	617,284	*	617,284
UTEC Limited Partnership 1	925,926	*	925,926
Venture Capital Investment Limited Partnership NIF Global Fund ⁽⁷⁾	642,058	2.50%	642,058
Venture Capital Investment Limited Partnership "NIF JAPAN-USA-Europe Bridge Fund" ⁽⁷⁾	549,767	2.50%	549,767
York V.C., Inc.	2,000,000	2.02%	2,000,000
Total	80,639,428	71.90%	80,639,428

* Amount represents less than 1% of the outstanding shares of our common stock.

(1) These stockholders are affiliated with one another and collectively own 5.93% of our common stock.

(2) These stockholders are affiliated with one another and collectively own 2.26% of our common stock.

(3) These stockholders are affiliated with one another and collectively own less than 1% of our common stock.

(4) These stockholders are affiliated with one another and collectively own 1.52% of our common stock.

(5) These stockholders are affiliated with one another and collectively own 3.66% of our common stock.

(6) These stockholders are affiliated with one another and collectively own 1.07% of our common stock.

(7) These stockholders are affiliated with one another and collectively own 2.50% of our common stock.

(8) Includes 250,000 shares of common stock and 6,428,286 shares subject to a warrant that is currently exercisable. Dr. Iwaki is the Executive Chairman of our board of directors, Acting Chief Executive Officer and Acting Chief Financial Officer.

(9) These stockholders are affiliated with one another and collectively own 7.08% of our common stock.

(10) Represents shares subject to a warrant that is currently exercisable.

(11) Includes 250,000 shares of common stock and 6,428,286 shares subject to a warrant that is currently exercisable.

The information provided above is based upon information provided by the selling stockholders and public documents filed with the SEC and is not necessarily indicative of beneficial ownership for any other purpose. The percent of beneficial ownership for the selling stockholders is based on 98,805,856 shares of our common stock outstanding as of January 31, 2006. Except as indicated in this prospectus, we are not aware of any material relationship between us and the selling stockholders within the past three years other than as a result of the ownership of the selling stockholders' shares.

This prospectus also covers any additional shares of stock which become issuable in connection with the shares being registered by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of common stock.

PLAN OF DISTRIBUTION

We have registered all 80,639,428 shares of common stock covered by this prospectus on behalf of the selling stockholders named herein. We will not receive any of the proceeds from sales of the shares by the selling stockholders.

The selling stockholders named in this prospectus may sell these shares from time to time. The selling stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. Sales may be made on one or more exchanges or in the over-the-counter market or otherwise, at prices and at terms then prevailing or at prices related to the then current market price or in negotiated transactions. The selling stockholders may effect such transactions by selling the shares to or through broker-dealers. The shares may be sold by one or more of, or a combination of, the following:

- a block trade in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as
 principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by such broker-dealer for its account under this prospectus;
- an exchange distribution in accordance with the rules of such exchange;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers; or
- privately negotiated transactions.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. In effecting sales, broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in such resales.

The selling stockholders may enter into hedging transactions with broker-dealers in connection with distributions of the shares or otherwise. In such transactions, broker-dealers may engage in short sales of the shares in the course of hedging the positions they assume with the selling stockholders. The selling stockholders also may sell shares short and redeliver the shares to close out such short positions. The selling stockholders may enter into option or other transactions with broker-dealers which require the delivery to the broker-dealer of the shares. The broker-dealer may then resell or otherwise transfer such shares under this prospectus. The selling stockholders also may loan or pledge the shares to a broker-dealer. The broker-dealer may sell the shares so loaned, or upon a default the broker-dealer may sell the pledged shares under this prospectus.

Broker-dealers or agents may receive compensation in the form of commissions, discounts or concessions from the selling stockholders. Broker-dealers or agents may also receive compensation from the purchasers of the shares for whom they act as agents or to whom they sell as principals, or both. Compensation as to a particular broker-dealer might be in excess of customary commissions and will be in amounts to be negotiated in connection with the sale. Broker-dealers or agents and any other participating broker-dealers or the selling stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act of 1933, or the Securities Act, in connection with sales of the shares. Accordingly, any such commissions under the Securities Act. Because certain of the selling stockholders may be deemed to be underwriting discounts or commissions under the Securities Act. Because certain of the selling stockholders may be deemed to be "underwriters" within the meaning stockholders will be subject to the prospectus delivery requirements of the Securities Act.

In addition, any securities covered by this prospectus which qualify for sale under Rule 144 promulgated under the Securities Act may be sold under Rule 144 rather than under this prospectus. The selling stockholders have advised us that they has not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities. There is no underwriter or coordinating broker acting in connection with the proposed sale of shares by the selling stockholders.

The shares will be sold only through registered or licensed brokers or dealers if required under applicable U.S. or Japanese securities laws. In addition, in certain states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act of 1934, or the Exchange Act, any person engaged in the distribution of the shares may not engage in market-making activities with respect to our common stock during certain restricted periods. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the associated rules and regulations under the Exchange Act, including Regulation M, which provisions may limit the timing of purchases and sales of shares of our common stock by the selling stockholders. We will make copies of this prospectus available to the selling stockholders of the need for delivery of copies of this prospectus to purchasers at or prior to the time of any sale of the shares.

We will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act upon being notified by the selling stockholders that any material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer. Such supplement will disclose:

- the name of such selling stockholder and of the participating broker-dealer(s);
- the number of shares involved;
- the price at which such shares were sold;
- the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable;
- that such broker-dealer(s) did not conduct any investigation to verify the information set out in this prospectus; and
- other facts material to the transaction.

We will bear all costs, expenses and fees in connection with the registration of the shares. The selling stockholders will bear all commissions and discounts, if any, attributable to their respective sales of the shares. The selling stockholders may agree to indemnify any broker-dealer or agent that participates in transactions involving sales of the shares against certain liabilities, including liabilities arising under the Securities Act.

LEGAL MATTERS

Selected legal matters with respect to the validity of the shares of common stock offered in this prospectus will be passed upon for MediciNova, Inc. by Pillsbury Winthrop Shaw Pittman LLP, San Diego, California. A member of Pillsbury Winthrop Shaw Pittman LLP serves as our Secretary and holds an option to purchase 100,000 shares of our common stock at a per share purchase price of \$1.00.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2005 as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC two registration statements under the Securities Act with respect to the common stock offered by this prospectus. This prospectus is a part of an amendment to each of those registration statements (Registration Statement No. 333-128055 and Registration Statement No. 333-129917). This

prospectus, which constitutes a part of the registration statements, does not contain all of the information set forth in the registration statements and the exhibits and schedules to the registration statements. Please refer to those registration statements, exhibits and schedules for further information with respect to the common stock offered by this prospectus. Statements contained in this prospectus regarding the contents of any contract or other document are not necessarily complete. With respect to any contract or document filed as an exhibit to the registration statements, you should refer to the exhibit for a copy of the contract or document, and each statement in this prospectus regarding that contract or document is qualified by reference to the exhibit. A copy of the registration statement and its exhibits and schedules may be inspected without charge at the SEC's public reference room, located at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings, including this registration statement, are also available to the public on the SEC's website at www.sec.gov.

We are subject to the information and reporting requirements of the Exchange Act and, in accordance therewith, will file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection at the public reference room and website of the SEC referred to above. We maintain a website at www.medicinova.com. You may access our periodic reports and any amendments to those reports filed with the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The reference to our website does not constitute incorporation by reference of the information contained therein.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We incorporate by reference the document listed below and any future filings made by us with the SEC under sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of the Registration Statement of which this prospectus is a part until the sale of all of the shares of common stock that are part of this offering. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information from the date of the filing of such information. The document that we are incorporating by reference is as follows:

• our annual report on Form 10-K for the year ended December 31, 2005 filed with the SEC on February 16, 2006.

Any statement contained in a document that is incorporated by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus (or in any other document that is subsequently filed with the SEC and incorporated by reference) modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus except as so modified or superseded.

You may request a copy of these filings (other than exhibits unless such exhibits are specifically incorporated by reference therein) at no cost by writing or telephoning our investor relations department at the following address and telephone number:

MediciNova, Inc. 4350 La Jolla Village Drive, Suite 950 San Diego, California 92122 (858) 373-1500

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses and Issuance of Distribution

The following table sets forth our expenses in connection with the offerings described in this Amendment to the (i) Registration Statement No. 333-128055, originally filed on Form S-1 on September 1, 2005 and amended on September 19, 2005 and (ii) Registration Statement No. 333-129917, originally filed on Form S-1 on November 23, 2005. Expenses other than the SEC registration fee are estimates.

SEC Registration Fee	\$ 15,866
Printing Expenses	57,500
Legal Fees and Expenses	60,000
Accounting Fees and Expenses	20,000
Miscellaneous	7,661
Total	\$ 161,027

Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933 (the "Securities Act").

As permitted by Delaware General Corporation Law, our restated certificate of incorporation includes a provision that eliminates the personal liability of our directors for monetary damages for breach of fiduciary duty as a director, except to the extent that exculpation from liability is not permitted under the Delaware General Corporation Law as in effect at the time such liability is determined.

As permitted by the Delaware General Corporation Law, our bylaws provide for indemnification of our directors, officers, employees and other agents to the extent and under the circumstances permitted by the Delaware General Corporation Law.

We have also entered into agreements with certain of our directors and executive officers that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors and executive officers to the fullest extent not prohibited by law.

We have purchased directors and officers liability insurance.

Item 16. Exhibits

The following is a list of all exhibits filed as a part of this Registration Statement on Form S-3, including those incorporated into this Registration Statement by reference.

Exhibit Number	Description of Exhibits
3.1*	Restated Certificate of Incorporation of the Registrant.
3.2*	Amended and Restated Bylaws of the Registrant.
4.1*	Specimen of Common Stock Certificate.
4.2*	Amended and Restated Registration Rights Agreement by and among the Registrant, its founders and the investors named therein, dated September 2, 2004.

Exhibit Number	Description of Exhibits
4.3*	Amended and Restated Stock Purchase Warrant held by Takashi Kiyoizumi, dated September 2, 2004.
4.4*	Amended and Restated Stock Purchase Warrant held by Yuichi Iwaki, dated September 2, 2004.
5.1†††	Opinion of Pillsbury Winthrop Shaw Pittman LLP.
10.1**	2000 General Stock Incentive Plan of the Registrant.
10.2**	2004 Stock Incentive Plan of the Registrant.
10.3†††	Form of Indemnification Agreement between the Registrant and its officers and directors.
10.4**†	License Agreement between the Registrant and Kyorin Pharmaceutical Co., Ltd., dated March 14, 2002.
10.5**†	License Agreement between the Registrant and Angiogene Pharmaceuticals, Ltd., dated June 19, 2002.
10.6**†	License Agreement by and among the Registrant, Riken and Dr. Katsuhiko Mikoshiba, dated June 1, 2003.
10.7**†	Exclusive License Agreement between the Registrant and Kissei Pharmaceutical Co., Ltd., dated February 25, 2004.
10.8**†	License Agreement between the Registrant and Mitsubishi Pharma Corporation, dated April 27, 2004.
10.9**†	Master Services Agreement between the Registrant and Argenes Inc., dated June 25, 2004.
10.10*	Employment Agreement between the Registrant and Takashi Kiyoizumi, M.D., Ph.D., dated September 26, 2003.
10.11*	Employment Agreement between the Registrant and Brian Anderson, dated April 26, 2004.
10.12*	Employment Agreement between the Registrant and Richard E. Gammans, Ph.D., dated June 14, 2004.
10.13*	Employment Agreement between the Registrant and Kenneth W. Locke, Ph.D., dated September 26, 2000, as amended.
10.14*	Employment Agreement between the Registrant and Joji Suzuki, M.D., Ph.D., effective May 10, 2004, as amended.
10.15*	Research Services Agreement between the Registrant and Tanabe Research Laboratories U.S.A., Inc., dated June 1, 2001.
10.16**	License Agreement between the Registrant and Kyorin Pharmaceutical Co., Ltd., dated October 22, 2004.
10.17**	Office Lease Agreement between the Registrant and CA-LA Jolla II Limited Partnership, dated January 28, 2004 and the First Amendment thereto, dated August 10, 2004.
10.18**	Consulting Agreement between the Registrant and Dr. Yuichi Iwaki, dated as of November 22, 2004.
10.19***	License Agreement between the Registrant and Mitsubishi Pharma Corporation, dated December 8, 2004.
10.20++	Second Amendment to Office Lease Agreement between the Registrant and CA-La Jolla II Limited Partnership, dated March 21, 2005.

Exhibit Number	Description of Exhibits
10.21†††	Executive Employment Agreement between the Registrant and Shintaro Asako, CPA, dated July 18, 2005.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2†††	Consent of Pillsbury Winthrop Shaw Pittman LLP (included in Exhibit 5.1).
24.1†††	Powers of Attorney (included in Signature page).

* Filed with the Registrant's Registration Statement on Form S-1 filed October 1, 2004 and incorporated herein by reference.

** Filed with the Registrant's Amendment to Registration Statement on Form S-1/A filed November 24, 2004 and incorporated herein by reference.

*** Filed with the Registrant's Amendment to Registration Statement on Form S-1/A filed January 6, 2005 and incorporated herein by reference.

Portions of this Exhibit have been omitted pursuant to a grant of confidential treatment by the SEC. Omitted information has been filed separately with the Securities and Exchange Commission.

++ Filed with the Registrant's Quarterly Report on Form 10-Q filed May 12, 2005 and incorporated herein by reference.

+++ Previously filed.

Item 17. Undertakings

The undersigned Registrant hereby undertakes:

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

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

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

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

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

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

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

(i) If the Registrant is relying on Rule 430B:

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

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospec

(ii) If the Registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, we certify that we have reasonable grounds to believe that we meet all of the requirements for filing on Form S-3 and have duly caused this registration statement to be signed on our behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California on February 16, 2006.

MEDICINOVA, INC.

By: /s/ YUICHI IWAKI

Yuichi Iwaki, M.D., Ph.D. Executive Chairman of the Board, Acting Chief Executive Officer and Acting Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this amendment on Form S-3 has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Yuichi Iwaki	Director, Executive Chairman of the Board, Acting Chief Executive Officer and Acting Chief Financial	February 16, 2006
Yuichi Iwaki, M.D., Ph.D.	Officer (Principal Executive Officer and Principal Financial Officer)	
John K.A. Prendergast, Ph.D. *	Director	February 16, 2006
 Daniel Vapnek, Ph.D. *	Director	February 16, 2006
Hideki Nagao *	Director	February 16, 2006
Jeff Himawan, Ph.D.*	Director	February 16, 2006
/s/ Shintaro Asako	Vice President, Accounting and Administration (Principal Accounting Officer)	February 16, 2006
Shintaro Asako	(Phileipai Accounting Officer)	
*By: /s/ YUICHI IWAKI Yuichi Iwaki, M.D., Ph.D.		

Attorney in Fact

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3), which is a post effective amendment to the Registration Statements (Form S-1 No.'s 333-128055 and 333-129917), and related Prospectus of MediciNova, Inc. for the registration of up to 80,639,428 shares of its common stock and to the incorporation by reference therein of our report dated February 14, 2006, with respect to the financial statements of MediciNova, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2005, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

February 14, 2006 San Diego, California