

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

Amendment No. 1
to
Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

EMERGENT BIOSOLUTIONS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

14-1902018
(I.R.S. Employer Identification Number)

2273 Research Boulevard, Suite 400
Rockville, Maryland 20850
(301) 795-1800

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

Fuad El-Hibri
Chief Executive Officer
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Rockville, Maryland 20850
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(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 public: From time to time 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 connection with dividend or interest reinvestment plans, check the following box.

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 5, 2008

EMERGENT BIOSOLUTIONS INC.

\$100,000,000
of
Common Stock
Preferred Stock
Debt Securities
Warrants

1,180,638 Shares
of
Common Stock
Offered by Selling Stockholders

We may from time to time offer and sell in the primary offering up to \$100,000,000 aggregate dollar amount of common stock, preferred stock, debt securities and warrants. We will specify in the accompanying prospectus supplement the terms of the securities to be offered and sold. We may sell these securities to or through underwriters or dealers and also to other purchasers or through agents. We will set forth the names of any underwriters, dealers or agents in the accompanying prospectus supplement.

In addition to the primary offering of securities described above, the selling stockholders identified in this prospectus may from time to time sell up to 1,180,638 shares of common stock. We will not receive any proceeds from the sale, if any, of common stock by the selling stockholders.

Our common stock is listed on the New York Stock Exchange under the symbol "EBS."

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 2.

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

This prospectus may not be used to consummate sales of securities unless, to the extent required by applicable law, it is accompanied by a prospectus supplement.

Prospectus dated December , 2008.

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You should rely only on the information contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or any “free writing prospectus” we may authorize to be delivered to you. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this prospectus, any prospectus supplement and the documents incorporated by reference herein and therein are accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates. Neither this prospectus nor any accompanying prospectus supplement shall constitute an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may from time to time sell common stock, preferred stock, debt securities or warrants, or any combination of these securities, in one or more primary offerings up to a total dollar amount of \$100,000,000. In addition to the primary offering of securities, the selling stockholders identified in this prospectus may from time to time sell up to 1,180,638 shares of our common stock in one or more secondary offerings. We have provided to you in this prospectus a general description of the securities we and the selling stockholders may offer. Each time we or the selling stockholders sell securities, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. We may also add, update or change in any accompanying prospectus supplement or any free writing prospectus we may authorize to be delivered to you any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in this prospectus or any prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement. This prospectus, together with any accompanying prospectus supplement and any free writing prospectus we may authorize to be delivered to you, includes all material information relating to the primary offering of our securities and the secondary offering of our common stock by the selling stockholders.

As permitted by the rules and regulations of the SEC, the registration statement, of which this prospectus forms a part, includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC’s web site or at the SEC’s offices described below under the heading “Where You Can Find Additional Information.”

SUMMARY

Emergent BioSolutions Inc.

We are a biopharmaceutical company focused on the development, manufacture and commercialization of immune related biologics products, consisting of vaccines and therapeutics that assist the body's immune system to prevent or treat disease. We develop vaccines and therapeutics for use against biological agents that are potential weapons of bioterrorism and biowarfare and against infectious diseases that have resulted in significant unmet or underserved public health needs. We manufacture and market BioThrax® (Anthrax Vaccine Adsorbed), the only vaccine licensed by the U.S. Food and Drug Administration for the prevention of anthrax infection. We use internally generated cash flows from the sale of BioThrax to substantially fund the development of our product pipeline. We also seek to obtain marketed products and development stage product candidates through acquisitions and licensing arrangements with third parties. For financial reporting purposes, we operate in two business segments, biodefense and commercial.

Our biodefense segment focuses on vaccines and therapeutics for use against biological agents that are potential weapons of bioterrorism or biowarfare. Our product candidates in this segment are focused on two specific biological agents: anthrax and botulinum. Within our anthrax product portfolio, in addition to our marketed vaccine, BioThrax, we are developing a recombinant protective antigen anthrax vaccine acquired in May 2008 from VaxGen, Inc., next generation anthrax vaccines, an anthrax immune globulin therapeutic and a recombinant anthrax monoclonal antibody therapeutic. Within our botulinum product portfolio, we are developing a recombinant botulinum vaccine.

Our commercial segment focuses on vaccines and therapeutics for use against infectious diseases and other medical conditions that have resulted in significant unmet or underserved public health needs. Our product candidates in this segment include a typhoid vaccine, a tuberculosis vaccine, a hepatitis B therapeutic vaccine, a chlamydia vaccine and a group B streptococcus vaccine.

Corporate Information

We were incorporated as BioPort Corporation under the laws of Michigan in May 1998. In June 2004, we completed a corporate reorganization in which Emergent BioSolutions Inc., a Delaware corporation formed in December 2003, issued shares of class A common stock to stockholders of BioPort in exchange for an equal number of outstanding shares of common stock of BioPort. As a result of this reorganization, BioPort became a wholly owned subsidiary of Emergent. We subsequently renamed BioPort as Emergent BioDefense Operations Lansing Inc.

Our principal executive offices are located at 2273 Research Boulevard, Suite 400, Rockville, Maryland 20850. Our telephone number is (301) 795-1800. Our website address is www.emergentbiosolutions.com. We have included our website address as an inactive textual reference only. The information contained on, or that can be accessed through, our website is not a part of this prospectus.

In this prospectus, unless otherwise stated or the context otherwise requires, references to "Emergent," "we," "us" and "our" and similar references refer to Emergent BioSolutions Inc. BioThrax®, MVAto™ and spi-VEC™ are our trademarks. Each of the other trademarks, trade names or service marks appearing or incorporated by reference in this prospectus or any applicable prospectus supplement are the property of their respective owners.

RISK FACTORS

An investment in our securities involves significant risks. You should carefully consider the risks and uncertainties described in this prospectus and any prospectus supplement, including the risk factors set forth in the documents and reports filed with the SEC that are incorporated by reference herein, such as the risk factors under the heading "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 on file with the SEC, before you make an investment decision pursuant to this prospectus and any accompanying prospectus supplement. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents incorporated by reference herein contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve substantial risks and uncertainties. All statements, other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "will" and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included and incorporated by reference in this prospectus that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. See "Risk Factors" for more information. You should consider these factors and other cautionary statements made in this prospectus and in the documents we incorporate by reference as being applicable to all related forward-looking statements wherever they appear in the prospectus and in the documents incorporated by reference. Unless specifically indicated, our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements.

USE OF PROCEEDS

Unless otherwise provided in the applicable prospectus supplement, we currently intend to use the net proceeds from the sale of the securities from primary offerings under this prospectus for general corporate purposes, including development of our product candidates, the acquisition or in-license of technologies, products or businesses, working capital and capital expenditures. We may set forth additional information on the use of proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific primary offering. We have not determined the amount of net proceeds to be used specifically for the foregoing purposes. As a result, our management will have broad discretion in the allocation of the net proceeds. Pending use of the net proceeds, we intend to invest the proceeds in a variety of capital preservation instruments, including short-term, investment-grade, interest-bearing instruments.

We will not receive any proceeds from the sale of shares of common stock in a secondary offering by the selling stockholders. The selling stockholders will pay any underwriting or broker discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares of common stock in a secondary offering. We will bear all other costs, fees and expenses incurred in effecting the registration of the securities covered by this prospectus, including, without limitation, all registration and filing fees and fees and expenses of our counsel and our accountants.

RATIO OF EARNINGS TO FIXED CHARGES

Our consolidated ratio of earnings to fixed charges for each of the periods indicated is as follows:

	Nine Months Ended September 30, 2008	Year Ended December 31,				
		2007	2006	2005	2004	2003
Ratio of earnings to fixed charges	13.5	11.1	19.6	28.2	69.6	20.5

For purposes of calculating the ratios in the table above:

- earnings consist of pretax income from continuing operations plus fixed charges and amortization of capitalized interest minus interest capitalized; and
- fixed charges consist of interest on debt expensed and capitalized and amortization of deferred debt issuance costs.

The ratios presented in the table above are based solely on historical financial information, and no pro forma adjustments have been made thereto. As of the date of this prospectus, we have no shares of preferred stock outstanding and have not declared or paid any preferred stock dividends for the periods set forth above.

DESCRIPTION OF SECURITIES

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize the material terms and provisions of the various types of securities that we or the selling stockholders may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we so indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement information, where applicable, about material U.S. federal income tax considerations relating to the securities, and the securities exchange, if any, on which the securities will be listed.

We may sell from time to time, in one or more primary offerings, common stock, preferred stock, debt securities and warrants to purchase any such securities. The selling stockholders may from time to time offer our common stock for resale in one or more secondary offerings.

In this prospectus, we refer to the common stock, preferred stock, debt securities and warrants to be sold by us in a primary offering collectively as "securities." The total dollar amount of all securities that we may issue under this prospectus, not including the value of the 1,180,638 shares of common stock that may be offered for resale by the selling stockholders, will not exceed \$100,000,000.

If we issue debt securities at a discount from their original stated principal amount, then we will use the issue price, and not the principal amount, of such debt securities for purposes of calculating the total dollar amount of all securities issued under this prospectus.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

DESCRIPTION OF COMMON STOCK AND PREFERRED STOCK

The following description of our common stock and preferred stock, together with any additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of our common stock and the preferred stock that we may offer in primary offerings under this prospectus. For the complete terms of our common stock and preferred stock, please refer to our certificate of incorporation and by-laws, which are exhibits to the registration statement that includes this prospectus. The terms of our common stock and preferred stock may also be affected by Delaware law.

Authorized Capital Stock

Under our certificate of incorporation, our authorized capital stock consists of 100,000,000 shares of common stock, \$0.001 par value per share, and 15,000,000 shares of preferred stock, \$0.001 par value per share, of which 100,000 shares have been designated as series A junior participating preferred stock. As of November 28, 2008, we had 30,082,052 shares of common stock outstanding and no shares of preferred stock outstanding. We will describe the specific terms of any common stock or preferred stock we may offer in more detail in a prospectus supplement relating to the offering of shares of common stock or preferred stock. If we so indicate in a prospectus supplement, the terms of any common stock or preferred stock offered under that prospectus supplement may differ from the terms described below.

Common Stock

Voting Rights. The holders of our common stock are entitled to one vote per share with respect to each matter presented to our stockholders on which the holders of common stock are entitled to vote and do not have cumulative voting rights. An election of directors by our stockholders is determined by a plurality of the votes cast by the stockholders entitled to vote on the election.

Dividends. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock.

Liquidation and Dissolution. In the event of our liquidation or dissolution, the holders of common stock are entitled to receive ratably all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock.

Other Rights. Holders of common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Listing. Our common stock is listed on the New York Stock Exchange under the symbol "EBS." As of November 28, 2008, the closing price per share of our common stock on the New York Stock Exchange was \$22.62, and we had approximately 24 holders of record of our common stock.

Transfer Agent and Registrar. The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

Preferred Stock

Under the terms of our certificate of incorporation, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. Authorizing our board of directors to issue preferred stock and determine its rights and preferences has the effect of eliminating delays associated with a stockholder vote on specific issuances. Currently, we have no shares of preferred stock outstanding. Our board of directors has authorized 100,000 shares of series A junior participating preferred stock for issuance under our stockholder rights plan. See "— Stockholder Rights Plan" below.

If we decide to issue any preferred stock pursuant to this prospectus, we will describe in a prospectus supplement the terms of the preferred stock, including, if applicable, the following:

- the title and stated value;
- the number of shares we are offering;
- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date, and method of calculation for dividends;

- whether dividends will be cumulative and, if cumulative, the date from which dividends will accumulate;
- the relative ranking and preference of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- the procedures for any auction and remarketing;
- the provisions for a sinking fund;
- the provisions for redemption or repurchase and any restrictions on our ability to exercise those redemption and repurchase rights;
- the listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock and, if convertible, the conversion price, or how it will be calculated, and the conversion period;
- whether the preferred stock will be exchangeable into debt securities and, if exchangeable, the exchange price, or how it will be calculated, and the exchange period;
- voting rights of the preferred stock;
- preemptive rights;
- restrictions on transfer, sale or other assignment;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material U.S. federal income tax considerations applicable to the preferred stock;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

The preferred stock could have other rights, including economic rights that are senior to our common stock that could adversely affect the market value of our common stock. The issuance of the preferred stock may also have the effect of delaying, deferring or preventing a change in control of us without any action by the shareholders.

Stockholder Rights Plan

We are party to a rights agreement pursuant to which we issue to our stockholders one preferred stock purchase right for each outstanding share of our common stock. Each right, when exercisable, will entitle the registered holder to purchase from us a unit consisting of one one-thousandth of a share of series A junior participating preferred stock.

The following description is a summary of the material terms of our stockholder rights plan. It does not restate these terms in their entirety. This summary is qualified in its entirety by reference to the rights agreement, which is an exhibit to the registration statement that contains this prospectus. We urge you to read the rights agreement because it, and not this description, defines its terms and provisions.

Rights. Each share of common stock has attached to it one right. Initially, the rights are not exercisable and are attached to all certificates representing outstanding shares of our common stock, and we will not distribute separate rights certificates. The rights are exercisable under limited circumstances specified in the rights agreement when there has been a distribution of the rights and the rights are no longer redeemable by us.

The rights will expire at the close of business on November 14, 2016, unless we redeem or exchange them earlier as described below.

Prior to the Rights Distribution Date. Prior to the rights distribution date:

- the rights are evidenced by our common stock certificates and will be transferred with and only with such common stock certificates; and

- the surrender for transfer of any certificates of our common stock will also constitute the transfer of the rights associated with our common stock represented by such certificate.

Rights Distribution Date. The rights will separate from our common stock, and a rights distribution date will occur, upon the earlier of the following events:

- 10 business days following the later of (1) a public announcement that a person or group, other than an exempted person, has acquired, or obtained the right to acquire beneficial ownership of 15% or more of the outstanding shares of our common stock or (2) the first date on which one of our executive officers has actual knowledge of such an event; and
- 10 business days following the start of a tender offer or exchange offer that would result in a person or group, other than an exempted person, beneficially owning 15% or more of the outstanding shares of our common stock.

The distribution date may be deferred by our board of directors and some inadvertent actions will not trigger the occurrence of the rights distribution date. In addition, a rights distribution date will not occur as a result of the ownership of our stock by the following exempted persons:

- Fuad El-Hibri and his wife and any entity controlled by either of them; and
- each other holder of our common stock immediately prior to our initial public offering to the extent such person's beneficial ownership exceeds 15% solely as a result of the fact that the person is a party to certain voting agreements in place at the time of our initial public offering.

As soon as practicable after the rights distribution date, separate rights certificates will be mailed to the holders of record of our common stock as of the close of business on the rights distribution date. From and after the rights distribution date, the separate rights certificates alone will represent the rights. All shares of our common stock issued prior to the rights distribution date will be issued with rights. Shares of our common stock issued after the rights distribution date in connection with specified employee benefit plans or upon conversion of specified securities will be issued with rights. Except as otherwise determined by our board of directors, no other shares of our common stock issued after the rights distribution date will be issued with rights.

Flip-in Event. If a person or group, other than an exempted person, becomes the beneficial owner of 15% or more of the outstanding shares of our common stock, except as described below, each holder of a right will thereafter have the right to receive, upon exercise, a number of shares of our common stock, or, in some circumstances, cash, property or other securities of ours, which equals the exercise price of the right divided by one-half of the current market price of our common stock on the date the acquisition occurs. However, following the acquisition:

- rights will not be exercisable until the rights are no longer redeemable by us as set forth below; and
- all rights that are, or were, under the circumstances specified in the rights agreement, beneficially owned by any acquiring person will be null and void.

The event set forth in this paragraph is referred to as a flip-in event. A flip-in event would not occur if there is an offer for all of our outstanding shares of common stock that at least 75% of our board of directors determines is fair to our stockholders and in their best interests.

Flip-over Event. If at any time after a person or group, other than an exempted person, has become the beneficial owner of 15% or more of the outstanding shares of our common stock:

- we are acquired in a merger or other business combination transaction in which we are not the surviving corporation;
- we are the surviving entity in a merger or other business combination transaction but our common stock is changed or exchanged for stock or securities of any other person or for cash or any other property; or
- more than 50% of our assets or earning power is sold or transferred,

then each holder of a right, except rights which previously have been voided as set forth above, shall thereafter have the right to receive, upon exercise, that number of shares of common stock of the acquiring company which equals the exercise price of the right divided by one-half of the current market price of that company's common stock at the date of the occurrence of the event. The event described in this paragraph is referred to as a flip-over event. A flip-over event does not arise if the merger or other transaction follows an offer for all of our outstanding shares of common stock that at least 75% of our board of directors determines is fair to our stockholders and in their best interests.

Exchange of Rights. At any time after a flip-in event, when no person owns a majority of our common stock, our board of directors may exchange the rights, other than rights owned by the acquiring person that have become void, in whole or in part, at an exchange ratio of one share of our common stock, or one one-thousandth of a share of series A junior participating preferred stock, or of a share of a class or series of preferred stock having equivalent rights, preferences and privileges, per right.

Adjustments. The purchase price of the rights, and the number of securities purchasable, are subject to adjustment from time to time to prevent dilution. The number of rights associated with each share of common stock is also subject to adjustment in the event of stock splits, subdivisions, consolidations or combinations of our common stock that occur prior to the rights distribution date.

Series A Junior Participating Preferred Stock. Series A junior participating preferred stock purchasable upon exercise of the rights will not be redeemable. Each share of series A junior participating preferred stock will be entitled to receive when, as and if declared by our board of directors, a minimum preferential quarterly dividend payment of \$10 per share or, if greater, an aggregate dividend of 1,000 times the dividend declared per share of our common stock. In the event of liquidation, the holders of the series A junior participating preferred stock will be entitled to a minimum preferential liquidation payment of \$1,000 per share, plus accrued and unpaid dividends, and will be entitled to an aggregate payment of 1,000 times the payment made per share of our common stock. Each share of series A junior participating preferred stock will have 1,000 votes, voting together with our common stock. In the event of any merger, consolidation or other transaction in which our common stock is changed or exchanged, each share of series A junior participating preferred stock will be entitled to receive 1,000 times the amount received per share of our common stock. These rights are protected by customary antidilution provisions.

Because of the nature of the series A junior participating preferred stock's dividend, liquidation and voting rights, the value of one one-thousandth of a share of series A junior participating preferred stock purchasable upon exercise of each right should approximate the value of one share of common stock.

Redemption of Rights. At any time until ten business days following the date of a public announcement that a person or group, other than an exempted person, has acquired or obtained the right to acquire beneficial ownership of 15% or more of the outstanding shares of our common stock, or such later date upon which one of our executive officers first has actual knowledge of such event or such later date as our board of directors may determine, we may redeem the rights in whole, but not in part, at a price of \$0.001 per right, payable in cash or stock. Immediately upon the redemption of the rights or such earlier time as established by our board of directors, the rights will terminate and the only right of the holders of rights will be to receive the redemption price.

Status of Rights Holder and Tax Effects. Until a right is exercised, the holder of the right, as such, will have no rights as a stockholder of ours, including no right to vote or to receive dividends. Although the distribution of the rights should not be taxable to stockholders or to us, stockholders may, depending upon the circumstances, recognize taxable income in the event that the rights become exercisable for our common stock, or other consideration, or for common stock of the acquiring company as described above.

Board's Authority to Amend. Our board of directors may amend any provision of the rights agreement, other than the redemption price, prior to the date on which the rights are no longer redeemable. Once the rights are no longer redeemable, our board's authority to amend the rights agreement is limited to correcting ambiguities or defective or inconsistent provisions in a manner that does not adversely affect the interest of holders of rights.

Effects of the Rights. The rights are intended to protect our stockholders in the event of an unfair or coercive offer to acquire our company and to provide our board of directors with adequate time to evaluate unsolicited offers. The rights may have anti-takeover effects. The rights will cause substantial dilution to a person or group that

attempts to acquire us without conditioning the offer on a substantial number of rights being acquired. The rights, however, should not affect any prospective offeror willing to make an offer at a fair price and otherwise in the best interests of us and our stockholders, as determined by our board of directors. The rights should not interfere with any merger or other business combination approved by our board of directors.

Anti-takeover Effects of Delaware Law and our Certificate of Incorporation and By-laws

Our certificate of incorporation and by-laws and Delaware law contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors.

As of November 28, 2008, Fuad El-Hibri, our chief executive officer and chairman of our board of directors, was the beneficial owner of approximately 47% of our outstanding common stock. As a result, Mr. El-Hibri has significant influence over the election of the members of our board of directors. The percentage ownership of our common stock by Mr. El-Hibri following the offering and sale of our securities under this prospectus will be summarized in the prospectus supplement relating to such offering. In addition, some of the provisions summarized below may further enhance Mr. El-Hibri's control of our corporate affairs for at least the next several years, including control of our board of directors. This control could discourage others from initiating a potential merger, takeover or other change of control transaction that other stockholders may view as beneficial.

Number of Directors. Subject to the rights of holders of any series of preferred stock to elect directors, our board of directors will establish the number of directors. Until November 20, 2011, any change in the number of directors will require the affirmative vote of at least 75% of the directors then in office.

Staggered Board; Removal of Directors. Our certificate of incorporation and our by-laws divide our directors into three classes with staggered three-year terms. Our directors may be removed from office only for cause and only by the affirmative vote of holders of our capital stock representing at least 75% of the voting power of all outstanding stock entitled to vote.

Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by the affirmative vote of a majority of our directors present at a meeting duly held at which a quorum is present.

The classification of our board of directors and the limitations on the removal of directors and filling of vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

Appointment and Removal of Chairman of Board. Until November 20, 2011, the appointment and removal of the chairman of our board of directors will require the affirmative vote of at least 75% of our directors then in office. Mr. El-Hibri currently serves as the chairman of our board of directors.

Stockholder Action by Written Consent; Special Meetings. Our certificate of incorporation and our by-laws provide that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of such holders and may not be effected by any consent in writing by such holders. Our certificate of incorporation and our by-laws also provide that, except as otherwise required by law, special meetings of our stockholders can only be called by our board of directors, our chairman of the board or our president.

Advance Notice Requirements. Beginning November 20, 2008, our by-laws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to the board of directors. Following November 20, 2008, stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the

effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities.

Delaware Business Combination Statute. We are subject to Section 203 of the General Corporation Law of Delaware. Subject to certain exceptions, Section 203 prevents a publicly held Delaware corporation from engaging in a “business combination” with any “interested stockholder” for three years following the date that the person became an interested stockholder, unless the interested stockholder attained such status with the approval of our board of directors or unless the business combination is approved in a prescribed manner. A “business combination” includes, among other things, a merger or consolidation involving us and the “interested stockholder” and the sale of more than 10% of our assets. In general, an “interested stockholder” is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person.

Super-Majority Voting. The General Corporation Law of Delaware provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation’s certificate of incorporation or by-laws, unless a corporation’s certificate of incorporation or by-laws, as the case may be, requires a greater percentage. Until November 20, 2008, the affirmative vote of holders of our capital stock representing a majority of the voting power of all outstanding stock entitled to vote is required to amend or repeal the provisions of our certificate of incorporation described in this section entitled “Anti-takeover Effects of Delaware Law and our Certificate of Incorporation and By-laws.” After November 20, 2008, the affirmative vote of holders of our capital stock representing at least 75% of the voting power of all outstanding stock entitled to vote is required to amend or repeal these provisions of our certificate of incorporation. Until November 20, 2008, the affirmative vote of either at least 75% of the directors then in office or holders of our capital stock representing a majority of the voting power of all outstanding stock entitled to vote is required to amend or repeal our by-laws. After November 20, 2008, the affirmative vote of either a majority of the directors present at a meeting of our board of directors or holders of our capital stock representing at least 75% of the voting power of all outstanding stock entitled to vote is required to amend or repeal our by-laws.

Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval, subject to any limitations imposed by the listing standards of the New York Stock Exchange. We may utilize these additional shares for a variety of corporate purposes including for future public offerings to raise additional capital or facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved common stock and preferred stock may enable our board of directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a controlling interest in our company by means of a merger, tender offer, proxy contest or otherwise. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation.

Limitation of Liability and Indemnification of Officers and Directors

Our certificate of incorporation contains provisions permitted under the General Corporation Law of Delaware relating to the liability of directors. The provisions eliminate a director’s liability for monetary damages for a breach of fiduciary duty, except in circumstances involving wrongful acts, such as the breach of a director’s duty of loyalty or acts or omissions that involve intentional misconduct or a knowing violation of law. Further, our certificate of incorporation contains provisions to indemnify our directors and officers to the fullest extent permitted by the General Corporation Law of Delaware.

Registration Rights

BioPharm, L.L.C., Biovac, L.L.C., Intervac, L.L.C. and Intervac Management, L.L.C. hold an aggregate of 13,665,308 shares of our common stock as of November 28, 2008 and have the right to require us to register these

shares of common stock under the Securities Act under specified circumstances, including any additional shares issued or distributed by way of a dividend, stock split or other distribution in respect of these shares.

Demand Registration Rights. Subject to specified limitations, holders of these registrations rights may require that we register all or part of our common stock subject to the registration rights for sale under the Securities Act. These holders may demand registration of our common stock so long as the offering price to the public of the shares requested to be registered is at least \$25,000,000. We are required to effect only one demand registration, subject to specified exceptions.

Incidental Registration Rights. If we propose to register any of our common stock under the Securities Act, subject to specified exceptions, either for our own account or for the account of other security holders, holders of registration rights are entitled to notice of the registration and to include shares of common stock subject to the registration rights in the registered offering. The holders of these registration rights have waived such rights in connection with the filing of the registration statement, of which this prospectus forms a part, including any offering under this prospectus, in exchange for the inclusion in the registration statement of 1,180,638 shares of common stock held by such stockholders.

Limitations and Expenses. With specified exceptions, the right to include shares in a registration is subject to the right of underwriters for the offering to limit the number of shares included in the offering. We are required to pay one-half of all fees, costs and expenses of any demand registration, other than underwriting discounts and commissions.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer in a primary offering under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any debt securities we offer under that prospectus supplement may differ from the terms we describe below.

We will issue senior notes under a senior indenture that we will enter into with a trustee to be named in the senior indenture. We will issue subordinated notes under a subordinated indenture that we will enter into with a trustee to be named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus forms a part. We will describe changes to the indentures in connection with an offering of debt securities in a prospectus supplement. We use the term "indentures" to refer to both the senior indenture and the subordinated indenture. The indentures will be qualified under the Trust Indenture Act of 1939, or the Trust Indenture Act. We use the term "trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of senior notes, subordinated notes and the indentures are subject to, and qualified in their entirety by reference to, the provisions of the indenture applicable to a particular series of debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

If we decide to issue any senior notes or subordinated notes pursuant to this prospectus, we will describe in a prospectus supplement the terms of the series of notes, including the following:

- the title of the notes;
- any limit on the amount that may be issued;
- whether or not we will issue the series of notes in global form, the terms and who the depository will be;
- the maturity date;

- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the notes will be secured or unsecured, and the terms of any secured debt;
- whether or not the notes will be senior or subordinated;
- the terms of the subordination of any series of subordinated debt;
- the terms on which the notes may be convertible into or exchangeable for common stock or other securities of ours, including provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option and provisions pursuant to which the number of shares of common stock or other securities of ours that the holders of the series of debt securities receive would be subject to adjustment;
- the place where payments will be payable;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of notes pursuant to any optional redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of notes;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness;
- a discussion of any material or special U.S. federal income tax considerations;
- the denominations in which we will issue the series of notes, if other than denominations of \$1,000 and any integral multiple thereof;
- the definition and consequences of events of default under the indentures; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

Subordination of Subordinated Notes

The subordinated notes will be unsecured and will be subordinate and junior in priority of payment to certain indebtedness to which we may be subject to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated notes that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

Form, Exchange and Transfer

We will issue the notes of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue notes of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, or DTC, or another depository named by us and identified in a prospectus supplement with respect to that series. See "Legal Ownership of Securities" for a further description of the terms relating to any book-entry securities.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the notes of any series can exchange the notes for other notes of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the notes may present the notes for exchange or for registration of

transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the notes that the holder presents for transfer or exchange, we will not require any payment for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any notes. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the notes of each series.

If we elect to redeem the notes of any series, we will not be required to:

- reissue, register the transfer of, or exchange any notes of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any notes that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any notes so selected for redemption, in whole or in part, except the unredeemed portion of any notes we are redeeming in part.

Consolidation, Merger or Sale

The indentures do not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the notes, as appropriate.

Events of Default Under the Indentures

The following are events of default under the indentures with respect to any series of notes that we may issue:

- if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;
- if we fail to pay the principal, or premium, if any, when due and the time for payment has not been extended or delayed;
- if we fail to observe or perform any other covenant contained in the notes or the indentures, other than a covenant specifically relating to another series of notes, and our failure continues for 90 days after we receive notice from the trustee or holders of at least 25% in aggregate principal amount of the outstanding notes of the applicable series; and
- if we experience specified events of bankruptcy, insolvency or reorganization.

If an event of default with respect to notes of any series occurs and is continuing, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding notes of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, or premium, if any, on and accrued interest, if any, on the notes due and payable immediately.

The holders of a majority in principal amount of the outstanding notes of an affected series may waive any default or event of default with respect to the series and its consequences, except uncured defaults or events of default regarding payment of principal, or premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of notes, unless such holders have offered the trustee reasonable indemnity. In such event, the holders of a majority in principal amount of the outstanding notes of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy

available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the notes of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the notes of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies, if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding notes of that series have made written request, and such holders have offered reasonable indemnity to the trustee to institute the proceeding as trustee; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding notes of that series other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of notes if we default in the payment of the principal of, or the premium, if any, or interest on, the notes.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

Discharge

Each indenture provides that we can elect, under specified circumstances, to be discharged from our obligations with respect to one or more series of debt securities, except for obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Modification of Indenture; Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture; or
- to change anything that does not materially adversely affect the interests of any holder of notes or any series.

In addition, under the indentures, we and the trustee may change the rights of holders of a series of notes with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding notes of each series that is affected. However, we and the trustee may only make the following changes with the consent of each holder of any outstanding notes affected:

- extending the fixed maturity of the series of notes;

- reducing the principal amount, the rate of interest or any premium payable upon the redemption of any notes; or
- reducing the minimum percentage of notes, the holders of which are required to consent to any amendment.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care and skill as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given to it by the indentures at the request of any holder of notes unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any notes on any interest payment date to the person in whose name the notes, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest payment.

We will pay principal of and any premium and interest on the notes of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check which we will mail to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the trustee in The City of New York as our sole paying agent for payments with respect to notes of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the notes of a particular series. We will maintain a paying agent in each place of payment for the notes of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any notes which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the notes will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

DESCRIPTION OF WARRANTS

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

General

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

We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We may enter into the warrant agreement with a warrant agent. We will indicate the name and address and other

information regarding the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

If we decide to issue warrants pursuant to this prospectus, we will specify in a prospectus supplement the terms of the series of warrants, including, if applicable, the following:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of the warrants and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- a discussion of any material U.S. income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 P.M. New York City time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

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

side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

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

Enforceability of Rights by Holders of Warrants

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

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee maintain for this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depositary or its nominee. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a book-entry security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in "street name." Securities held by an investor in street name would be

registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depository participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the holders.

Special Considerations For Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depository's rules and procedures will affect these matters.

Global Securities

A global security is a security held by a depository that represents one or any other number of individual securities. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement, DTC will be the depository for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depository, its nominee or a successor depository, unless special termination situations arise. We describe those situations below under "— Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and holder of all securities represented by a global

security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations For Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depository, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depository that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe under "— Legal Holders" above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depository's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security. We and any applicable trustee have no responsibility for any aspect of the depository's actions or for its records of ownership interests in a global security. We and the trustee also do not supervise the depository in any way;
- the depository may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depository's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When A Global Security Will Be Terminated

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

The global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

SELLING STOCKHOLDERS

The stockholders named below may from time to time offer and sell pursuant to this prospectus and the applicable prospectus supplement up to an aggregate of 1,180,638 shares of common stock. Each of the selling stockholders acquired shares of our class A common stock in June 2004 in connection with a corporate reorganization in which Emergent BioSolutions Inc. issued shares of class A common stock to stockholders of BioPort Corporation in exchange for an equal number of shares of common stock of BioPort. As a result of this reorganization, BioPort became a wholly owned subsidiary of Emergent. The selling stockholders originally acquired shares of common stock between 1998 and 2001 in connection with the founding of BioPort and related early stage financing provided to BioPort in transactions exempt from the registration provisions of the Securities Act pursuant to the exemption set forth in Section 4(2) thereof relative to sales by an issuer not involving any public offering. Our class A common stock was reclassified as common stock in October 2006 prior to the completion of our initial public offering in November 2006.

The following table sets forth for the selling stockholders, to our knowledge, the number of shares and percentage of our common stock beneficially owned as of November 28, 2008, the number of shares of common stock offered hereby and the number of shares and percentage of our common stock to be owned after completion of the sale of the maximum number of shares that may be offered by the selling stockholders under this prospectus. Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of common stock issuable pursuant to the exercise of any option, warrant or other right or the conversion of any other security that are currently exercisable or convertible, or exercisable or convertible within 60 days of November 28, 2008, are considered outstanding and beneficially owned by the person holding the option, warrant, right or other security for the purpose of calculating the percentage ownership of that person but are not considered outstanding for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the selling stockholders in the table below have sole voting and investment power with respect to all of the shares of common stock beneficially owned by them, subject to community property laws, where applicable. The percentages in the table are based on 30,082,052 shares of our common stock outstanding as of November 28, 2008.

The following table may be expanded or supplemented in prospectus supplements as new information becomes available to us. All information contained in the table below is based on information provided to us by

the selling stockholders, and we have not independently verified this information. The address of each of the selling stockholders is c/o Emergent BioSolutions Inc., 2273 Research Boulevard, Suite 400, Rockville, Maryland 20850.

Name of Selling Stockholder	Beneficial Ownership as of November 28, 2008		Maximum Number of Shares to be Offered	Beneficial Ownership After the Sale of the Maximum Number of Shares(1)	
	Shares	Percentage		Shares	Percentage
BioPharm, L.L.C.(2)	3,665,043	12.2%	316,648	3,348,395	11.1%
Biovac, L.L.C.(3)	1,599,155	5.3%	138,162	1,460,993	4.9%
Intervac, L.L.C.(4)	7,681,835	25.5%	663,685	7,018,150	23.3%
Intervac Management, L.L.C.(5)	719,275	2.4%	62,143	657,132	2.2%

- (1) We do not know when or in what amounts the selling stockholders may offer shares for sale. The selling stockholders might not sell any or all of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this prospectus, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot estimate the number of the shares that will be held by the selling stockholders after completion of the offering. However, for purposes of this table, we have assumed that, after completion of the offering, none of the shares covered by this prospectus will be held by the selling stockholders.
- (2) Fuad El-Hibri, our chief executive officer and chairman of our board of directors, holds a 40.17% equity interest in BioPharm, L.L.C. and in that capacity has the power to direct the voting and disposition of all shares of our common stock held by BioPharm. Mr. El-Hibri disclaims beneficial ownership of these shares for purposes of Section 16, except to the extent of his pecuniary interest in 1,472,248 shares.
- (3) Fuad El-Hibri with his wife, as tenants by the entirety, hold 89.2% of the ownership interests in Biovac, L.L.C. and have the power to vote and dispose of all shares of our common stock held by Biovac. Mr. El-Hibri disclaims beneficial ownership of these shares for purposes of Section 16, except to the extent of his pecuniary interest in 1,426,446 shares.
- (4) Fuad El-Hibri is the general manager of Intervac, L.L.C. and in that capacity has the power to vote and dispose of all shares of our common stock held by Intervac, L.L.C. Mr. El-Hibri and his wife, as tenants by the entirety, hold 38.0276% equity interest in Intervac, L.L.C. Under a voting agreement with the Shirley G. Crowe Revocable Trust, Mr. El-Hibri has the power to vote an additional 18.8% of the ownership interests in Intervac, L.L.C. on any matter. As a result, Mr. El-Hibri has the power to direct the voting of more than 50% of the aggregate ownership interests in Intervac, L.L.C. The voting agreement between Mr. El-Hibri and the Shirley G. Crowe Revocable Trust automatically terminates on October 21, 2010. Mr. El-Hibri disclaims beneficial ownership of the shares of common stock held by Intervac, L.L.C. for purposes of Section 16, except to the extent of his pecuniary interest therein.
- (5) Fuad El-Hibri is the general manager of Intervac Management, L.L.C. and in that capacity has the power to vote and dispose of all shares of our common stock held by Intervac Management. Mr. El-Hibri is appointed as general manager pursuant to the terms of the operating agreement of Intervac Management, which may only be amended with the unanimous consent of the members of Intervac Management. Mr. El-Hibri and his wife, as tenants by the entirety, hold 31.11% of the ownership interests in Intervac Management. Mr. El-Hibri disclaims beneficial ownership of these shares for purposes of Section 16, except to the extent of his pecuniary interest in 223,766 shares.

As of November 28, 2008, Fuad El-Hibri was the beneficial owner of 14,095,770 shares, or approximately 47%, of our outstanding common stock. Mr. El-Hibri's beneficial ownership consists of the shares of our common stock held by BioPharm, L.L.C., Biovac, L.L.C., Intervac, L.L.C. and Intervac Management, L.L.C. set forth in the table above 246,992 shares of our common stock held directly by Mr. El-Hibri and 183,470 shares of common stock subject to stock options held by Mr. El-Hibri that are currently exercisable or exercisable within 60 days of November 28, 2008 that are deemed to be outstanding and beneficially owned. After the completion of the sale of the maximum number of shares that may be offered by the selling stockholders under this prospectus and based on shares of our common stock outstanding as of November 28, 2008, Mr. El-Hibri would be the beneficial owner of 12,915,132 shares, or approximately 43%, of our outstanding common stock.

Mr. El-Hibri has served as our chief executive officer and as chairman of our board of directors since June 2004. Mr. El-Hibri served as our president from March 2006 to April 2007.

PLAN OF DISTRIBUTION

Securities Offered by Us

We may sell the securities under this prospectus in one or more of the following ways from time to time:

- through agents;
- to or through underwriters;
- through dealers;
- directly to purchasers; or
- through a combination of these methods of sale.

The securities that we distribute by any of these methods may be sold, in one or more transactions, at:

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

Offers to purchase offered securities may be solicited by agents designated by us from time to time. Any agent involved in the offer or sale of the offered securities in respect of which this prospectus is delivered will be named, and any commissions payable by us will be set forth, in the applicable prospectus supplement. Unless otherwise set forth in the applicable prospectus supplement, any agent will be acting on a reasonable best efforts basis for the period of its appointment. Any agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold.

We will set forth in a prospectus supplement the terms of the offering of our securities, including:

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

If offered securities are sold to the public by means of an underwritten offering, either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters, we will execute an underwriting agreement with an underwriter or underwriters, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, will be set forth in the applicable prospectus supplement. In addition, the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement, which prospectus supplement will be used by the underwriters to make resales of the offered securities. If underwriters are utilized in

the sale of the offered securities, the offered securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including:

- negotiated transactions;
- at fixed public offering prices; or
- at varying prices determined by the underwriters at the time of sale.

In addition, unless otherwise indicated in the prospectus supplement, the underwriting agreement will provide that the obligations of the underwriters are subject to specified conditions precedent and that the underwriters with respect to a sale of offered securities will be obligated to purchase all of the offered securities of a series if any are purchased.

We may grant to the underwriters options to purchase additional offered securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions, as may be set forth in the applicable prospectus supplement. If we grant any over-allotment option, the terms of the over-allotment option will be set forth in the applicable prospectus supplement.

If a dealer is utilized in the sales of offered securities, we will sell the offered securities to the dealer as principal. The dealer may then resell the offered securities to the public at varying prices to be determined by the dealer at the time of resale. Any dealer may be deemed to be an underwriter of the offered securities so offered and sold. The name of the dealer and the terms of the transaction will be set forth in the applicable prospectus supplement.

We may directly solicit offers to purchase offered securities and sell offered securities directly to institutional investors or others with respect to any resale of the offered securities. The terms of any of these sales will be described in the applicable prospectus supplement.

Offered securities may also be offered and sold in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise by one or more remarketing firms acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreements, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters in connection with the offered securities remarketed by them.

Agents, underwriters, dealers and remarketing firms may be entitled, under agreements entered into with us, to indemnification by us against specified civil liabilities, including liabilities under the Securities Act that may arise from any untrue statement or alleged untrue statement of a material fact or any omission or alleged omission to state a material fact in this prospectus, any supplement or amendment hereto, or in the registration statement of which this prospectus forms a part, or to contribution with respect to payments which the agents, underwriters or dealers may be required to make.

We may authorize underwriters or other persons acting as our agents to solicit offers by specified institutions to purchase offered securities from us pursuant to contracts providing for payments and delivery on a future date, which will be set forth in the applicable prospectus supplement. Institutions with which these contracts may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others. However, in all cases, these institutions must be approved by us. The obligations of any purchaser under any contract will be subject to the condition that the purchase of the offered securities shall not, at the time of delivery, be prohibited under the laws of the jurisdiction to which the purchaser is subject. The underwriters and other agents will not have any responsibility in respect of the validity or performance of these contracts.

Underwriters, dealers, agents and remarketing firms may be customers of, engage in transactions with, or perform services for, us in the ordinary course of business for which they have received or will continue to receive customary compensation.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is traded on the New York Stock Exchange. We may elect to list any other class or series of securities on any exchange and, in the case of our

common stock, on any additional exchange. However, unless otherwise specified in the applicable prospectus supplement, we will not be obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the offered securities.

In connection with an offering, an underwriter may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional securities from us, if any, in the offering. If the underwriters have an over-allotment option to purchase additional securities from us, the underwriters may close out any covered short position by either exercising their over-allotment option or purchasing securities in the open market. In determining the source of securities to close out the covered short position, the underwriters may consider, among other things, the price of securities available for purchase in the open market as compared to the price at which they may purchase securities through the over-allotment option. "Naked" short sales are any sales in excess of such option or where the underwriters do not have an over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

Accordingly, to cover these short sales positions or to otherwise stabilize or maintain the price of the securities, the underwriters may bid for or purchase securities in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if securities previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. The impositions of a penalty bid may also affect the price of the securities to the extent that it discourages resale of the securities. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the New York Stock Exchange or otherwise and, if commenced, may be discontinued at any time.

Common Stock Offered by the Selling Stockholders

The shares of common stock covered by this prospectus may be offered and sold from time to time by the selling stockholders. The term "selling stockholders" includes donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other non-sale related transfer. The selling stockholders may offer and sell the shares of common stock covered by this prospectus from time to time on any stock exchange on which the shares are listed, in the over-the-counter market, in privately negotiated transactions or otherwise, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at prices otherwise negotiated. The selling stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale, and we cannot assure you that the selling stockholders will sell all or any portion of the shares offered hereby. We will not receive any proceeds from the sale of shares of common stock by the selling stockholders.

The selling stockholders may offer and sell the shares of common stock covered by this prospectus by one or more of the following methods, including, without limitation:

- block trades in which the broker or 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 or dealer as principal and resale by the broker or dealer for its own account pursuant to this prospectus;
- ordinary brokerage transactions and transactions in which the broker solicits purchases;
- "at the market" transactions to or through market makers or into an existing market for our common stock;

- in privately negotiated transactions;
- short sales;
- in options, swaps or other derivative transactions that may or may not be listed on an exchange;
- one or more underwritten offerings on a firm commitment or best efforts basis; or
- any combination of the above.

The selling stockholders may engage brokers and dealers, and any brokers or dealers may arrange for other brokers or dealers to participate in effecting sales of the shares. These brokers, dealers or underwriters may act as principals, or as agents of the selling stockholders. Broker-dealers may agree with the selling stockholders to sell a specified number of the shares of common stock at a stipulated price per share. If a broker-dealer is unable to sell shares of common stock acting as agent for the selling stockholders, it may purchase as principal any unsold shares of common stock at the stipulated price. Broker-dealers who acquire shares of common stock as principals may thereafter resell the shares of common stock from time to time in transactions in any stock exchange on which the shares are then listed, at prices and on terms then prevailing at the time of sale, at prices related to the then-current market price or in negotiated transactions. Broker-dealers may use block transactions and sales to and through broker-dealers, including transactions of the nature described above.

To the extent required under the Securities Act, the aggregate amount of the shares of common stock being offered by the selling stockholders and the terms of the offering, the names of any agents, brokers, dealers or underwriters and any applicable commission with respect to a particular offering will be set forth in an accompanying prospectus supplement. Any underwriters, dealers, brokers or agents participating in the distribution of the shares may receive compensation in the form of underwriting discounts, concessions, commissions or fees from the selling stockholders and/or purchasers of the selling stockholders' shares, for whom they may act, which compensation as to a particular broker-dealer might be in excess of customary commissions.

Any underwriters, brokers, dealers or agents that participate in the distribution of the shares of common stock may be deemed to be underwriters within the meaning of the Securities Act, and any discounts, concessions, commissions or fees received by them and any profit on the resale of the shares of common stock sold by them may be deemed to be underwriting discounts and commissions.

The selling stockholders may enter into hedging transactions with broker-dealers and the broker-dealers may engage in short sales of the common stock in the course of hedging the positions they assume with the selling stockholders, including, without limitation, in connection with distributions of the shares of common stock by those broker-dealers. The selling stockholders may enter into option or other transactions with broker-dealers that involve the delivery of the shares of common stock offered hereby to the broker-dealers, who may then resell or otherwise transfer those securities.

The selling stockholders and other persons participating in the sale or distribution of the shares of common stock will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M. This regulation may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholders and any other person. The anti-manipulation rules under the Exchange Act may apply to sales of shares of common stock in the market and to the activities of the selling stockholders and their affiliates. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of the common stock to engage in market-making activities with respect to the particular shares being distributed for a period of up to five business days before the distribution. These restrictions may affect the marketability of the common stock and the ability of any person or entity to engage in market-making activities with respect to the securities.

The selling stockholders may also sell the shares in accordance with Rule 144 under the Securities Act rather than pursuant to this prospectus, regardless of whether the shares are covered by this prospectus.

We will make copies of this prospectus available to the selling stockholders and any of its successors in interest for purposes of satisfying the prospectus delivery requirements of the Securities Act, if applicable.

Pursuant to the registration rights agreements with the selling stockholders, we have agreed to indemnify in certain circumstances the selling stockholders against certain liabilities, including certain liabilities under the Securities Act. The selling stockholders have agreed to indemnify us in certain circumstances against certain liabilities, including certain liabilities under the Securities Act. The selling stockholders may indemnify any underwriter or broker-dealer that participates in transactions involving the sale of common stock against certain liabilities, including liabilities arising under the Securities Act.

In order to comply with the securities laws of some states, if applicable, the shares of common stock offered by this prospectus must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock 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.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution.

LEGAL MATTERS

The validity of the securities offered hereby is being passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, New York, New York.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K/A for the year ended December 31, 2007, and the effectiveness of our internal control over financial reporting as of December 31, 2007, as set forth in their reports, which are 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 reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other documents with the SEC as required by the Exchange Act. You can find, copy and inspect information we file at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. You can call the SEC at 1-800-SEC-0330 for further information about the public reference room. You can review our electronically filed reports, proxy and information statements on the SEC's web site at www.sec.gov or on our web site at www.emergentbiosolutions.com. Information included on our web site is not part of this prospectus or any prospectus supplement.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and our securities, including exhibits and schedules. You can obtain a copy of the registration statement from the SEC at any address listed above or from the SEC's web site.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate" into this prospectus information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. Any information that we incorporate by reference is considered part of this prospectus.

Information contained in this prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus automatically modifies and supersedes previously filed information including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information. Any information so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We incorporate by reference, as of their respective dates of filing, the documents listed below that we have filed with the SEC and any documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus:

- (1) our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the SEC on March 10, 2008;
- (2) our Annual Report on Form 10-K/A for the year ended December 31, 2007 filed with the SEC on March 13, 2008;
- (3) our Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 filed with the SEC on May 7, 2008;
- (4) our Quarterly Report on Form 10-Q for the quarter ended June 30, 2008 filed with the SEC on August 7, 2008;
- (5) our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 filed with the SEC on November 7, 2008;
- (6) our Current Report on Form 8-K filed with the SEC on May 2, 2008;
- (7) our Current Report on Form 8-K filed with the SEC on May 29, 2008;
- (8) our Current Report on Form 8-K filed with the SEC on June 27, 2008;
- (9) our Current Report on Form 8-K filed with the SEC on August 4, 2008;
- (10) our Current Report on Form 8-K filed with the SEC on August 6, 2008;
- (11) our Current Report on Form 8-K filed with the SEC on August 21, 2008;
- (12) our Current Report on Form 8-K filed with the SEC on October 6, 2008;

(13) any other filings pursuant to the Exchange Act after the date of filing the initial registration statement and prior to the effectiveness of the registration statement; and

(14) the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on November 7, 2006, including any amendments or reports filed for the purpose of updating that description.

You may request a copy of these documents, which will be provided to you at no cost, by writing or telephoning us using the following contact information:

Emergent BioSolutions Inc.
2273 Research Boulevard
Rockville, Maryland 20850
Attn: Vice President, Investor Relations
Telephone: (301) 795-1877

You should rely only on the information contained in this prospectus, including information incorporated by reference as described above, any accompanying prospectus supplement or any "free writing prospectus" we may authorize to be delivered to you. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses to be incurred in connection with the registration of the securities being registered hereby, all of which will be borne by the Registrant. All amounts shown are estimates except the SEC registration fee.

SEC registration fee	\$ 4,717
Transfer agent's, trustee's and depository's fees and expenses	10,000
Printing and engraving expenses	25,000
Legal fees and expenses	50,000
Accounting fees and expenses	30,000
Miscellaneous	5,283
Total expenses	<u>\$ 125,000</u>

Item 15. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Registrant's restated certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnify for such expenses which the Court of Chancery or such other court shall deem proper.

The Registrant's restated certificate of incorporation provides that the Registrant will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Registrant) by reason of the fact that he or she is or was, or has agreed to become, a director or officer of the Registrant, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, including any employee benefit plan, (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the

Registrant, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The Registrant's restated certificate of incorporation provides that the Registrant will indemnify any Indemnitee who was or is a party to or threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Registrant to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer of the Registrant, or is or was serving, or has agreed to serve, at our request, as a director, officer, partner, employee or trustee of or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, (including any employee benefit plan), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Registrant, except that no indemnification shall be made with respect to any claim, issue or matter as to which Indemnitee shall have been adjudged to be liable to the Registrant, unless, and only to the extent, that the Court of Chancery of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expense (including attorney's fees) which the Court of Chancery of Delaware or the court in which such action or suit was brought shall deem proper. Notwithstanding the foregoing, to the extent that an Indemnitee has been successful, on the merits or otherwise, in defense of any action, suit or proceeding, Indemnitee shall be indemnified by the Registrant against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

The Registrant has entered into agreements to indemnify the Registrant's directors and executive officers. These agreements, among other things, provide that the Registrant will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as a director, officer, manager, employee, agent or representative of the Registrant. The indemnification agreements also establish the procedures that will apply in the event a director or officer makes a claim for indemnification.

The Registrant maintains a general liability insurance policy which covers certain liabilities of directors and officers of the Registrant arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement the Registrant enters into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, the Registrant, the Registrant's directors, the Registrants officers and persons who control the Registrant with the meaning of the Securities Act of 1933 against certain liabilities.

Item 16. Exhibits.

Exhibit Number	Description
1.1	The form of equity underwriting agreement will be filed as an exhibit to a Current Report of the Registrant on Form 8-K and incorporated herein by reference
1.2	The form of debt underwriting agreement will be filed as an exhibit to a Current Report of the Registrant on Form 8-K and incorporated herein by reference
4.1	Restated Certificate of Incorporation of the Registrant (Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-8 (File No. 333-139190) filed on December 8, 2006)
4.2	Amended and Restated By-laws of the Registrant, as amended (Incorporated by reference to Exhibit 3.2 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2007 (SEC File No. 333-136622) filed on March 7, 2008)
4.3	Specimen Certificate Evidencing Shares of Common Stock (Incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the Registrant's Registration Statement on Form S-1 (File No. 333-136622) filed on October 20, 2006)
4.4	Registration Rights Agreement, dated June 23, 2005, between the Registrant and Microscience Investments Limited, formerly Microscience Holdings plc (Incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-136622) filed on August 14, 2006)

Exhibit Number	Description
4.5	Registration Rights Agreement, dated September 22, 2006, among the Registrant and the entities listed on Schedule 1 thereto (Incorporated by reference to Exhibit 4.3 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-136622) filed on September 25, 2006)
4.6	Rights Agreement, dated November 14, 2006, between the Registrant and American Stock Transfer & Trust Company (Incorporated by reference to Exhibit 4.3 to the Registrant's Registration Statement on Form S-8 (File No. 333-139090) filed on December 8, 2006)
4.7	Assignment and Assumption Agreement by and between the Registrant, Microscience Investments Limited and the Investors named therein, dated March 8, 2007, relating to the Registration Rights Agreement, dated June 23, 2005, between the Registrant and Microscience Investments Limited (Incorporated by reference to Exhibit 4.5 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 001-33137) filed on March 27, 2007)
4.8*	Form of Senior Indenture
4.9*	Form of Subordinated Indenture
4.10	The form of any senior note with respect to each particular series of senior notes issued hereunder will be filed as an exhibit to a Current Report of the Registrant on Form 8-K and incorporated herein by reference
4.11	The form of any subordinated note with respect to each particular series of subordinated notes issued hereunder will be filed as an exhibit to a Current Report of the Registrant on Form 8-K and incorporated herein by reference
4.12	The form of any warrant agreement with respect to each particular series of warrants issued hereunder will be filed as an exhibit to a Current Report of the Registrant on Form 8-K and incorporated herein by reference
4.13	The form of any certificate of designation with respect to any preferred stock issued hereunder and the related form of preferred stock certificate will be filed as exhibits to a Current Report of the Registrant on Form 8-K and incorporated herein by reference
5.1*	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
12.1*	Statement re: Computation of Ratio of Earnings to Fixed Charges
23.1	Consent of Ernst & Young LLP (Independent Registered Public Accounting Firm)
23.2*	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (Included in Exhibit 5.1)
24.1*	Power of Attorney (Included on signature page)
25.1	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Senior Indenture will be incorporated herein by reference from a subsequent filing in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939
25.2	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Subordinated Indenture will be incorporated herein by reference from a subsequent filing in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939

* 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 the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end

of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement.

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

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

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

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

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

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 or made in a document incorporated or deemed incorporated by reference into the Registration Statement or prospectus that is part of the Registration Statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the Registration Statement or prospectus that was part of the Registration Statement or made in any such document immediately prior to such effective date;

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: 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.

(6) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

(8) The undersigned Registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the SEC under Section 305(b)(2) of the Trust Indenture Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rockville, State of Maryland, on December 5, 2008.

EMERGENT BIOSOLUTIONS INC.

By: /s/ FUAD EL-HIBRI
Fuad El-Hibri
Chief Executive Officer and
Chairman of the Board of Directors

Pursuant to the requirements of the Securities Act of 1933, as amended, this Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ FUAD EL-HIBRI</u> Fuad El-Hibri	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	December 5, 2008
<u>/s/ R. DON ELSEY</u> R. Don Elsey	Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	December 5, 2008
<u>*</u> Joe Allbaugh	Director	December 5, 2008
<u>*</u> Zsolt Harsanyi, Ph.D.	Director	December 5, 2008
<u>*</u> Jerome M. Hauer	Director	December 5, 2008
<u>*</u> Ronald B. Richard	Director	December 5, 2008
<u>*</u> Louis W. Sullivan, M.D.	Director	December 5, 2008
<u>*</u> Dr. Sue Bailey	Director	December 5, 2008
*By: <u>/s/ FUAD EL-HIBRI</u> Fuad El-Hibri Attorney-in-fact		

EXHIBIT INDEX

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24.1*	Power of Attorney (Included on signature page)
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25.2	The Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Subordinated Indenture will be incorporated herein by reference from a subsequent filing in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939

* Previously filed.

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in Amendment No. 1 to the Registration Statement (Form S-3 No. 333-155311) and related Prospectus of Emergent BioSolutions Inc. and Subsidiaries for the registration of common stock, preferred stock, debt securities and warrants and to the incorporation by reference therein of our reports dated March 6, 2008, with respect to the consolidated financial statements of Emergent BioSolutions Inc. and Subsidiaries, and the effectiveness of internal control over financial reporting of Emergent BioSolutions Inc. and Subsidiaries, included in its Annual Report (Form 10-K/A) for the year ended December 31, 2007, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

McLean, Virginia
December 5, 2008

December 5, 2008

Brian A. Johnson

+ 1 212 937 7206 (t)

+ 1 212 230 8888 (f)

brian.johnson@wilmerhale.com

VIA EDGAR SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549

Attention: Michael Rosenthal, Esq.

Re: Emergent BioSolutions Inc.
Registration Statement on Form S-3
File No. 333-155311

Ladies and Gentlemen:

On behalf of Emergent BioSolutions Inc. (the "Company"), submitted herewith for filing is Amendment No. 1 ("Amendment No. 1") to the Registration Statement referenced above (the "Registration Statement").

Amendment No. 1 is being filed in response to comments contained in the letter dated December 1, 2008 from Jeffrey Riedler of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") to Fuad El-Hibri, the Company's Chief Executive Officer. The responses set forth below are based upon information provided to Wilmer Cutler Pickering Hale and Dorr LLP by the Company. The responses are keyed to the numbering of the comments and the headings used in the Staff's letter. Where appropriate, the Company has responded to the Staff's comments by making changes to the disclosure in the Registration Statement as set forth in Amendment No. 1.

On behalf of the Company, we advise you as follows:

General

1. We note that your registration statement does not disclose details of the private placement transaction(s) in which the shares you now seek to register were initially sold. Please revise the disclosure in your Form S-3 to include a complete description of those private placement transaction(s).

Response: In response to the Staff's comment, the Company has revised the disclosure on page 19 of Amendment No. 1.

2. We note the selling shareholders are the beneficial owners of approximately 47% of the company's outstanding shares of common stock. Given the beneficial ownership of the selling shareholders and the fact that the selling shareholders are affiliates of the

Wilmer Cutler Pickering Hale and Dorr LLP, 399 Park Avenue, New York, New York 10022
Beijing Berlin Boston Brussels London Los Angeles New York Oxford Palo Alto Waltham Washington

company, it appears that the transaction may be considered to be a primary offering. Please tell us your basis for determining the transaction is appropriately characterized as a transaction that is eligible to be made under Rule 415(a)(1)(i). See Telephone Interpretations Manual Interpretation D.29. Please include in this analysis your basis for determining that each affiliated selling shareholder is not an underwriter. Please provide a separate analysis for each affiliated selling shareholder.

Response: For the reasons set forth below, the Company respectfully submits that none of the selling stockholders is an underwriter and, accordingly, that the sale of shares of common stock by the selling stockholders is appropriately characterized as a secondary offering eligible to be made pursuant to Rule 415(a)(1)(i) under the Securities Act of 1933, as amended (the "Securities Act").

Legal Background

Rule 415(a)(1)(i) permits the registration of an offering on a continuous or delayed basis in the future if a registration statement pertains to "securities which are to be offered or sold solely by or on behalf of a person or persons other than the registrant, a subsidiary of the registrant or a person of which the registrant is a subsidiary." Interpretation D.29 from the Staff's Manual of Publicly Available Telephone Interpretations provides a framework for analyzing "whether a purported secondary offering is really a primary offering, i.e., the selling shareholders are actually underwriters selling on behalf of the issuer." Interpretation D.29 states, in relevant part, as follows:

"The question of whether an offering styled a secondary one is really on behalf of the issuer is a difficult factual one, not merely a question of who receives the proceeds. Consideration should be given to how long the selling shareholders have held the shares, the circumstances under which they received them, their relationship to the issuer, the amount of shares involved, whether the sellers are in the business of underwriting securities, and finally whether under all the circumstances it appears that the seller is acting as a conduit for the issuer."

Analysis

The following is a discussion of each of the factors referenced in Interpretation D.29, which, on balance, support the Company's view that none of the selling stockholders is an underwriter.

- *Holding Period.* The selling stockholders have held shares of common stock since the date set forth below opposite each such stockholder's
-

name, first by holding common stock of BioPort Corporation ("BioPort"), and then by holding common stock of Emergent BioSolutions Inc. following a corporate reorganization in June 2004, as described in more detail below, in which BioPort became a wholly owned subsidiary of Emergent BioSolutions Inc. The Company subsequently completed its initial public offering in November 2006.

<u>Selling Stockholder</u>	<u>Date of Original Acquisition</u>
BioPharm, L.L.C.	April 2001
Biovac, L.L.C.	January 2001
Intervac, L.L.C.	May 1998
Intervac Management, L.L.C.	September 1998

- Acquisition of the Common Stock.* Each of the selling stockholders acquired shares of the Company's class A common stock in June 2004 in connection with a corporate reorganization in which Emergent BioSolutions Inc. issued shares of class A common stock to stockholders of BioPort in exchange for an equal number of shares of common stock of BioPort. As a result of this reorganization, BioPort became a wholly owned subsidiary of Emergent BioSolutions Inc. The selling stockholders originally acquired shares of common stock, as of the dates set forth above, in connection with the founding of BioPort and related early stage financing provided to BioPort in transactions exempt from the registration provisions of the Securities Act pursuant to the exemption set forth in Section 4(2) thereof relative to sales by an issuer not involving any public offering. The Company's class A common stock was reclassified as common stock in October 2006 prior to the completion of the Company's initial public offering in November 2006.
- Relationship to the Issuer.* The Company considers each of the selling stockholders to be an affiliate of the Company based on the percentage ownership of the Company's common stock by the selling stockholders in the aggregate and the beneficial ownership by Fuad El-Hibri, the Company's Chief Executive Officer and Chairman of the Board of Directors, of the shares held by each of the selling stockholders. However, each of the selling stockholders is acting on its own behalf, independent of the Company, in connection with the proposed registration of its shares of the Company's common stock.

- *Amount of Shares Involved.* The Registration Statement relates to the registration of an aggregate of 1,180,638 shares of the Company's common stock on behalf of the selling stockholders. This represents (i) only 3.9% of the Company's outstanding common stock as of November 28, 2008 and (ii) only 8.6% of the aggregate shares of common stock currently held by the selling stockholders. The percentage of the Company's outstanding common stock represented by the shares being registered on behalf of each of the selling stockholders is set forth below.

Selling Stockholder	Shares to be Registered	Shares Registered as a Percentage of Outstanding Common Stock
BioPharm, L.L.C.	316,648	1.1%
Biovac, L.L.C.	138,162	0.5%
Intervac, L.L.C.	663,685	2.2%
Intervac Management, L.L.C.	62,143	0.2%

- *Business of the Selling Stockholders.* Each of the selling stockholders is a limited liability company, the sole business of which is investing in the Company's common stock. None of the selling stockholders is, or has ever been, in the business of underwriting securities.
- *Conduit of the Issuer.* The Company will not receive any of the proceeds, either directly or indirectly, from the sale of the shares of common stock by the selling stockholders. Furthermore, the totality of circumstances described above, in particular the length of the holding period of the common stock by the selling stockholders, the nature of the acquisition of such common stock and the relatively small amount of shares being registered for resale, do not create the appearance that the selling stockholders are acting as a conduit for the Company.

Notwithstanding the affiliate status of the selling stockholders and their aggregate percentage ownership of the Company's common stock, each of the other factors set forth above clearly supports the Company's view that none of the selling stockholders is an underwriter. Accordingly, the Company believes that the sale of shares of common stock by the selling stockholders is appropriately characterized as a secondary offering.

* * *

Securities and Exchange Commission
December 5, 2008
Page 5

If you have any further questions or comments, or if you require any additional information, please contact the undersigned by telephone at (212) 937-7206 or facsimile at (212) 230-8888. Thank you for your assistance.

Very truly yours,

/s/ Brian A. Johnson

Brian A. Johnson